N00236.000774
ALAMEDA POINT
SSIC NO. 5090.3

GROUNDWATER MONITORING REPORT FOR INSTALLATION RESTORATION SITE 1 SUMMER 2002 TO SPRING 2003

Alameda Point
Alameda, California

Environmental Remedial Action
Contract Number N62474-98-D-2076
Contract Task Orders 0078 & 0103

Document Control Number 8836

December 22, 2004

Submitted to:

Base Realignment and Closure
Program Management Office West
1230 Columbia Street, Suite 1100
San Diego, California 92101

Submitted by:

Shaw Environmental, Inc.
4005 Port Chicago Highway
Concord, California 94520-1120

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GROUNDWATER MONITORING REPORT FOR INSTALLATION RESTORATION SITE 1 SUMMER 2002 TO SPRING 2003

Alameda Point
Alameda, California

Environmental Remedial Action
Contract Number N62474-98-D-2076
Contract Task Orders 0078 & 0103

Document Control Number 8836

December 22, 2004

Approved By: _____ Date: December 20, 2004
John McGuire
Shaw, Project Manager

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DEPARTMENT OF THE NAVY
BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE WEST
1230 COLUMBIA STREET, SUITE 1100
SAN DIEGO, CA 92101-8571

5090
Ser BPMOW.CD\0238
December 22, 2004

Ms. Anna-Marie Cook
U.S. EPA
Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Dear Ms. Cook:

Subj: FINAL SPRING 2003 QUARTERLY/ANNUAL GROUNDWATER MONITORING REPORTS ALAMEDA POINT, ALAMEDA, CALIFORNIA

This letter transmits the above-referenced documents for all Groundwater Monitoring Program sites. The enclosed reports present the results of the Spring 2003 quarterly groundwater monitoring, summarizes the Summer 2002 to Spring 2003 sampling events, and provides the annual recommendations for the program. Regulatory comments have been incorporated/ addressed into these documents. Responses to regulatory comments for all sites are provided in a single attachment along with replacement pages addressing comments from the previous (Summer, Fall and Winter 2002) reports. As agreed upon on December 2, 2004 in an e-mail between EPA and the Navy, the recommendations will not be implemented at this time as the regulators and the Navy are still discussing changes to the program. Updated program changes will be proposed in the Spring 2005 Groundwater Annual Report. This final is provided as a hardcopy for insertion into the Summer 2002 to Spring 2003 report binders provided at an earlier date.

If you have any questions, please call Ms. Claudia Domingo, Remedial Project Manager at (619) 532-0935.

Sincerely,

THOMAS L. MACCHIARELLA
BRAC Environmental Coordinator
By direction of the Director

Encl: (1) Response to Regulator Comments Spring 2003 Groundwater Monitoring Reports
(2) Replacement pages (Attachments 1-16).
(3) Groundwater Monitoring Report for Installation Restoration Site 1, Summer 2002 to Spring 2003, Alameda Point, Alameda, California
(4) Groundwater Monitoring Report for Installation Restoration Site 2, Summer 2002 to Spring 2003, Alameda Point, Alameda, California
(5) Groundwater Monitoring Report for Installation Restoration Site 3 Group, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

(6) Groundwater Monitoring Report for Installation Restoration Site 5 Group, Summer 2002 to Spring 2003, Alameda Point, Alameda, California
(7) Groundwater Monitoring Report for Installation Restoration Site 6, Summer 2002 to Spring 2003, Alameda Point, Alameda, California
(8) Groundwater Monitoring Report for Installation Restoration Site 7, Summer 2002 to Spring 2003, Alameda Point, Alameda, California
(9) Groundwater Monitoring Report for Installation Restoration Site 8, Summer 2002 to Spring 2003, Alameda Point, Alameda, California
(10) Groundwater Monitoring Report for Installation Restoration Site 9 Group, Summer 2002 to Spring 2003, Alameda Point, Alameda, California
(11) Groundwater Monitoring Report for Installation Restoration Site 14, Summer 2002 to Spring 2003, Alameda Point, Alameda, California
(12) Groundwater Monitoring Report for Installation Restoration Site 16, Summer 2002 to Spring 2003, Alameda Point, Alameda, California
(13) Groundwater Monitoring Report for Installation Restoration Site 25 Group, Summer 2002 to Spring 2003, Alameda Point, Alameda, California
(14) Groundwater Monitoring Report for Installation Restoration Site 27, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

5090
Ser BPMOW.CD\0238
December 22, 2004

Copy to :
Ms. Marcia Liao
Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2721

Mr. Bud Duke
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, California 95826-3200

Ms. Judy Huang
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, California 94612

Ms. Karla Brasaemle
Tech Law - USEPA
90 New Montgomery Street, Suite 1010
San Francisco, CA 94105

Mr. Peter Russell, PhD
Russell Resources, Inc. (City of Alameda Consultant)
950 Northgate Drive, Suite 313
San Rafael, CA 94903

Ms. Jean Sweeney
Restoration Advisory Board Community Co-chair

DEPARTMENT OF THE NAVY
SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
1220 PACIFIC HIGHWAY
SAN DIEGO, CA 92132 - 5190

5090
Ser 06CA.CG\0222
February 25, 2004

Mr. Mark Ripperda
US EPA
Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Dear Mr. Ripperda:

Subj: SPRING 2003 QUARTERLY GROUNDWATER MONITORING REPORTS

This letter transmits the above-referenced documents. The enclosed reports present the results of the Spring 2003 quarterly groundwater monitoring at Alameda Point. This is the fourth quarter report that summarizes the first annual Groundwater Monitoring Reports twelve sites (or site group) from Summer 2002 to Spring 2003, (as listed below). This document also contains recommendations to the Basewide Groundwater Monitoring Program. At this time, as previously agreed by the Alameda Point BRAC Clean-up Team members, the Navy seeks your comments.

If you have any questions, please call Ms. Claudia Domingo, Remedial Project Manager at (619) 532-0935.

Sincerely,

GREG LORTON
Acting BRAC Environmental Coordinator
By direction of the Commander

Enclosures:
Groundwater Monitoring Report for Installation Restoration Site 1, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

Groundwater Monitoring Report for Installation Restoration Site 2, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

Groundwater Monitoring Report for Installation Restoration Site 3 Group, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

Groundwater Monitoring Report for Installation Restoration Site 5 Group, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

Groundwater Monitoring Report for Installation Restoration Site 6, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

5090
Ser 06CA.CG\0222
February 25, 2004

Groundwater Monitoring Report for Installation Restoration Site 7, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

Groundwater Monitoring Report for Installation Restoration Site 8, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

Groundwater Monitoring Report for Installation Restoration Site 9 Group, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

Groundwater Monitoring Report for Installation Restoration Site 14, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

Groundwater Monitoring Report for Installation Restoration Site 16, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

Groundwater Monitoring Report for Installation Restoration Site 25 Group, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

Groundwater Monitoring Report for Installation Restoration Site 26, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

Groundwater Monitoring Report for Installation Restoration Site 27, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

Copy to :
Ms. Marcia Liao
Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2721

Ms. Judy Huang
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, California 94612

Ms. Karla Brasaemle
Tech Law, Inc.
530 Howard Street, Suite 400
San Francisco, California 94105

Mr. Peter Russell, PhD
Northgate Environmental Management
950 Northgate Drive, Suite 313
San Rafael, California 94903

Shaw Environmental, Inc.

SHAW TRANSMITTAL/DELIVERABLE RECEIPT

CONTRACT: N62474-98-D-2076 **DOCUMENT CONTROL NUMBER: 6695, 6696, 6697,6698. 6699, 6700, 6701, 6702, 6703, 6704, 6705, AND 6706**

TO: Administrative Contract Officer
Southwest Division
Naval Facilities Engineering Command
Michelle Crook, 02R1.MC
1230 Columbia St., Suite 870
San Diego, CA 92101-5817

Date: February 27, 2004

CTO: 0103

Location: Alameda

FROM: John M. Warren
John Warren
Project Manager

DESCRIPTION OF ENCLOSURE: ***Groundwater Monitoring Report for Installation Restoration Site 1, Site 2, Site 3 Group, Site 5 Group, Site 6, Site 7, Site 8, Site 9, Site 14, Site 16, Site 25 Group, Site 27, Summer 2002 to Spring 2003, Alameda Point, Dated February 27, 2004.***

TYPE: CTO Deliverable

VERSION:

REVISION No: 0

ADMIN RECORD: Yes

SCHEDULED DELIVERY DATE March 01, 2004 **ACTUAL DELIVERY DATE** February 27, 2004

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Shaw Project File, Concord (1C/1E)
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Tony Searls, Richland (1C/1E)
John Warren, Sacramento (1C/1E)

Other

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Mark Berscheid, California Department of Toxic Substances Control (1C/1E)
Karla Brasaemle, TechLaw, Inc. (1C/1E)
Judy Huang, Regional Water Quality Control Board (1C/1E)
Beth Kelly, Tetra Tech EM Inc (1C/1E)
Marcia Liao, California Department of Toxic Substances Control (1C/1E)
Bert Morgan, RAB (1C/2E)
Mike Quillin, ERM West, Inc. (1C/1E)
Mark Ripperda, US Environmental Protection Agency (1C/2E)
Peter Russell, Northgate Environmental Management (1C/1E)
Marie McCrink, DTSC (1C/1E)

Date/Time Received _____/_____

Shaw® Shaw Environmental, Inc.

The attached includes replacement pages for inclusion into the Summer 2002 to Spring 2003 Groundwater Monitoring Report. Please note the pagination in the footer of each attached page and replace accordingly, discarding the previous version of these pages.

Additionally, Appendices A and B are now divided into two CDs. Please discard the previously submitted Appendices CD and replace with the attached versions.

If you have any questions regarding these replacements, please feel free to contact either Amber Eastland at (925) 288-2024 or Nicole Wojcik at (925) 288-2007.

Thank you,

Shaw Environmental, Inc.

Shaw® Shaw Environmental, Inc.

Shaw Environmental, Inc.
4005 Port Chicago Highway
Concord, CA 94520-1120
925-288-9898
FAX: 925-288-0888

November 11, 2003

Mr. Mark Ripperda
U.S. EPA
Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Subject: GROUNDWATER MONITORING REPORTS

Dear Mr. Mark Ripperda:

This letter transmits the above-referenced documents. An official Navy-issued transmittal for these Groundwater Monitoring Quarterly Reports will be forwarded shortly. The enclosed reports present the results of the winter 2002 quarterly groundwater monitoring at Alameda Point. The Alameda Point BRAC Cleanup Team members have previously agreed that comments on the groundwater monitoring reports would be provided after the fourth quarterly reports were submitted.

Preparation of the spring 2003 quarterly monitoring reports is underway.

Please feel free to contact me at (916) 565-4179, if you have any questions.

Sincerely,
Shaw Environmental, Inc.

for David W. Bad

John Warren
Project Manager

Enclosures:

Groundwater Monitoring Report for Installation Restoration Site 1, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

Groundwater Monitoring Report for Installation Restoration Site 2, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

Groundwater Monitoring Report for Installation Restoration Site 3 Group, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

Groundwater Monitoring Report for Installation Restoration Site 5 Group, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

Groundwater Monitoring Report for Installation Restoration Site 6, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

Groundwater Monitoring Report for Installation Restoration Site 7, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

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Groundwater Monitoring Report for Installation Restoration Site 25 Group, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

Groundwater Monitoring Report for Installation Restoration Site 27, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

Copy to:
Ms. Marcia Liao
Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2721

Ms. Judy Huang
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, California 94612

Ms. Karla Brasaemle
Tech Law, Inc.
90 New Montgomery Street, Suite 1010
San Francisco, California 94105

Mr. Peter Russell, PhD
Northgate Environmental Management
950 Northgate Drive, Suite 313
San Rafael, California 94903

Mr. Mark Ripperda

November 11, 2003

Ms. Beth Kelly
Tetra Tech EM Inc.
10670 White Rock Road, Ste 100
Rancho Cordova, California 95670

Mr. Bert Morgan

Mr. Mike Quillin
ERM West, Inc.
1777 Botelho Drive, Suite 260
Walnut Creek, California 94596

Mr. Mark Berscheid
California Department of Toxic Substances Co.
8800 Cal Center Drive
Sacramento, California 95826

Mr. Greg Lorton
Southwest Division
Naval Facilities Engineering Command
1230 Columbia Street, Suite 870
San Diego, California 92101-5817

Claudia Domingo
Southwest Division
Naval Facilities Engineering Command
1230 Columbia Street, Suite 870
San Diego, California 92101-5817

Administration Files

Project File

DEPARTMENT OF THE NAVY
SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
1220 PACIFIC HIGHWAY
SAN DIEGO, CA 92132 - 5190

5090
Serial 06CA.RW\1118
July 31, 2003

Mr. Mark Ripperda
U.S. EPA
Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Dear Mr. Ripperda:

Subj: GROUNDWATER MONITORING REPORTS

This letter transmits the above-referenced documents. The enclosed reports present the results of the summer and fall 2002 quarterly groundwater monitoring at Alameda Point. The Alameda Point BRAC Cleanup Team members have previously agreed that comments on the groundwater monitoring reports would be provided after the fourth quarterly reports were submitted.

Preparation of the fall and winter quarterly monitoring reports is underway. Navy intends to provide all subsequent reports in a timelier manner.

Please feel free to contact me at (619) 532-0952, if you have any questions.

Sincerely,

RICHARD C. WEISSENBORN, P.E.
Remedial Project Manager

Enclosures:

Groundwater Monitoring Report for Installation Restoration Site 1 Group, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

Groundwater Monitoring Report for Installation Restoration Site 2, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

Groundwater Monitoring Report for Installation Restoration Site 3 Group, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

Groundwater Monitoring Report for Installation Restoration Site 5 Group, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

Groundwater Monitoring Report for Installation Restoration Site 6, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

5090
Serial 06CA.RW\1118
July 31, 2003

Groundwater Monitoring Report for Installation Restoration Site 7, Summer 2002 to Spring 2003, Alameda Point, Alameda, California

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Copy to :
Ms. Marcia Liao
Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2721

Ms. Judy Huang
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, California 94612

Ms. Karla Brasaemle
Tech Law, Inc.
90 New Montgomery Street, Suite 1010
San Francisco, California 94105

Mr. Peter Russell, PhD
Northgate Environmental Management
950 Northgate Drive, Suite 313
San Rafael, California 94903

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SHAW TRANSMITTAL/DELIVERABLE RECEIPT

CONTRACT : N62474-98-D-2076 **DOCUMENT CONTROL NUMBER : 5708.0**

TO: Administrative Contract Officer
Southwest Division
Naval Facilities Engineering Command
Michelle Crook, 02R1.MC
1230 Columbia St., Suite 870
San Diego, CA 92101-5817

Date : July 31, 2003

CTO : 0078

Location: Alameda

FROM: for D. W. Bad
Tony Searls
Project Manager

DESCRIPTION OF ENCLOSURE : ***Groundwater Monitoring Report for Installation Restoration Site 1, Summer 2002 to Spring 2003, Dated July 31, 2003.***

TYPE : CTO Deliverable

VERSION : Draft **REVISION No :** 0

ADMIN RECORD : Yes

SCHEDULED DELIVERY DATE August 01, 2003 **ACTUAL DELIVERY DATE** July 31, 2003

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Mark Berscheid, California Department of Toxic Substances Control (1C/1E)
Karla Brasaemle, TechLaw, Inc. (1C/1E)
Judy Huang, Regional Water Quality Control Board (1C/1E)
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Mike Quillin, ERM West, Inc. (1C/1E)
Mark Ripperda, US Environmental Protection Agency (1C/2E)
Peter Russell, Northgate Environmental Management (1C/1E)

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Note: An electronic version of these appendices is located on compact disc at the end of this document.

Acronyms and Abbreviations

°C	degree(s) Celsius
µg/L	microgram(s) per liter
bgs	below ground surface
BSU	Bay Sediment Unit
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COC	Chain of Custody
COPC	chemical(s) of potential concern
EPA	U.S. Environmental Protection Agency
DO	dissolved oxygen
FWBZ	first water-bearing zone
IDW	investigation-derived waste
IR	Installation Restoration
IT	IT Corporation
ORP	oxidation-reduction potential
MCL	Maximum Contaminant Level
mg/L	milligram(s) per liter
msl	mean sea level
NAS	Naval Air Station
pCi/L	pico curie(s) per liter
PID	photoionization detector
QC	quality control
SOP	Standard Operating Procedure
SVOC	semivolatile organic compound
SWBZ	second water-bearing zone
VOC	volatile organic compound

1.0 Introduction

This Groundwater Monitoring Report presents the results of the quarterly sampling conducted from Summer 2002 to Spring 2003, as part of the Groundwater Monitoring Program, at Installation Restoration (IR) Site 1 located at Alameda Point (formerly Naval Air Station [NAS] Alameda) in Alameda, California (see Figure 1-1, "Site Location Map, IR Site 1"). This report was prepared by Shaw Environmental, Inc., for the U.S. Department of the Navy, Engineering Field Division, Southwest, Naval Facility Engineering Command, San Diego, California under Contract Number N62474-98-D-2076, Contract Task Orders 0078 and 0103.

The Groundwater Monitoring Program is a unified sampling and analysis program designed to provide a coordinated evaluation of groundwater quality at Alameda Point. Many of the Alameda Point groundwater monitoring wells have not been sampled on a regular basis, until their inclusion in the Groundwater Monitoring Program. The Groundwater Monitoring Program began sampling activities in June 2002. The Groundwater Monitoring Program activities are conducted in accordance with the *Work Plan for Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California* (Work Plan) (Shaw, 2003).

The program includes quarterly and semiannual sampling of select groundwater monitoring wells, with an annual re-evaluation of the sampled wells, sampling frequency, and sampled analyte strategy being conducted. The Groundwater Monitoring Program includes a monitoring regime with the number of wells sampled and type of analysis conducted varying between quarterly and semiannual events. Quarterly sampling events form the baseline regime, with additional monitoring wells and analytical suites incorporated during semiannual sampling events. The quarterly and semiannual sampling regimens allow for expanded chemical suites at locations where less frequent sampling is required and provides for the analysis of parameters, such as natural attenuation and general water chemistry. Recommendations based on this re-evaluation will be presented in the Spring 2003 Quarterly Report following completion of four consecutive quarterly sampling events.

Sampling activities are conducted at selected groundwater monitoring wells located on and adjacent to existing IR sites that are included in the Alameda Point Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) program. The Groundwater Monitoring Program also includes wells that are outside the limits of the CERCLA boundaries. The annual evaluation (Spring 2003) will include recommended program changes based on information derived from the IR Program.

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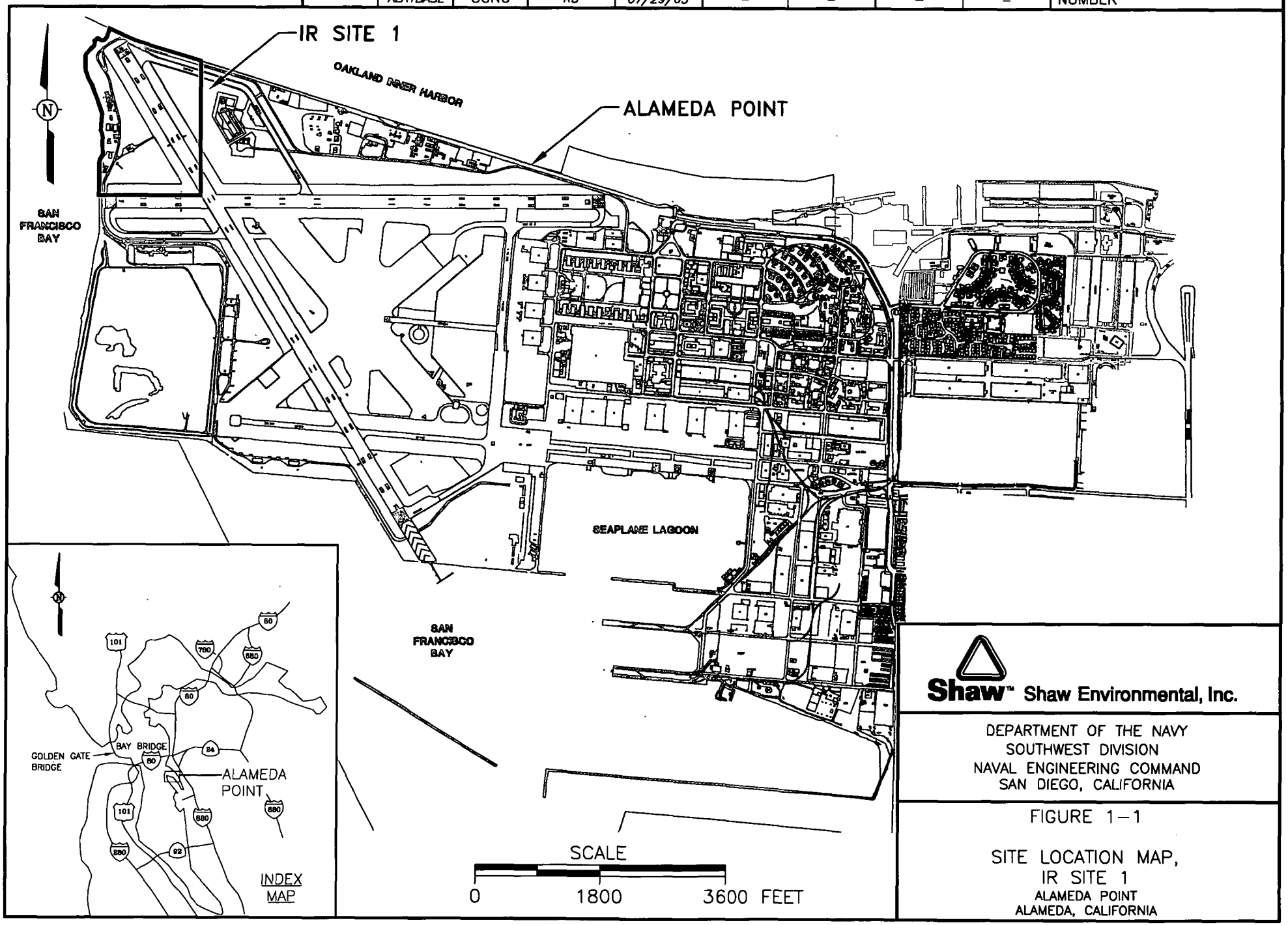

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NAVAL ENGINEERING COMMAND
SAN DIEGO, CALIFORNIA

FIGURE 1-1

SITE LOCATION MAP,
IR SITE 1
ALAMEDA POINT
ALAMEDA, CALIFORNIA

1.1 Purpose and Scope

The purpose of the Groundwater Monitoring Program is to provide an integrated time-series presentation and evaluation of groundwater quality at Alameda Point. It will provide a basis for eventual closure of the groundwater components of the CERCLA operable units. The Groundwater Monitoring Program includes the following activities:

- Inventory and visual inspection of existing site wells
- Evaluation of the adequacy of the existing well network
- Selection of program wells, analytes, and sampling frequencies
- Redevelopment of the wells designated for program inclusion
- Measurement of groundwater levels in wells
- Collection of groundwater samples for field and chemical analysis
- Evaluation of groundwater data quality and presentation of quarterly data summaries

These activities were described in detail in the Work Plan (Shaw, 2003). The first four activities were completed before starting the Summer 2002 sampling activities. The requirements for the remaining three activities are detailed in the Work Plan and the results of their implementation are discussed in this Groundwater Monitoring Report.

The objective of the Groundwater Monitoring Program is to produce a site-specific or site group-specific summary for each quarterly sampling event, which will be included in an updateable binder. One binder for each site or site group will contain summaries of four quarters of sampling. This multi-quarter single binder format will provide enhanced data usability, allowing for the compilation of multiple sampling events into a single, cumulative sequence.

1.2 Site Location and Description

Alameda Point is located on the western tip of Alameda Island, along the eastern margin of the San Francisco Bay (see Figure 1-1). Alameda Point was constructed in the late 1930's, and was an operational air station until closure in June 1997. Additional Alameda Point historical information is available in *The Environmental Baseline Survey, Alameda Point, Alameda, California* (IT Corporation [IT], 2001).

Installation Restoration Site 1, "1943 to 1956 Disposal Area," (Disposal Area), represents one of the 12 sites/site groups designated for sampling under the Groundwater Monitoring Program. Installation Restoration Site 1 is located in the northwestern portion of Alameda Point, adjoined to the north by the Oakland Inner Harbor and to the west by San Francisco Bay. The IR Site boundary includes portions of the runways and adjacent areas. The former disposal area was located to the west and under Runway 13 and north of Runway 7, as shown on Figure 1-2, "Site and Well Location Map, IR Site 1 Operable Unit 3." The site improvements have largely been removed or declared inactive since base closure. Site 1 includes the former unlined disposal

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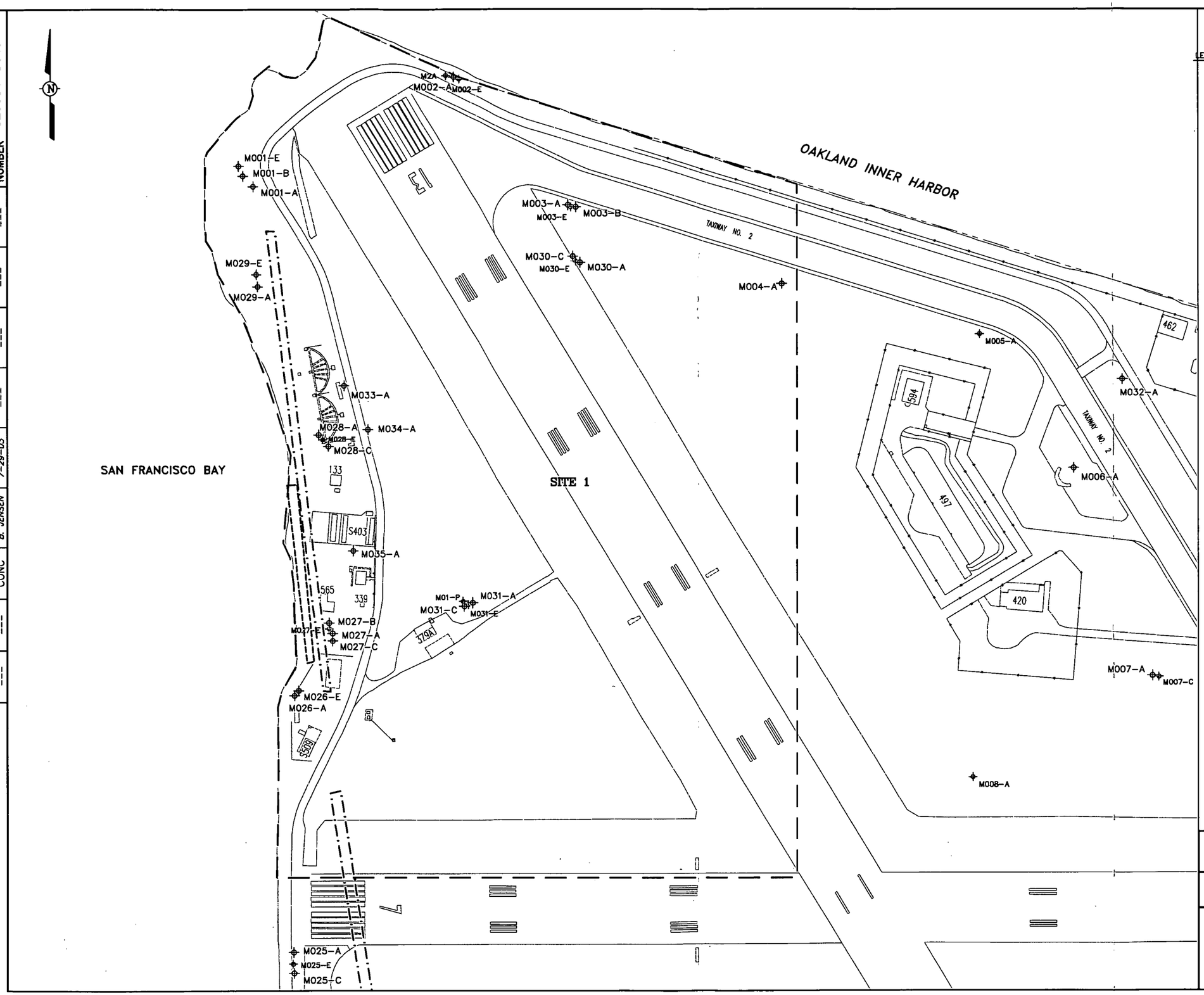

LEGEND

- PROGRAM MONITORING WELL
- MONITORING WELL NOT IN PROGRAM
- CERCLA BOUNDARY
- BARGE LINES (1949 AERIAL SURVEY)
- BARGE LINES (1957 AERIAL SURVEY)

NOTE:
1. POSITION OF BARGE LINES ARE INFERRED.

SCALE
0 120 240 FEET

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SAN DIEGO, CALIFORNIA

FIGURE 1-2
SITE AND WELL LOCATION MAP
IR SITE 1
OPERABLE UNIT 3
ALAMEDA POINT
ALAMEDA, CALIFORNIA

IMAGE	X-REF	OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
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area. The Site 1 Disposal Area was used for the disposal of all waste, including municipal garbage, construction debris, transformers, cleaning solvents, oil and lubricants, ordnance and explosive waste, and radiological materials such as radium dials and buttons. It received waste from 1943 until 1956. Runway 13 was partially constructed over part of the landfill in 1952.

Additional information on the location and characteristics of IR Site 1 is available in the Environmental Baseline Survey report (IT, 2001) and the Work Plan (Shaw, 2003).

1.3 Report Organization

This document is organized in a progressively updateable format. The format is designed to minimize repetition of information common to all sampling events, while allowing detailed reporting of quarterly and semiannual sampling results. Reports for multiple sampling events are included in a single document with general program and procedural information presented in Sections 1.0 through 3.0. Specific quarterly sampling event information is or will be included in Sections 4.0 through 7.0. Section 8.0 presents the recommendations for changes to the IR Site 1 Groundwater Monitoring Program. Section 9.0 presents the references.

The document is organized as follows:

- **Section 1.0: Introduction (this section)**
  - Identifies the purpose and scope of the activities and provides site background information, including site location description
- **Section 2.0: Site Background and Groundwater Monitoring Progra**
  - Describes the former site usage, rationale for the monitoring well network, and identification of chemicals of potential concern (COPCs)
- **Section 3.0: Groundwater Monitoring Field Activities**
  - Describes the field activities conducted for the sampling event
- **Section 4.0: Summer 2002 Monitoring Event Summary and Results**
  - Presents a summary of the results of the Summer 2002 sampling event, provides suggestions for future sampling activities, if appropriate
- **Section 5.0: Fall 2002 Monitoring Event Summary and Results**
  - Presents a summary of the results of the Fall 2002 sampling event, provides suggestions for future sampling activities, if appropriate

- **Section 6.0: Winter 2002 Monitoring Event Summary and Results**
  - Presents a summary of the results of the Winter 2002 sampling event, provides suggestions for future sampling activities, if appropriate
- **Section 7.0: Spring 2003 Monitoring Event Summary and Results**
  - Presents a summary of the results of the Spring 2003 sampling event, provides suggestions for future sampling activities, if appropriate, and provides a summary of data usability
- **Section 8.0: Recommendations**
  - Provides recommendations for changes to the Groundwater Monitoring Program for IR Site 1 based on the results of the Summer 2002, Fall 2002, Winter 2002, and Spring 2003 sampling events
- **Section 9.0: References**
  - Provides a listing of references cited in the text
- **Appendix A: Analytical Data with Data Qualifiers and Reason Code Definitions (on Compact Disc)**
  - Presents a complete cumulative listing of all analytical results with data qualifiers and reason code definitions
- **Appendix B: Data Quality Summary Report, Summer to Fall 2002 (on Compact Disc)**
  - Provides details on the data quality assessment that are discussed in Sections 4.0 through 7.0

The Summer 2002, Winter 2002, and Spring 2003 sections include or will include COPC plume maps and site-specific observations. The Fall 2002 report only includes cumulative data, but does not provide chemical constituent plume maps.

2.0 Site Background and Groundwater Monitoring Program

This section provides summary background information of the Groundwater Monitoring Program for Installation Restoration (IR) Site 1 at Alameda Point. Detailed descriptions of Alameda Point can be found in Sections 2.0 and 3.0 of the *Work Plan for Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California* (Work Plan) (Shaw, 2003). Alameda Point was an active Navy facility from 1939 until its closure in 1997. The closure of Naval Air Station Alameda and transition to civilian use required an evaluation of the existing environmental conditions and the remediation of any conditions found to be potentially adverse to human health or ecological conditions. Initial evaluation of the existing environmental conditions of Alameda Point resulted in the facility being listed on the National Priority List. One aspect of this evaluation, the Groundwater Monitoring Program, and more specifically groundwater monitoring at IR Site 1, is presented in this report.

2.1 Hydrogeology

Five geologic units are identified at IR Site 1, including; the Artificial Fill, the Bay Sediment Unit (BSU), Merritt Sand, the Upper San Antonio Formation and the Yerba Buena Mud. The BSU and the Yerba Buena Mud act as aquitards (at least locally) across much of Alameda Point. These geologic units vary in thickness across the site. The geology is made complex by the presence of a large paleochannel eroded into the Merritt Sand and San Antonio Formation, which was subsequently filled with BSU.

The first water-bearing zone (FWBZ) is located in the Artificial Fill material and the upper BSU. The low permeability BSU separates the FWBZ from the second water-bearing zone (SWBZ). The SWBZ includes the Merritt Sand (where present) and the Upper San Antonio Formation. The FWBZ-SWBZ boundary at IR Site 1 is at the BSU-Merritt boundary except within the paleochannel where the boundary probably lies within the BSU. The boundary is not clearly defined within IR Site 1 and is tentatively assigned at depths associated with the surrounding Merritt Sand unit. Additional details of the site geology and hydrogeology are presented in the Work Plan (Shaw, 2003). Table 2-1, "Geologic and Hydrogeologic Units, Installation Restoration Site 1," presents the geologic and hydrogeologic units and their anticipated depths.

The water table is present within the fill at approximately 1 to 6 feet above mean sea level (msl) (2 to 8 feet below ground surface [bgs]). The potentiometric surface for the SWBZ is between 2 and 4 feet above msl (4 and 9 feet bgs). Based on the potentiometric surface map presented in the Work Plan (Shaw, 2003), groundwater flow direction is inferred to be generally to the northwest with some southward flow at the south site margin.

Table 2-1
Installation Restoration Site 1 Geologic and Hydrogeologic Units

Depth (feet bgs)	Geologic Unit	Hydrologic Unit
Surface to 20 feet	Artificial Fill	First Water-Bearing Zone
7 to 80 (thickest in paleochannel to north)	Bay Sediment Unit	Aquitard
45 to 70 (discontinuous, eroded by paleochannel locally)	Merritt Sand	Second Water-Bearing Zone
70 to 80 (partially eroded in paleochannel)	Upper San Antonio Formation	Second Water-Bearing Zone
Underlies Upper San Antonio or BSU where USA eroded	Yerba Buena Mud	Aquitard

bgs denotes below ground surface.
BSU denotes Bay Sediment Unit.
USA denotes Upper San Antonio.

2.2 Chemicals of Potential Concern

Previous investigations conducted at Site 1 identified chemicals of potential concern (COPCs) in groundwater that include chlorinated volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), total petroleum hydrocarbon (TPH) compounds, metals, and cyanide. Specific COPCs include the following:

- Trichloroethene
- 1,1-Dichloroethene (DCE)
- 1,2-DCE
- Vinyl chloride
- Cyanide
- Benzene
- Radium
- 2,4-Dimethylphenol
- 2-Methylphenol
- Toluene, ethylbenzene, and xylenes
- Lead

Maximum contaminant levels used for the comparison of site-specific COPCs are presented in Table 2-2, "Summary of Regulatory Limits, Installation Restoration Site 1."

Trichloroethene and cis-1,2-DCE have been detected in samples taken from well M002-A, near the north end of the northwest-southeast trending runway (Runway 13). Vinyl chloride and benzene have been detected in samples taken from well M001-E, also near the end of Runway 13. Benzene and vinyl chloride were detected in samples from wells M029-A and M001-A, located west of the terminus of Runway 13. Vinyl chloride was also detected in samples taken from wells M005-A and M032-A, located east of the IR Site 1 boundary. Details on the distribution of these constituents, as determined from previous studies, are presented in the Work Plan (Shaw, 2003).

2.3 Groundwater Monitoring Program

Twenty-eight wells are included in the Groundwater Monitoring Program to evaluate the groundwater at IR Site 1 (Table 2-3, "Groundwater Monitoring Program, Installation Restoration Site 1 Wells and Analytical Program"). Twenty of the wells are screened in the FWBZ and eight wells are screened in the SWBZ. The wells were selected based on their location to monitor the known plume boundaries and to provide data for monitored natural attenuation, as shown on Figure 1-2, "Site and Well Location Map, IR Site 1 Operable Unit 3."

The monitoring frequency is quarterly and semiannually (see Table 2-3). Constituents are monitored either quarterly or semiannually depending on the objective of individual wells.

Table 2-2: Summary of Regulatory Limits, Installation Restoration Site 1
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	Regulatory Limit (µg/L)	Source of Limit
Anions		
Nitrate	45,000	California Maximum Contaminant Level
Nitrite	1,000	California Maximum Contaminant Level
Cyanide		
Total Cyanide	200	California Maximum Contaminant Level
Gross Alpha/Beta		
Gross Alpha	15 (pCi/L)	California Maximum Contaminant Level
Gross Beta	50 (pCi/L)	California Maximum Contaminant Level
Mercury		
Mercury	2	California Maximum Contaminant Level
Metals		
Aluminum	1,000	California Maximum Contaminant Level
Antimony	6	California Maximum Contaminant Level
Arsenic	50	California Maximum Contaminant Level
Barium	1,000	California Maximum Contaminant Level
Beryllium	4	California Maximum Contaminant Level
Cadmium	5	California Maximum Contaminant Level
Chromium	50	California Maximum Contaminant Level
Copper	1,000	California Maximum Contaminant Level
Lead	15	California Maximum Contaminant Level
Nickel	100	California Maximum Contaminant Level
Selenium	50	California Maximum Contaminant Level
Thallium	2	California Maximum Contaminant Level
Semivolatile Organic Compounds		
Benzo(a)pyrene	0.2	California Maximum Contaminant Level
bis(2-Ethylhexyl)phthalate	4	California Maximum Contaminant Level
Hexachlorobenzene	1	California Maximum Contaminant Level
Hexachlorocyclopentadiene	50	California Maximum Contaminant Level
Pentachlorophenol	1	California Maximum Contaminant Level
Volatile Organic Compounds		
1,1,1-Trichloroethane	200	California Maximum Contaminant Level
1,1,2,2-Tetrachloroethane	1	California Maximum Contaminant Level
1,1,2-Trichloroethane	5	California Maximum Contaminant Level
1,1-Dichloroethane	5	California Maximum Contaminant Level
1,1-Dichloroethene	6	California Maximum Contaminant Level
1,2,4-Trichlorobenzene	5	California Maximum Contaminant Level
1,2-Dibromo-3-chloropropane	0.2	California Maximum Contaminant Level
1,2-Dibromoethane	0.05	California Maximum Contaminant Level
1,2-Dichlorobenzene	600	California Maximum Contaminant Level
1,2-Dichloroethane	0.5	California Maximum Contaminant Level
1,2-Dichloropropane	5	California Maximum Contaminant Level
1,4-Dichlorobenzene	5	California Maximum Contaminant Level
Benzene	1	California Maximum Contaminant Level
Carbon Tetrachloride	0.5	California Maximum Contaminant Level

Table 2-2: Summary of Regulatory Limits, Installation Restoration Site 1 (Continued)
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	Regulatory Limit (µg/L)	Source of Limit
Chlorobenzene	70	California Maximum Contaminant Level
cis-1,2-Dichloroethene	6	California Maximum Contaminant Level
Dibromochloromethane	100	California Maximum Contaminant Level
Ethylbenzene	300	California Maximum Contaminant Level
M,p-xylene	1,750	California Maximum Contaminant Level
Methyl tert-butyl ether	13	California Maximum Contaminant Level
Methylene Chloride	5	California Maximum Contaminant Level
O-xylene	1,750	California Maximum Contaminant Level
Styrene	100	California Maximum Contaminant Level
Tetrachloroethene	5	California Maximum Contaminant Level
Toluene	150	California Maximum Contaminant Level
trans-1,2-Dichloroethene	10	California Maximum Contaminant Level
Trichloroethene	5	California Maximum Contaminant Level
Trichlorofluoromethane	150	California Maximum Contaminant Level
Vinyl Chloride	0.5	California Maximum Contaminant Level

µg/L - micrograms per liter
pCi/L - pico curies per liter

Natural attenuation are measured semiannually. The constituents sampled and analyzed for are as follows:

- VOCs including oxygenates by U.S. Environmental Protection Agency (EPA) Method 8260B
- Pesticides by EPA Method 8081
- Purgeable and extractable TPH by EPA Method 8015B
- Dissolved metals by EPA Methods 6010B/6020/7470
- SVOCs by EPA Method 8270C
- Gross alpha and gross beta by EPA Method 7110C
- Radium by EPA Method 903
- Cyanide by EPA Method 9010B
- Anions (nitrate, nitrite, chloride, and sulfate) by EPA Methods 9056 or 300.0
- Monitored natural attenuation: ferrous iron using a field test kit, alkalinity using EPA Method 310.1, sulfide using EPA Method 376.1, and dissolved gases methane, ethane, and ethene using R.S. Kerr Laboratory Standard Operating Procedure

Table 2-3: Groundwater Monitoring Program, Installation Restoration Site 1 Wells and Analytical Program
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Water-Bearing Zone	Well	Geologic Unit	Top of Screen (ft. bgs)	Bottom of Screen (ft. bgs)	Well Depth* (ft. bgs)	Sampling Objective	VOCs (8260B)	SVOCs (8270C)	TPH as Diesel (8015B)	TPH as Gasoline (8015B)	Metals (6010B/6020A 7470A)	Total Cyanide (335.2)	Gross Alpha (900)	Gross Beta (900)	Radium (903.0)	Anions (300.0)	Sulfide (376.2)	Alkalinity (310.1)	Dissolved Gases (RSK175)	Ferrous Iron (8146)†
First	M001-A	Fill	4.0	14.0	15.0	Disposal area perimeter well	Q	Q	F	F	Q	Q	Q	Q	Q					
	M001-E	Fill	9.5	19.5	20.0	Disposal area perimeter well	Q	Q	F	F	Q	Q	Q	Q	Q					
	M002-A	Fill	4.0	10.0	10.5	Disposal area perimeter well	Q	Q	F	F	Q	Q	Q	Q	Q					
	M003-A	Fill	4.0	14.0	15.0	Disposal area perimeter well	Q	Q	F	F	Q	Q	Q	Q	Q					
	M004-A	Fill	3.5	13.5	14.5	Background MNA well	S	S	F	F	S	S	S	S	S	S	S	S	S	S
	M006-A	Fill	4.0	14.0	15.0	Monitor VOC plume perimeter	S	S	F	F	S	S	S	S	S					
	M007-A	Fill	3.5	13.5	14.0	General coverage for Bldgs 420, 497	S	S	F	F	S	S	S	S	S					
	M025-A	Fill	4.0	14.0	15.0	Monitor recurrence of cyanide	S	Q	F	F	Q	Q	S	S	S					
	M026-A	Fill	3.5	13.5	14.0	Disposal area perimeter - shoreline well	S	S	F	F	S	S	S	S	S					
	M026-E	Fill-BSU	11.0	21.0	21.5	Disposal area perimeter - shoreline well	S	S	F	F	S	S	S	S	S					
	M027-A	Fill	3.5	13.5	14.0	Disposal area perimeter well	Q	Q	F	F	Q	Q	Q	Q	Q	S	S	S	S	S
	M028-A	Fill	4.0	14.0	15.5	Monitor VOC plume - interior	Q	Q	F	F	Q	Q	Q	Q	Q	S	S	S	S	S
	M029-A	Fill	4.0	14.0	15.0	Disposal area perimeter - shoreline well	Q	Q	F	F	Q	Q	Q	Q	Q					
	M029-E	Fill	10.0	20.0	21.0	Disposal area perimeter - shoreline well	S	S	F	F	S	S	S	S	S					
	M030-A	Fill	2.5	12.5	12.5	Disposal area perimeter well	Q	Q	F	F	Q	Q	Q	Q	Q					
	M031-A	Fill	2.5	12.5	12.5	Disposal area perimeter well	Q	Q	F	F	Q	Q	Q	Q	Q					
	M032-A	Fill	2.5	12.5	12.5	Monitor VOC plume - interior	S	S	F	F	S	S	S	S	S					
	M033-A	Fill	4.3	12.5	12.5	Monitor VOC plume - perimeter	Q	Q	F	F	Q	Q	Q	Q	Q	S	S	S	S	S
	M034-A	Fill	4.3	12.5	12.5	Monitor VOC plume	Q	Q	F	F	Q	Q	Q	Q	Q					
	M035-A	Fill	4.0	14.0	14.0	Monitor VOC plume - perimeter	Q	Q	F	F	Q	Q	Q	Q	Q					
Second	M001-B	Merritt	62.0	72.0	77.0	Deep perimeter well	S	S	F	F	S	S	S	S	S					
	M003-B	Merritt	33.0	43.0	44.5	Deep perimeter well	S	S	F	F	S	S	S	S	S	S	S	S	S	S
	M025-C	BSU	70.0	79.5	80.0	Disposal area perimeter well	S	Q	F	F	Q	Q	S	S	S					
	M027-B	Merritt	56.0	66.0	66.5	Perimeter well - deep	S	S	F	F	S	S	S	S	S					
	M027-C	BSU-USA	80.0	90.0	94.0	Perimeter well - deep	S	S	F	F	S	S	S	S	S					
	M028-C	USA	80.0	90.0	90.0	Monitor VOC plume for vertical migration	Q	Q	F	F	Q	Q	Q	Q	Q	S	S	S	S	S
	M030-C	USA	76.5	86.5	89.5	Perimeter well - deep	S	S	F	F	S	S	S	S	S					
	M031-C	Merritt-USA	77.5	87.5	92.5	Perimeter well - deep	S	S	F	F	S	S	S	S	S					

Notes:

*Well Depth - Constructed well depth (to the base of sand pack)
ft. bgs - feet below ground surface
MNA - Monitored natural attenuation
VOC - Volatile organic compound
SVOC - Semivolatile Organic Compound
TPH - Total Petroleum Hydrocarbons
(8260B) - U.S. Environmental Protection Agency Analytical Method
†Hach field test
Fill - Artificial Fill
BSU - Bay Sediment Unit
USA - Upper San Antonio Formation
Merritt - Merritt Sand

F - Sampled first quarter (Summer 2002) only
Q - Sampled quarterly
S - Sampled semiannually

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3.0 Groundwater Monitoring Field Activities

The following subsections briefly describe the procedures followed, and protocols adhered to by Shaw during implementation of the Alameda Point Groundwater Monitoring Program. Additional details of the field activities are presented in Section 6.0 of the *Work Plan for Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California* (Work Plan) (Shaw, 2003). The primary field activities conducted include the following:

- Mobilization activities
- Groundwater level measurements
- Groundwater sampling activities
- Decontamination
- Investigation-derived waste (IDW) management

3.1 Mobilization

Mobilization for monitoring activities included obtaining equipment and materials, procuring the services of subcontractors, and conducting preparatory- and initial-phase quality control (QC) inspections. A preparatory-phase QC inspection was held prior to mobilization to discuss the project scope, status of the prerequisites required to start field work, health and safety requirements, field procedures, submittals, and QC protocols.

An initial-phase QC inspection was held at Alameda Point before commencement of the monitoring event to verify that the prerequisites were met. The Navy Resident Officer In Charge of Construction was notified of the initial-phase inspection.

The Shaw Health and Safety Officer conducted a health and safety orientation during mobilization. Additionally, Shaw and subcontractor personnel attended Tailgate Safety Meetings before commencement of each day's field activities. The objective of the indoctrination and daily Tailgate Safety Meetings was to alert site personnel to potential hazards and safety protocol.

3.2 Groundwater Level Measurements

Static groundwater level measurements were obtained, prior to monitoring well sampling, from each Installation Restoration (IR) Site 1 monitoring well from which analytical samples were intended to be collected. Additionally, the water levels were measured in select site wells not identified for sampling in the program so that a more complete assessment of the water level elevations and flow directions could be conducted. Groundwater level measurements were collected in accordance with Section 5.4 of the Work Plan (Shaw, 2003).

3.3 Groundwater Sampling Activities

The groundwater monitoring wells sampled and analyte groups evaluated at IR Site 1 are those recommended in the Work Plan (Shaw, 2003). The IR Site 1 Groundwater Monitoring Program wells were sampled using a low-flow peristaltic pump. Groundwater in wells was purged prior to sampling, following low-flow purging techniques described in the Work Plan (Shaw, 2003), until field parameters stabilized up to three well casing volumes of groundwater were removed. The sampling activities were conducted in the following order at each monitoring well:

- Recorded the well number, checked well for visual damage, and recorded conditions on the Purge Log and Collected Sample Form.
- Crew approached each well from the upwind side, uncapped well, and used a photoionization detector (PID) meter and combustible gas/oxygen meter to measure for potential organic vapors in the breathing zone and well annulus. Results were recorded on the Purge Log and Collected Sample Form. The PID and combustible gas/oxygen meter were calibrated daily.
- The well cap was fully removed if well vapor levels were below health and safety action levels .
- Crew measured the depth to groundwater, with a water-level meter and recorded the depth on the Purge Log and Collected Sample Form.
- Crew purged the well using a low-flow peristaltic pump at a flowrate of 300 to 500 milliliters per minute while monitoring the amount of drawdown. The purge volume, pumping rate, and groundwater field parameters were recorded on the Purge Log and Collected Sample Form initially and following each 5 minutes of purging. The following groundwater field stabilization parameters were measured and recorded:
  - Temperature
  - Specific conductivity
  - Dissolved oxygen
  - pH

In addition, turbidity and oxidation-reduction potential readings were collected but were not used for determining whether the groundwater in the well had stabilization.

- Samples were collected following completion of purging. The purge flowrate was reduced to a maximum of 100 milliliters per minute during volatile organic compound (VOC) and total petroleum hydrocarbon measured as purgeables sample collection. The target flowrate was verified using a watch and graduated cylinder and recorded on the Purge Log and Collected Sample Form.
- Laboratory sample bottles were filled in the order of most volatile analyses first, as indicated in the Work Plan (Shaw, 2003). The collection order was as follows:

- VOCs
- Dissolved gases
- Pesticides
- Metals
- Anions
- Sulfide
- Alkalinity

- A unique sample label was attached to each sample container and the Chain-of-Custody (COC) Record was updated. Each glass sample container was immediately placed in bubble wrap and a Ziploc® bag, and each plastic sample container was immediately placed only in a Ziploc® bag. They were then placed in a cooler containing a temperature blank and ice. The temperature blank was placed in the coolers each morning before leaving the office for the sample location. Also, a trip blank (prepared by the laboratory) was placed in the cooler containing VOC samples, prior to leaving the office to sample, and kept in the cooler.

- After sampling was completed, the sample coolers with their associated COC Records were taken to the office and prepared for shipment. Preparation consisted of conducting a QC check of the sample containers, placing bubble wrap on the bottom of the cooler, restocking the cooler with an appropriate amount of double-bagged ice to maintain a cooler temperature of 4 degrees Celsius (°C) plus or minus 2°C. The COC Record was placed in a Ziploc® bag and placed in the sample cooler. The sample cooler was then sealed and secured for shipment with tape, and custody seals were placed across the opening of the lid.

Field personnel were responsible for properly preserving, packaging, labeling, documenting, storing, handling, and shipping samples obtained during the sampling event. Sample handling, documentation, and custody protocols followed appropriate procedures that are detailed in the Work Plan (Shaw, 2003). Field QC samples were collected or prepared to evaluate if sampling practices impacted the analytical results. Field QC samples consisted of field duplicate, trip blank, and equipment rinsate samples.

Groundwater samples were transported daily to the analytical laboratory.

3.4 Decontamination

Procedures used for the decontamination of non-dedicated field equipment during the groundwater sampling activities were in accordance with the Work Plan (Shaw, 2003). Non-dedicated purging and sampling equipment were decontaminated before use at each well. Field monitoring instrumentation and water level meters were decontaminated before use. Well sampling was conducted with a peristaltic pump that used dedicated high-density polyethylene

tubing and disposable silicon tubing at the pump head for each well. As a result of this approach decontamination of the pump and tubing was not required.

3.5 Investigation-Derived Waste Management

Investigation-derived waste was managed in accordance with the Work Plan (Shaw, 2003). Investigation-derived waste generated from well purging and sampling and equipment decontamination, was managed by containerizing the waste fluids in truck-mounted plastic tanks. Each day the contents of the truck-mounted tanks were transferred to a stationary poly tank, with secondary containment, located at Building 112.

A composite sample of the IDW water was collected and analyzed for parameters consistent with the basewide waste disposal permit issued by East Bay Municipal Utility District. Following receipt of results and verification that disposal permit requirements were met, the IDW was transported and disposed at the East Bay Municipal Utility District Water Treatment Plant.

Personal protective equipment and miscellaneous refuse (i.e., plastic sheeting and sample tubing) were bagged and disposed as general refuse.

4.0 Summer 2002 Monitoring Event Summary and Results

The Summer 2002 sampling activities were performed between June 17 and July 24, 2002. Twenty-eight Groundwater Monitoring Program wells were sampled between June 26, and July 17, 2002 at Installation Restoration (IR) Site 1 (see Figure 1-2, "Site and Well Location Map, IR Site 1 Operable Unit 3"). Twenty of the wells were completed in the Fill or Fill-Bay Sediment Unit (BSU) in the first water-bearing zone (FWBZ). Eight sampled wells were completed in the BSU, Merritt Sand, or Upper San Antonio in the second water-bearing zone (SWBZ). These Groundwater Monitoring Program wells and analytical parameters were as recommended in the *Work Plan for Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California* (Work Plan) (Shaw, 2003). The sampling was conducted in accordance with the Work Plan (Shaw, 2003).

4.1 Groundwater Level Measurement Summary

At IR Site 1, the water levels in all sampled wells were measured between June 26 and July 15, 2002. Table 4-1, "Summary of Groundwater Level Measurements, Installation Restoration Site 1, Summer 2002," provides a summary of the groundwater levels measured. Groundwater levels within the FWBZ for Summer 2002 were approximately 2.4 to 7.9 feet below ground surface (bgs) with elevations ranging between 1.2 and 6.0 feet above mean sea level (msl). Groundwater levels within the FWBZ for Summer 2002 were approximately 4.4 to 8.8 feet bgs with elevations ranging between 2.42 and 4.37 feet above msl. Due to the length of time (approximately 17 days) that the water levels were measured, a groundwater elevation map was not produced for the Summer 2002 event.

4.2 Analytical Program

The analytical samples were collected and analyzed according to the requirements presented in the Work Plan (Shaw, 2003) and Table 2-3, "Groundwater Monitoring Program, Installation Restoration Site 1 Wells and Analytical Program," as follows:

- Volatile organic compounds (VOCs), including oxygenated additives and naphthalene by U.S. Environmental Protection Agency (EPA) Method 8260B
- Pesticides by EPA Method 8081
- Total petroleum hydrocarbons (TPH) measured as purgeable (gasoline) by EPA Method 8015B
- TPH measured as extractable (jet fuel, diesel, and motor oil) by EPA Method 8015B
- Dissolved metals by EPA Method 6010B/6020/7470

Table 4-1: Summary of Groundwater Level Measurements, Installation Restoration Site 1
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Well ID	Date	Top of Casing Elevation† (feet MSL)	Depth to Water* (feet)	Groundwater Elevation (feet MSL)
M001-A	6/27/2002	9.02	7.90	1.12
M001-B	7/2/2002	9.57	6.18	3.39
M001-E	6/27/2002	9.74	5.73	4.01
M002-A	6/26/2002	10.94	6.51	4.43
M003-A	6/26/2002	10.81	6.14	4.67
M003-B	7/1/2002	11.23	8.81	2.42
M004-A	6/26/2002	10.27	6.05	4.22
M006-A	6/26/2002	10.29	4.30	5.99
M007-A	6/26/2002	8.22	2.35	5.87
M025-A	7/1/2002	8.51	5.58	2.93
M025-C	7/1/2002	7.97	3.60	4.37
M026-A	7/12/2002	8.61	5.55	3.06
M026-E	7/1/2002	8.65	5.40	3.25
M027-A	6/28/2002	9.38	5.16	4.22
M027-B	7/2/2002	9.33	6.18	3.15
M027-C	7/2/2002	8.92	5.60	3.32
M028-A	7/1/2002	10.67	6.68	3.99
M028-C	7/2/2002	10.86	7.81	3.05
M029-A	6/27/2002	9.46	5.51	3.95
M029-E	6/27/2002	8.62	4.67	3.95
M030-A	6/27/2002	10.08	6.12	3.96
M030-C	7/15/2002	10.41	7.86	2.55
M031-A	6/28/2002	8.47	3.79	4.68
M031-C	7/2/2002	8.87	5.28	3.59
M032-A	6/26/2002	9.84	4.20	5.64
M033-A	6/28/2002	10.14	5.78	4.36
M034-A	6/28/2002	8.87	4.39	4.48
M035-A	6/28/2002	10.58	6.23	4.35

† Surveyed to NGVD 29 by Calvada Surveying in September 2002
Subsequently converted to NAVD 88 by Shaw E&I using the Corpscon software
* Depth to water from top of casing
MSL Mean Sea Level

- Anions (chloride, nitrate, nitrite, and sulfate) by EPA Method 9056 or 300.0
- Sulfide by EPA Method 376.1
- Alkalinity by EPA Method 310.1
- Dissolved gases (methane, ethene, and ethane) by R.S. Kerr Laboratory Standard Operating Procedure (SOP)
- Semivolatile organic compounds (SVOCs) by EPA Method 8270C
- Gross alpha and gross beta by EPA Method 7110C
- Radium by EPA Method 903
- Cyanide by EPA Method 9010B
- Anions (nitrate, nitrite, chloride, and sulfate) by EPA Method 9056 or 300.0
- Natural attenuation: ferrous iron by Hach field test kit; alkalinity by EPA Method 310.1, sulfide by EPA Method 376.2, and dissolved gases (methane, ethane, and ethene) by R.S. Kerr Laboratory SOP

The samples were analyzed by Curtis and Tompkins, Ltd., which subcontracted the dissolved gases analysis to Air Toxics, Ltd. Both laboratories are State of California-certified and have successfully completed the Naval Facilities Engineering Service Center's Laboratory Evaluation Program.

4.3 Analytical Results Summary

This section presents a brief summary of the analytical results. Analytical data were compared to historical results and to the California State Maximum Contaminant Levels (MCLs) (California Code of Regulations Title 22). The California State MCLs were used only for comparison purposes. Criteria for comparison of analytical results are presented in Table 2-2, "Summary of Regulatory Limits, Installation Restoration Site 1." Discussion of the analytical results is limited to observations made relative to regulatory criteria and historic data.

A complete listing of all analytical results is provided on compact disc in Appendix A, "Analytical Data with Data Qualifiers and Reason Code Definitions." The analytical data were validated at EPA Level III by a third-party validator (Laboratory Data Consultants of Carlsbad, California) and reviewed by the Shaw Project Chemist. The findings of the data validation process are also provided on compact disc and presented in Appendix B, "Data Quality Summary Report, Summer to Fall 2002." Analytical results for some silver and cyanide were rejected during data validation and were not applied to site evaluation.

4.3.1 Detected Chemical of Potential Concern Results

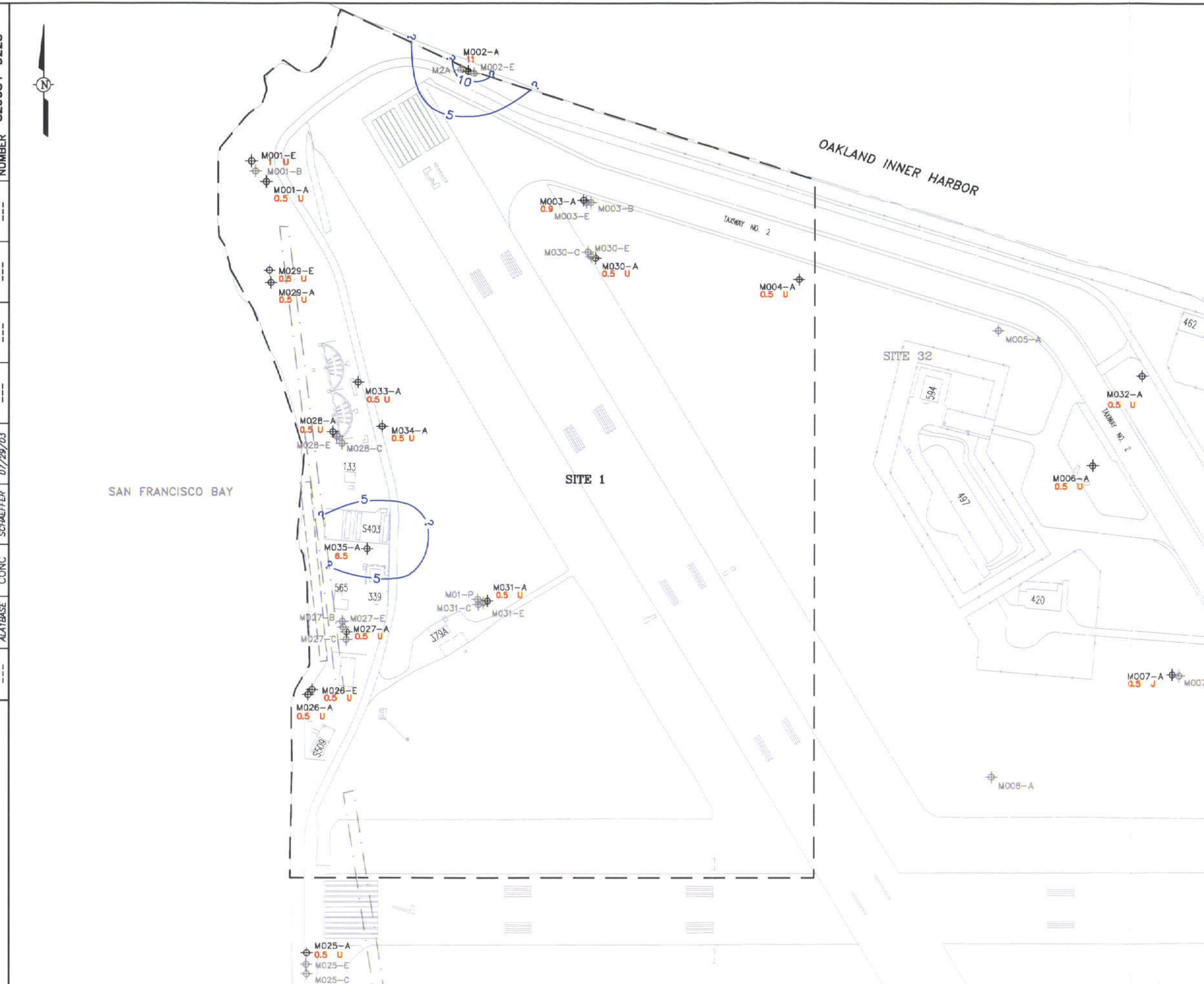
Detected analytical results are provided in Table 4-2, "Detected Parameters, Installation Restoration Site 1, Summer 2002." Detected analytes are bolded and those exceeding the respective California State MCLs (see Table 2-2) are circled on the table. A complete listing of analytical results is provided on a compact disc as Appendix A.

Constituents detected during the Summer 2002 included VOCs, SVOCs, TPH, metals, methane, radium, gross alpha and beta. Analyte concentrations detected during the Summer 2002 monitoring event are provided in Table 4-2. Of the 28 monitoring wells at IR Site 1, samples from 13 wells were found to have constituents above the California State MCLs. These include the following:

- Trichloroethene was detected above the California State MCL of 5 micrograms per liter (µg/L) in samples taken from two wells M002-A (11 µg/L) and M035-A (6.5 µg/L).
- Cis-1,2-dichloroethene was detected above the California State MCL of 6 µg/L in samples taken from three wells (M002-A, M028-A, and M033-A) at concentrations of 6.2 µg/L, 7.7 µg/L, and 7.9 µg/L, respectively.
- Vinyl chloride was detected above the California State MCL of 0.5 µg/L in samples taken from three wells (M028-A, M032-A, and M033-A) at concentrations of 12 µg/L, 1 µg/L, and 2.2 µg/L, respectively.
- Benzene was detected above the California State MCL of 1 µg/L in samples taken from five wells (M001-E, M029-E, M029-A, M028-A, and M034A) at concentrations that ranged from 1.2 to 30 µg/L.
- 1,2-dichloroethane was detected above the California State MCL of 0.5 µg/L in a sample taken from well M032-A at a concentration of 0.8 µg/L.
- Gross alpha was detected at the California State MCL of 15 pico curies per liter (pCi/L) in a sample taken from well M032-A (15 ± 3.84 pCi/L).
- Gross beta was detected above the California State MCL of 50 pCi/L in samples taken from wells M001-B, M003-B, M027-B, M028-C and M030-C at concentrations ranging from 139 pCi/L to 265 pCi/L.

Concentration contours for selected VOCs are presented in this report on the following figures:

- Figure 4-1, "Trichloroethene, First Water-Bearing Zone, IR Site 1 Operable Unit 3, Summer 2002"
- Figure 4-2, "Cis-1,2-Dichloroethene, First Water-Bearing Zone, IR Site 1 Operable Unit 3, Summer 2002"



LEGEND

- PROGRAM MONITORING WELL
- MONITORING WELL NOT IN PROGRAM OR NOT SCREENED IN SPECIFIED HYDROLOGIC UNIT
- TRICHLOROETHENE ISOCONCENTRATION CONTOUR, QUERIED WHERE UNCERTAIN
- 6.5 U — RESULT (µg/L)/QUALIFIER
- CERCLA BOUNDARY
- BARGE LINES (1949 AERIAL SURVEY)
- BARGE LINES (1957 AERIAL SURVEY)
- J — ESTIMATED RESULT
- D — DILUTION
- U — NOT DETECTED AT SPECIFIED REPORTING LIMIT

NOTES:

1. POSITION OF BARGE LINES ARE INFERRED.
2. MCL IS 5 µg/L (TITLE 28 CALIFORNIA CODE OF REGULATIONS, 2002)
3. µg/L IN MICROGRAMS PER LITER.

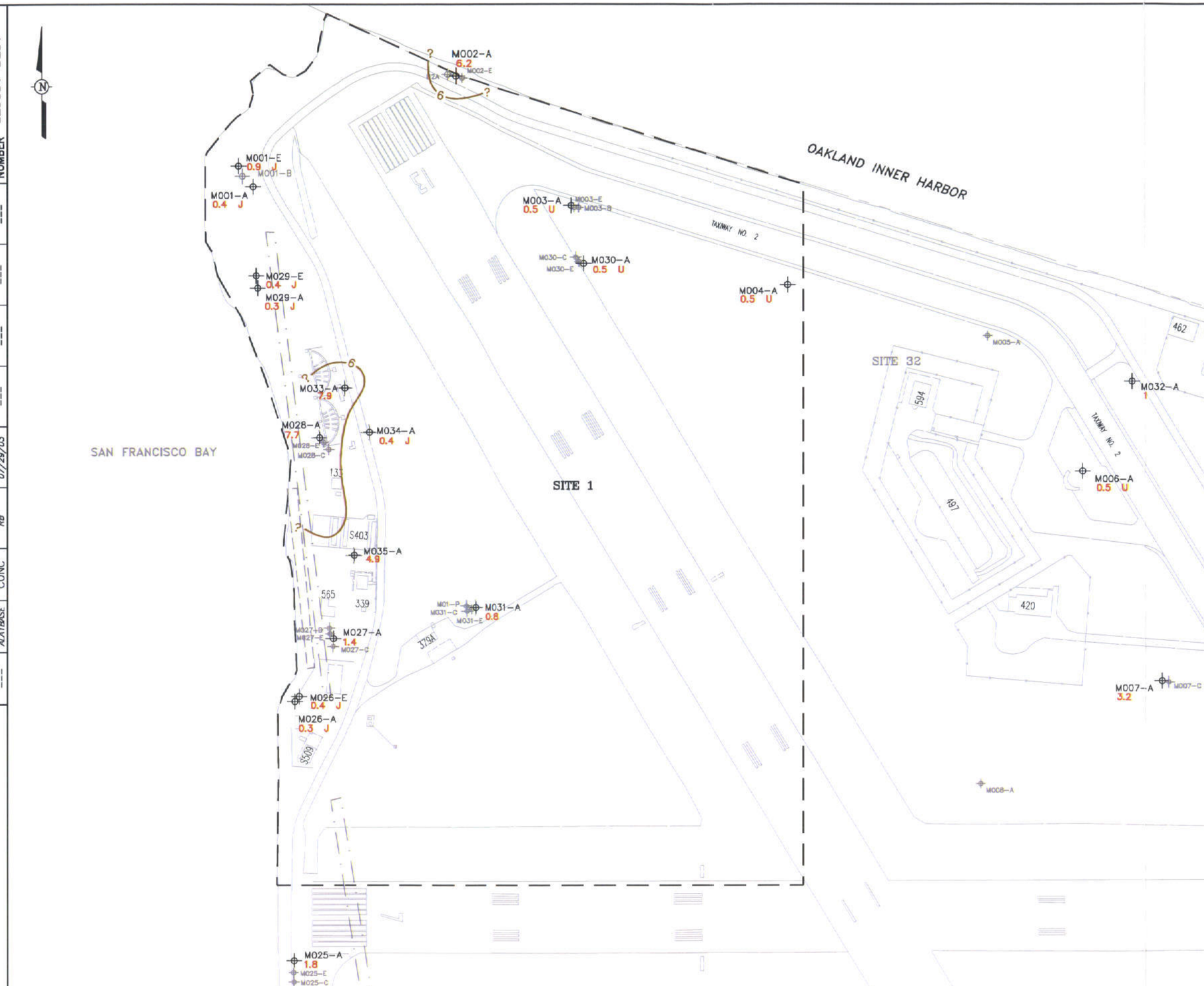
SCALE
0 120 240 FEET

Shaw Environmental, Inc.

DEPARTMENT OF THE NAVY, SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
SAN DIEGO, CALIFORNIA

FIGURE 4-1
TRICHLOROETHENE
FIRST WATER-BEARING ZONE
IR SITE 1 OPERABLE UNIT 3
SUMMER 2002
ALAMEDA POINT ALAMEDA, CALIFORNIA

IMAGE	X-REF	OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
---	ALATBASE	CONC	SCHAEFFER 07/29/03	--- ---	--- ---	829084-D228



LEGEND

- PROGRAM MONITORING WELL
- MONITORING WELL NOT IN PROGRAM OR NOT SCREENED IN SPECIFIED HYDROLOGIC UNIT
- CIS-1,2-DICHLOROETHENE ISOCONCENTRATION CONTOUR, QUERIED WHERE UNCERTAIN
- 7.7 U — RESULT (µg/L)/QUALIFIER
- CERCLA BOUNDARY
- BARGE LINES (1949 AERIAL SURVEY)
- BARGE LINES (1957 AERIAL SURVEY)
- J — ESTIMATED RESULT
- D — DILUTION
- U — NOT DETECTED AT SPECIFIED REPORTING LIMIT

NOTES:

1. POSITION OF BARGE LINES ARE INFERRED.
2. MCL IS 6 µg/L (TITLE 26 CALIFORNIA CODE OF REGULATIONS, 2002)
3. µg/L IN MICROGRAMS PER LITER.

SCALE 0 120 240 FEET

Shaw Environmental, Inc.

DEPARTMENT OF THE NAVY, SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
SAN DIEGO, CALIFORNIA

FIGURE 4-2
CIS-1,2-DICHLOROETHENE
FIRST WATER-BEARING ZONE
IR SITE 1 OPERABLE UNIT 3
SUMMER 2002
ALAMEDA POINT ALAMEDA, CALIFORNIA

DRAWING NUMBER	APPROVED BY	CHECKED BY	DRAWN BY	OFFICE	X-REF	IMAGE
829084-D231	---	---	RB 07/29/03	CONC.	ALATBASE	---

Table 4-2: Detected Parameters at Installation Restoration Site 1
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M001-A				
Volatile Organic Compounds				
Acetone			µg/L	10 U
Benzene	1		µg/L	**0.7**
tert-butyl alcohol			µg/L	20 U
N-butylbenzene			µg/L	0.5 U
sec-butylbenzene			µg/L	0.5 U
tert-butylbenzene			µg/L	0.5 U
Carbon Disulfide			µg/L	0.5 U
Chlorobenzene	70		µg/L	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**0.4 J**
trans-1,2-Dichloroethene	10		µg/L	0.5 U
Ethylbenzene	300		µg/L	0.5 U
Isopropyl Ether			µg/L	0.5 U
Isopropylbenzene			µg/L	0.5 U
p-Isopropyltoluene			µg/L	0.5 U
N-propylbenzene			µg/L	0.5 U
Naphthalene			µg/L	**0.3 J**
Tetrachloroethene	5		µg/L	0.5 U
Toluene	150		µg/L	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U
Trichloroethene	5		µg/L	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U
M,p-xylene	1,750		µg/L	0.5 U
O-xylene	1,750		µg/L	0.5 U
Semivolatile Organic Compounds				
Acenaphthene			µg/L	10 U
Anthracene			µg/L	10 U
bis(2-Chloroethyl)ether			µg/L	10 U
bis(2-chloroisopropyl) ether			µg/L	10 U
Dibenzofuran			µg/L	10 U
1,2-Dichlorobenzene	600		µg/L	10 U
1,4-Dichlorobenzene	5		µg/L	10 U
2,4-Dimethylphenol			µg/L	10 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M001-A				
Semivolatile Organic Compounds				
Dimethylphthalate			µg/L	10 U
Fluoranthene			µg/L	10 U
Fluorene			µg/L	10 U
2-Methylnaphthalene			µg/L	10 U
Naphthalene			µg/L	10 U
Phenanthrene			µg/L	10 U
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 U
Jet Fuel #5 (JP5)			µg/L	50 U
TPH, as motor oil			µg/L	300 U
TPH as Gasoline				
TPH, as gasoline			µg/L	50 U
TPH (calculated)				
Total TPH (calculated)			µg/L	300 U
Metals				
Aluminum	1,000	439	µg/L	**8.5 J**
Antimony	6	46	µg/L	**0.38 J**
Arsenic	50	28	µg/L	**1.3 J**
Barium	1,000	575	µg/L	**160**
Beryllium	4	3.8	µg/L	**0.025 J**
Cadmium	5	5.4	µg/L	5 U
Chromium	50	14	µg/L	**0.46 J**
Cobalt		12	µg/L	**0.16 J**
Copper	1,000	27	µg/L	**0.51 J**
Iron		7,135	µg/L	**300**
Lead	15	3.9	µg/L	**0.42 J**
Manganese		5,213	µg/L	**92**
Mercury	2	0.15	µg/L	0.2 U
Molybdenum		12	µg/L	20 U
Nickel	100	19	µg/L	**0.83 J**
Selenium	50	6.0	µg/L	**1 J**
Silver		3.3	µg/L	5 UJ
Vanadium		29	µg/L	**0.59 J**
Zinc		43	µg/L	20 U
Calcium		379	mg/L	**47**
Magnesium		500	mg/L	**26 J**
Potassium		182	mg/L	**25**
Sodium		4,540	mg/L	**270**
Cyanide				
Total Cyanide	0.2		mg/L	**0.01 J**

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M001-A				
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	0.671 U2
Gross Beta	50		pCi/L	**11**
Radium				
Radium			pCi/L	0.202 U2
M001-B				
Volatile Organic Compounds				
Acetone			µg/L	10 U
Benzene	1		µg/L	0.5 U
tert-butyl alcohol			µg/L	20 U
N-butylbenzene			µg/L	0.5 U
sec-butylbenzene			µg/L	0.5 U
tert-butylbenzene			µg/L	0.5 U
Carbon Disulfide			µg/L	0.5 U
Chlorobenzene	70		µg/L	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U
1,1-Dichloroethane	5		µg/L	**0.2 J**
1,2-Dichloroethane	0.5		µg/L	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U
Ethylbenzene	300		µg/L	0.5 U
Isopropyl Ether			µg/L	0.5 U
Isopropylbenzene			µg/L	0.5 U
p-Isopropyltoluene			µg/L	0.5 U
N-propylbenzene			µg/L	0.5 U
Naphthalene			µg/L	2 U
Tetrachloroethene	5		µg/L	0.5 U
Toluene	150		µg/L	**3.3**
1,1,1-Trichloroethane	200		µg/L	**1.4**
Trichloroethene	5		µg/L	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U
M,p-xylene	1,750		µg/L	0.5 U
O-xylene	1,750		µg/L	0.5 U
Semivolatile Organic Compounds				
Acenaphthene			µg/L	9.4 U
Anthracene			µg/L	9.4 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M001-B				
Semivolatile Organic Compounds				
bis(2-Chloroethyl)ether			µg/L	9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U
Dibenzofuran			µg/L	9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U
Dimethylphthalate			µg/L	**57**
Fluoranthene			µg/L	9.4 U
Fluorene			µg/L	9.4 U
2-Methylnaphthalene			µg/L	9.4 U
Naphthalene			µg/L	9.4 U
Phenanthrene			µg/L	9.4 U
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 UJ
Jet Fuel #5 (JP5)			µg/L	50 UJ
TPH, as motor oil			µg/L	300 UJ
TPH as Gasoline				
TPH, as gasoline			µg/L	50 U
TPH (calculated)				
Total TPH (calculated)			µg/L	300 U
Metals				
Aluminum	1,000	439	µg/L	100 U
Antimony	6	46	µg/L	50 U
Arsenic	50	28	µg/L	5 U
Barium	1,000	575	µg/L	**65**
Beryllium	4	3.8	µg/L	2 U
Cadmium	5	5.4	µg/L	5 U
Chromium	50	14	µg/L	**3.4 J**
Cobalt		12	µg/L	**9 J**
Copper	1,000	27	µg/L	**7.8 J**
Iron		7,135	µg/L	**1,400**
Lead	15	3.9	µg/L	3 U
Manganese		5,213	µg/L	**7,100**
Mercury	2	0.15	µg/L	0.2 U
Molybdenum		12	µg/L	20 U
Nickel	100	19	µg/L	20 U
Selenium	50	6.0	µg/L	5 U
Silver		3.3	µg/L	**4.8 J**
Vanadium		29	µg/L	**1.6 J**
Zinc		43	µg/L	28 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M001-B				
Metals				
Calcium		379	mg/L	**550**
Magnesium		500	mg/L	**1,000**
Potassium		182	mg/L	**110**
Sodium		4,540	mg/L	**5,200**
Cyanide				
Total Cyanide	0.2		mg/L	0.01 U
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	**12**
Gross Beta	50		pCi/L	**139**
Radium				
Radium			pCi/L	0.406 U4
M001-E				
Volatile Organic Compounds				
Acetone			µg/L	20 U
Benzene	1		µg/L	**4.9**
tert-butyl alcohol			µg/L	40 U
N-butylbenzene			µg/L	1 U
sec-butylbenzene			µg/L	1 U
tert-butylbenzene			µg/L	1 U
Carbon Disulfide			µg/L	1 U
Chlorobenzene	70		µg/L	**10**
1,2-Dichlorobenzene	600		µg/L	**1.4**
1,3-Dichlorobenzene			µg/L	1 U
1,4-Dichlorobenzene	5		µg/L	1 U
1,1-Dichloroethane	5		µg/L	1 U
1,2-Dichloroethane	0.5		µg/L	1 U
1,1-Dichloroethene	6		µg/L	1 U
cis-1,2-Dichloroethene	6		µg/L	**0.9 J**
trans-1,2-Dichloroethene	10		µg/L	1 U
Ethylbenzene	300		µg/L	**2.9**
Isopropyl Ether			µg/L	1 U
Isopropylbenzene			µg/L	**0.6 J**
p-Isopropyltoluene			µg/L	1 U
N-propylbenzene			µg/L	1 U
Naphthalene			µg/L	**210**
Tetrachloroethene	5		µg/L	1 U
Toluene	150		µg/L	**0.8 J**
1,1,1-Trichloroethane	200		µg/L	1 U
Trichloroethene	5		µg/L	1 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M001-E				
Volatile Organic Compounds				
1,2,4-Trimethylbenzene			µg/L	**0.8 J**
1,3,5-Trimethylbenzene			µg/L	1 U
Vinyl Chloride	0.5		µg/L	1 U
M,p-xylene	1,750		µg/L	**1.3**
O-xylene	1,750		µg/L	**8.4**
Semivolatile Organic Compounds				
Acenaphthene			µg/L	**1.5 J**
Anthracene			µg/L	**1.5 J**
bis(2-Chloroethyl)ether			µg/L	**0.94 J**
bis(2-chloroisopropyl) ether			µg/L	9.4 U
Dibenzofuran			µg/L	**0.96 J**
1,2-Dichlorobenzene	600		µg/L	**1.2 J**
1,4-Dichlorobenzene	5		µg/L	9.4 U
2,4-Dimethylphenol			µg/L	**2.2 J**
Dimethylphthalate			µg/L	9.4 U
Fluoranthene			µg/L	**1.5 J**
Fluorene			µg/L	9.4 U
2-Methylnaphthalene			µg/L	9.4 U
Naphthalene			µg/L	**4.1 J**
Phenanthrene			µg/L	**1.2 J**
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 U
Jet Fuel #5 (JP5)			µg/L	50 U
TPH, as motor oil			µg/L	300 U
TPH as Gasoline				
TPH, as gasoline			µg/L	**140**
TPH (calculated)				
Total TPH (calculated)			µg/L	**140**
Metals				
Aluminum	1,000	439	µg/L	**10 J**
Antimony	6	46	µg/L	**1.8 J**
Arsenic	50	28	µg/L	**1.3 J**
Barium	1,000	575	µg/L	**110**
Beryllium	4	3.8	µg/L	**0.077 J**
Cadmium	5	5.4	µg/L	5 U
Chromium	50	14	µg/L	**0.88 J**
Cobalt		12	µg/L	**0.21 J**
Copper	1,000	27	µg/L	**0.29 J**
Iron		7,135	µg/L	**160**
Lead	15	3.9	µg/L	**0.64 J**

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M001-E				
Metals				
Manganese		5,213	µg/L	**32 J**
Mercury	2	0.15	µg/L	0.2 U
Molybdenum		12	µg/L	20 U
Nickel	100	19	µg/L	**0.76 J**
Selenium	50	6.0	µg/L	**1.7 J**
Silver		3.3	µg/L	5 UJ
Vanadium		29	µg/L	**1.2 J**
Zinc		43	µg/L	20 U
Calcium		379	mg/L	**5.8**
Magnesium		500	mg/L	**4.8 J**
Potassium		182	mg/L	**46**
Sodium		4,540	mg/L	**580**
Cyanide				
Total Cyanide	0.2		mg/L	**0.05**
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	2.43 U4
Gross Beta	50		pCi/L	**2.11**
Radium				
Radium			pCi/L	0.068 U3
M002-A				
Volatile Organic Compounds				
Acetone			µg/L	10 U
Benzene	1		µg/L	0.5 U
tert-butyl alcohol			µg/L	20 U
N-butylbenzene			µg/L	0.5 U
sec-butylbenzene			µg/L	0.5 U
tert-butylbenzene			µg/L	0.5 U
Carbon Disulfide			µg/L	0.5 U
Chlorobenzene	70		µg/L	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**6.2**
trans-1,2-Dichloroethene	10		µg/L	0.5 U
Ethylbenzene	300		µg/L	0.5 U
Isopropyl Ether			µg/L	0.5 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M002-A				
Volatile Organic Compounds				
Isopropylbenzene			µg/L	0.5 U
p-Isopropyltoluene			µg/L	0.5 U
N-propylbenzene			µg/L	0.5 U
Naphthalene			µg/L	2 U
Tetrachloroethene	5		µg/L	0.5 U
Toluene	150		µg/L	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U
Trichloroethene	5		µg/L	**11**
1,2,4-Trimethylbenzene			µg/L	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U
M,p-xylene	1,750		µg/L	0.5 U
O-xylene	1,750		µg/L	0.5 U
Semivolatile Organic Compounds				
Acenaphthene			µg/L	9.5 U
Anthracene			µg/L	9.5 U
bis(2-Chloroethyl)ether			µg/L	9.5 U
bis(2-chloroisopropyl) ether			µg/L	9.5 U
Dibenzofuran			µg/L	9.5 U
1,2-Dichlorobenzene	600		µg/L	9.5 U
1,4-Dichlorobenzene	5		µg/L	9.5 U
2,4-Dimethylphenol			µg/L	9.5 U
Dimethylphthalate			µg/L	9.5 U
Fluoranthene			µg/L	9.5 U
Fluorene			µg/L	9.5 U
2-Methylnaphthalene			µg/L	9.5 U
Naphthalene			µg/L	9.5 U
Phenanthrene			µg/L	9.5 U
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 U
Jet Fuel #5 (JP5)			µg/L	50 U
TPH, as motor oil			µg/L	300 U
TPH as Gasoline				
TPH, as gasoline			µg/L	50 U
TPH (calculated)				
Total TPH (calculated)			µg/L	300 U
Metals				
Aluminum	1,000	439	µg/L	**8.2 J**
Antimony	6	46	µg/L	**0.29 J**
Arsenic	50	28	µg/L	**2.6 J**

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M002-A				
Metals				
Barium	1,000	575	µg/L	**60**
Beryllium	4	3.8	µg/L	2 U
Cadmium	5	5.4	µg/L	5 U
Chromium	50	14	µg/L	10 U
Cobalt		12	µg/L	**0.69 J**
Copper	1,000	27	µg/L	**1.3 J**
Iron		7,135	µg/L	**390**
Lead	15	3.9	µg/L	3 U
Manganese		5,213	µg/L	**57**
Mercury	2	0.15	µg/L	0.2 U
Molybdenum		12	µg/L	**2 J**
Nickel	100	19	µg/L	**2.7 J**
Selenium	50	6.0	µg/L	**1.1 J**
Silver		3.3	µg/L	5 U
Vanadium		29	µg/L	10 U
Zinc		43	µg/L	**0.73 J**
Calcium		379	mg/L	**160**
Magnesium		500	mg/L	**26 J**
Potassium		182	mg/L	**15**
Sodium		4,540	mg/L	**220**
Cyanide				
Total Cyanide	0.2		mg/L	0.01 U
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	**3.3**
Gross Beta	50		pCi/L	**22.8**
Radium				
Radium			pCi/L	0.276 U2
Sulfide				
Sulfide			mg/L	0.04 U
M003-A				
Volatile Organic Compounds				
Acetone			µg/L	10 U
Benzene	1		µg/L	0.5 U
tert-butyl alcohol			µg/L	20 U
N-butylbenzene			µg/L	0.5 U
sec-butylbenzene			µg/L	0.5 U
tert-butylbenzene			µg/L	0.5 U
Carbon Disulfide			µg/L	0.5 U
Chlorobenzene	70		µg/L	0.5 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M003-A				
Volatile Organic Compounds				
1,2-Dichlorobenzene	600		µg/L	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U
Ethylbenzene	300		µg/L	0.5 U
Isopropyl Ether			µg/L	0.5 U
Isopropylbenzene			µg/L	0.5 U
p-Isopropyltoluene			µg/L	0.5 U
N-propylbenzene			µg/L	0.5 U
Naphthalene			µg/L	2 U
Tetrachloroethene	5		µg/L	0.5 U
Toluene	150		µg/L	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U
Trichloroethene	5		µg/L	**0.9**
1,2,4-Trimethylbenzene			µg/L	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U
M,p-xylene	1,750		µg/L	0.5 U
O-xylene	1,750		µg/L	0.5 U
Semivolatile Organic Compounds				
Acenaphthene			µg/L	9.5 U
Anthracene			µg/L	9.5 U
bis(2-Chloroethyl)ether			µg/L	9.5 U
bis(2-chloroisopropyl) ether			µg/L	9.5 U
Dibenzofuran			µg/L	9.5 U
1,2-Dichlorobenzene	600		µg/L	9.5 U
1,4-Dichlorobenzene	5		µg/L	9.5 U
2,4-Dimethylphenol			µg/L	9.5 U
Dimethylphthalate			µg/L	9.5 U
Fluoranthene			µg/L	9.5 U
Fluorene			µg/L	9.5 U
2-Methylnaphthalene			µg/L	9.5 U
Naphthalene			µg/L	9.5 U
Phenanthrene			µg/L	9.5 U
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M003-A				
TPH as Diesel				
Jet Fuel #5 (JP5)			µg/L	50 U
TPH, as motor oil			µg/L	300 U
TPH as Gasoline				
TPH, as gasoline			µg/L	50 U
TPH (calculated)				
Total TPH (calculated)			µg/L	300 U
Metals				
Aluminum	1,000	439	µg/L	**6 J**
Antimony	6	46	µg/L	**0.22 J**
Arsenic	50	28	µg/L	5 U
Barium	1,000	575	µg/L	**30**
Beryllium	4	3.8	µg/L	2 U
Cadmium	5	5.4	µg/L	5 U
Chromium	50	14	µg/L	**1 J**
Cobalt		12	µg/L	**0.97 J**
Copper	1,000	27	µg/L	**0.25 J**
Iron		7,135	µg/L	**570**
Lead	15	3.9	µg/L	3 U
Manganese		5,213	µg/L	**40**
Mercury	2	0.15	µg/L	0.2 U
Molybdenum		12	µg/L	**4.7 J**
Nickel	100	19	µg/L	**1.6 J**
Selenium	50	6.0	µg/L	5 U
Silver		3.3	µg/L	5 U
Vanadium		29	µg/L	**2.3 J**
Zinc		43	µg/L	**3.4 J**
Calcium		379	mg/L	**120**
Magnesium		500	mg/L	**9**
Potassium		182	mg/L	**3.5**
Sodium		4,540	mg/L	**9.9**
Cyanide				
Total Cyanide	0.2		mg/L	0.01 U
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	**3.29**
Gross Beta	50		pCi/L	**5.39**
Radium				
Radium			pCi/L	0.07 U3
Sulfide				
Sulfide			mg/L	0.04 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M003-B				
Volatile Organic Compounds				
Acetone			µg/L	10 U
Benzene	1		µg/L	0.5 U
tert-butyl alcohol			µg/L	20 U
N-butylbenzene			µg/L	0.5 U
sec-butylbenzene			µg/L	0.5 U
tert-butylbenzene			µg/L	0.5 U
Carbon Disulfide			µg/L	0.5 U
Chlorobenzene	70		µg/L	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U
Ethylbenzene	300		µg/L	0.5 U
Isopropyl Ether			µg/L	0.5 U
Isopropylbenzene			µg/L	0.5 U
p-Isopropyltoluene			µg/L	0.5 U
N-propylbenzene			µg/L	0.5 U
Naphthalene			µg/L	2 U
Tetrachloroethene	5		µg/L	0.5 U
Toluene	150		µg/L	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U
Trichloroethene	5		µg/L	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U
M,p-xylene	1,750		µg/L	0.5 U
O-xylene	1,750		µg/L	0.5 U
Semivolatile Organic Compounds				
Acenaphthene			µg/L	9.4 U
Anthracene			µg/L	9.4 U
bis(2-Chloroethyl)ether			µg/L	9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U
Dibenzofuran			µg/L	9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M003-B				
Semivolatile Organic Compounds				
Dimethylphthalate			µg/L	9.4 U
Fluoranthene			µg/L	9.4 U
Fluorene			µg/L	9.4 U
2-Methylnaphthalene			µg/L	9.4 U
Naphthalene			µg/L	9.4 U
Phenanthrene			µg/L	9.4 U
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 UJ
Jet Fuel #5 (JP5)			µg/L	50 UJ
TPH, as motor oil			µg/L	300 UJ
TPH as Gasoline				
TPH, as gasoline			µg/L	50 U
TPH (calculated)				
Total TPH (calculated)			µg/L	300 U
Metals				
Aluminum	1,000	439	µg/L	2500 U
Antimony	6	46	µg/L	**0.13 J**
Arsenic	50	28	µg/L	5 U
Barium	1,000	575	µg/L	**130**
Beryllium	4	3.8	µg/L	50 U
Cadmium	5	5.4	µg/L	**0.089 J**
Chromium	50	14	µg/L	**7.9 J**
Cobalt		12	µg/L	**2.5 J**
Copper	1,000	27	µg/L	**4.6 J**
Iron		7,135	µg/L	**7,300**
Lead	15	3.9	µg/L	3 U
Manganese		5,213	µg/L	**7,300**
Mercury	2	0.15	µg/L	**0.061 J**
Molybdenum		12	µg/L	20 U
Nickel	100	19	µg/L	**5.8 J**
Selenium	50	6.0	µg/L	5 U
Silver		3.3	µg/L	**3 J**
Vanadium		29	µg/L	**2.4 J**
Zinc		43	µg/L	20 U
Calcium		379	mg/L	**370**
Magnesium		500	mg/L	**1,000**
Potassium		182	mg/L	**210**
Sodium		4,540	mg/L	**6,900**
Cyanide				
Total Cyanide	0.2		mg/L	0.01 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M003-B				
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	**7.34**
Gross Beta	50		pCi/L	**182**
Radium				
Radium			pCi/L	**0.75**
Anions				
Chloride			mg/L	**13,000**
Sulfate			mg/L	**600**
Sulfide				
Sulfide			mg/L	0.04 U
Alkalinity				
Alkalinity			mg/L	**1,000**
Alkalinity, bicarbonate			mg/L	**1,000**
Dissolved Gases				
Ethane			mg/L	0.01 U
Ethene			mg/L	0.01 U
Methane			mg/L	**0.062**
M004-A				
Volatile Organic Compounds				
Acetone			µg/L	10 U
Benzene	1		µg/L	0.5 U
tert-butyl alcohol			µg/L	20 U
N-butylbenzene			µg/L	0.5 U
sec-butylbenzene			µg/L	0.5 U
tert-butylbenzene			µg/L	0.5 U
Carbon Disulfide			µg/L	0.5 U
Chlorobenzene	70		µg/L	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U
Ethylbenzene	300		µg/L	0.5 U
Isopropyl Ether			µg/L	0.5 U
Isopropylbenzene			µg/L	0.5 U
p-Isopropyltoluene			µg/L	0.5 U
N-propylbenzene			µg/L	0.5 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M004-A				
Volatile Organic Compounds				
Naphthalene			µg/L	2 U
Tetrachloroethene	5		µg/L	0.5 U
Toluene	150		µg/L	**0.5 J**
1,1,1-Trichloroethane	200		µg/L	0.5 U
Trichloroethene	5		µg/L	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U
M,p-xylene	1,750		µg/L	0.5 U
O-xylene	1,750		µg/L	0.5 U
Semivolatile Organic Compounds				
Acenaphthene			µg/L	9.6 U
Anthracene			µg/L	9.6 U
bis(2-Chloroethyl)ether			µg/L	9.6 U
bis(2-chloroisopropyl) ether			µg/L	9.6 U
Dibenzofuran			µg/L	9.6 U
1,2-Dichlorobenzene	600		µg/L	9.6 U
1,4-Dichlorobenzene	5		µg/L	9.6 U
2,4-Dimethylphenol			µg/L	9.6 U
Dimethylphthalate			µg/L	9.6 U
Fluoranthene			µg/L	9.6 U
Fluorene			µg/L	9.6 U
2-Methylnaphthalene			µg/L	9.6 U
Naphthalene			µg/L	9.6 U
Phenanthrene			µg/L	9.6 U
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 U
Jet Fuel #5 (JP5)			µg/L	50 U
TPH, as motor oil			µg/L	300 U
TPH as Gasoline				
TPH, as gasoline			µg/L	50 U
TPH (calculated)				
Total TPH (calculated)			µg/L	300 U
Metals				
Aluminum	1,000	439	µg/L	100 U
Antimony	6	46	µg/L	**0.37 J**
Arsenic	50	28	µg/L	**4.6 J**
Barium	1,000	575	µg/L	**16**
Beryllium	4	3.8	µg/L	2 U
Cadmium	5	5.4	µg/L	5 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M004-A				
Metals				
Chromium	50	14	µg/L	**0.95 J**
Cobalt		12	µg/L	**1.1 J**
Copper	1,000	27	µg/L	**0.52 J**
Iron		7,135	µg/L	**140**
Lead	15	3.9	µg/L	3 U
Manganese		5,213	µg/L	**98**
Mercury	2	0.15	µg/L	0.2 U
Molybdenum		12	µg/L	**2.4 J**
Nickel	100	19	µg/L	**2 J**
Selenium	50	6.0	µg/L	**0.81 J**
Silver		3.3	µg/L	**0.27 J**
Vanadium		29	µg/L	**3.4 J**
Zinc		43	µg/L	**2.3 J**
Calcium		379	mg/L	**64**
Magnesium		500	mg/L	**34 J**
Potassium		182	mg/L	**25**
Sodium		4,540	mg/L	**240**
Cyanide				
Total Cyanide	0.2		mg/L	0.01 U
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	**2.76**
Gross Beta	50		pCi/L	**19.3**
Radium				
Radium			pCi/L	0.069 U3
Anions				
Chloride			mg/L	**130**
Sulfate			mg/L	**26**
Sulfide				
Sulfide			mg/L	0.04 U
Alkalinity				
Alkalinity			mg/L	**450**
Alkalinity, bicarbonate			mg/L	**450**
Dissolved Gases				
Ethane			mg/L	0.01 U
Ethene			mg/L	0.01 U
Methane			mg/L	**0.2**
M006-A				
Volatile Organic Compounds				
Acetone			µg/L	10 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M006-A				
Volatile Organic Compounds				
Benzene	1		µg/L	0.5 U
tert-butyl alcohol			µg/L	20 U
N-butylbenzene			µg/L	0.5 U
sec-butylbenzene			µg/L	0.5 U
tert-butylbenzene			µg/L	0.5 U
Carbon Disulfide			µg/L	0.5 U
Chlorobenzene	70		µg/L	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U
Ethylbenzene	300		µg/L	0.5 U
Isopropyl Ether			µg/L	0.5 U
Isopropylbenzene			µg/L	0.5 U
p-Isopropyltoluene			µg/L	0.5 U
N-propylbenzene			µg/L	0.5 U
Naphthalene			µg/L	2 U
Tetrachloroethene	5		µg/L	0.5 U
Toluene	150		µg/L	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U
Trichloroethene	5		µg/L	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U
M,p-xylene	1,750		µg/L	0.5 U
O-xylene	1,750		µg/L	0.5 U
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 U
Jet Fuel #5 (JP5)			µg/L	50 U
TPH, as motor oil			µg/L	**54 Jy**
TPH as Gasoline				
TPH, as gasoline			µg/L	50 U
TPH (calculated)				
Total TPH (calculated)			µg/L	**54 J**
Metals				
Aluminum	1,000	439	µg/L	100 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M006-A				
Metals				
Antimony	6	46	µg/L	**0.077 J**
Arsenic	50	28	µg/L	**2.8 J**
Barium	1,000	575	µg/L	**110**
Beryllium	4	3.8	µg/L	2 U
Cadmium	5	5.4	µg/L	5 U
Chromium	50	14	µg/L	10 U
Cobalt		12	µg/L	**0.36 J**
Copper	1,000	27	µg/L	**0.79 J**
Iron		7,135	µg/L	**1,400**
Lead	15	3.9	µg/L	3 U
Manganese		5,213	µg/L	**910 J**
Mercury	2	0.15	µg/L	**0.061 J**
Molybdenum		12	µg/L	**0.51 J**
Nickel	100	19	µg/L	**6.6 J**
Selenium	50	6.0	µg/L	5 U
Silver		3.3	µg/L	5 U
Vanadium		29	µg/L	10 U
Zinc		43	µg/L	**16 J**
Calcium		379	mg/L	**97**
Magnesium		500	mg/L	**24 J**
Potassium		182	mg/L	**12**
Sodium		4,540	mg/L	**31**
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	**2.73**
Gross Beta	50		pCi/L	**9.86**
Radium				
Radium			pCi/L	0.068 U3
Sulfide				
Sulfide			mg/L	0.04 U
M007-A				
Volatile Organic Compounds				
Acetone			µg/L	10 U
Benzene	1		µg/L	0.5 U
tert-butyl alcohol			µg/L	20 U
N-butylbenzene			µg/L	0.5 U
sec-butylbenzene			µg/L	0.5 U
tert-butylbenzene			µg/L	0.5 U
Carbon Disulfide			µg/L	0.5 U
Chlorobenzene	70		µg/L	0.5 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M007-A				
Volatile Organic Compounds				
1,2-Dichlorobenzene	600		µg/L	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**3.2**
trans-1,2-Dichloroethene	10		µg/L	0.5 U
Ethylbenzene	300		µg/L	0.5 U
Isopropyl Ether			µg/L	0.5 U
Isopropylbenzene			µg/L	0.5 U
p-Isopropyltoluene			µg/L	0.5 U
N-propylbenzene			µg/L	0.5 U
Naphthalene			µg/L	2 U
Tetrachloroethene	5		µg/L	0.5 U
Toluene	150		µg/L	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U
Trichloroethene	5		µg/L	**0.5 J**
1,2,4-Trimethylbenzene			µg/L	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U
M,p-xylene	1,750		µg/L	0.5 U
O-xylene	1,750		µg/L	0.5 U
Semivolatile Organic Compounds				
Acenaphthene			µg/L	9.4 U
Anthracene			µg/L	9.4 U
bis(2-Chloroethyl)ether			µg/L	9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U
Dibenzofuran			µg/L	9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U
Dimethylphthalate			µg/L	9.4 U
Fluoranthene			µg/L	9.4 U
Fluorene			µg/L	9.4 U
2-Methylnaphthalene			µg/L	9.4 U
Naphthalene			µg/L	9.4 U
Phenanthrene			µg/L	9.4 U
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M007-A				
TPH as Diesel				
Jet Fuel #5 (JP5)			µg/L	50 U
TPH, as motor oil			µg/L	300 U
TPH as Gasoline				
TPH, as gasoline			µg/L	50 U
TPH (calculated)				
Total TPH (calculated)			µg/L	300 U
Metals				
Aluminum	1,000	439	µg/L	**4 J**
Antimony	6	46	µg/L	**0.081 J**
Arsenic	50	28	µg/L	**19**
Barium	1,000	575	µg/L	**17**
Beryllium	4	3.8	µg/L	2 U
Cadmium	5	5.4	µg/L	5 U
Chromium	50	14	µg/L	**1.2 J**
Cobalt		12	µg/L	**0.2 J**
Copper	1,000	27	µg/L	**0.49 J**
Iron		7,135	µg/L	**230**
Lead	15	3.9	µg/L	3 U
Manganese		5,213	µg/L	**570 J**
Mercury	2	0.15	µg/L	0.2 U
Molybdenum		12	µg/L	**1.2 J**
Nickel	100	19	µg/L	**1.4 J**
Selenium	50	6.0	µg/L	5 U
Silver		3.3	µg/L	5 U
Vanadium		29	µg/L	**2.6 J**
Zinc		43	µg/L	**0.53 J**
Calcium		379	mg/L	**17**
Magnesium		500	mg/L	**8.3**
Potassium		182	mg/L	**10**
Sodium		4,540	mg/L	**110**
Cyanide				
Total Cyanide	0.2		mg/L	0.01 U
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	2.85 U4
Gross Beta	50		pCi/L	**12.5**
Radium				
Radium			pCi/L	0.069 U3
Sulfide				
Sulfide			mg/L	0.04 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M025-A				
Volatile Organic Compounds				
Acetone			µg/L	10 U
Benzene	1		µg/L	**0.6**
tert-butyl alcohol			µg/L	20 U
N-butylbenzene			µg/L	0.5 U
sec-butylbenzene			µg/L	0.5 U
tert-butylbenzene			µg/L	0.5 U
Carbon Disulfide			µg/L	0.5 U
Chlorobenzene	70		µg/L	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U
1,2-Dichloroethane	0.5		µg/L	**0.5 J**
1,1-Dichloroethene	6		µg/L	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**1.8**
trans-1,2-Dichloroethene	10		µg/L	0.5 U
Ethylbenzene	300		µg/L	0.5 U
Isopropyl Ether			µg/L	0.5 U
Isopropylbenzene			µg/L	0.5 U
p-Isopropyltoluene			µg/L	0.5 U
N-propylbenzene			µg/L	0.5 U
Naphthalene			µg/L	2 U
Tetrachloroethene	5		µg/L	0.5 U
Toluene	150		µg/L	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U
Trichloroethene	5		µg/L	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U
M,p-xylene	1,750		µg/L	0.5 U
O-xylene	1,750		µg/L	0.5 U
Semivolatile Organic Compounds				
Acenaphthene			µg/L	9.4 U
Anthracene			µg/L	9.4 U
bis(2-Chloroethyl)ether			µg/L	9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U
Dibenzofuran			µg/L	9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M025-A				
Semivolatile Organic Compounds				
Dimethylphthalate			µg/L	9.4 U
Fluoranthene			µg/L	9.4 U
Fluorene			µg/L	9.4 U
2-Methylnaphthalene			µg/L	9.4 U
Naphthalene			µg/L	9.4 U
Phenanthrene			µg/L	9.4 U
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 UJ
Jet Fuel #5 (JP5)			µg/L	50 UJ
TPH, as motor oil			µg/L	300 UJ
TPH as Gasoline				
TPH, as gasoline			µg/L	50 U
TPH (calculated)				
Total TPH (calculated)			µg/L	300 U
Metals				
Aluminum	1,000	439	µg/L	**5.8 J**
Antimony	6	46	µg/L	**4.1 J**
Arsenic	50	28	µg/L	**1.7 J**
Barium	1,000	575	µg/L	**800**
Beryllium	4	3.8	µg/L	**0.1 J**
Cadmium	5	5.4	µg/L	**0.056 J**
Chromium	50	14	µg/L	**2.3 J**
Cobalt		12	µg/L	10 U
Copper	1,000	27	µg/L	**0.95 J**
Iron		7,135	µg/L	**390**
Lead	15	3.9	µg/L	**0.3 J**
Manganese		5,213	µg/L	**350**
Mercury	2	0.15	µg/L	0.2 U
Molybdenum		12	µg/L	20 U
Nickel	100	19	µg/L	**0.82 J**
Selenium	50	6.0	µg/L	**12**
Silver		3.3	µg/L	5 U
Vanadium		29	µg/L	**1.7 J**
Zinc		43	µg/L	20 U
Calcium		379	mg/L	**140**
Magnesium		500	mg/L	**240**
Potassium		182	mg/L	**62**
Sodium		4,540	mg/L	**1,100**
Cyanide				
Total Cyanide	0.2		mg/L	0.01 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M025-A				
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	**1.26**
Gross Beta	50		pCi/L	2.8 U3
Radium				
Radium			pCi/L	0.274 U2
M025-C				
Volatile Organic Compounds				
Acetone			µg/L	10 U
Benzene	1		µg/L	0.5 U
tert-butyl alcohol			µg/L	20 U
N-butylbenzene			µg/L	0.5 U
sec-butylbenzene			µg/L	0.5 U
tert-butylbenzene			µg/L	0.5 U
Carbon Disulfide			µg/L	**0.3 J**
Chlorobenzene	70		µg/L	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U
Ethylbenzene	300		µg/L	0.5 U
Isopropyl Ether			µg/L	0.5 U
Isopropylbenzene			µg/L	0.5 U
p-Isopropyltoluene			µg/L	0.5 U
N-propylbenzene			µg/L	0.5 U
Naphthalene			µg/L	2 U
Tetrachloroethene	5		µg/L	0.5 U
Toluene	150		µg/L	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U
Trichloroethene	5		µg/L	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U
M,p-xylene	1,750		µg/L	0.5 U
O-xylene	1,750		µg/L	0.5 U
Semivolatile Organic Compounds				
Acenaphthene			µg/L	9.4 U
Anthracene			µg/L	9.4 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M025-C				
Semivolatile Organic Compounds				
bis(2-Chloroethyl)ether			µg/L	9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U
Dibenzofuran			µg/L	9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U
Dimethylphthalate			µg/L	9.4 U
Fluoranthene			µg/L	9.4 U
Fluorene			µg/L	9.4 U
2-Methylnaphthalene			µg/L	9.4 U
Naphthalene			µg/L	9.4 U
Phenanthrene			µg/L	9.4 U
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 UJ
Jet Fuel #5 (JP5)			µg/L	50 UJ
TPH, as motor oil			µg/L	300 UJ
TPH as Gasoline				
TPH, as gasoline			µg/L	50 U
TPH (calculated)				
Total TPH (calculated)			µg/L	300 U
Metals				
Aluminum	1,000	439	µg/L	100 U
Antimony	6	46	µg/L	50 U
Arsenic	50	28	µg/L	**4.5 J**
Barium	1,000	575	µg/L	**280**
Beryllium	4	3.8	µg/L	2 U
Cadmium	5	5.4	µg/L	5 U
Chromium	50	14	µg/L	**10 J**
Cobalt		12	µg/L	10 U
Copper	1,000	27	µg/L	**0.95 J**
Iron		7,135	µg/L	**6,300**
Lead	15	3.9	µg/L	3 U
Manganese		5,213	µg/L	**2,000**
Mercury	2	0.15	µg/L	0.2 U
Molybdenum		12	µg/L	20 U
Nickel	100	19	µg/L	20 U
Selenium	50	6.0	µg/L	5 U
Silver		3.3	µg/L	5 U
Vanadium		29	µg/L	**2.3 J**
Zinc		43	µg/L	26 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M025-C				
Metals				
Calcium		379	mg/L	**100**
Magnesium		500	mg/L	**200**
Potassium		182	mg/L	**66**
Sodium		4,540	mg/L	**1,300**
Cyanide				
Total Cyanide	0.2		mg/L	0.01 U
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	0.559 U4
Gross Beta	50		pCi/L	31.6 U2
Radium				
Radium			pCi/L	0.472 U
M026-A				
Volatile Organic Compounds				
Acetone			µg/L	10 U
Benzene	1		µg/L	0.5 U
tert-butyl alcohol			µg/L	20 U
N-butylbenzene			µg/L	0.5 U
sec-butylbenzene			µg/L	0.5 U
tert-butylbenzene			µg/L	0.5 U
Carbon Disulfide			µg/L	0.5 U
Chlorobenzene	70		µg/L	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**0.3 J**
trans-1,2-Dichloroethene	10		µg/L	0.5 U
Ethylbenzene	300		µg/L	0.5 U
Isopropyl Ether			µg/L	0.5 U
Isopropylbenzene			µg/L	0.5 U
p-Isopropyltoluene			µg/L	0.5 U
N-propylbenzene			µg/L	0.5 U
Naphthalene			µg/L	2 U
Tetrachloroethene	5		µg/L	0.5 U
Toluene	150		µg/L	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U
Trichloroethene	5		µg/L	0.5 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M026-A				
Volatile Organic Compounds				
1,2,4-Trimethylbenzene			µg/L	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U
M,p-xylene	1,750		µg/L	0.5 U
O-xylene	1,750		µg/L	0.5 U
Semivolatile Organic Compounds				
Acenaphthene			µg/L	9.8 U
Anthracene			µg/L	9.8 U
bis(2-Chloroethyl)ether			µg/L	9.8 U
bis(2-chloroisopropyl) ether			µg/L	9.8 U
Dibenzofuran			µg/L	9.8 U
1,2-Dichlorobenzene	600		µg/L	9.8 U
1,4-Dichlorobenzene	5		µg/L	9.8 U
2,4-Dimethylphenol			µg/L	9.8 U
Dimethylphthalate			µg/L	9.8 U
Fluoranthene			µg/L	9.8 U
Fluorene			µg/L	9.8 U
2-Methylnaphthalene			µg/L	9.8 U
Naphthalene			µg/L	9.8 U
Phenanthrene			µg/L	9.8 U
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 UJ
Jet Fuel #5 (JP5)			µg/L	50 UJ
TPH, as motor oil			µg/L	300 UJ
TPH as Gasoline				
TPH, as gasoline			µg/L	50 U
TPH (calculated)				
Total TPH (calculated)			µg/L	300 U
Metals				
Aluminum	1,000	439	µg/L	**3.5 J**
Antimony	6	46	µg/L	**0.79 J**
Arsenic	50	28	µg/L	**5.8**
Barium	1,000	575	µg/L	**46**
Beryllium	4	3.8	µg/L	2 U
Cadmium	5	5.4	µg/L	5 U
Chromium	50	14	µg/L	**1.8 J**
Cobalt		12	µg/L	10 U
Copper	1,000	27	µg/L	**4.8 J**
Iron		7,135	µg/L	**490**
Lead	15	3.9	µg/L	3 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M026-A				
Metals				
Manganese		5,213	µg/L	**23**
Mercury	2	0.15	µg/L	**0.14 J**
Molybdenum		12	µg/L	**7.3 J**
Nickel	100	19	µg/L	**2.5 J**
Selenium	50	6.0	µg/L	**10**
Silver		3.3	µg/L	**0.53 J**
Vanadium		29	µg/L	**3.2 J**
Zinc		43	µg/L	20 U
Calcium		379	mg/L	**310**
Magnesium		500	mg/L	**820**
Potassium		182	mg/L	**240**
Sodium		4,540	mg/L	**6,700**
Cyanide				
Total Cyanide	0.2		mg/L	0.01 U
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	0.7 U3
Gross Beta	50		pCi/L	**271**
Radium				
Radium			pCi/L	0.067 U3
M026-E				
Volatile Organic Compounds				
Acetone			µg/L	10 U
Benzene	1		µg/L	0.5 U
tert-butyl alcohol			µg/L	20 U
N-butylbenzene			µg/L	0.5 U
sec-butylbenzene			µg/L	0.5 U
tert-butylbenzene			µg/L	0.5 U
Carbon Disulfide			µg/L	0.5 U
Chlorobenzene	70		µg/L	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**0.4 J**
trans-1,2-Dichloroethene	10		µg/L	0.5 U
Ethylbenzene	300		µg/L	0.5 U
Isopropyl Ether			µg/L	0.5 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M026-E				
Volatile Organic Compounds				
Isopropylbenzene			µg/L	0.5 U
p-Isopropyltoluene			µg/L	0.5 U
N-propylbenzene			µg/L	0.5 U
Naphthalene			µg/L	2 U
Tetrachloroethene	5		µg/L	0.5 U
Toluene	150		µg/L	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U
Trichloroethene	5		µg/L	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U
M,p-xylene	1,750		µg/L	0.5 U
O-xylene	1,750		µg/L	0.5 U
Semivolatile Organic Compounds				
Acenaphthene			µg/L	9.7 U
Anthracene			µg/L	9.7 U
bis(2-Chloroethyl)ether			µg/L	9.7 U
bis(2-chloroisopropyl) ether			µg/L	9.7 U
Dibenzofuran			µg/L	9.7 U
1,2-Dichlorobenzene	600		µg/L	9.7 U
1,4-Dichlorobenzene	5		µg/L	9.7 U
2,4-Dimethylphenol			µg/L	9.7 U
Dimethylphthalate			µg/L	9.7 U
Fluoranthene			µg/L	9.7 U
Fluorene			µg/L	9.7 U
2-Methylnaphthalene			µg/L	9.7 U
Naphthalene			µg/L	9.7 U
Phenanthrene			µg/L	9.7 U
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 UJ
Jet Fuel #5 (JP5)			µg/L	50 UJ
TPH, as motor oil			µg/L	300 UJ
TPH as Gasoline				
TPH, as gasoline			µg/L	50 U
TPH (calculated)				
Total TPH (calculated)			µg/L	300 U
Metals				
Aluminum	1,000	439	µg/L	100 U
Antimony	6	46	µg/L	**0.091 J**
Arsenic	50	28	µg/L	**6**

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M026-E				
Metals				
Barium	1,000	575	µg/L	**120**
Beryllium	4	3.8	µg/L	2 U
Cadmium	5	5.4	µg/L	5 U
Chromium	50	14	µg/L	**2.7 J**
Cobalt		12	µg/L	10 U
Copper	1,000	27	µg/L	**0.81 J**
Iron		7,135	µg/L	**1,800**
Lead	15	3.9	µg/L	3 U
Manganese		5,213	µg/L	**860**
Mercury	2	0.15	µg/L	**0.052 J**
Molybdenum		12	µg/L	20 U
Nickel	100	19	µg/L	**1.1 J**
Selenium	50	6.0	µg/L	**7**
Silver		3.3	µg/L	**0.055 J**
Vanadium		29	µg/L	**1.7 J**
Zinc		43	µg/L	20 U
Calcium		379	mg/L	**110**
Magnesium		500	mg/L	**180**
Potassium		182	mg/L	**55**
Sodium		4,540	mg/L	**1,600**
Cyanide				
Total Cyanide	0.2		mg/L	0.01 U
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	0.14 U2
Gross Beta	50		pCi/L	**64.3**
Radium				
Radium			pCi/L	**0.869**
M027-A				
Volatile Organic Compounds				
Acetone			µg/L	10 U
Benzene	1		µg/L	0.5 U
tert-butyl alcohol			µg/L	20 U
N-butylbenzene			µg/L	0.5 U
sec-butylbenzene			µg/L	0.5 U
tert-butylbenzene			µg/L	0.5 U
Carbon Disulfide			µg/L	0.5 U
Chlorobenzene	70		µg/L	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M027-A				
Volatile Organic Compounds				
1,4-Dichlorobenzene	5		µg/L	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**1.4**
trans-1,2-Dichloroethene	10		µg/L	0.5 U
Ethylbenzene	300		µg/L	0.5 U
Isopropyl Ether			µg/L	0.5 U
Isopropylbenzene			µg/L	0.5 U
p-Isopropyltoluene			µg/L	0.5 U
N-propylbenzene			µg/L	0.5 U
Naphthalene			µg/L	2 U
Tetrachloroethene	5		µg/L	0.5 U
Toluene	150		µg/L	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U
Trichloroethene	5		µg/L	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U
M,p-xylene	1,750		µg/L	0.5 U
O-xylene	1,750		µg/L	0.5 U
Semivolatile Organic Compounds				
Acenaphthene			µg/L	9.4 U
Anthracene			µg/L	9.4 U
bis(2-Chloroethyl)ether			µg/L	9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U
Dibenzofuran			µg/L	9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U
Dimethylphthalate			µg/L	9.4 U
Fluoranthene			µg/L	9.4 U
Fluorene			µg/L	9.4 U
2-Methylnaphthalene			µg/L	9.4 U
Naphthalene			µg/L	9.4 U
Phenanthrene			µg/L	9.4 U
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 UJ
Jet Fuel #5 (JP5)			µg/L	50 UJ
TPH, as motor oil			µg/L	300 UJ

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M027-A				
TPH as Gasoline				
TPH, as gasoline			µg/L	50 U
TPH (calculated)				
Total TPH (calculated)			µg/L	300 U
Metals				
Aluminum	1,000	439	µg/L	100 U
Antimony	6	46	µg/L	**2.2 J**
Arsenic	50	28	µg/L	**2.8 J**
Barium	1,000	575	µg/L	**190**
Beryllium	4	3.8	µg/L	2 U
Cadmium	5	5.4	µg/L	**0.58 J**
Chromium	50	14	µg/L	**0.96 J**
Cobalt		12	µg/L	10 U
Copper	1,000	27	µg/L	10 U
Iron		7,135	µg/L	**900**
Lead	15	3.9	µg/L	3 U
Manganese		5,213	µg/L	**390**
Mercury	2	0.15	µg/L	0.2 U
Molybdenum		12	µg/L	20 U
Nickel	100	19	µg/L	**1.6 J**
Selenium	50	6.0	µg/L	**1.9 J**
Silver		3.3	µg/L	5 UR
Vanadium		29	µg/L	**0.74 J**
Zinc		43	µg/L	**6.3 J**
Calcium		379	mg/L	**97**
Magnesium		500	mg/L	**57**
Potassium		182	mg/L	**42**
Sodium		4,540	mg/L	**370**
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	**7.47**
Gross Beta	50		pCi/L	**30.2**
Radium				
Radium			pCi/L	0.131 U2
Anions				
Chloride			mg/L	**420**
Sulfate			mg/L	**190**
Alkalinity				
Alkalinity			mg/L	**570**
Alkalinity, bicarbonate			mg/L	**570**

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M027-A				
Dissolved Gases				
Ethane			mg/L	0.01 U
Ethene			mg/L	0.01 U
Methane			mg/L	**0.025**
M027-B				
Volatile Organic Compounds				
Acetone			µg/L	10 U
Benzene	1		µg/L	0.5 U
tert-butyl alcohol			µg/L	20 U
N-butylbenzene			µg/L	0.5 U
sec-butylbenzene			µg/L	0.5 U
tert-butylbenzene			µg/L	0.5 U
Carbon Disulfide			µg/L	0.5 U
Chlorobenzene	70		µg/L	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U
Ethylbenzene	300		µg/L	0.5 U
Isopropyl Ether			µg/L	0.5 U
Isopropylbenzene			µg/L	0.5 U
p-Isopropyltoluene			µg/L	0.5 U
N-propylbenzene			µg/L	0.5 U
Naphthalene			µg/L	2 U
Tetrachloroethene	5		µg/L	0.5 U
Toluene	150		µg/L	**0.4 J**
1,1,1-Trichloroethane	200		µg/L	0.5 U
Trichloroethene	5		µg/L	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U
M,p-xylene	1,750		µg/L	0.5 U
O-xylene	1,750		µg/L	0.5 U
Semivolatile Organic Compounds				
Acenaphthene			µg/L	9.4 U
Anthracene			µg/L	9.4 U
bis(2-Chloroethyl)ether			µg/L	9.4 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M027-B				
Semivolatile Organic Compounds				
bis(2-chloroisopropyl) ether			µg/L	9.4 U
Dibenzofuran			µg/L	9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U
Dimethylphthalate			µg/L	**6.6 J**
Fluoranthene			µg/L	9.4 U
Fluorene			µg/L	9.4 U
2-Methylnaphthalene			µg/L	9.4 U
Naphthalene			µg/L	9.4 U
Phenanthrene			µg/L	9.4 U
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 UJ
Jet Fuel #5 (JP5)			µg/L	50 UJ
TPH, as motor oil			µg/L	300 UJ
TPH as Gasoline				
TPH, as gasoline			µg/L	50 U
TPH (calculated)				
Total TPH (calculated)			µg/L	300 U
Metals				
Aluminum	1,000	439	µg/L	100 U
Antimony	6	46	µg/L	50 U
Arsenic	50	28	µg/L	**40**
Barium	1,000	575	µg/L	**500**
Beryllium	4	3.8	µg/L	2 U
Cadmium	5	5.4	µg/L	5 U
Chromium	50	14	µg/L	**5.6 J**
Cobalt		12	µg/L	10 U
Copper	1,000	27	µg/L	**2.6 J**
Iron		7,135	µg/L	**11,000**
Lead	15	3.9	µg/L	3 U
Manganese		5,213	µg/L	**5,600**
Mercury	2	0.15	µg/L	0.2 U
Molybdenum		12	µg/L	20 U
Nickel	100	19	µg/L	20 U
Selenium	50	6.0	µg/L	5 U
Silver		3.3	µg/L	**0.92 J**
Vanadium		29	µg/L	**1.3 J**
Zinc		43	µg/L	**260**
Calcium		379	mg/L	**260**

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M027-B				
Metals				
Magnesium		500	mg/L	**550**
Potassium		182	mg/L	**63**
Sodium		4,540	mg/L	**3,000**
Cyanide				
Total Cyanide	0.2		mg/L	0.01 U
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	2.8 U
Gross Beta	50		pCi/L	**173**
Radium				
Radium			pCi/L	0.277 U2
M027-C				
Volatile Organic Compounds				
Acetone			µg/L	10 U
Benzene	1		µg/L	0.5 U
tert-butyl alcohol			µg/L	20 U
N-butylbenzene			µg/L	0.5 U
sec-butylbenzene			µg/L	0.5 U
tert-butylbenzene			µg/L	0.5 U
Carbon Disulfide			µg/L	0.5 U
Chlorobenzene	70		µg/L	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U
Ethylbenzene	300		µg/L	0.5 U
Isopropyl Ether			µg/L	0.5 U
Isopropylbenzene			µg/L	0.5 U
p-Isopropyltoluene			µg/L	0.5 U
N-propylbenzene			µg/L	0.5 U
Naphthalene			µg/L	2 U
Tetrachloroethene	5		µg/L	0.5 U
Toluene	150		µg/L	**0.2 J**
1,1,1-Trichloroethane	200		µg/L	0.5 U
Trichloroethene	5		µg/L	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M027-C				
Volatile Organic Compounds				
1,3,5-Trimethylbenzene			µg/L	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U
M,p-xylene	1,750		µg/L	0.5 U
O-xylene	1,750		µg/L	0.5 U
Semivolatile Organic Compounds				
Acenaphthene			µg/L	9.5 U
Anthracene			µg/L	9.5 U
bis(2-Chloroethyl)ether			µg/L	9.5 U
bis(2-chloroisopropyl) ether			µg/L	9.5 U
Dibenzofuran			µg/L	9.5 U
1,2-Dichlorobenzene	600		µg/L	9.5 U
1,4-Dichlorobenzene	5		µg/L	9.5 U
2,4-Dimethylphenol			µg/L	9.5 U
Dimethylphthalate			µg/L	**1.3 J**
Fluoranthene			µg/L	9.5 U
Fluorene			µg/L	9.5 U
2-Methylnaphthalene			µg/L	9.5 U
Naphthalene			µg/L	9.5 U
Phenanthrene			µg/L	9.5 U
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 UJ
Jet Fuel #5 (JP5)			µg/L	50 UJ
TPH, as motor oil			µg/L	300 UJ
TPH as Gasoline				
TPH, as gasoline			µg/L	50 U
TPH (calculated)				
Total TPH (calculated)			µg/L	300 U
Metals				
Aluminum	1,000	439	µg/L	100 U
Antimony	6	46	µg/L	50 U
Arsenic	50	28	µg/L	**6**
Barium	1,000	575	µg/L	**75 J**
Beryllium	4	3.8	µg/L	2 U
Cadmium	5	5.4	µg/L	5 U
Chromium	50	14	µg/L	**3.6 J**
Cobalt		12	µg/L	10 U
Copper	1,000	27	µg/L	**2.8 J**
Iron		7,135	µg/L	**2,500**
Lead	15	3.9	µg/L	3 U
Manganese		5,213	µg/L	**6,100**

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M027-C				
Metals				
Mercury	2	0.15	µg/L	0.2 U
Molybdenum		12	µg/L	20 U
Nickel	100	19	µg/L	20 U
Selenium	50	6.0	µg/L	5 U
Silver		3.3	µg/L	**3.5 J**
Vanadium		29	µg/L	**1.1 J**
Zinc		43	µg/L	20 U
Calcium		379	mg/L	**390**
Magnesium		500	mg/L	**830 J**
Potassium		182	mg/L	**95**
Sodium		4,540	mg/L	**4,200**
Cyanide				
Total Cyanide	0.2		mg/L	0.01 U
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	1.12 U2
Gross Beta	50		pCi/L	**117**
Radium				
Radium			pCi/L	0.551 U
M028-A				
Volatile Organic Compounds				
Acetone			µg/L	10 U
Benzene	1		µg/L	**10**
tert-butyl alcohol			µg/L	20 U
N-butylbenzene			µg/L	**0.4 J**
sec-butylbenzene			µg/L	**1.2**
tert-butylbenzene			µg/L	0.5 U
Carbon Disulfide			µg/L	**1.1**
Chlorobenzene	70		µg/L	**21**
1,2-Dichlorobenzene	600		µg/L	**5.1**
1,3-Dichlorobenzene			µg/L	**0.4 J**
1,4-Dichlorobenzene	5		µg/L	**2.7**
1,1-Dichloroethane	5		µg/L	**3.1**
1,2-Dichloroethane	0.5		µg/L	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**7.7**
trans-1,2-Dichloroethene	10		µg/L	0.5 U
Ethylbenzene	300		µg/L	**2.8**
Isopropyl Ether			µg/L	0.5 U
Isopropylbenzene			µg/L	**2.1**

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M028-A				
Volatile Organic Compounds				
p-Isopropyltoluene			µg/L	0.5 U
N-propylbenzene			µg/L	**0.9**
Naphthalene			µg/L	2 U
Tetrachloroethene	5		µg/L	0.5 U
Toluene	150		µg/L	**0.6**
1,1,1-Trichloroethane	200		µg/L	0.5 U
Trichloroethene	5		µg/L	0.5 U
1,2,4-Trimethylbenzene			µg/L	**1**
1,3,5-Trimethylbenzene			µg/L	**0.4 J**
Vinyl Chloride	0.5		µg/L	**12**
M,p-xylene	1,750		µg/L	**1.4**
O-xylene	1,750		µg/L	**1.3**
Semivolatile Organic Compounds				
Acenaphthene			µg/L	9.7 U
Anthracene			µg/L	9.7 U
bis(2-Chloroethyl)ether			µg/L	9.7 U
bis(2-chloroisopropyl) ether			µg/L	9.7 U
Dibenzofuran			µg/L	9.7 U
1,2-Dichlorobenzene	600		µg/L	**3.2 J**
1,4-Dichlorobenzene	5		µg/L	**1.6 J**
2,4-Dimethylphenol			µg/L	9.7 U
Dimethylphthalate			µg/L	9.7 U
Fluoranthene			µg/L	9.7 U
Fluorene			µg/L	9.7 U
2-Methylnaphthalene			µg/L	9.7 U
Naphthalene			µg/L	9.7 U
Phenanthrene			µg/L	9.7 U
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 UJ
Jet Fuel #5 (JP5)			µg/L	50 UJ
TPH, as motor oil			µg/L	300 UJ
TPH as Gasoline				
TPH, as gasoline			µg/L	150 U
TPH (calculated)				
Total TPH (calculated)			µg/L	300 U
Metals				
Aluminum	1,000	439	µg/L	100 U
Antimony	6	46	µg/L	**0.17 J**
Arsenic	50	28	µg/L	**4.7 J**
Barium	1,000	575	µg/L	**170**

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M028-A				
Metals				
Beryllium	4	3.8	µg/L	2 U
Cadmium	5	5.4	µg/L	5 U
Chromium	50	14	µg/L	**2.2 J**
Cobalt		12	µg/L	10 U
Copper	1,000	27	µg/L	**0.59 J**
Iron		7,135	µg/L	**4,700**
Lead	15	3.9	µg/L	3 U
Manganese		5,213	µg/L	**350**
Mercury	2	0.15	µg/L	0.2 U
Molybdenum		12	µg/L	20 U
Nickel	100	19	µg/L	**0.48 J**
Selenium	50	6.0	µg/L	**0.63 J**
Silver		3.3	µg/L	5 U
Vanadium		29	µg/L	**0.47 J**
Zinc		43	µg/L	20 U
Calcium		379	mg/L	**67**
Magnesium		500	mg/L	**30**
Potassium		182	mg/L	**33**
Sodium		4,540	mg/L	**74**
Cyanide				
Total Cyanide	0.2		mg/L	0.01 U
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	0.888 U2
Gross Beta	50		pCi/L	**30.1**
Radium				
Radium			pCi/L	**0.671**
Anions				
Chloride			mg/L	**74**
Sulfate			mg/L	**10**
Sulfide				
Sulfide			mg/L	**0.09**
Alkalinity				
Alkalinity			mg/L	**350**
Alkalinity, bicarbonate			mg/L	**350**
Dissolved Gases				
Ethane			mg/L	**0.83**
Ethene			mg/L	**0.13**
Methane			mg/L	**3.2**
M028-C				

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M028-C				
Volatile Organic Compounds				
Acetone			µg/L	10 U
Benzene	1		µg/L	0.5 U
tert-butyl alcohol			µg/L	20 U
N-butylbenzene			µg/L	0.5 U
sec-butylbenzene			µg/L	0.5 U
tert-butylbenzene			µg/L	0.5 U
Carbon Disulfide			µg/L	0.5 U
Chlorobenzene	70		µg/L	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U
Ethylbenzene	300		µg/L	0.5 U
Isopropyl Ether			µg/L	0.5 U
Isopropylbenzene			µg/L	0.5 U
p-Isopropyltoluene			µg/L	0.5 U
N-propylbenzene			µg/L	0.5 U
Naphthalene			µg/L	2 U
Tetrachloroethene	5		µg/L	0.5 U
Toluene	150		µg/L	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U
Trichloroethene	5		µg/L	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U
M,p-xylene	1,750		µg/L	0.5 U
O-xylene	1,750		µg/L	0.5 U
Semivolatile Organic Compounds				
Acenaphthene			µg/L	9.4 U
Anthracene			µg/L	9.4 U
bis(2-Chloroethyl)ether			µg/L	9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U
Dibenzofuran			µg/L	9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M028-C				
Semivolatile Organic Compounds				
Dimethylphthalate			µg/L	9.4 U
Fluoranthene			µg/L	9.4 U
Fluorene			µg/L	9.4 U
2-Methylnaphthalene			µg/L	9.4 U
Naphthalene			µg/L	9.4 U
Phenanthrene			µg/L	9.4 U
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 UJ
Jet Fuel #5 (JP5)			µg/L	50 UJ
TPH, as motor oil			µg/L	300 UJ
TPH as Gasoline				
TPH, as gasoline			µg/L	50 U
TPH (calculated)				
Total TPH (calculated)			µg/L	300 U
Metals				
Aluminum	1,000	439	µg/L	100 U
Antimony	6	46	µg/L	50 U
Arsenic	50	28	µg/L	**0.52 J**
Barium	1,000	575	µg/L	**150**
Beryllium	4	3.8	µg/L	2 U
Cadmium	5	5.4	µg/L	5 U
Chromium	50	14	µg/L	**2.9 J**
Cobalt		12	µg/L	10 U
Copper	1,000	27	µg/L	**4.2 J**
Iron		7,135	µg/L	**6,300**
Lead	15	3.9	µg/L	3 U
Manganese		5,213	µg/L	**6,100**
Mercury	2	0.15	µg/L	0.2 U
Molybdenum		12	µg/L	20 U
Nickel	100	19	µg/L	20 U
Selenium	50	6.0	µg/L	5 U
Silver		3.3	µg/L	**1.5 J**
Vanadium		29	µg/L	**1.3 J**
Zinc		43	µg/L	20 U
Calcium		379	mg/L	**530**
Magnesium		500	mg/L	**1,000**
Potassium		182	mg/L	**110**
Sodium		4,540	mg/L	**5,700**
Cyanide				
Total Cyanide	0.2		mg/L	0.01 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M028-C				
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	2.1 U
Gross Beta	50		pCi/L	**265**
Radium				
Radium			pCi/L	0.463 U
Anions				
Chloride			mg/L	**12,000**
Sulfate			mg/L	**1,300**
Sulfide				
Sulfide			mg/L	0.04 U
Alkalinity				
Alkalinity			mg/L	**450**
Alkalinity, bicarbonate			mg/L	**450**
Dissolved Gases				
Ethane			mg/L	0.01 U
Ethene			mg/L	0.01 U
Methane			mg/L	0.01 U
M029-A				
Volatile Organic Compounds				
Acetone			µg/L	10 U
Benzene	1		µg/L	**2.4**
tert-butyl alcohol			µg/L	20 U
N-butylbenzene			µg/L	**0.8**
sec-butylbenzene			µg/L	**0.7**
tert-butylbenzene			µg/L	0.5 U
Carbon Disulfide			µg/L	0.5 U
Chlorobenzene	70		µg/L	**0.3 J**
1,2-Dichlorobenzene	600		µg/L	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**0.3 J**
trans-1,2-Dichloroethene	10		µg/L	**0.2**
Ethylbenzene	300		µg/L	0.5 U
Isopropyl Ether			µg/L	0.5 U
Isopropylbenzene			µg/L	**0.7**
p-Isopropyltoluene			µg/L	0.5 U
N-propylbenzene			µg/L	**0.7**

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M029-A				
Volatile Organic Compounds				
Naphthalene			µg/L	2 U
Tetrachloroethene	5		µg/L	0.5 U
Toluene	150		µg/L	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U
Trichloroethene	5		µg/L	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U
M,p-xylene	1,750		µg/L	0.5 U
O-xylene	1,750		µg/L	0.5 U
Semivolatile Organic Compounds				
Acenaphthene			µg/L	**4.1 J**
Anthracene			µg/L	**1.4 J**
bis(2-Chloroethyl)ether			µg/L	**1.2 J**
bis(2-chloroisopropyl) ether			µg/L	**1.9 J**
Dibenzofuran			µg/L	**1.2 J**
1,2-Dichlorobenzene	600		µg/L	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U
Dimethylphthalate			µg/L	9.4 U
Fluoranthene			µg/L	**1.3 J**
Fluorene			µg/L	**0.75 J**
2-Methylnaphthalene			µg/L	9.4 U
Naphthalene			µg/L	9.4 U
Phenanthrene			µg/L	**0.96 J**
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 U
Jet Fuel #5 (JP5)			µg/L	50 U
TPH, as motor oil			µg/L	300 U
TPH as Gasoline				
TPH, as gasoline			µg/L	79 Uh
TPH (calculated)				
Total TPH (calculated)			µg/L	300 U
Metals				
Aluminum	1,000	439	µg/L	**34 J**
Antimony	6	46	µg/L	**0.054 J**
Arsenic	50	28	µg/L	**0.71 J**
Barium	1,000	575	µg/L	**260**
Beryllium	4	3.8	µg/L	2 U
Cadmium	5	5.4	µg/L	5 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M029-A				
Metals				
Chromium	50	14	µg/L	**0.66 J**
Cobalt		12	µg/L	**0.081 J**
Copper	1,000	27	µg/L	**0.19 J**
Iron		7,135	µg/L	**230**
Lead	15	3.9	µg/L	3 U
Manganese		5,213	µg/L	**49**
Mercury	2	0.15	µg/L	0.2 U
Molybdenum		12	µg/L	20 U
Nickel	100	19	µg/L	**0.21 J**
Selenium	50	6.0	µg/L	**0.55 J**
Silver		3.3	µg/L	5 UJ
Vanadium		29	µg/L	**0.17 J**
Zinc		43	µg/L	20 U
Calcium		379	mg/L	**23**
Magnesium		500	mg/L	**52 J**
Potassium		182	mg/L	**30**
Sodium		4,540	mg/L	**180**
Cyanide				
Total Cyanide	0.2		mg/L	**0.03**
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	**0.93**
Gross Beta	50		pCi/L	**15.1**
Radium				
Radium			pCi/L	0.067 U3
M029-E				
Volatile Organic Compounds				
Acetone			µg/L	10 U
Benzene	1		µg/L	**1.2**
tert-butyl alcohol			µg/L	20 U
N-butylbenzene			µg/L	0.5 U
sec-butylbenzene			µg/L	0.5 U
tert-butylbenzene			µg/L	0.5 U
Carbon Disulfide			µg/L	**1.5**
Chlorobenzene	70		µg/L	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M029-E				
Volatile Organic Compounds				
1,1-Dichloroethene	6		µg/L	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**0.4 J**
trans-1,2-Dichloroethene	10		µg/L	**0.4 J**
Ethylbenzene	300		µg/L	0.5 U
Isopropyl Ether			µg/L	0.5 U
Isopropylbenzene			µg/L	0.5 U
p-Isopropyltoluene			µg/L	0.5 U
N-propylbenzene			µg/L	0.5 U
Naphthalene			µg/L	2 U
Tetrachloroethene	5		µg/L	0.5 U
Toluene	150		µg/L	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U
Trichloroethene	5		µg/L	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U
M,p-xylene	1,750		µg/L	0.5 U
O-xylene	1,750		µg/L	0.5 U
Semivolatile Organic Compounds				
Acenaphthene			µg/L	**1.1 J**
Anthracene			µg/L	**1.4 J**
bis(2-Chloroethyl)ether			µg/L	**0.79 J**
bis(2-chloroisopropyl) ether			µg/L	9.4 U
Dibenzofuran			µg/L	**0.89 J**
1,2-Dichlorobenzene	600		µg/L	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U
Dimethylphthalate			µg/L	9.4 U
Fluoranthene			µg/L	**1.6 J**
Fluorene			µg/L	9.4 U
2-Methylnaphthalene			µg/L	9.4 U
Naphthalene			µg/L	**4.1 J**
Phenanthrene			µg/L	**0.99 J**
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 U
Jet Fuel #5 (JP5)			µg/L	50 U
TPH, as motor oil			µg/L	300 U
TPH as Gasoline				
TPH, as gasoline			µg/L	50 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M029-E				
TPH (calculated)				
Total TPH (calculated)			µg/L	300 U
Metals				
Aluminum	1,000	439	µg/L	100 U
Antimony	6	46	µg/L	**0.077 J**
Arsenic	50	28	µg/L	**0.8 J**
Barium	1,000	575	µg/L	**390**
Beryllium	4	3.8	µg/L	2 U
Cadmium	5	5.4	µg/L	5 U
Chromium	50	14	µg/L	**0.47 J**
Cobalt		12	µg/L	**0.049 J**
Copper	1,000	27	µg/L	**0.088 J**
Iron		7,135	µg/L	**280**
Lead	15	3.9	µg/L	3 U
Manganese		5,213	µg/L	**25**
Mercury	2	0.15	µg/L	0.2 U
Molybdenum		12	µg/L	20 U
Nickel	100	19	µg/L	**0.23 J**
Selenium	50	6.0	µg/L	**1.2 J**
Silver		3.3	µg/L	5 UJ
Vanadium		29	µg/L	**0.11 J**
Zinc		43	µg/L	20 U
Calcium		379	mg/L	**23**
Magnesium		500	mg/L	**33 J**
Potassium		182	mg/L	**26**
Sodium		4,540	mg/L	**270**
Cyanide				
Total Cyanide	0.2		mg/L	**0.03**
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	0.623 U2
Gross Beta	50		pCi/L	**9.49**
Radium				
Radium			pCi/L	0.333 U2
M030-A				
Volatile Organic Compounds				
Acetone			µg/L	10 U
Benzene	1		µg/L	0.5 U
tert-butyl alcohol			µg/L	20 U
N-butylbenzene			µg/L	0.5 U
sec-butylbenzene			µg/L	0.5 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M030-A				
Volatile Organic Compounds				
tert-butylbenzene			µg/L	0.5 U
Carbon Disulfide			µg/L	0.5 U
Chlorobenzene	70		µg/L	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U
Ethylbenzene	300		µg/L	0.5 U
Isopropyl Ether			µg/L	0.5 U
Isopropylbenzene			µg/L	0.5 U
p-Isopropyltoluene			µg/L	0.5 U
N-propylbenzene			µg/L	0.5 U
Naphthalene			µg/L	**0.7 J**
Tetrachloroethene	5		µg/L	0.5 U
Toluene	150		µg/L	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U
Trichloroethene	5		µg/L	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U
M,p-xylene	1,750		µg/L	0.5 U
O-xylene	1,750		µg/L	0.5 U
Semivolatile Organic Compounds				
Acenaphthene			µg/L	9.4 U
Anthracene			µg/L	9.4 U
bis(2-Chloroethyl)ether			µg/L	9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U
Dibenzofuran			µg/L	9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U
Dimethylphthalate			µg/L	9.4 U
Fluoranthene			µg/L	9.4 U
Fluorene			µg/L	9.4 U
2-Methylnaphthalene			µg/L	9.4 U
Naphthalene			µg/L	9.4 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M030-A				
Semivolatile Organic Compounds				
Phenanthrene			µg/L	9.4 U
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 U
Jet Fuel #5 (JP5)			µg/L	50 U
TPH, as motor oil			µg/L	300 U
TPH as Gasoline				
TPH, as gasoline			µg/L	50 U
TPH (calculated)				
Total TPH (calculated)			µg/L	300 U
Metals				
Aluminum	1,000	439	µg/L	**3.4 J**
Antimony	6	46	µg/L	**0.89 J**
Arsenic	50	28	µg/L	**2.2 J**
Barium	1,000	575	µg/L	**26**
Beryllium	4	3.8	µg/L	2 U
Cadmium	5	5.4	µg/L	5 U
Chromium	50	14	µg/L	**0.22 J**
Cobalt		12	µg/L	**0.042 J**
Copper	1,000	27	µg/L	**1.4 J**
Iron		7,135	µg/L	**57 J**
Lead	15	3.9	µg/L	3 U
Manganese		5,213	µg/L	**1.7 J**
Mercury	2	0.15	µg/L	0.2 U
Molybdenum		12	µg/L	20 U
Nickel	100	19	µg/L	**2.5 J**
Selenium	50	6.0	µg/L	**0.36 J**
Silver		3.3	µg/L	5 UJ
Vanadium		29	µg/L	**3.1 J**
Zinc		43	µg/L	20 U
Calcium		379	mg/L	**30**
Magnesium		500	mg/L	**6.2**
Potassium		182	mg/L	**6.9**
Sodium		4,540	mg/L	**17**
Cyanide				
Total Cyanide	0.2		mg/L	**0.02**
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	0.105 U2
Gross Beta	50		pCi/L	**3.56**

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M030-A				
Radium				
Radium			pCi/L	0.068 U3
M030-C				
Volatile Organic Compounds				
Acetone			µg/L	**1.5 J**
Benzene	1		µg/L	0.5 U
tert-butyl alcohol			µg/L	**8.4 J**
N-butylbenzene			µg/L	0.5 U
sec-butylbenzene			µg/L	0.5 U
tert-butylbenzene			µg/L	0.5 U
Carbon Disulfide			µg/L	0.5 U
Chlorobenzene	70		µg/L	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U
Ethylbenzene	300		µg/L	0.5 U
Isopropyl Ether			µg/L	0.5 U
Isopropylbenzene			µg/L	0.5 U
p-Isopropyltoluene			µg/L	0.5 U
N-propylbenzene			µg/L	0.5 U
Naphthalene			µg/L	2 U
Tetrachloroethene	5		µg/L	0.5 U
Toluene	150		µg/L	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U
Trichloroethene	5		µg/L	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U
M,p-xylene	1,750		µg/L	0.5 U
O-xylene	1,750		µg/L	0.5 U
Semivolatile Organic Compounds				
Acenaphthene			µg/L	9.7 U
Anthracene			µg/L	9.7 U
bis(2-Chloroethyl)ether			µg/L	9.7 U
bis(2-chloroisopropyl) ether			µg/L	9.7 U
Dibenzofuran			µg/L	9.7 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M030-C				
Semivolatile Organic Compounds				
1,2-Dichlorobenzene	600		µg/L	9.7 U
1,4-Dichlorobenzene	5		µg/L	9.7 U
2,4-Dimethylphenol			µg/L	9.7 U
Dimethylphthalate			µg/L	9.7 U
Fluoranthene			µg/L	9.7 U
Fluorene			µg/L	9.7 U
2-Methylnaphthalene			µg/L	9.7 U
Naphthalene			µg/L	9.7 U
Phenanthrene			µg/L	9.7 U
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 UJ
Jet Fuel #5 (JP5)			µg/L	50 UJ
TPH, as motor oil			µg/L	300 UJ
TPH as Gasoline				
TPH, as gasoline			µg/L	50 U
TPH (calculated)				
Total TPH (calculated)			µg/L	300 U
Metals				
Aluminum	1,000	439	µg/L	100 UJ
Antimony	6	46	µg/L	50 U
Arsenic	50	28	µg/L	5 U
Barium	1,000	575	µg/L	**53**
Beryllium	4	3.8	µg/L	2 U
Cadmium	5	5.4	µg/L	5 U
Chromium	50	14	µg/L	10 U
Cobalt		12	µg/L	10 U
Copper	1,000	27	µg/L	10 U
Iron		7,135	µg/L	**370**
Lead	15	3.9	µg/L	3 U
Manganese		5,213	µg/L	**3,900**
Mercury	2	0.15	µg/L	**0.27**
Molybdenum		12	µg/L	20 U
Nickel	100	19	µg/L	20 U
Selenium	50	6.0	µg/L	5 U
Silver		3.3	µg/L	5 U
Vanadium		29	µg/L	**6.8 J**
Zinc		43	µg/L	20 U
Calcium		379	mg/L	**390**
Magnesium		500	mg/L	**1,000**
Potassium		182	mg/L	**150**

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M030-C				
Metals				
Sodium		4,540	mg/L	**8,100**
Cyanide				
Total Cyanide	0.2		mg/L	0.01 UR
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	**8.12**
Gross Beta	50		pCi/L	**261**
Radium				
Radium			pCi/L	**0.754**
M031-A				
Volatile Organic Compounds				
Acetone			µg/L	10 U
Benzene	1		µg/L	0.5 U
tert-butyl alcohol			µg/L	20 U
N-butylbenzene			µg/L	0.5 U
sec-butylbenzene			µg/L	0.5 U
tert-butylbenzene			µg/L	0.5 U
Carbon Disulfide			µg/L	0.5 U
Chlorobenzene	70		µg/L	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**0.8**
trans-1,2-Dichloroethene	10		µg/L	0.5 U
Ethylbenzene	300		µg/L	0.5 U
Isopropyl Ether			µg/L	0.5 U
Isopropylbenzene			µg/L	0.5 U
p-Isopropyltoluene			µg/L	0.5 U
N-propylbenzene			µg/L	0.5 U
Naphthalene			µg/L	2 U
Tetrachloroethene	5		µg/L	0.5 U
Toluene	150		µg/L	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U
Trichloroethene	5		µg/L	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M031-A				
Volatile Organic Compounds				
M,p-xylene	1,750		µg/L	0.5 U
O-xylene	1,750		µg/L	0.5 U
Semivolatile Organic Compounds				
Acenaphthene			µg/L	9.4 U
Anthracene			µg/L	9.4 U
bis(2-Chloroethyl)ether			µg/L	9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U
Dibenzofuran			µg/L	9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U
Dimethylphthalate			µg/L	9.4 U
Fluoranthene			µg/L	9.4 U
Fluorene			µg/L	9.4 U
2-Methylnaphthalene			µg/L	9.4 U
Naphthalene			µg/L	9.4 U
Phenanthrene			µg/L	9.4 U
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 UJ
Jet Fuel #5 (JP5)			µg/L	50 UJ
TPH, as motor oil			µg/L	300 UJ
TPH as Gasoline				
TPH, as gasoline			µg/L	50 U
TPH (calculated)				
Total TPH (calculated)			µg/L	300 U
Metals				
Aluminum	1,000	439	µg/L	100 U
Antimony	6	46	µg/L	50 U
Arsenic	50	28	µg/L	**3 J**
Barium	1,000	575	µg/L	**34**
Beryllium	4	3.8	µg/L	2 U
Cadmium	5	5.4	µg/L	5 U
Chromium	50	14	µg/L	**0.35 J**
Cobalt		12	µg/L	10 U
Copper	1,000	27	µg/L	10 U
Iron		7,135	µg/L	**150**
Lead	15	3.9	µg/L	3 U
Manganese		5,213	µg/L	**330**
Mercury	2	0.15	µg/L	0.2 U
Molybdenum		12	µg/L	**3.4 J**

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M031-A				
Metals				
Nickel	100	19	µg/L	**1.4 J**
Selenium	50	6.0	µg/L	**0.37 J**
Silver		3.3	µg/L	5 UR
Vanadium		29	µg/L	**1 J**
Zinc		43	µg/L	20 U
Calcium		379	mg/L	**33**
Magnesium		500	mg/L	**12**
Potassium		182	mg/L	**13**
Sodium		4,540	mg/L	**65**
Cyanide				
Total Cyanide	0.2		mg/L	0.01 U
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	0.868 U2
Gross Beta	50		pCi/L	**14.9**
Radium				
Radium			pCi/L	0.066 U3
M031-C				
Volatile Organic Compounds				
Acetone			µg/L	10 U
Benzene	1		µg/L	0.5 U
tert-butyl alcohol			µg/L	20 U
N-butylbenzene			µg/L	0.5 U
sec-butylbenzene			µg/L	0.5 U
tert-butylbenzene			µg/L	0.5 U
Carbon Disulfide			µg/L	0.5 U
Chlorobenzene	70		µg/L	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U
Ethylbenzene	300		µg/L	0.5 U
Isopropyl Ether			µg/L	0.5 U
Isopropylbenzene			µg/L	0.5 U
p-Isopropyltoluene			µg/L	0.5 U
N-propylbenzene			µg/L	0.5 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M031-C				
Volatile Organic Compounds				
Naphthalene			µg/L	2 U
Tetrachloroethene	5		µg/L	0.5 U
Toluene	150		µg/L	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U
Trichloroethene	5		µg/L	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U
M,p-xylene	1,750		µg/L	0.5 U
O-xylene	1,750		µg/L	0.5 U
Semivolatile Organic Compounds				
Acenaphthene			µg/L	9.5 U
Anthracene			µg/L	9.5 U
bis(2-Chloroethyl)ether			µg/L	9.5 U
bis(2-chloroisopropyl) ether			µg/L	9.5 U
Dibenzofuran			µg/L	9.5 U
1,2-Dichlorobenzene	600		µg/L	9.5 U
1,4-Dichlorobenzene	5		µg/L	9.5 U
2,4-Dimethylphenol			µg/L	9.5 U
Dimethylphthalate			µg/L	9.5 U
Fluoranthene			µg/L	9.5 U
Fluorene			µg/L	9.5 U
2-Methylnaphthalene			µg/L	9.5 U
Naphthalene			µg/L	9.5 U
Phenanthrene			µg/L	9.5 U
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 UJ
Jet Fuel #5 (JP5)			µg/L	50 UJ
TPH, as motor oil			µg/L	300 UJ
TPH as Gasoline				
TPH, as gasoline			µg/L	50 U
TPH (calculated)				
Total TPH (calculated)			µg/L	300 U
Metals				
Aluminum	1,000	439	µg/L	100 U
Antimony	6	46	µg/L	50 U
Arsenic	50	28	µg/L	**0.94 J**
Barium	1,000	575	µg/L	**92**
Beryllium	4	3.8	µg/L	2 U
Cadmium	5	5.4	µg/L	5 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M031-C				
Metals				
Chromium	50	14	µg/L	**2.8 J**
Cobalt		12	µg/L	10 U
Copper	1,000	27	µg/L	**3.6 J**
Iron		7,135	µg/L	**2,900**
Lead	15	3.9	µg/L	3 U
Manganese		5,213	µg/L	**5,700**
Mercury	2	0.15	µg/L	0.2 U
Molybdenum		12	µg/L	20 U
Nickel	100	19	µg/L	20 U
Selenium	50	6.0	µg/L	5 U
Silver		3.3	µg/L	**1.6 J**
Vanadium		29	µg/L	**1.1 J**
Zinc		43	µg/L	**470**
Calcium		379	mg/L	**450**
Magnesium		500	mg/L	**860**
Potassium		182	mg/L	**100**
Sodium		4,540	mg/L	**5,000**
Cyanide				
Total Cyanide	0.2		mg/L	0.01 U
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	**4.19**
Gross Beta	50		pCi/L	**250**
Radium				
Radium			pCi/L	**0.618**
M032-A				
Volatile Organic Compounds				
Acetone			µg/L	10 U
Benzene	1		µg/L	0.5 U
tert-butyl alcohol			µg/L	20 U
N-butylbenzene			µg/L	0.5 U
sec-butylbenzene			µg/L	0.5 U
tert-butylbenzene			µg/L	**0.2 J**
Carbon Disulfide			µg/L	0.5 U
Chlorobenzene	70		µg/L	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U
1,2-Dichloroethane	0.5		µg/L	**0.8**

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M032-A				
Volatile Organic Compounds				
1,1-Dichloroethene	6		µg/L	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**1**
trans-1,2-Dichloroethene	10		µg/L	0.5 U
Ethylbenzene	300		µg/L	0.5 U
Isopropyl Ether			µg/L	0.5 U
Isopropylbenzene			µg/L	0.5 U
p-Isopropyltoluene			µg/L	0.5 U
N-propylbenzene			µg/L	0.5 U
Naphthalene			µg/L	2 U
Tetrachloroethene	5		µg/L	0.5 U
Toluene	150		µg/L	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U
Trichloroethene	5		µg/L	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U
Vinyl Chloride	0.5		µg/L	**1**
M,p-xylene	1,750		µg/L	0.5 U
O-xylene	1,750		µg/L	0.5 U
Semivolatile Organic Compounds				
Acenaphthene			µg/L	9.4 U
Anthracene			µg/L	9.4 U
bis(2-Chloroethyl)ether			µg/L	9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U
Dibenzofuran			µg/L	9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U
Dimethylphthalate			µg/L	9.4 U
Fluoranthene			µg/L	**1.2 J**
Fluorene			µg/L	9.4 U
2-Methylnaphthalene			µg/L	9.4 U
Naphthalene			µg/L	9.4 U
Phenanthrene			µg/L	9.4 U
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 U
Jet Fuel #5 (JP5)			µg/L	50 U
TPH, as motor oil			µg/L	300 U
TPH as Gasoline				
TPH, as gasoline			µg/L	**17 J**

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M032-A				
TPH (calculated)				
Total TPH (calculated)			µg/L	**17 J**
Metals				
Aluminum	1,000	439	µg/L	100 U
Antimony	6	46	µg/L	**0.059 J**
Arsenic	50	28	µg/L	5 U
Barium	1,000	575	µg/L	**83**
Beryllium	4	3.8	µg/L	2 U
Cadmium	5	5.4	µg/L	5 U
Chromium	50	14	µg/L	10 U
Cobalt		12	µg/L	**0.18 J**
Copper	1,000	27	µg/L	**0.28 J**
Iron		7,135	µg/L	**1,800**
Lead	15	3.9	µg/L	3 U
Manganese		5,213	µg/L	**530 J**
Mercury	2	0.15	µg/L	0.2 U
Molybdenum		12	µg/L	**1.7 J**
Nickel	100	19	µg/L	**0.77 J**
Selenium	50	6.0	µg/L	5 U
Silver		3.3	µg/L	5 U
Vanadium		29	µg/L	10 U
Zinc		43	µg/L	**7.4 J**
Calcium		379	mg/L	**74**
Magnesium		500	mg/L	**30 J**
Potassium		182	mg/L	**16**
Sodium		4,540	mg/L	**27**
Cyanide				
Total Cyanide	0.2		mg/L	0.01 U
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	**15.1**
Gross Beta	50		pCi/L	**13.6**
Radium				
Radium			pCi/L	0.278 U2
Sulfide				
Sulfide			mg/L	0.04 U
M033-A				
Volatile Organic Compounds				
Acetone			µg/L	10 U
Benzene	1		µg/L	0.5 U
tert-butyl alcohol			µg/L	20 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M033-A				
Volatile Organic Compounds				
N-butylbenzene			µg/L	0.5 U
sec-butylbenzene			µg/L	0.5 U
tert-butylbenzene			µg/L	**0.2 J**
Carbon Disulfide			µg/L	0.5 U
Chlorobenzene	70		µg/L	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U
1,2-Dichloroethane	0.5		µg/L	**0.3 J**
1,1-Dichloroethene	6		µg/L	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**7.9**
trans-1,2-Dichloroethene	10		µg/L	**0.5 J**
Ethylbenzene	300		µg/L	0.5 U
Isopropyl Ether			µg/L	0.5 U
Isopropylbenzene			µg/L	0.5 U
p-Isopropyltoluene			µg/L	0.5 U
N-propylbenzene			µg/L	0.5 U
Naphthalene			µg/L	2 U
Tetrachloroethene	5		µg/L	0.5 U
Toluene	150		µg/L	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U
Trichloroethene	5		µg/L	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U
Vinyl Chloride	0.5		µg/L	**2.2**
M,p-xylene	1,750		µg/L	0.5 U
O-xylene	1,750		µg/L	0.5 U
Semivolatile Organic Compounds				
Acenaphthene			µg/L	9.4 U
Anthracene			µg/L	9.4 U
bis(2-Chloroethyl)ether			µg/L	9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U
Dibenzofuran			µg/L	9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U
Dimethylphthalate			µg/L	9.4 U
Fluoranthene			µg/L	9.4 U
Fluorene			µg/L	9.4 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M033-A				
Semivolatile Organic Compounds				
2-Methylnaphthalene			µg/L	9.4 U
Naphthalene			µg/L	9.4 U
Phenanthrene			µg/L	9.4 U
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 UJ
Jet Fuel #5 (JP5)			µg/L	50 UJ
TPH, as motor oil			µg/L	300 UJ
TPH as Gasoline				
TPH, as gasoline			µg/L	140 Uly
TPH (calculated)				
Total TPH (calculated)			µg/L	300 U
Metals				
Aluminum	1,000	439	µg/L	100 U
Antimony	6	46	µg/L	50 U
Arsenic	50	28	µg/L	**5 J**
Barium	1,000	575	µg/L	**23**
Beryllium	4	3.8	µg/L	2 U
Cadmium	5	5.4	µg/L	5 U
Chromium	50	14	µg/L	**0.44 J**
Cobalt		12	µg/L	10 U
Copper	1,000	27	µg/L	10 U
Iron		7,135	µg/L	**960**
Lead	15	3.9	µg/L	**0.026 J**
Manganese		5,213	µg/L	**320**
Mercury	2	0.15	µg/L	0.2 U
Molybdenum		12	µg/L	20 U
Nickel	100	19	µg/L	**0.59 J**
Selenium	50	6.0	µg/L	5 U
Silver		3.3	µg/L	5 UR
Vanadium		29	µg/L	**0.48 J**
Zinc		43	µg/L	20 U
Calcium		379	mg/L	**51**
Magnesium		500	mg/L	**15**
Potassium		182	mg/L	**14**
Sodium		4,540	mg/L	**100**
Cyanide				
Total Cyanide	0.2		mg/L	0.01 U
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	**1**
Gross Beta	50		pCi/L	**18.2**

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M033-A				
Radium				
Radium			pCi/L	0.066 U3
Anions				
Chloride			mg/L	**58**
Sulfate			mg/L	**2.5**
Sulfide				
Sulfide			mg/L	0.04 U
Alkalinity				
Alkalinity			mg/L	**340**
Alkalinity, bicarbonate			mg/L	**340**
Dissolved Gases				
Ethane			mg/L	0.01 U
Ethene			mg/L	0.01 U
Methane			mg/L	**2.5**
M034-A				
Volatile Organic Compounds				
Acetone			µg/L	10 U
Benzene	1		µg/L	**30**
tert-butyl alcohol			µg/L	20 U
N-butylbenzene			µg/L	0.5 U
sec-butylbenzene			µg/L	**3.4**
tert-butylbenzene			µg/L	**0.4 J**
Carbon Disulfide			µg/L	0.5 U
Chlorobenzene	70		µg/L	**13**
1,2-Dichlorobenzene	600		µg/L	**2.6**
1,3-Dichlorobenzene			µg/L	**0.6**
1,4-Dichlorobenzene	5		µg/L	**2.6**
1,1-Dichloroethane	5		µg/L	**0.5 J**
1,2-Dichloroethane	0.5		µg/L	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**0.4 J**
trans-1,2-Dichloroethene	10		µg/L	**0.3 J**
Ethylbenzene	300		µg/L	**4**
Isopropyl Ether			µg/L	**0.7**
Isopropylbenzene			µg/L	**4.9**
p-Isopropyltoluene			µg/L	**1.6**
N-propylbenzene			µg/L	**4.6**
Naphthalene			µg/L	**82**
Tetrachloroethene	5		µg/L	0.5 U
Toluene	150		µg/L	**1.2**

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M034-A				
Volatile Organic Compounds				
1,1,1-Trichloroethane	200		µg/L	0.5 U
Trichloroethene	5		µg/L	0.5 U
1,2,4-Trimethylbenzene			µg/L	**17**
1,3,5-Trimethylbenzene			µg/L	**0.4 J**
Vinyl Chloride	0.5		µg/L	**0.5 J**
M,p-xylene	1,750		µg/L	**10**
O-xylene	1,750		µg/L	**0.4 J**
Semivolatile Organic Compounds				
Acenaphthene			µg/L	**3.4 J**
Anthracene			µg/L	9.4 U
bis(2-Chloroethyl)ether			µg/L	9.4 U
bis(2-chloroisopropyl) ether			µg/L	**1.8 J**
Dibenzofuran			µg/L	**1.4 J**
1,2-Dichlorobenzene	600		µg/L	**1.9 J**
1,4-Dichlorobenzene	5		µg/L	**1.8 J**
2,4-Dimethylphenol			µg/L	9.4 U
Dimethylphthalate			µg/L	9.4 U
Fluoranthene			µg/L	9.4 U
Fluorene			µg/L	9.4 U
2-Methylnaphthalene			µg/L	**3.8 J**
Naphthalene			µg/L	**59**
Phenanthrene			µg/L	9.4 U
TPH as Diesel				
TPH, as diesel fuel			µg/L	**46 Jly**
Jet Fuel #5 (JP5)			µg/L	**190 J**
TPH, as motor oil			µg/L	300 UJ
TPH as Gasoline				
TPH, as gasoline			µg/L	**490 h**
TPH (calculated)				
Total TPH (calculated)			µg/L	**726 J**
Metals				
Aluminum	1,000	439	µg/L	100 U
Antimony	6	46	µg/L	50 U
Arsenic	50	28	µg/L	**12**
Barium	1,000	575	µg/L	**120**
Beryllium	4	3.8	µg/L	2 U
Cadmium	5	5.4	µg/L	5 U
Chromium	50	14	µg/L	**0.8 J**
Cobalt		12	µg/L	**0.61 J**
Copper	1,000	27	µg/L	10 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M034-A				
Metals				
Iron		7,135	µg/L	**5,800**
Lead	15	3.9	µg/L	**0.031 J**
Manganese		5,213	µg/L	**720**
Mercury	2	0.15	µg/L	0.2 U
Molybdenum		12	µg/L	20 U
Nickel	100	19	µg/L	**0.59 J**
Selenium	50	6.0	µg/L	**0.76 J**
Silver		3.3	µg/L	5 UR
Vanadium		29	µg/L	**0.44 J**
Zinc		43	µg/L	**4.6 J**
Calcium		379	mg/L	**59**
Magnesium		500	mg/L	**15**
Potassium		182	mg/L	**21**
Sodium		4,540	mg/L	**70**
Cyanide				
Total Cyanide	0.2		mg/L	0.01 U
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	**2.6**
Gross Beta	50		pCi/L	**26.2**
Radium				
Radium			pCi/L	0.066 U3
M035-A				
Volatile Organic Compounds				
Acetone			µg/L	10 U
Benzene	1		µg/L	0.5 U
tert-butyl alcohol			µg/L	20 U
N-butylbenzene			µg/L	0.5 U
sec-butylbenzene			µg/L	0.5 U
tert-butylbenzene			µg/L	0.5 U
Carbon Disulfide			µg/L	0.5 U
Chlorobenzene	70		µg/L	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U
1,1-Dichloroethene	6		µg/L	**0.5 J**
cis-1,2-Dichloroethene	6		µg/L	**4.9**
trans-1,2-Dichloroethene	10		µg/L	**2.9**

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M035-A				
Volatile Organic Compounds				
Ethylbenzene	300		µg/L	0.5 U
Isopropyl Ether			µg/L	0.5 U
Isopropylbenzene			µg/L	0.5 U
p-Isopropyltoluene			µg/L	0.5 U
N-propylbenzene			µg/L	0.5 U
Naphthalene			µg/L	2 U
Tetrachloroethene	5		µg/L	**0.3 J**
Toluene	150		µg/L	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U
Trichloroethene	5		µg/L	**6.5**
1,2,4-Trimethylbenzene			µg/L	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U
M,p-xylene	1,750		µg/L	0.5 U
O-xylene	1,750		µg/L	0.5 U
Semivolatile Organic Compounds				
Acenaphthene			µg/L	9.4 U
Anthracene			µg/L	9.4 U
bis(2-Chloroethyl)ether			µg/L	9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U
Dibenzofuran			µg/L	9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U
Dimethylphthalate			µg/L	9.4 U
Fluoranthene			µg/L	9.4 U
Fluorene			µg/L	9.4 U
2-Methylnaphthalene			µg/L	9.4 U
Naphthalene			µg/L	9.4 U
Phenanthrene			µg/L	9.4 U
TPH as Diesel				
TPH, as diesel fuel			µg/L	50 UJ
Jet Fuel #5 (JP5)			µg/L	50 UJ
TPH, as motor oil			µg/L	300 UJ
TPH as Gasoline				
TPH, as gasoline			µg/L	50 U
TPH (calculated)				
Total TPH (calculated)			µg/L	300 U
Metals				
Aluminum	1,000	439	µg/L	100 U

Table 4-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Result
M035-A				
Metals				
Antimony	6	46	µg/L	**0.34 J**
Arsenic	50	28	µg/L	**11**
Barium	1,000	575	µg/L	**55**
Beryllium	4	3.8	µg/L	2 U
Cadmium	5	5.4	µg/L	5 U
Chromium	50	14	µg/L	**0.42 J**
Cobalt		12	µg/L	**0.53 J**
Copper	1,000	27	µg/L	10 U
Iron		7,135	µg/L	**470**
Lead	15	3.9	µg/L	3 U
Manganese		5,213	µg/L	**920**
Mercury	2	0.15	µg/L	0.2 U
Molybdenum		12	µg/L	20 U
Nickel	100	19	µg/L	**2.5 J**
Selenium	50	6.0	µg/L	5 U
Silver		3.3	µg/L	5 UR
Vanadium		29	µg/L	**1.3 J**
Zinc		43	µg/L	**11 J**
Calcium		379	mg/L	**99**
Magnesium		500	mg/L	**28**
Potassium		182	mg/L	**8.3**
Sodium		4,540	mg/L	**32**
Cyanide				
Total Cyanide	0.2		mg/L	0.01 U
Gross Alpha/Beta				
Gross Alpha	15		pCi/L	1.76 U4
Gross Beta	50		pCi/L	**9.64**
Radium				
Radium			pCi/L	0.262 U2

MCL California Maximum Contaminant Level
BV Background value (Tetra Tech Environmental Management, Inc., January 18, 1999)
TPH Total Petroleum Hydrocarbon
µg/L micrograms per liter
mg/L milligrams per liter
pCi/L pico curies per liter
Detected values are bolded.
Detected values greater than the California Maximum Contaminant Level are circled.
Detected values greater than the Background value are underlined.
Blank entries under well names indicate compound not analyzed. Blank entries under MCL and BV indicate no California Maximum Contaminant Levels or background values available, respectively.

- Figure 4-3, "Vinyl Chloride, First Water-Bearing Zone, IR Site 1 Operable Unit 3, Summer 2002"
- Figure 4-4, "Benzene, First Water-Bearing Zone, IR Site 1 Operable Unit 3, Summer 2002."

Contours for trichloroethene (TCE) within the FWBZ are presented on Figure 4-1. Trichloroethene was detected in samples taken from 4 of the 20 FWBZ wells at IR Site 1. However, the TCE concentrations that were above the MCL were detected in samples taken from two wells (M002-A and M035-A), which are located in the northern and west-central portion of IR Site 1. The detection of TCE in the samples taken from the four wells is consistent with previous sampling results.

Figure 4-2 presents contours for cis 1,2-dichloroethene (cis-1,2-DCE) within the FWBZ. Cis-1,2-Dichloroethene was detected in samples taken from 16 of the 28 Groundwater Monitoring Program wells. However, the cis-1,2-DCE content exceeded the MCL in only three samples. The distribution of cis-1,2-DCE was similar to that of TCE. Figure 4-3 presents contours for vinyl chloride within the FWBZ.

Vinyl chloride was detected in four samples but vinyl chloride exceeded the MCL in samples taken from only three wells (see Figure 4-3). Two plumes are shown within IR Site 1: one near well the M028-series well cluster at the west margin of the site and one to the east of the site near Building 594.

Contours for benzene within the FWBZ are presented on Figure 4-4. Benzene was detected in 7 of the 28 Groundwater Monitoring Program wells sampled during the Summer 2002 event. Five of those samples exceed the benzene MCL.

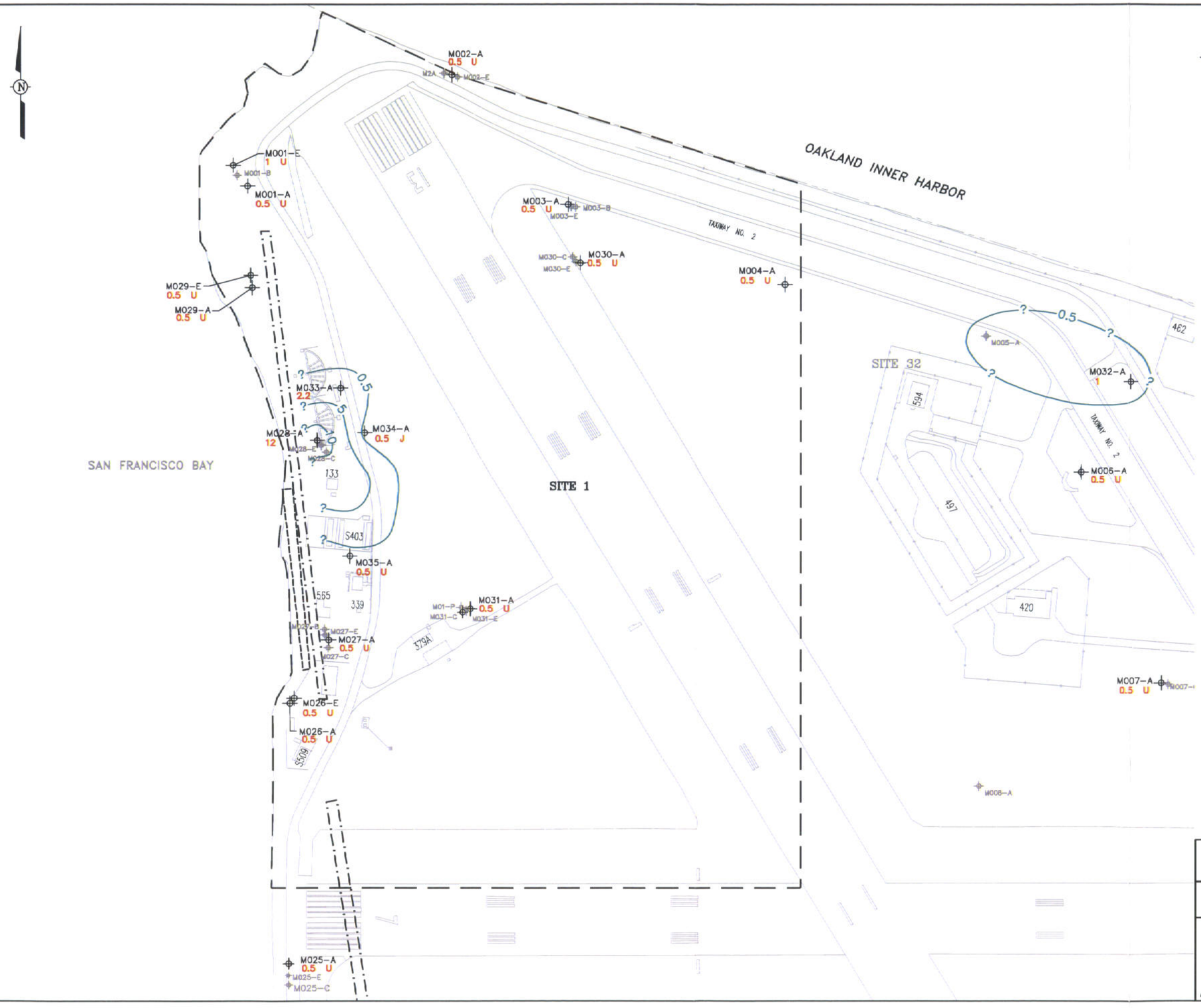
Potassium 40 are being evaluated as the possible source of gross beta radioactivity was detected in five wells at levels above the California State MCL.

4.3.2 Hydrochemistry Results

An evaluation of metal concentrations shows that the primary inorganic components of the groundwater samples are cations (iron, manganese, calcium, magnesium, potassium, and sodium) and anions (chloride, sulfate, and bicarbonate). No metals constituents exceeded the respective MCLs in the groundwater samples.

Graphical presentations of anion and cation ratios are presented on the Piper diagram in Figure 4-5, "Groundwater Piper Diagram, Installation Restoration Site 1, Summer 2002." The Piper diagram was used to identify unique characteristics of groundwater anion and cation ratios, and potentially determine the origin of groundwater and whether groundwater is impacted by site

DRAWING NUMBER	APPROVED BY	CHECKED BY	DRAWN BY	OFFICE	X-REF	IMAGE
829084-D232	---	---	RB 07/29/03	CONC	ALA1BASE	---



LEGEND

- PROGRAM MONITORING WELL
- MONITORING WELL NOT IN PROGRAM OR NOT SCREENED IN SPECIFIED HYDROLOGIC UNIT
- 0.5 ? — VINYL CHLORIDE ISOCONCENTRATION CONTOUR, QUERIED WHERE UNCERTAIN
- 12 U — RESULT (µg/L)/QUALIFIER
- CERCLA BOUNDARY
- BARGE LINES (1949 AERIAL SURVEY)
- BARGE LINES (1957 AERIAL SURVEY)
- J — ESTIMATED RESULT
- D — DILUTION
- U — NOT DETECTED AT SPECIFIED REPORTING LIMIT

NOTES:

1. POSITION OF BARGE LINES ARE INFERRED.
2. MCL IS 0.5 µg/L (TITLE 26 CALIFORNIA CODE OF REGULATIONS, 2002)
3. µg/L IN MICROGRAMS PER LITER.

SCALE 0 120 240 FEET

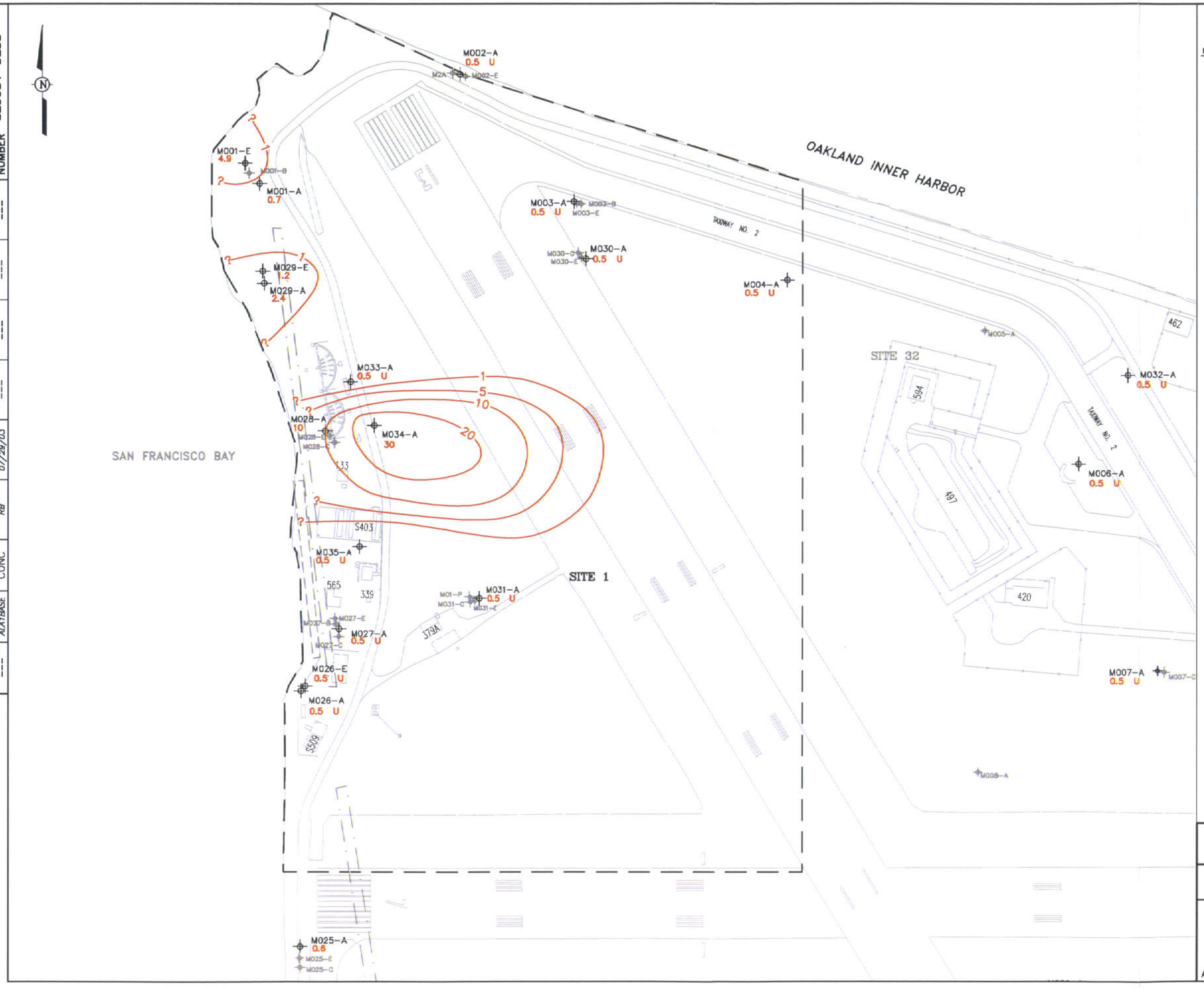
Shaw Environmental, Inc.

DEPARTMENT OF THE NAVY, SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
SAN DIEGO, CALIFORNIA

FIGURE 4-3
VINYL CHLORIDE
FIRST WATER-BEARING ZONE
IR SITE 1 OPERABLE UNIT 3
SUMMER 2002

ALAMEDA POINT ALAMEDA, CALIFORNIA

IMAGE	X-REF	OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
---	ALA1BASE	CONC	RB 07/29/03	---	---	829084-D233



LEGEND

- PROGRAM MONITORING WELL
- MONITORING WELL NOT IN PROGRAM OR NOT SCREENED IN SPECIFIED HYDROLOGIC UNIT
- BENZENE ISOCONCENTRATION CONTOUR, QUERIED WHERE UNCERTAIN
- 10 U — RESULT (µg/L)/QUALIFIER
- CERCLA BOUNDARY
- BARGE LINES (1949 AERIAL SURVEY)
- BARGE LINES (1957 AERIAL SURVEY)
- J — ESTIMATED RESULT
- D — DILUTION
- U — NOT DETECTED AT SPECIFIED REPORTING LIMIT

NOTES:

1. POSITION OF BARGE LINES ARE INFERRED.
2. MCL IS 1 µg/L (TITLE 28 CALIFORNIA CODE OF REGULATIONS, 2002)
3. µg/L IN MICROGRAMS PER LITER.

SCALE 0 120 240 FEET

Shaw Environmental, Inc.

DEPARTMENT OF THE NAVY, SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
SAN DIEGO, CALIFORNIA

FIGURE 4-4
BENZENE
FIRST WATER-BEARING ZONE
IR SITE 1 OPERABLE UNIT 3
SUMMER 2002

ALAMEDA POINT ALAMEDA, CALIFORNIA

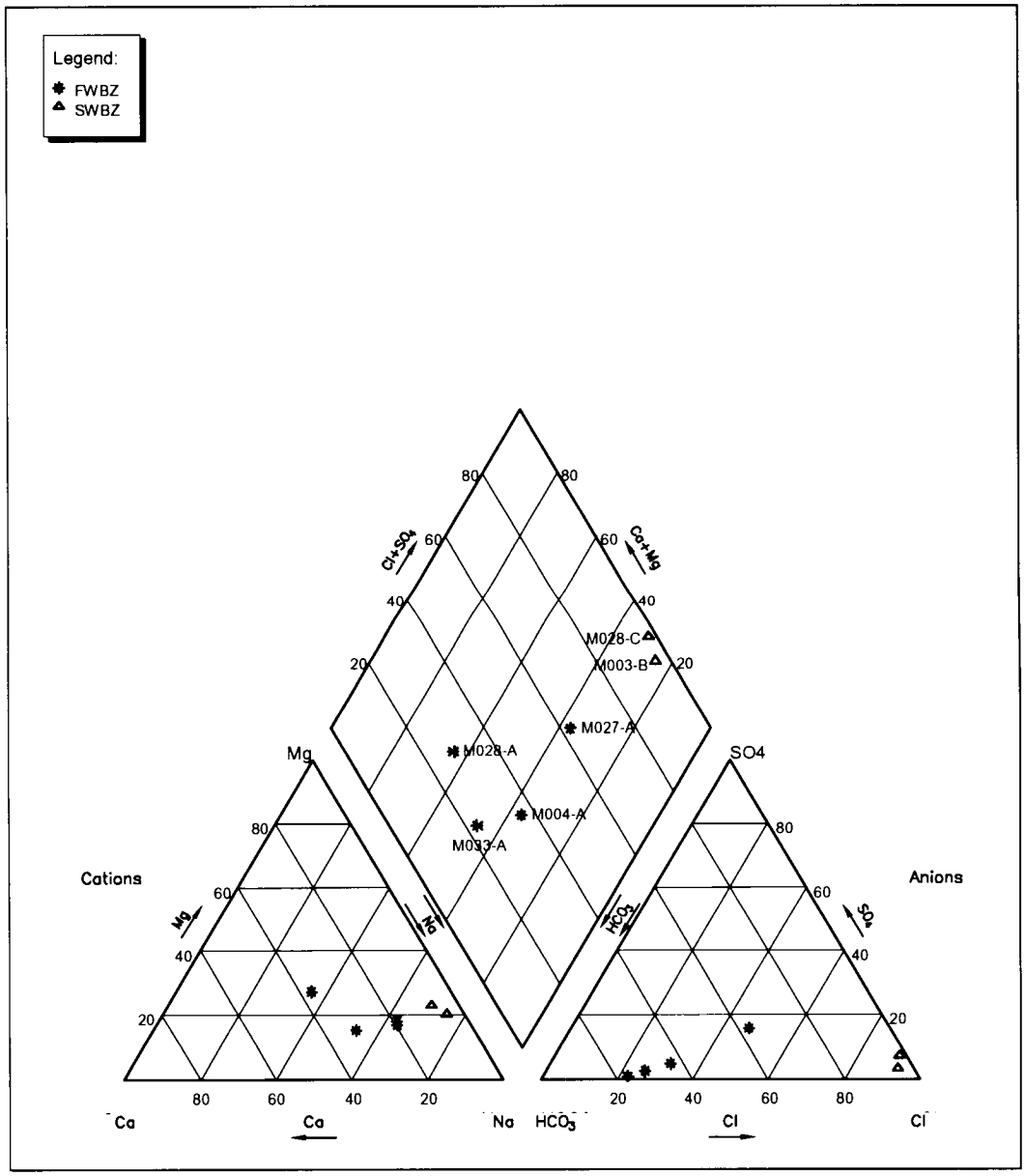


IMAGE	X-REF	OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
---	---	Concord	RB 07/29/03			829084-A27

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DEPARTMENT OF THE NAVY
SOUTHWEST DIVISION
NAVAL ENGINEERING COMMAND
SAN DIEGO, CALIFORNIA

FIGURE 4-5

GROUNDWATER PIPER DIAGRAM
INSTALLATION RESTORATION SITE 1
SUMMER 2002

ALAMEDA POINT
ALAMEDA, CALIFORNIA

activities. The Piper diagram plots the major cations (sodium, potassium, calcium, and magnesium) concentrations against the major anions (chloride, sulfate, and bicarbonate) concentrations of samples on the same diagram. Groundwater samples were only collected from the FWBZ at IR Site 1. Major anion and cation ratios are plotted wells sampled during the Summer 2002 sampling event.

A graphical presentation of anion and cation ratios is illustrated on the Piper diagram, Figure 4-5. The Piper diagram is used to identify unique characteristics of groundwater anion and cation ratios and is useful in determining the origin of groundwater. Groundwater samples collected from the FWBZ are widely scattered across Figure 4-5. Samples collected from the SWBZ are sodium-magnesium-chloride type water, which is typical of the SWBZ. This zone also has higher specific conductance and calculated total dissolved solids.

4.3.3 Natural Attenuation Data

Data used to evaluate the natural attenuation of chemicals in groundwater were collected during the Summer 2002 sampling event. Natural attenuation is the reduction in concentration and mass of a contaminant plume due to processes occurring naturally in the subsurface environment. Natural attenuation data measured during the Summer 2002 sampling event were:

- pH
- Dissolved oxygen
- Oxidation/reduction potential
- Ferrous iron
- Dissolved gases (methane, ethene, and ethane)
- Anions (chloride, nitrate, nitrite, and sulfate)
- Sulfide
- Alkalinity

Table 4-3, "Summary of Natural Attenuation Data, Installation Restoration Site 1, Summer 2002," lists the results of the natural attenuation analyses and measurements.

Table 4-3: Summary of Natural Attenuation Data, Installation Restoration Site 1
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Well	Date Measured	pH	Dissolved Oxygen (ppm)	ORP (mV)	Ferrous Iron (mg/L)	Methane (mg/L)	Ethane (mg/L)	Ethene (mg/L)	Nitrate (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	Alkalinity (mg/L)
M001-A	06/27/02	7.74	2.30	-63.0	NC	NC	NC	NC	NC	NC	NC	NC
M001-B	07/02/02	6.90	0.18	-46.1	0.73	NC	NC	NC	NC	NC	NC	NC
M001-E	06/27/02	6.65	4.20	-234.0	NC	NC	NC	NC	NC	NC	NC	NC
M002-A	06/26/02	6.91	2.40	120.0	NC	NC	NC	NC	NC	NC	0.04 U	NC
M003-A	06/26/02	6.96	1.10	1.0	NC	NC	NC	NC	NC	NC	0.04 U	NC
M003-B	07/01/02	6.78	0.03	-82.3	3.30	0.062	0.01 U	0.01 U	0.5 U	600	0.04 U	1,000
M004-A	06/26/02	7.22	2.20	115.0	0.07	0.2	0.01 U	0.01 U	0.05 U	26	0.04 U	450
M006-A	06/26/02	6.72	0.01	-54.8	1.18	NC	NC	NC	NC	NC	0.04 U	NC
M007-A	06/26/02	7.27	0.16	-75.0	0.00	NC	NC	NC	NC	NC	0.04 U	NC
M025-A	07/01/02	7.80	0.15	-183.2	0.06	NC	NC	NC	NC	NC	NC	NC
M025-C	07/01/02	6.90	1.68	-150.9	3.30	NC	NC	NC	NC	NC	NC	NC
M026-A	07/01/02	7.50	2.50	120.0	NC	NC	NC	NC	NC	NC	NC	NC
M026-E	07/01/02	7.85	2.10	-115.0	NC	NC	NC	NC	NC	NC	NC	NC
M027-A	06/28/02	7.18	0.80	43.0	0.27	0.025	0.01 U	0.01 U	0.1 U	190	NC	570
M027-B	07/02/02	6.97	0.18	-127.0	3.30	NC	NC	NC	NC	NC	NC	NC
M027-C	07/02/02	6.97	0.12	-81.4	2.43	NC	NC	NC	NC	NC	NC	NC
M028-A	07/01/02	7.32	2.20	-120.0	2.87	3.2	0.83	0.13	0.05 U	10	0.09	350
M028-C	07/02/02	7.06	0.42	-126.3	3.30	0.01 U	0.01 U	0.01 U	0.5 U	1,300	0.04 U	450
M029-A	06/27/02	7.95	2.30	-139.0	NC	NC	NC	NC	NC	NC	NC	NC
M029-E	06/27/02	8.02	2.20	-152.0	NC	NC	NC	NC	NC	NC	NC	NC
M030-A	06/27/02	6.55	2.60	-237.0	NC	NC	NC	NC	NC	NC	NC	NC
M030-C	07/15/02	7.66	2.50	-24.0	0.00	NC	NC	NC	NC	NC	NC	NC
M031-A	06/28/02	7.22	2.30	-31.0	NC	NC	NC	NC	NC	NC	NC	NC
M031-C	07/02/02	7.06	0.32	-87.6	1.98	NC	NC	NC	NC	NC	NC	NC
M032-A	06/26/02	7.11	0.09	-116.5	0.52	NC	NC	NC	NC	NC	0.04 U	NC
M033-A	06/28/02	7.17	2.00	-85.0	0.67	2.5	0.01 U	0.01 U	0.05 U	2.5	0.04 U	340

Table 4-3: Summary of Natural Attenuation Data, Installation Restoration Site 1 (Continued)
Summer 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Well	Date Measured	pH	Dissolved Oxygen (ppm)	ORP (mV)	Ferrous Iron (mg/L)	Methane (mg/L)	Ethane (mg/L)	Ethene (mg/L)	Nitrate (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	Alkalinity (mg/L)
M034-A	06/28/02	6.71	1.70	95.0	NC	NC	NC	NC	NC	NC	NC	NC
M035-A	06/28/02	7.14	0.90	-127.0	NC	NC	NC	NC	NC	NC	NC	NC

Note: Field parameter measurements represent the final field measurements taken prior to collection of the groundwater sample.

ppm parts per million
ORP Oxidation-Reduction Potential
mV millivolt
mg/L milligrams per liter
NC not collected

Qualifier Definitions:

U Not detected above the reporting limit.

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5.0 Fall 2002 Monitoring Event Summary and Results

The Fall 2002 sampling activities were performed between September 4 and October 1, 2002. Fifteen Groundwater Monitoring Program wells were sampled between August 17 and August 19, 2002 at Installation Restoration (IR) Site 1 (see Figure 1-2, "Site and Well Location Map, IR Site 1 Operable Unit 3"). Thirteen of the wells are completed in the Fill or Fill-Bay Sediment Unit (BSU) in the first water-bearing zone (FWBZ). Three of the sampled wells are completed in the BSU, Merritt Sand, or Upper San Antonio Formation in the second water-bearing zone (SWBZ). These Groundwater Monitoring Program wells and analytical parameters were as recommended and in accordance with the *Work Plan for Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California* (Work Plan) (Shaw, 2003). The sampling was conducted in accordance with the Work Plan (Shaw, 2003).

5.1 Groundwater Level Measurement Summary

At IR Site 1, the water levels in all sampled wells were measured on August 13, 2002. Table 5-1, "Summary of Groundwater Level Measurements, Installation Restoration Site 1, Summer and Fall 2002," provides a summary of the groundwater levels measured. Figure 5-1, "Groundwater Elevation Map, First Water-Bearing Zone, IR Site 1 Operable Unit 3, Fall 2002" provides a potentiometric surface map for the FWBZ based on water levels measured during the groundwater monitoring event. Groundwater levels within the FWBZ and SWBZ were approximately 2.8 to 6.9 feet below ground surface with elevations ranging between 3.5 and 7.2 feet above mean sea level. In the Fall 2002 event, the inferred general groundwater flow direction was south-southwest.

5.2 Analytical Program

The analytical samples were collected and analyzed according to the requirements presented in the Work Plan (Shaw, 2003) and Table 2-3, "Groundwater Monitoring Program, Installation Restoration Site 1 Wells and Analytical Program," as follows:

- Volatile organic compounds (VOCs), including oxygenated additives and naphthalene by U.S. Environmental Protection Agency (EPA) Method 8260B
- Dissolved metals by EPA Method 6010B/6020/7470
- Semivolatile organic compounds by EPA Method 8270C
- Gross alpha and gross beta by EPA Method 7110C
- Radium by EPA Method 903
- Cyanide by EPA Method 9010B

Table 5-1: Summary of Groundwater Level Measurements, Installation Restoration Site 1
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Well ID	Date	Top of Casing Elevation† (feet MSL)	Depth to Water* (feet)	Groundwater Elevation (feet MSL)
M001-A	6/27/2002	9.02	7.90	1.12
	9/13/2002	9.02	5.50	3.52
M001-B	7/2/2002	9.57	6.18	3.39
	9/13/2002	9.57	2.35	7.22
M001-E	6/27/2002	9.74	5.73	4.01
	9/13/2002	9.74	5.87	3.87
M002-A	6/26/2002	10.94	6.51	4.43
	9/13/2002	10.94	6.72	4.22
M003-A	6/26/2002	10.81	6.14	4.67
	9/13/2002	10.81	6.59	4.22
M003-B	7/1/2002	11.23	8.81	2.42
	9/13/2002	11.23	6.95	4.28
M004-A	6/26/2002	10.27	6.05	4.22
	9/13/2002	10.27	6.35	3.92
M006-A	6/26/2002	10.29	4.30	5.99
	9/13/2002	10.29	4.96	5.33
M007-A	6/26/2002	8.22	2.35	5.87
	9/13/2002	8.22	2.87	5.35
M025-A	7/1/2002	8.51	5.58	2.93
	9/13/2002	8.51	5.03	3.48
M025-C	7/1/2002	7.97	3.60	4.37
	9/13/2002	7.97	3.46	4.51
M025-E	9/13/2002	8.34	4.97	3.37
M026-A	7/12/2002	8.61	5.55	3.06
	9/13/2002	8.61	5.06	3.55
M026-E	7/1/2002	8.65	5.40	3.25
	9/13/2002	8.65	5.17	3.48
M027-A	6/28/2002	9.38	5.16	4.22
	9/13/2002	9.38	5.18	4.20
M027-B	7/2/2002	9.33	6.18	3.15
	9/13/2002	9.33	5.10	4.23
M027-C	7/2/2002	8.92	5.60	3.32
	9/13/2002	8.92	4.90	4.02
M027-E	9/13/2002	9.24	4.95	4.29

Table 5-1: Summary of Groundwater Level Measurements, Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Well ID	Date	Top of Casing Elevation† (feet MSL)	Depth to Water* (feet)	Groundwater Elevation (feet MSL)
M028-A	7/1/2002	10.67	6.68	3.99
	9/13/2002	10.67	6.58	4.09
M028-C	7/2/2002	10.86	7.81	3.05
	9/13/2002	10.86	6.73	4.13
M028-E	9/13/2002	10.46	6.27	4.19
M029-A	6/27/2002	9.46	5.51	3.95
	9/13/2002	9.46	5.70	3.76
M029-E	6/27/2002	8.62	4.67	3.95
	9/13/2002	8.62	4.80	3.82
M030-A	6/27/2002	10.08	6.12	3.96
	9/13/2002	10.08	6.62	3.46
M030-C	7/15/2002	10.41	7.86	2.55
	9/13/2002	10.41	6.28	4.13
M030-E	9/13/2002	10.10	5.59	4.51
M031-A	6/28/2002	8.47	3.79	4.68
	9/13/2002	8.47	4.16	4.31
M031-C	7/2/2002	8.87	5.28	3.59
	9/13/2002	8.87	4.86	4.01
M031-E	9/13/2002	8.53	4.17	4.36
M032-A	6/26/2002	9.84	4.20	5.64
	9/13/2002	9.84	4.70	5.14
M033-A	6/28/2002	10.14	5.78	4.36
	9/13/2002	10.14	6.03	4.11
M034-A	6/28/2002	8.87	4.39	4.48
	9/13/2002	8.87	4.63	4.24
M035-A	6/28/2002	10.58	6.23	4.35
	9/13/2002	10.58	6.38	4.20

† Surveyed to NGVD 29 by Calvada Surveying in September 2002
Subsequently converted to NAVD 88 by Shaw E&I using the Corpscon software
* Depth to water from top of casing
MSL Mean Sea Level

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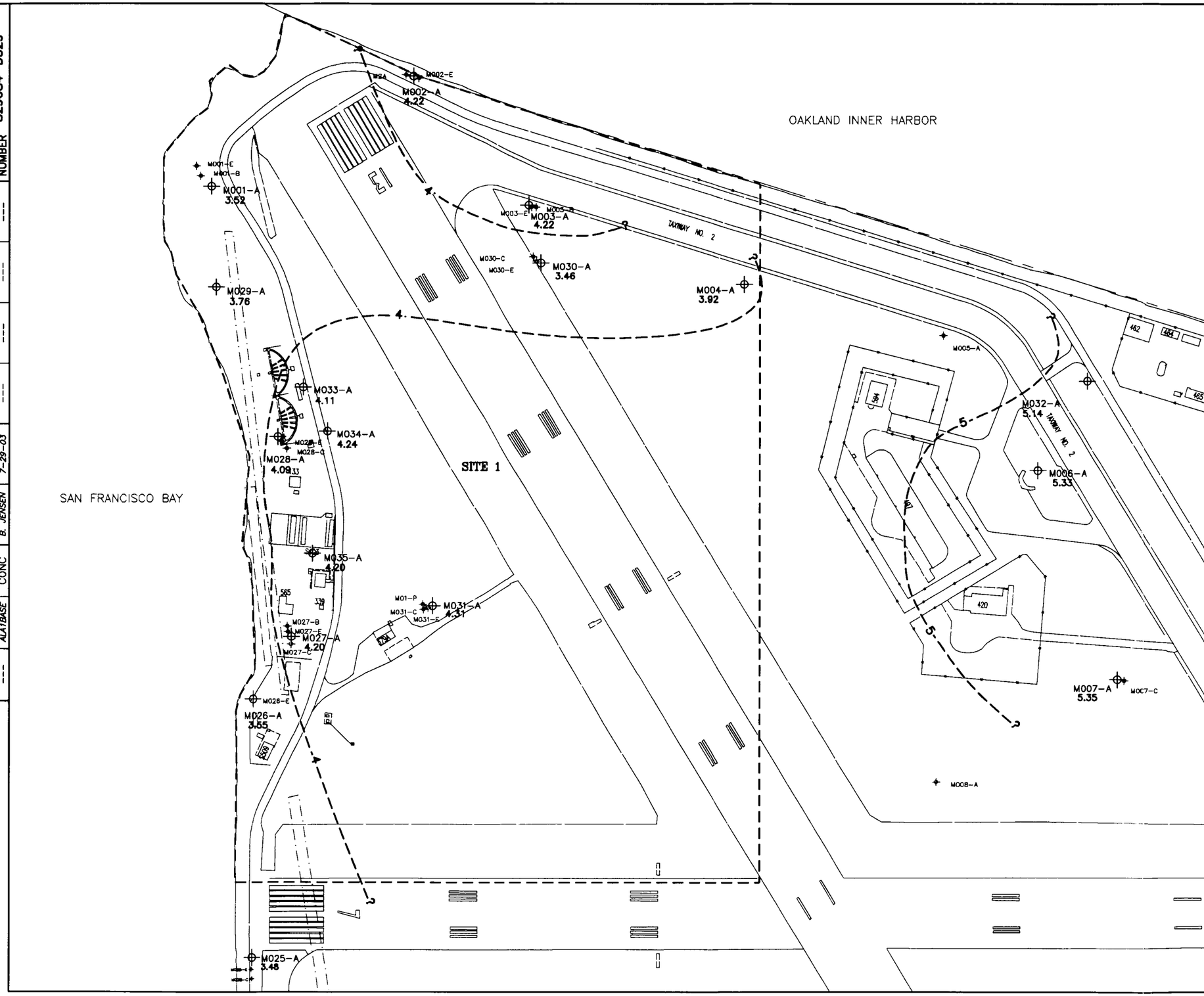

LEGEND

- PROGRAM MONITORING WELL
- MONITORING WELL NOT IN PROGRAM
- CERCLA BOUNDARY
- BARGE LINES (1949 AERIAL SURVEY)
- BARGE LINES (1957 AERIAL SURVEY)
- —4—?— GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL, QUERIED WHERE UNCERTAIN
- 3.92 GROUNDWATER ELEVATION
- CONTOUR INTERVAL 1 FOOT

NOTES:

1. POSITION OF BARGE LINES ARE INFERRED.
2. MONITORING WELLS LABELED A & E SCREENED AT DIFFERENT DEPTHS. GROUNDWATER CONTOURS ONLY REFLECT WELLS LABELED A.
3. WATER LEVELS MEASURED ON SEPTEMBER 13, 2003.

SCALE 0 120 240 FEET

Shaw Environmental, Inc.

DEPARTMENT OF THE NAVY, SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
SAN DIEGO, CALIFORNIA

FIGURE 5-1
GROUNDWATER ELEVATION MAP
FIRST WATER-BEARING ZONE
IR SITE 1 OPERABLE UNIT 3
FALL 2002

ALAMEDA POINT ALAMEDA, CALIFORNIA

IMAGE	X-REF	OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
---	ALA1BASE	CONC	B. JENSEN 7-29-03	--- ---	--- ---	829084-D329

The samples were analyzed by Curtis and Tompkins, Ltd., which subcontracted the dissolved gases analysis to Air Toxics, Ltd. Both laboratories are State of California-certified and have successfully completed the Naval Facilities Engineering Service Center's Laboratory Evaluation Program.

5.3 Analytical Results Summary

This section presents a brief summary of the analytical results. Analytical data were compared to historical results and to the California State Maximum Contaminant Levels (MCLs) (California Code of Regulations Title 22). The California State MCLs were compared to previous analytical results. Derivations of remedial action levels for cleanup of sites will be negotiated at a later date. Criteria for comparison of analytical results are presented in Table 2-2, "Summary of Regulatory Limits, Installation Restoration Site 1." Discussion of the analytical results is limited to observations made relative to regulatory criteria and historic data.

A complete listing of all analytical results is provided on compact disc in Appendix A, "Analytical Data with Data Qualifiers and Reason Code Definitions." The analytical data were validated at EPA Level III by a third-party validator (Laboratory Data Consultants of Carlsbad, California) and reviewed by the Shaw Project Chemist. The findings of the data validation process are also provided on compact disc and presented in Appendix B, "Data Quality Summary Report, Summer to Fall 2002." Based on the validation findings, the quality control data were found to be indicative of acceptable analytical method performance. All of the analytical data were valid and usable for project decisions.

5.3.1 Detected Chemical of Potential Concern Results

Detected analytical results are provided in Table 5-2, "Detected Parameters, Installation Restoration Site 1, Summer and Fall 2002." Results are provided for VOCs, metals, anions, alkalinity, and dissolved gases. Detected analytes are bolded and those exceeding the respective California State MCLs are circled on the table. Samples collected from 10 of the 15 monitoring wells during the Fall 2002 quarter at IR Site 1 had constituents above the California State MCLs.

Ten of the fifteen monitoring wells sampled in the Fall 2002 quarter at IR Site 1 had constituents above the California State MCLs. These included the following:

- Trichloroethene was detected above the California State MCL of 5 micrograms per liter (µg/L) in samples taken from wells M002-A (8.1 µg/L) and M035-A (5.2 µg/L)
- Cis-1,2-dichloroethene was detected above the California State MCL of 6 µg/L in samples taken from well M002-A at a concentration of 7.3 µg/L
- 1,1-dichloroethane exceeded the California State MCL of 5 µg/L in samples taken from well M028-A at a concentration of 21 µg/L

Table 5-2: Detected Parameters at Installation Restoration Site 1
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M001-A					
Volatile Organic Compounds					
Acetone			µg/L	10 U	10 U
Benzene	1		µg/L	**0.7**	**0.8**
tert-butyl alcohol			µg/L	20 U	20 U
N-butylbenzene			µg/L	0.5 U	0.5 UJ
sec-butylbenzene			µg/L	0.5 U	0.5 UJ
tert-butylbenzene			µg/L	0.5 U	0.5 UJ
Carbon Disulfide			µg/L	0.5 U	0.5 UJ
Chlorobenzene	70		µg/L	0.5 U	0.5 U
Chloroethane			µg/L	1 U	1 U
1,2-Dichlorobenzene	600		µg/L	0.5 U	**0.1 J**
1,3-Dichlorobenzene			µg/L	0.5 U	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U	0.5 UJ
1,1-Dichloroethene	6		µg/L	0.5 U	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**0.4 J**	**0.3 J**
trans-1,2-Dichloroethene	10		µg/L	0.5 U	0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U	**0.1 J**
Ethylbenzene	300		µg/L	0.5 U	**0.3 J**
Isopropyl Ether			µg/L	0.5 U	0.5 U
Isopropylbenzene			µg/L	0.5 U	0.5 U
p-Isopropyltoluene			µg/L	0.5 U	0.5 UJ
Methyl tert-butyl ether	13		µg/L	0.5 U	**0.1 J**
N-propylbenzene			µg/L	0.5 U	0.5 U
Naphthalene			µg/L	**0.3 J**	2 U
Tetrachloroethene	5		µg/L	0.5 U	0.5 U
Toluene	150		µg/L	0.5 U	**0.1 J**
1,1,1-Trichloroethane	200		µg/L	0.5 U	0.5 U
Trichloroethene	5		µg/L	0.5 U	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U	0.5 UJ
1,3,5-Trimethylbenzene			µg/L	0.5 U	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U	**0.2 J**
M,p-xylene	1,750		µg/L	0.5 U	**0.2 J**
O-xylene	1,750		µg/L	0.5 U	**0.2 J**
Semivolatile Organic Compounds					
Acenaphthene			µg/L	10 U	9.9 U
Anthracene			µg/L	10 U	9.9 U
bis(2-Chloroethyl)ether			µg/L	10 U	9.9 U
bis(2-chloroisopropyl) ether			µg/L	10 U	9.9 U
bis(2-Ethylhexyl)phthalate	4		µg/L	10 U	9.9 U

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M001-A					
Semivolatile Organic Compounds					
Dibenzofuran			µg/L	10 U	9.9 U
1,2-Dichlorobenzene	600		µg/L	10 U	9.9 U
1,3-Dichlorobenzene			µg/L	10 U	9.9 U
1,4-Dichlorobenzene	5		µg/L	10 U	9.9 U
2,4-Dimethylphenol			µg/L	10 U	9.9 U
Dimethylphthalate			µg/L	10 U	9.9 U
Fluoranthene			µg/L	10 U	9.9 U
Fluorene			µg/L	10 U	9.9 U
2-Methylnaphthalene			µg/L	10 U	9.9 U
2-Methylphenol			µg/L	10 U	9.9 U
Naphthalene			µg/L	10 U	9.9 U
Phenanthrene			µg/L	10 U	9.9 U
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 U	
Jet Fuel #5 (JP5)			µg/L	50 U	
TPH, as motor oil			µg/L	300 U	
TPH as Gasoline					
TPH, as gasoline			µg/L	50 U	
TPH (calculated)					
Total TPH (calculated)			µg/L	300 U	
Metals					
Aluminum	1,000	439	µg/L	**8.5 J**	100 U
Antimony	6	46	µg/L	**0.38 J**	**0.4 J**
Arsenic	50	28	µg/L	**1.3 J**	5 U
Barium	1,000	575	µg/L	**160**	**120**
Beryllium	4	3.8	µg/L	**0.025 J**	2 U
Cadmium	5	5.4	µg/L	5 U	5 U
Chromium	50	14	µg/L	**0.46 J**	10 U
Cobalt		12	µg/L	**0.16 J**	10 U
Copper	1,000	27	µg/L	**0.51 J**	10 U
Iron		7,135	µg/L	**300**	**230**
Lead	15	3.9	µg/L	**0.42 J**	3 U
Manganese		5,213	µg/L	**92**	**39**
Mercury	2	0.15	µg/L	0.2 U	0.2 U
Molybdenum		12	µg/L	20 U	**2.4 J**
Nickel	100	19	µg/L	**0.83 J**	20 U
Selenium	50	6.0	µg/L	**1 J**	**0.62 J**
Silver		3.3	µg/L	5 UJ	5 U
Vanadium		29	µg/L	**0.59 J**	10 U
Zinc		43	µg/L	20 U	20 U

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M001-A					
Metals					
Calcium		379	mg/L	**47**	**25**
Magnesium		500	mg/L	**26 J**	**26**
Potassium		182	mg/L	**25**	**30**
Sodium		4,540	mg/L	**270**	**370**
Cyanide					
Total Cyanide	0.2		mg/L	**0.01 J**	0.01 U
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	0.671 U2	**1.75**
Gross Beta	50		pCi/L	**11**	**37.3**
Radium					
Radium			pCi/L	0.202 U2	0.248 U4J
M001-B					
Volatile Organic Compounds					
Acetone			µg/L	10 U	
Benzene	1		µg/L	0.5 U	
tert-butyl alcohol			µg/L	20 U	
N-butylbenzene			µg/L	0.5 U	
sec-butylbenzene			µg/L	0.5 U	
tert-butylbenzene			µg/L	0.5 U	
Carbon Disulfide			µg/L	0.5 U	
Chlorobenzene	70		µg/L	0.5 U	
Chloroethane			µg/L	1 U	
1,2-Dichlorobenzene	600		µg/L	0.5 U	
1,3-Dichlorobenzene			µg/L	0.5 U	
1,4-Dichlorobenzene	5		µg/L	0.5 U	
1,1-Dichloroethane	5		µg/L	**0.2 J**	
1,2-Dichloroethane	0.5		µg/L	0.5 U	
1,1-Dichloroethene	6		µg/L	0.5 U	
cis-1,2-Dichloroethene	6		µg/L	0.5 U	
trans-1,2-Dichloroethene	10		µg/L	0.5 U	
1,2-Dichloropropane	5		µg/L	0.5 U	
Ethylbenzene	300		µg/L	0.5 U	
Isopropyl Ether			µg/L	0.5 U	
Isopropylbenzene			µg/L	0.5 U	
p-Isopropyltoluene			µg/L	0.5 U	
Methyl tert-butyl ether	13		µg/L	0.5 U	
N-propylbenzene			µg/L	0.5 U	
Naphthalene			µg/L	2 U	
Tetrachloroethene	5		µg/L	0.5 U	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M001-B					
Volatile Organic Compounds					
Toluene	150		µg/L	**3.3**	
1,1,1-Trichloroethane	200		µg/L	**1.4**	
Trichloroethene	5		µg/L	0.5 U	
1,2,4-Trimethylbenzene			µg/L	0.5 U	
1,3,5-Trimethylbenzene			µg/L	0.5 U	
Vinyl Chloride	0.5		µg/L	0.5 U	
M,p-xylene	1,750		µg/L	0.5 U	
O-xylene	1,750		µg/L	0.5 U	
Semivolatile Organic Compounds					
Acenaphthene			µg/L	9.4 U	
Anthracene			µg/L	9.4 U	
bis(2-Chloroethyl)ether			µg/L	9.4 U	
bis(2-chloroisopropyl) ether			µg/L	9.4 U	
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	
Dibenzofuran			µg/L	9.4 U	
1,2-Dichlorobenzene	600		µg/L	9.4 U	
1,3-Dichlorobenzene			µg/L	9.4 U	
1,4-Dichlorobenzene	5		µg/L	9.4 U	
2,4-Dimethylphenol			µg/L	9.4 U	
Dimethylphthalate			µg/L	**57**	
Fluoranthene			µg/L	9.4 U	
Fluorene			µg/L	9.4 U	
2-Methylnaphthalene			µg/L	9.4 U	
2-Methylphenol			µg/L	9.4 U	
Naphthalene			µg/L	9.4 U	
Phenanthrene			µg/L	9.4 U	
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 UJ	
Jet Fuel #5 (JP5)			µg/L	50 UJ	
TPH, as motor oil			µg/L	300 UJ	
TPH as Gasoline					
TPH, as gasoline			µg/L	50 U	
TPH (calculated)					
Total TPH (calculated)			µg/L	300 U	
Metals					
Aluminum	1,000	439	µg/L	100 U	
Antimony	6	46	µg/L	50 U	
Arsenic	50	28	µg/L	5 U	
Barium	1,000	575	µg/L	**65**	
Beryllium	4	3.8	µg/L	2 U	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M001-B					
Metals					
Cadmium	5	5.4	µg/L	5 U	
Chromium	50	14	µg/L	**3.4 J**	
Cobalt		12	µg/L	**9 J**	
Copper	1,000	27	µg/L	**7.8 J**	
Iron		7,135	µg/L	**1,400**	
Lead	15	3.9	µg/L	3 U	
Manganese		5,213	µg/L	**7,100**	
Mercury	2	0.15	µg/L	0.2 U	
Molybdenum		12	µg/L	20 U	
Nickel	100	19	µg/L	20 U	
Selenium	50	6.0	µg/L	5 U	
Silver		3.3	µg/L	**4.8 J**	
Vanadium		29	µg/L	**1.6 J**	
Zinc		43	µg/L	28 U	
Calcium		379	mg/L	**550**	
Magnesium		500	mg/L	**1,000**	
Potassium		182	mg/L	**110**	
Sodium		4,540	mg/L	**5,200**	
Cyanide					
Total Cyanide	0.2		mg/L	0.01 U	
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	**12**	
Gross Beta	50		pCi/L	**139**	
Radium					
Radium			pCi/L	0.406 U4	
M001-E					
Volatile Organic Compounds					
Acetone			µg/L	20 U	10 U
Benzene	1		µg/L	**4.9**	**5.4**
tert-butyl alcohol			µg/L	40 U	20 U
N-butylbenzene			µg/L	1 U	0.5 U
sec-butylbenzene			µg/L	1 U	**0.2 J**
tert-butylbenzene			µg/L	1 U	0.5 U
Carbon Disulfide			µg/L	1 U	0.5 U
Chlorobenzene	70		µg/L	**10**	**10**
Chloroethane			µg/L	2 U	1 U
1,2-Dichlorobenzene	600		µg/L	**1.4**	**1.8**
1,3-Dichlorobenzene			µg/L	1 U	0.5 U
1,4-Dichlorobenzene	5		µg/L	1 U	**0.4 J**

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M001-E					
Volatile Organic Compounds					
1,1-Dichloroethane	5		µg/L	1 U	0.5 U
1,2-Dichloroethane	0.5		µg/L	1 U	0.5 U
1,1-Dichloroethene	6		µg/L	1 U	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**0.9 J**	**1.1**
trans-1,2-Dichloroethene	10		µg/L	1 U	0.5 U
1,2-Dichloropropane	5		µg/L	1 U	0.5 U
Ethylbenzene	300		µg/L	**2.9**	**3.3**
Isopropyl Ether			µg/L	1 U	0.5 U
Isopropylbenzene			µg/L	**0.6 J**	**0.6**
p-Isopropyltoluene			µg/L	1 U	**0.7**
Methyl tert-butyl ether	13		µg/L	1 U	0.5 U
N-propylbenzene			µg/L	1 U	**0.3 J**
Naphthalene			µg/L	**210**	**230**
Tetrachloroethene	5		µg/L	1 U	0.5 U
Toluene	150		µg/L	**0.8 J**	**0.9**
1,1,1-Trichloroethane	200		µg/L	1 U	0.5 U
Trichloroethene	5		µg/L	1 U	0.5 U
1,2,4-Trimethylbenzene			µg/L	**0.8 J**	**0.8**
1,3,5-Trimethylbenzene			µg/L	1 U	0.5 U
Vinyl Chloride	0.5		µg/L	1 U	**0.5**
M,p-xylene	1,750		µg/L	**1.3**	**1.8**
O-xylene	1,750		µg/L	**8.4**	**11**
Semivolatile Organic Compounds					
Acenaphthene			µg/L	**1.5 J**	**1.3 J**
Anthracene			µg/L	**1.5 J**	9.4 U
bis(2-Chloroethyl)ether			µg/L	**0.94 J**	9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U	**2.8 J**
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	9.4 U
Dibenzofuran			µg/L	**0.96 J**	9.4 U
1,2-Dichlorobenzene	600		µg/L	**1.2 J**	9.4 U
1,3-Dichlorobenzene			µg/L	9.4 U	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U	9.4 U
2,4-Dimethylphenol			µg/L	**2.2 J**	**2.7 J**
Dimethylphthalate			µg/L	9.4 U	9.4 U
Fluoranthene			µg/L	**1.5 J**	9.4 U
Fluorene			µg/L	9.4 U	9.4 U
2-Methylnaphthalene			µg/L	9.4 U	9.4 U
2-Methylphenol			µg/L	9.4 U	9.4 U
Naphthalene			µg/L	**4.1 J**	9.4 U
Phenanthrene			µg/L	**1.2 J**	9.4 U

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M001-E					
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 U	
Jet Fuel #5 (JP5)			µg/L	50 U	
TPH, as motor oil			µg/L	300 U	
TPH as Gasoline					
TPH, as gasoline			µg/L	**140**	
TPH (calculated)					
Total TPH (calculated)			µg/L	**140**	
Metals					
Aluminum	1,000	439	µg/L	**10 J**	100 UJ
Antimony	6	46	µg/L	**1.8 J**	**2.4 J**
Arsenic	50	28	µg/L	**1.3 J**	5 UJ
Barium	1,000	575	µg/L	**110**	**120**
Beryllium	4	3.8	µg/L	**0.077 J**	2 U
Cadmium	5	5.4	µg/L	5 U	5 U
Chromium	50	14	µg/L	**0.88 J**	10 UJ
Cobalt		12	µg/L	**0.21 J**	10 UJ
Copper	1,000	27	µg/L	**0.29 J**	10 UJ
Iron		7,135	µg/L	**160**	**160 J**
Lead	15	3.9	µg/L	**0.64 J**	3 U
Manganese		5,213	µg/L	**32 J**	**31 J**
Mercury	2	0.15	µg/L	0.2 U	0.2 U
Molybdenum		12	µg/L	20 U	**5 J**
Nickel	100	19	µg/L	**0.76 J**	20 UJ
Selenium	50	6.0	µg/L	**1.7 J**	**1.4 J**
Silver		3.3	µg/L	5 UJ	5 U
Vanadium		29	µg/L	**1.2 J**	10 UJ
Zinc		43	µg/L	20 U	20 UJ
Calcium		379	mg/L	**5.8**	**7.7 J**
Magnesium		500	mg/L	**4.8 J**	**5.5 J**
Potassium		182	mg/L	**46**	**46**
Sodium		4,540	mg/L	**580**	**560**
Cyanide					
Total Cyanide	0.2		mg/L	**0.05**	0.01 U
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	2.43 U4	**1.21**
Gross Beta	50		pCi/L	**2.11**	**29.9**
Radium					
Radium			pCi/L	0.068 U3	0.124 U2J
M002-A					

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M002-A					
Volatile Organic Compounds					
Acetone			µg/L	10 U	10 U
Benzene	1		µg/L	0.5 U	0.5 U
tert-butyl alcohol			µg/L	20 U	20 U
N-butylbenzene			µg/L	0.5 U	0.5 U
sec-butylbenzene			µg/L	0.5 U	0.5 U
tert-butylbenzene			µg/L	0.5 U	0.5 U
Carbon Disulfide			µg/L	0.5 U	0.5 U
Chlorobenzene	70		µg/L	0.5 U	0.5 U
Chloroethane			µg/L	1 U	1 U
1,2-Dichlorobenzene	600		µg/L	0.5 U	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**6.2**	**7.3**
trans-1,2-Dichloroethene	10		µg/L	0.5 U	0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U	0.5 U
Ethylbenzene	300		µg/L	0.5 U	0.5 U
Isopropyl Ether			µg/L	0.5 U	0.5 U
Isopropylbenzene			µg/L	0.5 U	0.5 U
p-Isopropyltoluene			µg/L	0.5 U	0.5 U
Methyl tert-butyl ether	13		µg/L	0.5 U	0.5 U
N-propylbenzene			µg/L	0.5 U	0.5 U
Naphthalene			µg/L	2 U	2 U
Tetrachloroethene	5		µg/L	0.5 U	0.5 U
Toluene	150		µg/L	0.5 U	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U	0.5 U
Trichloroethene	5		µg/L	**11**	**8.1**
1,2,4-Trimethylbenzene			µg/L	0.5 U	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U	0.5 U
M,p-xylene	1,750		µg/L	0.5 U	0.5 U
O-xylene	1,750		µg/L	0.5 U	0.5 U
Semivolatile Organic Compounds					
Acenaphthene			µg/L	9.5 U	9.6 U
Anthracene			µg/L	9.5 U	9.6 U
bis(2-Chloroethyl)ether			µg/L	9.5 U	9.6 U
bis(2-chloroisopropyl) ether			µg/L	9.5 U	9.6 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.5 U	9.6 U

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M002-A					
Semivolatile Organic Compounds					
Dibenzofuran			µg/L	9.5 U	9.6 U
1,2-Dichlorobenzene	600		µg/L	9.5 U	9.6 U
1,3-Dichlorobenzene			µg/L	9.5 U	9.6 U
1,4-Dichlorobenzene	5		µg/L	9.5 U	9.6 U
2,4-Dimethylphenol			µg/L	9.5 U	9.6 U
Dimethylphthalate			µg/L	9.5 U	9.6 U
Fluoranthene			µg/L	9.5 U	9.6 U
Fluorene			µg/L	9.5 U	9.6 U
2-Methylnaphthalene			µg/L	9.5 U	9.6 U
2-Methylphenol			µg/L	9.5 U	9.6 U
Naphthalene			µg/L	9.5 U	9.6 U
Phenanthrene			µg/L	9.5 U	9.6 U
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 U	
Jet Fuel #5 (JP5)			µg/L	50 U	
TPH, as motor oil			µg/L	300 U	
TPH as Gasoline					
TPH, as gasoline			µg/L	50 U	
TPH (calculated)					
Total TPH (calculated)			µg/L	300 U	
Metals					
Aluminum	1,000	439	µg/L	**8.2 J**	100 U
Antimony	6	46	µg/L	**0.29 J**	**0.41 J**
Arsenic	50	28	µg/L	**2.6 J**	5 U
Barium	1,000	575	µg/L	**60**	**110**
Beryllium	4	3.8	µg/L	2 U	2 U
Cadmium	5	5.4	µg/L	5 U	5 U
Chromium	50	14	µg/L	10 U	10 U
Cobalt		12	µg/L	**0.69 J**	**1 J**
Copper	1,000	27	µg/L	**1.3 J**	10 U
Iron		7,135	µg/L	**390**	**900**
Lead	15	3.9	µg/L	3 U	3 U
Manganese		5,213	µg/L	**57**	**110**
Mercury	2	0.15	µg/L	0.2 U	0.2 U
Molybdenum		12	µg/L	**2 J**	**1.4 J**
Nickel	100	19	µg/L	**2.7 J**	**4.1 J**
Selenium	50	6.0	µg/L	**1.1 J**	**1.4 J**
Silver		3.3	µg/L	5 U	5 U
Vanadium		29	µg/L	10 U	10 UJ
Zinc		43	µg/L	**0.73 J**	20 U

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M002-A					
Metals					
Calcium		379	mg/L	**160**	**250**
Magnesium		500	mg/L	**26 J**	**46**
Potassium		182	mg/L	**15**	**25**
Sodium		4,540	mg/L	**220**	**250**
Cyanide					
Total Cyanide	0.2		mg/L	0.01 U	0.01 U
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	**3.3**	**3.59**
Gross Beta	50		pCi/L	**22.8**	**29**
Radium					
Radium			pCi/L	0.276 U2	0.056 U3J
Sulfide					
Sulfide			mg/L	0.04 U	
M003-A					
Volatile Organic Compounds					
Acetone			µg/L	10 U	10 U
Benzene	1		µg/L	0.5 U	0.5 U
tert-butyl alcohol			µg/L	20 U	20 U
N-butylbenzene			µg/L	0.5 U	0.5 U
sec-butylbenzene			µg/L	0.5 U	0.5 U
tert-butylbenzene			µg/L	0.5 U	0.5 U
Carbon Disulfide			µg/L	0.5 U	0.5 U
Chlorobenzene	70		µg/L	0.5 U	0.5 U
Chloroethane			µg/L	1 U	1 U
1,2-Dichlorobenzene	600		µg/L	0.5 U	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U	0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U	0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U	0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U	0.5 U
Ethylbenzene	300		µg/L	0.5 U	0.5 U
Isopropyl Ether			µg/L	0.5 U	0.5 U
Isopropylbenzene			µg/L	0.5 U	0.5 U
p-Isopropyltoluene			µg/L	0.5 U	**0.6**
Methyl tert-butyl ether	13		µg/L	0.5 U	0.5 U
N-propylbenzene			µg/L	0.5 U	0.5 U

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M003-A					
Volatile Organic Compounds					
Naphthalene			µg/L	2 U	2 U
Tetrachloroethene	5		µg/L	0.5 U	0.5 U
Toluene	150		µg/L	0.5 U	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U	0.5 U
Trichloroethene	5		µg/L	**0.9**	**1.1**
1,2,4-Trimethylbenzene			µg/L	0.5 U	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U	0.5 U
M,p-xylene	1,750		µg/L	0.5 U	0.5 U
O-xylene	1,750		µg/L	0.5 U	0.5 U
Semivolatile Organic Compounds					
Acenaphthene			µg/L	9.5 U	9.6 U
Anthracene			µg/L	9.5 U	9.6 U
bis(2-Chloroethyl)ether			µg/L	9.5 U	9.6 U
bis(2-chloroisopropyl) ether			µg/L	9.5 U	9.6 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.5 U	9.6 U
Dibenzofuran			µg/L	9.5 U	9.6 U
1,2-Dichlorobenzene	600		µg/L	9.5 U	9.6 U
1,3-Dichlorobenzene			µg/L	9.5 U	9.6 U
1,4-Dichlorobenzene	5		µg/L	9.5 U	9.6 U
2,4-Dimethylphenol			µg/L	9.5 U	9.6 U
Dimethylphthalate			µg/L	9.5 U	9.6 U
Fluoranthene			µg/L	9.5 U	9.6 U
Fluorene			µg/L	9.5 U	9.6 U
2-Methylnaphthalene			µg/L	9.5 U	9.6 U
2-Methylphenol			µg/L	9.5 U	9.6 U
Naphthalene			µg/L	9.5 U	9.6 U
Phenanthrene			µg/L	9.5 U	9.6 U
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 U	
Jet Fuel #5 (JP5)			µg/L	50 U	
TPH, as motor oil			µg/L	300 U	
TPH as Gasoline					
TPH, as gasoline			µg/L	50 U	
TPH (calculated)					
Total TPH (calculated)			µg/L	300 U	
Metals					
Aluminum	1,000	439	µg/L	**6 J**	100 U
Antimony	6	46	µg/L	**0.22 J**	**0.34 J**
Arsenic	50	28	µg/L	5 U	**3 J**

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M003-A					
Metals					
Barium	1,000	575	µg/L	**30**	**33**
Beryllium	4	3.8	µg/L	2 U	2 U
Cadmium	5	5.4	µg/L	5 U	5 U
Chromium	50	14	µg/L	**1 J**	10 U
Cobalt		12	µg/L	**0.97 J**	**6.1 J**
Copper	1,000	27	µg/L	**0.25 J**	**0.42 J**
Iron		7,135	µg/L	**570**	**1,400**
Lead	15	3.9	µg/L	3 U	**0.062 J**
Manganese		5,213	µg/L	**40**	**100**
Mercury	2	0.15	µg/L	0.2 U	0.2 U
Molybdenum		12	µg/L	**4.7 J**	**5.1 J**
Nickel	100	19	µg/L	**1.6 J**	**4.6 J**
Selenium	50	6.0	µg/L	5 U	5 U
Silver		3.3	µg/L	5 U	5 U
Vanadium		29	µg/L	**2.3 J**	**2.9 J**
Zinc		43	µg/L	**3.4 J**	**91**
Calcium		379	mg/L	**120**	**120**
Magnesium		500	mg/L	**9**	**9.9**
Potassium		182	mg/L	**3.5**	**3.9**
Sodium		4,540	mg/L	**9.9**	**8.9**
Cyanide					
Total Cyanide	0.2		mg/L	0.01 U	**0.01**
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	**3.29**	**2.92**
Gross Beta	50		pCi/L	**5.39**	**3.55**
Radium					
Radium			pCi/L	0.07 U3	0.397 U4J
Sulfide					
Sulfide			mg/L	0.04 U	
M003-B					
Volatile Organic Compounds					
Acetone			µg/L	10 U	
Benzene	1		µg/L	0.5 U	
tert-butyl alcohol			µg/L	20 U	
N-butylbenzene			µg/L	0.5 U	
sec-butylbenzene			µg/L	0.5 U	
tert-butylbenzene			µg/L	0.5 U	
Carbon Disulfide			µg/L	0.5 U	
Chlorobenzene	70		µg/L	0.5 U	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M003-B					
Volatile Organic Compounds					
Chloroethane			µg/L	1 U	
1,2-Dichlorobenzene	600		µg/L	0.5 U	
1,3-Dichlorobenzene			µg/L	0.5 U	
1,4-Dichlorobenzene	5		µg/L	0.5 U	
1,1-Dichloroethane	5		µg/L	0.5 U	
1,2-Dichloroethane	0.5		µg/L	0.5 U	
1,1-Dichloroethene	6		µg/L	0.5 U	
cis-1,2-Dichloroethene	6		µg/L	0.5 U	
trans-1,2-Dichloroethene	10		µg/L	0.5 U	
1,2-Dichloropropane	5		µg/L	0.5 U	
Ethylbenzene	300		µg/L	0.5 U	
Isopropyl Ether			µg/L	0.5 U	
Isopropylbenzene			µg/L	0.5 U	
p-Isopropyltoluene			µg/L	0.5 U	
Methyl tert-butyl ether	13		µg/L	0.5 U	
N-propylbenzene			µg/L	0.5 U	
Naphthalene			µg/L	2 U	
Tetrachloroethene	5		µg/L	0.5 U	
Toluene	150		µg/L	0.5 U	
1,1,1-Trichloroethane	200		µg/L	0.5 U	
Trichloroethene	5		µg/L	0.5 U	
1,2,4-Trimethylbenzene			µg/L	0.5 U	
1,3,5-Trimethylbenzene			µg/L	0.5 U	
Vinyl Chloride	0.5		µg/L	0.5 U	
M,p-xylene	1,750		µg/L	0.5 U	
O-xylene	1,750		µg/L	0.5 U	
Semivolatile Organic Compounds					
Acenaphthene			µg/L	9.4 U	
Anthracene			µg/L	9.4 U	
bis(2-Chloroethyl)ether			µg/L	9.4 U	
bis(2-chloroisopropyl) ether			µg/L	9.4 U	
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	
Dibenzofuran			µg/L	9.4 U	
1,2-Dichlorobenzene	600		µg/L	9.4 U	
1,3-Dichlorobenzene			µg/L	9.4 U	
1,4-Dichlorobenzene	5		µg/L	9.4 U	
2,4-Dimethylphenol			µg/L	9.4 U	
Dimethylphthalate			µg/L	9.4 U	
Fluoranthene			µg/L	9.4 U	
Fluorene			µg/L	9.4 U	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M003-B					
Semivolatile Organic Compounds					
2-Methylnaphthalene			µg/L	9.4 U	
2-Methylphenol			µg/L	9.4 U	
Naphthalene			µg/L	9.4 U	
Phenanthrene			µg/L	9.4 U	
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 UJ	
Jet Fuel #5 (JP5)			µg/L	50 UJ	
TPH, as motor oil			µg/L	300 UJ	
TPH as Gasoline					
TPH, as gasoline			µg/L	50 U	
TPH (calculated)					
Total TPH (calculated)			µg/L	300 U	
Metals					
Aluminum	1,000	439	µg/L	2500 U	
Antimony	6	46	µg/L	**0.13 J**	
Arsenic	50	28	µg/L	5 U	
Barium	1,000	575	µg/L	**130**	
Beryllium	4	3.8	µg/L	50 U	
Cadmium	5	5.4	µg/L	**0.089 J**	
Chromium	50	14	µg/L	**7.9 J**	
Cobalt		12	µg/L	**2.5 J**	
Copper	1,000	27	µg/L	**4.6 J**	
Iron		7,135	µg/L	**7,300**	
Lead	15	3.9	µg/L	3 U	
Manganese		5,213	µg/L	**7,300**	
Mercury	2	0.15	µg/L	**0.061 J**	
Molybdenum		12	µg/L	20 U	
Nickel	100	19	µg/L	**5.8 J**	
Selenium	50	6.0	µg/L	5 U	
Silver		3.3	µg/L	**3 J**	
Vanadium		29	µg/L	**2.4 J**	
Zinc		43	µg/L	20 U	
Calcium		379	mg/L	**370**	
Magnesium		500	mg/L	**1,000**	
Potassium		182	mg/L	**210**	
Sodium		4,540	mg/L	**6,900**	
Cyanide					
Total Cyanide	0.2		mg/L	0.01 U	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M003-B					
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	**7.34**	
Gross Beta	50		pCi/L	**182**	
Radium					
Radium			pCi/L	**0.75**	
Anions					
Chloride			mg/L	**13,000**	
Sulfate			mg/L	**600**	
Sulfide					
Sulfide			mg/L	0.04 U	
Alkalinity					
Alkalinity			mg/L	**1,000**	
Alkalinity, bicarbonate			mg/L	**1,000**	
Dissolved Gases					
Ethane			mg/L	0.01 U	
Ethene			mg/L	0.01 U	
Methane			mg/L	**0.062**	
M004-A					
Volatile Organic Compounds					
Acetone			µg/L	10 U	
Benzene	1		µg/L	0.5 U	
tert-butyl alcohol			µg/L	20 U	
N-butylbenzene			µg/L	0.5 U	
sec-butylbenzene			µg/L	0.5 U	
tert-butylbenzene			µg/L	0.5 U	
Carbon Disulfide			µg/L	0.5 U	
Chlorobenzene	70		µg/L	0.5 U	
Chloroethane			µg/L	1 U	
1,2-Dichlorobenzene	600		µg/L	0.5 U	
1,3-Dichlorobenzene			µg/L	0.5 U	
1,4-Dichlorobenzene	5		µg/L	0.5 U	
1,1-Dichloroethane	5		µg/L	0.5 U	
1,2-Dichloroethane	0.5		µg/L	0.5 U	
1,1-Dichloroethene	6		µg/L	0.5 U	
cis-1,2-Dichloroethene	6		µg/L	0.5 U	
trans-1,2-Dichloroethene	10		µg/L	0.5 U	
1,2-Dichloropropane	5		µg/L	0.5 U	
Ethylbenzene	300		µg/L	0.5 U	
Isopropyl Ether			µg/L	0.5 U	
Isopropylbenzene			µg/L	0.5 U	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M004-A					
Volatile Organic Compounds					
p-Isopropyltoluene			µg/L	0.5 U	
Methyl tert-butyl ether	13		µg/L	0.5 U	
N-propylbenzene			µg/L	0.5 U	
Naphthalene			µg/L	2 U	
Tetrachloroethene	5		µg/L	0.5 U	
Toluene	150		µg/L	**0.5 J**	
1,1,1-Trichloroethane	200		µg/L	0.5 U	
Trichloroethene	5		µg/L	0.5 U	
1,2,4-Trimethylbenzene			µg/L	0.5 U	
1,3,5-Trimethylbenzene			µg/L	0.5 U	
Vinyl Chloride	0.5		µg/L	0.5 U	
M,p-xylene	1,750		µg/L	0.5 U	
O-xylene	1,750		µg/L	0.5 U	
Semivolatile Organic Compounds					
Acenaphthene			µg/L	9.6 U	
Anthracene			µg/L	9.6 U	
bis(2-Chloroethyl)ether			µg/L	9.6 U	
bis(2-chloroisopropyl) ether			µg/L	9.6 U	
bis(2-Ethylhexyl)phthalate	4		µg/L	9.6 U	
Dibenzofuran			µg/L	9.6 U	
1,2-Dichlorobenzene	600		µg/L	9.6 U	
1,3-Dichlorobenzene			µg/L	9.6 U	
1,4-Dichlorobenzene	5		µg/L	9.6 U	
2,4-Dimethylphenol			µg/L	9.6 U	
Dimethylphthalate			µg/L	9.6 U	
Fluoranthene			µg/L	9.6 U	
Fluorene			µg/L	9.6 U	
2-Methylnaphthalene			µg/L	9.6 U	
2-Methylphenol			µg/L	9.6 U	
Naphthalene			µg/L	9.6 U	
Phenanthrene			µg/L	9.6 U	
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 U	
Jet Fuel #5 (JP5)			µg/L	50 U	
TPH, as motor oil			µg/L	300 U	
TPH as Gasoline					
TPH, as gasoline			µg/L	50 U	
TPH (calculated)					
Total TPH (calculated)			µg/L	300 U	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M004-A					
Metals					
Aluminum	1,000	439	µg/L	100 U	
Antimony	6	46	µg/L	**0.37 J**	
Arsenic	50	28	µg/L	**4.6 J**	
Barium	1,000	575	µg/L	**16**	
Beryllium	4	3.8	µg/L	2 U	
Cadmium	5	5.4	µg/L	5 U	
Chromium	50	14	µg/L	**0.95 J**	
Cobalt		12	µg/L	**1.1 J**	
Copper	1,000	27	µg/L	**0.52 J**	
Iron		7,135	µg/L	**140**	
Lead	15	3.9	µg/L	3 U	
Manganese		5,213	µg/L	**98**	
Mercury	2	0.15	µg/L	0.2 U	
Molybdenum		12	µg/L	**2.4 J**	
Nickel	100	19	µg/L	**2 J**	
Selenium	50	6.0	µg/L	**0.81 J**	
Silver		3.3	µg/L	**0.27 J**	
Vanadium		29	µg/L	**3.4 J**	
Zinc		43	µg/L	**2.3 J**	
Calcium		379	mg/L	**64**	
Magnesium		500	mg/L	**34 J**	
Potassium		182	mg/L	**25**	
Sodium		4,540	mg/L	**240**	
Cyanide					
Total Cyanide	0.2		mg/L	0.01 U	
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	**2.76**	
Gross Beta	50		pCi/L	**19.3**	
Radium					
Radium			pCi/L	0.069 U3	
Anions					
Chloride			mg/L	**130**	
Sulfate			mg/L	**26**	
Sulfide					
Sulfide			mg/L	0.04 U	
Alkalinity					
Alkalinity			mg/L	**450**	
Alkalinity, bicarbonate			mg/L	**450**	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M004-A					
Dissolved Gases					
Ethane			mg/L	0.01 U	
Ethene			mg/L	0.01 U	
Methane			mg/L	**0.2**	
M006-A					
Volatile Organic Compounds					
Acetone			µg/L	10 U	
Benzene	1		µg/L	0.5 U	
tert-butyl alcohol			µg/L	20 U	
N-butylbenzene			µg/L	0.5 U	
sec-butylbenzene			µg/L	0.5 U	
tert-butylbenzene			µg/L	0.5 U	
Carbon Disulfide			µg/L	0.5 U	
Chlorobenzene	70		µg/L	0.5 U	
Chloroethane			µg/L	1 U	
1,2-Dichlorobenzene	600		µg/L	0.5 U	
1,3-Dichlorobenzene			µg/L	0.5 U	
1,4-Dichlorobenzene	5		µg/L	0.5 U	
1,1-Dichloroethane	5		µg/L	0.5 U	
1,2-Dichloroethane	0.5		µg/L	0.5 U	
1,1-Dichloroethene	6		µg/L	0.5 U	
cis-1,2-Dichloroethene	6		µg/L	0.5 U	
trans-1,2-Dichloroethene	10		µg/L	0.5 U	
1,2-Dichloropropane	5		µg/L	0.5 U	
Ethylbenzene	300		µg/L	0.5 U	
Isopropyl Ether			µg/L	0.5 U	
Isopropylbenzene			µg/L	0.5 U	
p-Isopropyltoluene			µg/L	0.5 U	
Methyl tert-butyl ether	13		µg/L	0.5 U	
N-propylbenzene			µg/L	0.5 U	
Naphthalene			µg/L	2 U	
Tetrachloroethene	5		µg/L	0.5 U	
Toluene	150		µg/L	0.5 U	
1,1,1-Trichloroethane	200		µg/L	0.5 U	
Trichloroethene	5		µg/L	0.5 U	
1,2,4-Trimethylbenzene			µg/L	0.5 U	
1,3,5-Trimethylbenzene			µg/L	0.5 U	
Vinyl Chloride	0.5		µg/L	0.5 U	
M,p-xylene	1,750		µg/L	0.5 U	
O-xylene	1,750		µg/L	0.5 U	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M006-A					
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 U	
Jet Fuel #5 (JP5)			µg/L	50 U	
TPH, as motor oil			µg/L	**54 Jy**	
TPH as Gasoline					
TPH, as gasoline			µg/L	50 U	
TPH (calculated)					
Total TPH (calculated)			µg/L	**54 J**	
Metals					
Aluminum	1,000	439	µg/L	100 U	
Antimony	6	46	µg/L	**0.077 J**	
Arsenic	50	28	µg/L	**2.8 J**	
Barium	1,000	575	µg/L	**110**	
Beryllium	4	3.8	µg/L	2 U	
Cadmium	5	5.4	µg/L	5 U	
Chromium	50	14	µg/L	10 U	
Cobalt		12	µg/L	**0.36 J**	
Copper	1,000	27	µg/L	**0.79 J**	
Iron		7,135	µg/L	**1,400**	
Lead	15	3.9	µg/L	3 U	
Manganese		5,213	µg/L	**910 J**	
Mercury	2	0.15	µg/L	**0.061 J**	
Molybdenum		12	µg/L	**0.51 J**	
Nickel	100	19	µg/L	**6.6 J**	
Selenium	50	6.0	µg/L	5 U	
Silver		3.3	µg/L	5 U	
Vanadium		29	µg/L	10 U	
Zinc		43	µg/L	**16 J**	
Calcium		379	mg/L	**97**	
Magnesium		500	mg/L	**24 J**	
Potassium		182	mg/L	**12**	
Sodium		4,540	mg/L	**31**	
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	**2.73**	
Gross Beta	50		pCi/L	**9.86**	
Radium					
Radium			pCi/L	0.068 U3	
Sulfide					
Sulfide			mg/L	0.04 U	
M007-A					

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M007-A					
Volatile Organic Compounds					
Acetone			µg/L	10 U	
Benzene	1		µg/L	0.5 U	
tert-butyl alcohol			µg/L	20 U	
N-butylbenzene			µg/L	0.5 U	
sec-butylbenzene			µg/L	0.5 U	
tert-butylbenzene			µg/L	0.5 U	
Carbon Disulfide			µg/L	0.5 U	
Chlorobenzene	70		µg/L	0.5 U	
Chloroethane			µg/L	1 U	
1,2-Dichlorobenzene	600		µg/L	0.5 U	
1,3-Dichlorobenzene			µg/L	0.5 U	
1,4-Dichlorobenzene	5		µg/L	0.5 U	
1,1-Dichloroethane	5		µg/L	0.5 U	
1,2-Dichloroethane	0.5		µg/L	0.5 U	
1,1-Dichloroethene	6		µg/L	0.5 U	
cis-1,2-Dichloroethene	6		µg/L	**3.2**	
trans-1,2-Dichloroethene	10		µg/L	0.5 U	
1,2-Dichloropropane	5		µg/L	0.5 U	
Ethylbenzene	300		µg/L	0.5 U	
Isopropyl Ether			µg/L	0.5 U	
Isopropylbenzene			µg/L	0.5 U	
p-Isopropyltoluene			µg/L	0.5 U	
Methyl tert-butyl ether	13		µg/L	0.5 U	
N-propylbenzene			µg/L	0.5 U	
Naphthalene			µg/L	2 U	
Tetrachloroethene	5		µg/L	0.5 U	
Toluene	150		µg/L	0.5 U	
1,1,1-Trichloroethane	200		µg/L	0.5 U	
Trichloroethene	5		µg/L	**0.5 J**	
1,2,4-Trimethylbenzene			µg/L	0.5 U	
1,3,5-Trimethylbenzene			µg/L	0.5 U	
Vinyl Chloride	0.5		µg/L	0.5 U	
M,p-xylene	1,750		µg/L	0.5 U	
O-xylene	1,750		µg/L	0.5 U	
Semivolatile Organic Compounds					
Acenaphthene			µg/L	9.4 U	
Anthracene			µg/L	9.4 U	
bis(2-Chloroethyl)ether			µg/L	9.4 U	
bis(2-chloroisopropyl) ether			µg/L	9.4 U	
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M007-A					
Semivolatile Organic Compounds					
Dibenzofuran			µg/L	9.4 U	
1,2-Dichlorobenzene	600		µg/L	9.4 U	
1,3-Dichlorobenzene			µg/L	9.4 U	
1,4-Dichlorobenzene	5		µg/L	9.4 U	
2,4-Dimethylphenol			µg/L	9.4 U	
Dimethylphthalate			µg/L	9.4 U	
Fluoranthene			µg/L	9.4 U	
Fluorene			µg/L	9.4 U	
2-Methylnaphthalene			µg/L	9.4 U	
2-Methylphenol			µg/L	9.4 U	
Naphthalene			µg/L	9.4 U	
Phenanthrene			µg/L	9.4 U	
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 U	
Jet Fuel #5 (JP5)			µg/L	50 U	
TPH, as motor oil			µg/L	300 U	
TPH as Gasoline					
TPH, as gasoline			µg/L	50 U	
TPH (calculated)					
Total TPH (calculated)			µg/L	300 U	
Metals					
Aluminum	1,000	439	µg/L	**4 J**	
Antimony	6	46	µg/L	**0.081 J**	
Arsenic	50	28	µg/L	**19**	
Barium	1,000	575	µg/L	**17**	
Beryllium	4	3.8	µg/L	2 U	
Cadmium	5	5.4	µg/L	5 U	
Chromium	50	14	µg/L	**1.2 J**	
Cobalt		12	µg/L	**0.2 J**	
Copper	1,000	27	µg/L	**0.49 J**	
Iron		7,135	µg/L	**230**	
Lead	15	3.9	µg/L	3 U	
Manganese		5,213	µg/L	**570 J**	
Mercury	2	0.15	µg/L	0.2 U	
Molybdenum		12	µg/L	**1.2 J**	
Nickel	100	19	µg/L	**1.4 J**	
Selenium	50	6.0	µg/L	5 U	
Silver		3.3	µg/L	5 U	
Vanadium		29	µg/L	**2.6 J**	
Zinc		43	µg/L	**0.53 J**	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M007-A					
Metals					
Calcium		379	mg/L	**17**	
Magnesium		500	mg/L	**8.3**	
Potassium		182	mg/L	**10**	
Sodium		4,540	mg/L	**110**	
Cyanide					
Total Cyanide	0.2		mg/L	0.01 U	
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	2.85 U4	
Gross Beta	50		pCi/L	**12.5**	
Radium					
Radium			pCi/L	0.069 U3	
Sulfide					
Sulfide			mg/L	0.04 U	
M025-A					
Volatile Organic Compounds					
Acetone			µg/L	10 U	
Benzene	1		µg/L	**0.6**	
tert-butyl alcohol			µg/L	20 U	
N-butylbenzene			µg/L	0.5 U	
sec-butylbenzene			µg/L	0.5 U	
tert-butylbenzene			µg/L	0.5 U	
Carbon Disulfide			µg/L	0.5 U	
Chlorobenzene	70		µg/L	0.5 U	
Chloroethane			µg/L	1 U	
1,2-Dichlorobenzene	600		µg/L	0.5 U	
1,3-Dichlorobenzene			µg/L	0.5 U	
1,4-Dichlorobenzene	5		µg/L	0.5 U	
1,1-Dichloroethane	5		µg/L	0.5 U	
1,2-Dichloroethane	0.5		µg/L	**0.5 J**	
1,1-Dichloroethene	6		µg/L	0.5 U	
cis-1,2-Dichloroethene	6		µg/L	**1.8**	
trans-1,2-Dichloroethene	10		µg/L	0.5 U	
1,2-Dichloropropane	5		µg/L	0.5 U	
Ethylbenzene	300		µg/L	0.5 U	
Isopropyl Ether			µg/L	0.5 U	
Isopropylbenzene			µg/L	0.5 U	
p-Isopropyltoluene			µg/L	0.5 U	
Methyl tert-butyl ether	13		µg/L	0.5 U	
N-propylbenzene			µg/L	0.5 U	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M025-A					
Volatile Organic Compounds					
Naphthalene			µg/L	2 U	
Tetrachloroethene	5		µg/L	0.5 U	
Toluene	150		µg/L	0.5 U	
1,1,1-Trichloroethane	200		µg/L	0.5 U	
Trichloroethene	5		µg/L	0.5 U	
1,2,4-Trimethylbenzene			µg/L	0.5 U	
1,3,5-Trimethylbenzene			µg/L	0.5 U	
Vinyl Chloride	0.5		µg/L	0.5 U	
M,p-xylene	1,750		µg/L	0.5 U	
O-xylene	1,750		µg/L	0.5 U	
Semivolatile Organic Compounds					
Acenaphthene			µg/L	9.4 U	9.4 U
Anthracene			µg/L	9.4 U	9.4 U
bis(2-Chloroethyl)ether			µg/L	9.4 U	9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U	9.4 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	9.4 U
Dibenzofuran			µg/L	9.4 U	9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U	9.4 U
1,3-Dichlorobenzene			µg/L	9.4 U	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U	9.4 U
Dimethylphthalate			µg/L	9.4 U	9.4 U
Fluoranthene			µg/L	9.4 U	9.4 U
Fluorene			µg/L	9.4 U	9.4 U
2-Methylnaphthalene			µg/L	9.4 U	9.4 U
2-Methylphenol			µg/L	9.4 U	9.4 U
Naphthalene			µg/L	9.4 U	9.4 U
Phenanthrene			µg/L	9.4 U	9.4 U
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 UJ	
Jet Fuel #5 (JP5)			µg/L	50 UJ	
TPH, as motor oil			µg/L	300 UJ	
TPH as Gasoline					
TPH, as gasoline			µg/L	50 U	
TPH (calculated)					
Total TPH (calculated)			µg/L	300 U	
Metals					
Aluminum	1,000	439	µg/L	**5.8 J**	100 U
Antimony	6	46	µg/L	**4.1 J**	**0.2 J**
Arsenic	50	28	µg/L	**1.7 J**	5 U

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M025-A					
Metals					
Barium	1,000	575	µg/L	**800**	**250**
Beryllium	4	3.8	µg/L	**0.1 J**	2 U
Cadmium	5	5.4	µg/L	**0.056 J**	5 U
Chromium	50	14	µg/L	**2.3 J**	10 U
Cobalt		12	µg/L	10 U	**0.47 J**
Copper	1,000	27	µg/L	**0.95 J**	10 U
Iron		7,135	µg/L	**390**	**920**
Lead	15	3.9	µg/L	**0.3 J**	3 U
Manganese		5,213	µg/L	**350**	**650**
Mercury	2	0.15	µg/L	0.2 U	0.2 U
Molybdenum		12	µg/L	20 U	**0.83 J**
Nickel	100	19	µg/L	**0.82 J**	**3.1 J**
Selenium	50	6.0	µg/L	**12**	5 U
Silver		3.3	µg/L	5 U	5 U
Vanadium		29	µg/L	**1.7 J**	10 U
Zinc		43	µg/L	20 U	20 U
Calcium		379	mg/L	**140**	**360**
Magnesium		500	mg/L	**240**	**750**
Potassium		182	mg/L	**62**	**180**
Sodium		4,540	mg/L	**1,100**	**4,700**
Cyanide					
Total Cyanide	0.2		mg/L	0.01 U	**0.01**
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	**1.26**	
Gross Beta	50		pCi/L	2.8 U3	
Radium					
Radium			pCi/L	0.274 U2	
M025-C					
Volatile Organic Compounds					
Acetone			µg/L	10 U	
Benzene	1		µg/L	0.5 U	
tert-butyl alcohol			µg/L	20 U	
N-butylbenzene			µg/L	0.5 U	
sec-butylbenzene			µg/L	0.5 U	
tert-butylbenzene			µg/L	0.5 U	
Carbon Disulfide			µg/L	**0.3 J**	
Chlorobenzene	70		µg/L	0.5 U	
Chloroethane			µg/L	1 U	
1,2-Dichlorobenzene	600		µg/L	0.5 U	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M025-C					
Volatile Organic Compounds					
1,3-Dichlorobenzene			µg/L	0.5 U	
1,4-Dichlorobenzene	5		µg/L	0.5 U	
1,1-Dichloroethane	5		µg/L	0.5 U	
1,2-Dichloroethane	0.5		µg/L	0.5 U	
1,1-Dichloroethene	6		µg/L	0.5 U	
cis-1,2-Dichloroethene	6		µg/L	0.5 U	
trans-1,2-Dichloroethene	10		µg/L	0.5 U	
1,2-Dichloropropane	5		µg/L	0.5 U	
Ethylbenzene	300		µg/L	0.5 U	
Isopropyl Ether			µg/L	0.5 U	
Isopropylbenzene			µg/L	0.5 U	
p-Isopropyltoluene			µg/L	0.5 U	
Methyl tert-butyl ether	13		µg/L	0.5 U	
N-propylbenzene			µg/L	0.5 U	
Naphthalene			µg/L	2 U	
Tetrachloroethene	5		µg/L	0.5 U	
Toluene	150		µg/L	0.5 U	
1,1,1-Trichloroethane	200		µg/L	0.5 U	
Trichloroethene	5		µg/L	0.5 U	
1,2,4-Trimethylbenzene			µg/L	0.5 U	
1,3,5-Trimethylbenzene			µg/L	0.5 U	
Vinyl Chloride	0.5		µg/L	0.5 U	
M,p-xylene	1,750		µg/L	0.5 U	
O-xylene	1,750		µg/L	0.5 U	
Semivolatile Organic Compounds					
Acenaphthene			µg/L	9.4 U	9.4 U
Anthracene			µg/L	9.4 U	9.4 U
bis(2-Chloroethyl)ether			µg/L	9.4 U	9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U	9.4 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	**3 J**
Dibenzofuran			µg/L	9.4 U	9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U	9.4 U
1,3-Dichlorobenzene			µg/L	9.4 U	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U	9.4 U
Dimethylphthalate			µg/L	9.4 U	9.4 U
Fluoranthene			µg/L	9.4 U	9.4 U
Fluorene			µg/L	9.4 U	9.4 U
2-Methylnaphthalene			µg/L	9.4 U	9.4 U
2-Methylphenol			µg/L	9.4 U	9.4 U

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M025-C					
Semivolatile Organic Compounds					
Naphthalene			µg/L	9.4 U	9.4 U
Phenanthrene			µg/L	9.4 U	9.4 U
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 UJ	
Jet Fuel #5 (JP5)			µg/L	50 UJ	
TPH, as motor oil			µg/L	300 UJ	
TPH as Gasoline					
TPH, as gasoline			µg/L	50 U	
TPH (calculated)					
Total TPH (calculated)			µg/L	300 U	
Metals					
Aluminum	1,000	439	µg/L	100 U	100 U
Antimony	6	46	µg/L	50 U	**0.082 J**
Arsenic	50	28	µg/L	**4.5 J**	**5.7**
Barium	1,000	575	µg/L	**280**	**230**
Beryllium	4	3.8	µg/L	2 U	2 U
Cadmium	5	5.4	µg/L	5 U	5 U
Chromium	50	14	µg/L	**10 J**	10 U
Cobalt		12	µg/L	10 U	**0.48 J**
Copper	1,000	27	µg/L	**0.95 J**	10 U
Iron		7,135	µg/L	**6,300**	**3,100**
Lead	15	3.9	µg/L	3 U	3 U
Manganese		5,213	µg/L	**2,000**	**2,000**
Mercury	2	0.15	µg/L	0.2 U	0.2 U
Molybdenum		12	µg/L	20 U	**1.2 J**
Nickel	100	19	µg/L	20 U	**2.1 J**
Selenium	50	6.0	µg/L	5 U	5 U
Silver		3.3	µg/L	5 U	5 U
Vanadium		29	µg/L	**2.3 J**	10 UJ
Zinc		43	µg/L	26 U	20 U
Calcium		379	mg/L	**100**	**110**
Magnesium		500	mg/L	**200**	**190**
Potassium		182	mg/L	**66**	**63**
Sodium		4,540	mg/L	**1,300**	**1,200**
Cyanide					
Total Cyanide	0.2		mg/L	0.01 U	0.01 U
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	0.559 U4	
Gross Beta	50		pCi/L	31.6 U2	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M025-C					
Radium					
Radium			pCi/L	0.472 U	
M026-A					
Volatile Organic Compounds					
Acetone			µg/L	10 U	
Benzene	1		µg/L	0.5 U	
tert-butyl alcohol			µg/L	20 U	
N-butylbenzene			µg/L	0.5 U	
sec-butylbenzene			µg/L	0.5 U	
tert-butylbenzene			µg/L	0.5 U	
Carbon Disulfide			µg/L	0.5 U	
Chlorobenzene	70		µg/L	0.5 U	
Chloroethane			µg/L	1 U	
1,2-Dichlorobenzene	600		µg/L	0.5 U	
1,3-Dichlorobenzene			µg/L	0.5 U	
1,4-Dichlorobenzene	5		µg/L	0.5 U	
1,1-Dichloroethane	5		µg/L	0.5 U	
1,2-Dichloroethane	0.5		µg/L	0.5 U	
1,1-Dichloroethene	6		µg/L	0.5 U	
cis-1,2-Dichloroethene	6		µg/L	**0.3 J**	
trans-1,2-Dichloroethene	10		µg/L	0.5 U	
1,2-Dichloropropane	5		µg/L	0.5 U	
Ethylbenzene	300		µg/L	0.5 U	
Isopropyl Ether			µg/L	0.5 U	
Isopropylbenzene			µg/L	0.5 U	
p-Isopropyltoluene			µg/L	0.5 U	
Methyl tert-butyl ether	13		µg/L	0.5 U	
N-propylbenzene			µg/L	0.5 U	
Naphthalene			µg/L	2 U	
Tetrachloroethene	5		µg/L	0.5 U	
Toluene	150		µg/L	0.5 U	
1,1,1-Trichloroethane	200		µg/L	0.5 U	
Trichloroethene	5		µg/L	0.5 U	
1,2,4-Trimethylbenzene			µg/L	0.5 U	
1,3,5-Trimethylbenzene			µg/L	0.5 U	
Vinyl Chloride	0.5		µg/L	0.5 U	
M,p-xylene	1,750		µg/L	0.5 U	
O-xylene	1,750		µg/L	0.5 U	
Semivolatile Organic Compounds					
Acenaphthene			µg/L	9.8 U	
Anthracene			µg/L	9.8 U	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M026-A					
Semivolatile Organic Compounds					
bis(2-Chloroethyl)ether			µg/L	9.8 U	
bis(2-chloroisopropyl) ether			µg/L	9.8 U	
bis(2-Ethylhexyl)phthalate	4		µg/L	9.8 U	
Dibenzofuran			µg/L	9.8 U	
1,2-Dichlorobenzene	600		µg/L	9.8 U	
1,3-Dichlorobenzene			µg/L	9.8 U	
1,4-Dichlorobenzene	5		µg/L	9.8 U	
2,4-Dimethylphenol			µg/L	9.8 U	
Dimethylphthalate			µg/L	9.8 U	
Fluoranthene			µg/L	9.8 U	
Fluorene			µg/L	9.8 U	
2-Methylnaphthalene			µg/L	9.8 U	
2-Methylphenol			µg/L	9.8 U	
Naphthalene			µg/L	9.8 U	
Phenanthrene			µg/L	9.8 U	
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 UJ	
Jet Fuel #5 (JP5)			µg/L	50 UJ	
TPH, as motor oil			µg/L	300 UJ	
TPH as Gasoline					
TPH, as gasoline			µg/L	50 U	
TPH (calculated)					
Total TPH (calculated)			µg/L	300 U	
Metals					
Aluminum	1,000	439	µg/L	**3.5 J**	
Antimony	6	46	µg/L	**0.79 J**	
Arsenic	50	28	µg/L	**5.8**	
Barium	1,000	575	µg/L	**46**	
Beryllium	4	3.8	µg/L	2 U	
Cadmium	5	5.4	µg/L	5 U	
Chromium	50	14	µg/L	**1.8 J**	
Cobalt		12	µg/L	10 U	
Copper	1,000	27	µg/L	**4.8 J**	
Iron		7,135	µg/L	**490**	
Lead	15	3.9	µg/L	3 U	
Manganese		5,213	µg/L	**23**	
Mercury	2	0.15	µg/L	**0.14 J**	
Molybdenum		12	µg/L	**7.3 J**	
Nickel	100	19	µg/L	**2.5 J**	
Selenium	50	6.0	µg/L	**10**	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M026-A					
Metals					
Silver		3.3	µg/L	**0.53 J**	
Vanadium		29	µg/L	**3.2 J**	
Zinc		43	µg/L	20 U	
Calcium		379	mg/L	**310**	
Magnesium		500	mg/L	**820**	
Potassium		182	mg/L	**240**	
Sodium		4,540	mg/L	**6,700**	
Cyanide					
Total Cyanide	0.2		mg/L	0.01 U	
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	0.7 U3	
Gross Beta	50		pCi/L	**271**	
Radium					
Radium			pCi/L	0.067 U3	
M026-E					
Volatile Organic Compounds					
Acetone			µg/L	10 U	
Benzene	1		µg/L	0.5 U	
tert-butyl alcohol			µg/L	20 U	
N-butylbenzene			µg/L	0.5 U	
sec-butylbenzene			µg/L	0.5 U	
tert-butylbenzene			µg/L	0.5 U	
Carbon Disulfide			µg/L	0.5 U	
Chlorobenzene	70		µg/L	0.5 U	
Chloroethane			µg/L	1 U	
1,2-Dichlorobenzene	600		µg/L	0.5 U	
1,3-Dichlorobenzene			µg/L	0.5 U	
1,4-Dichlorobenzene	5		µg/L	0.5 U	
1,1-Dichloroethane	5		µg/L	0.5 U	
1,2-Dichloroethane	0.5		µg/L	0.5 U	
1,1-Dichloroethene	6		µg/L	0.5 U	
cis-1,2-Dichloroethene	6		µg/L	**0.4 J**	
trans-1,2-Dichloroethene	10		µg/L	0.5 U	
1,2-Dichloropropane	5		µg/L	0.5 U	
Ethylbenzene	300		µg/L	0.5 U	
Isopropyl Ether			µg/L	0.5 U	
Isopropylbenzene			µg/L	0.5 U	
p-Isopropyltoluene			µg/L	0.5 U	
Methyl tert-butyl ether	13		µg/L	0.5 U	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M026-E					
Volatile Organic Compounds					
N-propylbenzene			µg/L	0.5 U	
Naphthalene			µg/L	2 U	
Tetrachloroethene	5		µg/L	0.5 U	
Toluene	150		µg/L	0.5 U	
1,1,1-Trichloroethane	200		µg/L	0.5 U	
Trichloroethene	5		µg/L	0.5 U	
1,2,4-Trimethylbenzene			µg/L	0.5 U	
1,3,5-Trimethylbenzene			µg/L	0.5 U	
Vinyl Chloride	0.5		µg/L	0.5 U	
M,p-xylene	1,750		µg/L	0.5 U	
O-xylene	1,750		µg/L	0.5 U	
Semivolatile Organic Compounds					
Acenaphthene			µg/L	9.7 U	
Anthracene			µg/L	9.7 U	
bis(2-Chloroethyl)ether			µg/L	9.7 U	
bis(2-chloroisopropyl) ether			µg/L	9.7 U	
bis(2-Ethylhexyl)phthalate	4		µg/L	9.7 U	
Dibenzofuran			µg/L	9.7 U	
1,2-Dichlorobenzene	600		µg/L	9.7 U	
1,3-Dichlorobenzene			µg/L	9.7 U	
1,4-Dichlorobenzene	5		µg/L	9.7 U	
2,4-Dimethylphenol			µg/L	9.7 U	
Dimethylphthalate			µg/L	9.7 U	
Fluoranthene			µg/L	9.7 U	
Fluorene			µg/L	9.7 U	
2-Methylnaphthalene			µg/L	9.7 U	
2-Methylphenol			µg/L	9.7 U	
Naphthalene			µg/L	9.7 U	
Phenanthrene			µg/L	9.7 U	
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 UJ	
Jet Fuel #5 (JP5)			µg/L	50 UJ	
TPH, as motor oil			µg/L	300 UJ	
TPH as Gasoline					
TPH, as gasoline			µg/L	50 U	
TPH (calculated)					
Total TPH (calculated)			µg/L	300 U	
Metals					
Aluminum	1,000	439	µg/L	100 U	
Antimony	6	46	µg/L	**0.091 J**	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M026-E					
Metals					
Arsenic	50	28	µg/L	**6**	
Barium	1,000	575	µg/L	**120**	
Beryllium	4	3.8	µg/L	2 U	
Cadmium	5	5.4	µg/L	5 U	
Chromium	50	14	µg/L	**2.7 J**	
Cobalt		12	µg/L	10 U	
Copper	1,000	27	µg/L	**0.81 J**	
Iron		7,135	µg/L	**1,800**	
Lead	15	3.9	µg/L	3 U	
Manganese		5,213	µg/L	**860**	
Mercury	2	0.15	µg/L	**0.052 J**	
Molybdenum		12	µg/L	20 U	
Nickel	100	19	µg/L	**1.1 J**	
Selenium	50	6.0	µg/L	**7**	
Silver		3.3	µg/L	**0.055 J**	
Vanadium		29	µg/L	**1.7 J**	
Zinc		43	µg/L	20 U	
Calcium		379	mg/L	**110**	
Magnesium		500	mg/L	**180**	
Potassium		182	mg/L	**55**	
Sodium		4,540	mg/L	**1,600**	
Cyanide					
Total Cyanide	0.2		mg/L	0.01 U	
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	0.14 U2	
Gross Beta	50		pCi/L	**64.3**	
Radium					
Radium			pCi/L	**0.869**	
M027-A					
Volatile Organic Compounds					
Acetone			µg/L	10 U	10 U
Benzene	1		µg/L	0.5 U	0.5 U
tert-butyl alcohol			µg/L	20 U	20 U
N-butylbenzene			µg/L	0.5 U	0.5 U
sec-butylbenzene			µg/L	0.5 U	0.5 U
tert-butylbenzene			µg/L	0.5 U	0.5 U
Carbon Disulfide			µg/L	0.5 U	0.5 U
Chlorobenzene	70		µg/L	0.5 U	0.5 U
Chloroethane			µg/L	1 U	1 U

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M027-A					
Volatile Organic Compounds					
1,2-Dichlorobenzene	600		µg/L	0.5 U	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**1.4**	**1.6**
trans-1,2-Dichloroethene	10		µg/L	0.5 U	0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U	0.5 U
Ethylbenzene	300		µg/L	0.5 U	0.5 U
Isopropyl Ether			µg/L	0.5 U	0.5 U
Isopropylbenzene			µg/L	0.5 U	0.5 U
p-Isopropyltoluene			µg/L	0.5 U	0.5 U
Methyl tert-butyl ether	13		µg/L	0.5 U	0.5 U
N-propylbenzene			µg/L	0.5 U	0.5 U
Naphthalene			µg/L	2 U	2 U
Tetrachloroethene	5		µg/L	0.5 U	0.5 U
Toluene	150		µg/L	0.5 U	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U	0.5 U
Trichloroethene	5		µg/L	0.5 U	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U	0.5 U
M,p-xylene	1,750		µg/L	0.5 U	0.5 U
O-xylene	1,750		µg/L	0.5 U	0.5 U
Semivolatile Organic Compounds					
Acenaphthene			µg/L	9.4 U	9.4 U
Anthracene			µg/L	9.4 U	9.4 U
bis(2-Chloroethyl)ether			µg/L	9.4 U	9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U	9.4 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	9.4 U
Dibenzofuran			µg/L	9.4 U	9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U	9.4 U
1,3-Dichlorobenzene			µg/L	9.4 U	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U	9.4 U
Dimethylphthalate			µg/L	9.4 U	9.4 U
Fluoranthene			µg/L	9.4 U	9.4 U
Fluorene			µg/L	9.4 U	9.4 U
2-Methylnaphthalene			µg/L	9.4 U	9.4 U

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M027-A					
Semivolatile Organic Compounds					
2-Methylphenol			µg/L	9.4 U	9.4 U
Naphthalene			µg/L	9.4 U	9.4 U
Phenanthrene			µg/L	9.4 U	9.4 U
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 UJ	
Jet Fuel #5 (JP5)			µg/L	50 UJ	
TPH, as motor oil			µg/L	300 UJ	
TPH as Gasoline					
TPH, as gasoline			µg/L	50 U	
TPH (calculated)					
Total TPH (calculated)			µg/L	300 U	
Metals					
Aluminum	1,000	439	µg/L	100 U	100 U
Antimony	6	46	µg/L	**2.2 J**	**2.2 J**
Arsenic	50	28	µg/L	**2.8 J**	5 U
Barium	1,000	575	µg/L	**190**	**180**
Beryllium	4	3.8	µg/L	2 U	2 U
Cadmium	5	5.4	µg/L	**0.58 J**	**0.5 J**
Chromium	50	14	µg/L	**0.96 J**	10 U
Cobalt		12	µg/L	10 U	10 U
Copper	1,000	27	µg/L	10 U	10 U
Iron		7,135	µg/L	**900**	**700**
Lead	15	3.9	µg/L	3 U	3 U
Manganese		5,213	µg/L	**390**	**420**
Mercury	2	0.15	µg/L	0.2 U	0.2 U
Molybdenum		12	µg/L	20 U	**2.4 J**
Nickel	100	19	µg/L	**1.6 J**	20 U
Selenium	50	6.0	µg/L	**1.9 J**	**0.88 J**
Silver		3.3	µg/L	5 UR	5 U
Vanadium		29	µg/L	**0.74 J**	10 U
Zinc		43	µg/L	**6.3 J**	20 U
Calcium		379	mg/L	**97**	**110**
Magnesium		500	mg/L	**57**	**55**
Potassium		182	mg/L	**42**	**44**
Sodium		4,540	mg/L	**370**	**370**
Cyanide					
Total Cyanide	0.2		mg/L		0.01 U
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	**7.47**	**1.87**

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M027-A					
Gross Alpha/Beta					
Gross Beta	50		pCi/L	**30.2**	**58.1**
Radium					
Radium			pCi/L	0.131 U2	0.373 UJ
Anions					
Chloride			mg/L	**420**	
Sulfate			mg/L	**190**	
Alkalinity					
Alkalinity			mg/L	**570**	
Alkalinity, bicarbonate			mg/L	**570**	
Dissolved Gases					
Ethane			mg/L	0.01 U	
Ethene			mg/L	0.01 U	
Methane			mg/L	**0.025**	
M027-B					
Volatile Organic Compounds					
Acetone			µg/L	10 U	
Benzene	1		µg/L	0.5 U	
tert-butyl alcohol			µg/L	20 U	
N-butylbenzene			µg/L	0.5 U	
sec-butylbenzene			µg/L	0.5 U	
tert-butylbenzene			µg/L	0.5 U	
Carbon Disulfide			µg/L	0.5 U	
Chlorobenzene	70		µg/L	0.5 U	
Chloroethane			µg/L	1 U	
1,2-Dichlorobenzene	600		µg/L	0.5 U	
1,3-Dichlorobenzene			µg/L	0.5 U	
1,4-Dichlorobenzene	5		µg/L	0.5 U	
1,1-Dichloroethane	5		µg/L	0.5 U	
1,2-Dichloroethane	0.5		µg/L	0.5 U	
1,1-Dichloroethene	6		µg/L	0.5 U	
cis-1,2-Dichloroethene	6		µg/L	0.5 U	
trans-1,2-Dichloroethene	10		µg/L	0.5 U	
1,2-Dichloropropane	5		µg/L	0.5 U	
Ethylbenzene	300		µg/L	0.5 U	
Isopropyl Ether			µg/L	0.5 U	
Isopropylbenzene			µg/L	0.5 U	
p-Isopropyltoluene			µg/L	0.5 U	
Methyl tert-butyl ether	13		µg/L	0.5 U	
N-propylbenzene			µg/L	0.5 U	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M027-B					
Volatile Organic Compounds					
Naphthalene			µg/L	2 U	
Tetrachloroethene	5		µg/L	0.5 U	
Toluene	150		µg/L	**0.4 J**	
1,1,1-Trichloroethane	200		µg/L	0.5 U	
Trichloroethene	5		µg/L	0.5 U	
1,2,4-Trimethylbenzene			µg/L	0.5 U	
1,3,5-Trimethylbenzene			µg/L	0.5 U	
Vinyl Chloride	0.5		µg/L	0.5 U	
M,p-xylene	1,750		µg/L	0.5 U	
O-xylene	1,750		µg/L	0.5 U	
Semivolatile Organic Compounds					
Acenaphthene			µg/L	9.4 U	
Anthracene			µg/L	9.4 U	
bis(2-Chloroethyl)ether			µg/L	9.4 U	
bis(2-chloroisopropyl) ether			µg/L	9.4 U	
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	
Dibenzofuran			µg/L	9.4 U	
1,2-Dichlorobenzene	600		µg/L	9.4 U	
1,3-Dichlorobenzene			µg/L	9.4 U	
1,4-Dichlorobenzene	5		µg/L	9.4 U	
2,4-Dimethylphenol			µg/L	9.4 U	
Dimethylphthalate			µg/L	**6.6 J**	
Fluoranthene			µg/L	9.4 U	
Fluorene			µg/L	9.4 U	
2-Methylnaphthalene			µg/L	9.4 U	
2-Methylphenol			µg/L	9.4 U	
Naphthalene			µg/L	9.4 U	
Phenanthrene			µg/L	9.4 U	
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 UJ	
Jet Fuel #5 (JP5)			µg/L	50 UJ	
TPH, as motor oil			µg/L	300 UJ	
TPH as Gasoline					
TPH, as gasoline			µg/L	50 U	
TPH (calculated)					
Total TPH (calculated)			µg/L	300 U	
Metals					
Aluminum	1,000	439	µg/L	100 U	
Antimony	6	46	µg/L	50 U	
Arsenic	50	28	µg/L	**40**	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M027-B					
Metals					
Barium	1,000	575	µg/L	**500**	
Beryllium	4	3.8	µg/L	2 U	
Cadmium	5	5.4	µg/L	5 U	
Chromium	50	14	µg/L	**5.6 J**	
Cobalt		12	µg/L	10 U	
Copper	1,000	27	µg/L	**2.6 J**	
Iron		7,135	µg/L	**11,000**	
Lead	15	3.9	µg/L	3 U	
Manganese		5,213	µg/L	**5,600**	
Mercury	2	0.15	µg/L	0.2 U	
Molybdenum		12	µg/L	20 U	
Nickel	100	19	µg/L	20 U	
Selenium	50	6.0	µg/L	5 U	
Silver		3.3	µg/L	**0.92 J**	
Vanadium		29	µg/L	**1.3 J**	
Zinc		43	µg/L	**260**	
Calcium		379	mg/L	**260**	
Magnesium		500	mg/L	**550**	
Potassium		182	mg/L	**63**	
Sodium		4,540	mg/L	**3,000**	
Cyanide					
Total Cyanide	0.2		mg/L	0.01 U	
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	2.8 U	
Gross Beta	50		pCi/L	**173**	
Radium					
Radium			pCi/L	0.277 U2	
M027-C					
Volatile Organic Compounds					
Acetone			µg/L	10 U	
Benzene	1		µg/L	0.5 U	
tert-butyl alcohol			µg/L	20 U	
N-butylbenzene			µg/L	0.5 U	
sec-butylbenzene			µg/L	0.5 U	
tert-butylbenzene			µg/L	0.5 U	
Carbon Disulfide			µg/L	0.5 U	
Chlorobenzene	70		µg/L	0.5 U	
Chloroethane			µg/L	1 U	
1,2-Dichlorobenzene	600		µg/L	0.5 U	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M027-C					
Volatile Organic Compounds					
1,3-Dichlorobenzene			µg/L	0.5 U	
1,4-Dichlorobenzene	5		µg/L	0.5 U	
1,1-Dichloroethane	5		µg/L	0.5 U	
1,2-Dichloroethane	0.5		µg/L	0.5 U	
1,1-Dichloroethene	6		µg/L	0.5 U	
cis-1,2-Dichloroethene	6		µg/L	0.5 U	
trans-1,2-Dichloroethene	10		µg/L	0.5 U	
1,2-Dichloropropane	5		µg/L	0.5 U	
Ethylbenzene	300		µg/L	0.5 U	
Isopropyl Ether			µg/L	0.5 U	
Isopropylbenzene			µg/L	0.5 U	
p-Isopropyltoluene			µg/L	0.5 U	
Methyl tert-butyl ether	13		µg/L	0.5 U	
N-propylbenzene			µg/L	0.5 U	
Naphthalene			µg/L	2 U	
Tetrachloroethene	5		µg/L	0.5 U	
Toluene	150		µg/L	**0.2 J**	
1,1,1-Trichloroethane	200		µg/L	0.5 U	
Trichloroethene	5		µg/L	0.5 U	
1,2,4-Trimethylbenzene			µg/L	0.5 U	
1,3,5-Trimethylbenzene			µg/L	0.5 U	
Vinyl Chloride	0.5		µg/L	0.5 U	
M,p-xylene	1,750		µg/L	0.5 U	
O-xylene	1,750		µg/L	0.5 U	
Semivolatile Organic Compounds					
Acenaphthene			µg/L	9.5 U	
Anthracene			µg/L	9.5 U	
bis(2-Chloroethyl)ether			µg/L	9.5 U	
bis(2-chloroisopropyl) ether			µg/L	9.5 U	
bis(2-Ethylhexyl)phthalate	4		µg/L	9.5 U	
Dibenzofuran			µg/L	9.5 U	
1,2-Dichlorobenzene	600		µg/L	9.5 U	
1,3-Dichlorobenzene			µg/L	9.5 U	
1,4-Dichlorobenzene	5		µg/L	9.5 U	
2,4-Dimethylphenol			µg/L	9.5 U	
Dimethylphthalate			µg/L	**1.3 J**	
Fluoranthene			µg/L	9.5 U	
Fluorene			µg/L	9.5 U	
2-Methylnaphthalene			µg/L	9.5 U	
2-Methylphenol			µg/L	9.5 U	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M027-C					
Semivolatile Organic Compounds					
Naphthalene			µg/L	9.5 U	
Phenanthrene			µg/L	9.5 U	
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 UJ	
Jet Fuel #5 (JP5)			µg/L	50 UJ	
TPH, as motor oil			µg/L	300 UJ	
TPH as Gasoline					
TPH, as gasoline			µg/L	50 U	
TPH (calculated)					
Total TPH (calculated)			µg/L	300 U	
Metals					
Aluminum	1,000	439	µg/L	100 U	
Antimony	6	46	µg/L	50 U	
Arsenic	50	28	µg/L	**6**	
Barium	1,000	575	µg/L	**75 J**	
Beryllium	4	3.8	µg/L	2 U	
Cadmium	5	5.4	µg/L	5 U	
Chromium	50	14	µg/L	**3.6 J**	
Cobalt		12	µg/L	10 U	
Copper	1,000	27	µg/L	**2.8 J**	
Iron		7,135	µg/L	**2,500**	
Lead	15	3.9	µg/L	3 U	
Manganese		5,213	µg/L	**6,100**	
Mercury	2	0.15	µg/L	0.2 U	
Molybdenum		12	µg/L	20 U	
Nickel	100	19	µg/L	20 U	
Selenium	50	6.0	µg/L	5 U	
Silver		3.3	µg/L	**3.5 J**	
Vanadium		29	µg/L	**1.1 J**	
Zinc		43	µg/L	20 U	
Calcium		379	mg/L	**390**	
Magnesium		500	mg/L	**830 J**	
Potassium		182	mg/L	**95**	
Sodium		4,540	mg/L	**4,200**	
Cyanide					
Total Cyanide	0.2		mg/L	0.01 U	
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	1.12 U2	
Gross Beta	50		pCi/L	**117**	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M027-C					
Radium					
Radium			pCi/L	0.551 U	
M028-A					
Volatile Organic Compounds					
Acetone			µg/L	10 U	10 U
Benzene	1		µg/L	**10**	**53**
tert-butyl alcohol			µg/L	20 U	20 U
N-butylbenzene			µg/L	**0.4 J**	**1.4**
sec-butylbenzene			µg/L	**1.2**	**2.3**
tert-butylbenzene			µg/L	0.5 U	0.5 U
Carbon Disulfide			µg/L	**1.1**	**4.9**
Chlorobenzene	70		µg/L	**21**	**77**
Chloroethane			µg/L	1 U	**2.4**
1,2-Dichlorobenzene	600		µg/L	**5.1**	**9.6**
1,3-Dichlorobenzene			µg/L	**0.4 J**	**0.8**
1,4-Dichlorobenzene	5		µg/L	**2.7**	**6.5**
1,1-Dichloroethane	5		µg/L	**3.1**	**21**
1,2-Dichloroethane	0.5		µg/L	0.5 U	**0.4 J**
1,1-Dichloroethene	6		µg/L	0.5 U	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**7.7**	**1.7**
trans-1,2-Dichloroethene	10		µg/L	0.5 U	0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U	0.5 U
Ethylbenzene	300		µg/L	**2.8**	**20**
Isopropyl Ether			µg/L	0.5 U	**0.9**
Isopropylbenzene			µg/L	**2.1**	**5.4**
p-Isopropyltoluene			µg/L	0.5 U	**1.7**
Methyl tert-butyl ether	13		µg/L	0.5 U	0.5 U
N-propylbenzene			µg/L	**0.9**	**5**
Naphthalene			µg/L	2 U	**11**
Tetrachloroethene	5		µg/L	0.5 U	0.5 U
Toluene	150		µg/L	**0.6**	**15**
1,1,1-Trichloroethane	200		µg/L	0.5 U	0.5 U
Trichloroethene	5		µg/L	0.5 U	0.5 U
1,2,4-Trimethylbenzene			µg/L	**1**	**41**
1,3,5-Trimethylbenzene			µg/L	**0.4 J**	**8.8**
Vinyl Chloride	0.5		µg/L	**12**	**2.2**
M,p-xylene	1,750		µg/L	**1.4**	**56**
O-xylene	1,750		µg/L	**1.3**	**30**
Semivolatile Organic Compounds					
Acenaphthene			µg/L	9.7 U	14 U
Anthracene			µg/L	9.7 U	14 U

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M028-A					
Semivolatile Organic Compounds					
bis(2-Chloroethyl)ether			µg/L	9.7 U	14 U
bis(2-chloroisopropyl) ether			µg/L	9.7 U	**1.9 J**
bis(2-Ethylhexyl)phthalate	4		µg/L	9.7 U	14 U
Dibenzofuran			µg/L	9.7 U	14 U
1,2-Dichlorobenzene	600		µg/L	**3.2 J**	**7.3 J**
1,3-Dichlorobenzene			µg/L	9.7 U	14 U
1,4-Dichlorobenzene	5		µg/L	**1.6 J**	**4.9 J**
2,4-Dimethylphenol			µg/L	9.7 U	**290**
Dimethylphthalate			µg/L	9.7 U	14 U
Fluoranthene			µg/L	9.7 U	14 U
Fluorene			µg/L	9.7 U	14 U
2-Methylnaphthalene			µg/L	9.7 U	14 U
2-Methylphenol			µg/L	9.7 U	**4.6 J**
Naphthalene			µg/L	9.7 U	**8.4 J**
Phenanthrene			µg/L	9.7 U	14 U
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 UJ	
Jet Fuel #5 (JP5)			µg/L	50 UJ	
TPH, as motor oil			µg/L	300 UJ	
TPH as Gasoline					
TPH, as gasoline			µg/L	150 U	
TPH (calculated)					
Total TPH (calculated)			µg/L	300 U	
Metals					
Aluminum	1,000	439	µg/L	100 U	100 U
Antimony	6	46	µg/L	**0.17 J**	**0.2 J**
Arsenic	50	28	µg/L	**4.7 J**	**14**
Barium	1,000	575	µg/L	**170**	**240**
Beryllium	4	3.8	µg/L	2 U	2 U
Cadmium	5	5.4	µg/L	5 U	5 U
Chromium	50	14	µg/L	**2.2 J**	10 U
Cobalt		12	µg/L	10 U	**0.53 J**
Copper	1,000	27	µg/L	**0.59 J**	10 U
Iron		7,135	µg/L	**4,700**	**12,000**
Lead	15	3.9	µg/L	3 U	3 U
Manganese		5,213	µg/L	**350**	**810**
Mercury	2	0.15	µg/L	0.2 U	0.2 U
Molybdenum		12	µg/L	20 U	20 U
Nickel	100	19	µg/L	**0.48 J**	20 U
Selenium	50	6.0	µg/L	**0.63 J**	5 U

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M028-A					
Metals					
Silver		3.3	µg/L	5 U	5 U
Vanadium		29	µg/L	**0.47 J**	10 U
Zinc		43	µg/L	20 U	20 U
Calcium		379	mg/L	**67**	**100**
Magnesium		500	mg/L	**30**	**41**
Potassium		182	mg/L	**33**	**47**
Sodium		4,540	mg/L	**74**	**88**
Cyanide					
Total Cyanide	0.2		mg/L	0.01 U	0.01 U
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	0.888 U2	**2.88**
Gross Beta	50		pCi/L	**30.1**	**44.3**
Radium					
Radium			pCi/L	**0.671**	**0.873 J**
Anions					
Chloride			mg/L	**74**	
Sulfate			mg/L	**10**	
Sulfide					
Sulfide			mg/L	**0.09**	
Alkalinity					
Alkalinity			mg/L	**350**	
Alkalinity, bicarbonate			mg/L	**350**	
Dissolved Gases					
Ethane			mg/L	**0.83**	
Ethene			mg/L	**0.13**	
Methane			mg/L	**3.2**	
M028-C					
Volatile Organic Compounds					
Acetone			µg/L	10 U	10 U
Benzene	1		µg/L	0.5 U	0.5 U
tert-butyl alcohol			µg/L	20 U	20 U
N-butylbenzene			µg/L	0.5 U	0.5 U
sec-butylbenzene			µg/L	0.5 U	0.5 U
tert-butylbenzene			µg/L	0.5 U	0.5 U
Carbon Disulfide			µg/L	0.5 U	0.5 U
Chlorobenzene	70		µg/L	0.5 U	0.5 U
Chloroethane			µg/L	1 U	1 U
1,2-Dichlorobenzene	600		µg/L	0.5 U	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U	0.5 U

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M028-C					
Volatile Organic Compounds					
1,4-Dichlorobenzene	5		µg/L	0.5 U	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U	0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U	0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U	0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U	0.5 U
Ethylbenzene	300		µg/L	0.5 U	0.5 U
Isopropyl Ether			µg/L	0.5 U	0.5 U
Isopropylbenzene			µg/L	0.5 U	0.5 U
p-Isopropyltoluene			µg/L	0.5 U	0.5 U
Methyl tert-butyl ether	13		µg/L	0.5 U	0.5 U
N-propylbenzene			µg/L	0.5 U	0.5 U
Naphthalene			µg/L	2 U	2 U
Tetrachloroethene	5		µg/L	0.5 U	0.5 U
Toluene	150		µg/L	0.5 U	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U	0.5 U
Trichloroethene	5		µg/L	0.5 U	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U	0.5 U
M,p-xylene	1,750		µg/L	0.5 U	0.5 U
O-xylene	1,750		µg/L	0.5 U	0.5 U
Semivolatile Organic Compounds					
Acenaphthene			µg/L	9.4 U	9.6 U
Anthracene			µg/L	9.4 U	9.6 U
bis(2-Chloroethyl)ether			µg/L	9.4 U	9.6 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U	9.6 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	9.6 U
Dibenzofuran			µg/L	9.4 U	9.6 U
1,2-Dichlorobenzene	600		µg/L	9.4 U	9.6 U
1,3-Dichlorobenzene			µg/L	9.4 U	9.6 U
1,4-Dichlorobenzene	5		µg/L	9.4 U	9.6 U
2,4-Dimethylphenol			µg/L	9.4 U	9.6 U
Dimethylphthalate			µg/L	9.4 U	9.6 U
Fluoranthene			µg/L	9.4 U	9.6 U
Fluorene			µg/L	9.4 U	9.6 U
2-Methylnaphthalene			µg/L	9.4 U	9.6 U
2-Methylphenol			µg/L	9.4 U	9.6 U
Naphthalene			µg/L	9.4 U	9.6 U

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M028-C					
Semivolatile Organic Compounds					
Phenanthrene			µg/L	9.4 U	9.6 U
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 UJ	
Jet Fuel #5 (JP5)			µg/L	50 UJ	
TPH, as motor oil			µg/L	300 UJ	
TPH as Gasoline					
TPH, as gasoline			µg/L	50 U	
TPH (calculated)					
Total TPH (calculated)			µg/L	300 U	
Metals					
Aluminum	1,000	439	µg/L	100 U	100 U
Antimony	6	46	µg/L	50 U	50 U
Arsenic	50	28	µg/L	**0.52 J**	5 U
Barium	1,000	575	µg/L	**150**	**200**
Beryllium	4	3.8	µg/L	2 U	2 U
Cadmium	5	5.4	µg/L	5 U	5 U
Chromium	50	14	µg/L	**2.9 J**	10 U
Cobalt		12	µg/L	10 U	**0.59 J**
Copper	1,000	27	µg/L	**4.2 J**	10 U
Iron		7,135	µg/L	**6,300**	**7,200**
Lead	15	3.9	µg/L	3 U	3 U
Manganese		5,213	µg/L	**6,100**	**5,400**
Mercury	2	0.15	µg/L	0.2 U	0.2 U
Molybdenum		12	µg/L	20 U	**2.1 J**
Nickel	100	19	µg/L	20 U	**3.7 J**
Selenium	50	6.0	µg/L	5 U	5 U
Silver		3.3	µg/L	**1.5 J**	5 U
Vanadium		29	µg/L	**1.3 J**	10 U
Zinc		43	µg/L	20 U	20 U
Calcium		379	mg/L	**530**	**620**
Magnesium		500	mg/L	**1,000**	**940**
Potassium		182	mg/L	**110**	**100**
Sodium		4,540	mg/L	**5,700**	**5,300**
Cyanide					
Total Cyanide	0.2		mg/L	0.01 U	0.01 U
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	2.1 U	**5.68**
Gross Beta	50		pCi/L	**265**	**92.9**

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M028-C					
Radium					
Radium			pCi/L	0.463 U	**0.913 J**
Anions					
Chloride			mg/L	**12,000**	
Sulfate			mg/L	**1,300**	
Sulfide					
Sulfide			mg/L	0.04 U	
Alkalinity					
Alkalinity			mg/L	**450**	
Alkalinity, bicarbonate			mg/L	**450**	
Dissolved Gases					
Ethane			mg/L	0.01 U	
Ethene			mg/L	0.01 U	
Methane			mg/L	0.01 U	
M029-A					
Volatile Organic Compounds					
Acetone			µg/L	10 U	10 U
Benzene	1		µg/L	**2.4**	**2**
tert-butyl alcohol			µg/L	20 U	20 U
N-butylbenzene			µg/L	**0.8**	0.5 U
sec-butylbenzene			µg/L	**0.7**	**0.7**
tert-butylbenzene			µg/L	0.5 U	0.5 U
Carbon Disulfide			µg/L	0.5 U	0.5 U
Chlorobenzene	70		µg/L	**0.3 J**	**0.5**
Chloroethane			µg/L	1 U	1 U
1,2-Dichlorobenzene	600		µg/L	0.5 U	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**0.3 J**	0.5 U
trans-1,2-Dichloroethene	10		µg/L	**0.2**	0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U	0.5 U
Ethylbenzene	300		µg/L	0.5 U	0.5 U
Isopropyl Ether			µg/L	0.5 U	0.5 U
Isopropylbenzene			µg/L	**0.7**	**0.7**
p-Isopropyltoluene			µg/L	0.5 U	0.5 U
Methyl tert-butyl ether	13		µg/L	0.5 U	0.5 U
N-propylbenzene			µg/L	**0.7**	**0.7**

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M029-A					
Volatile Organic Compounds					
Naphthalene			µg/L	2 U	2 U
Tetrachloroethene	5		µg/L	0.5 U	0.5 U
Toluene	150		µg/L	0.5 U	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U	0.5 U
Trichloroethene	5		µg/L	0.5 U	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U	**0.4 J**
M,p-xylene	1,750		µg/L	0.5 U	0.5 U
O-xylene	1,750		µg/L	0.5 U	0.5 U
Semivolatile Organic Compounds					
Acenaphthene			µg/L	**4.1 J**	**6.6 J**
Anthracene			µg/L	**1.4 J**	9.6 U
bis(2-Chloroethyl)ether			µg/L	**1.2 J**	9.6 U
bis(2-chloroisopropyl) ether			µg/L	**1.9 J**	**1.9 J**
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	9.6 U
Dibenzofuran			µg/L	**1.2 J**	**0.8 J**
1,2-Dichlorobenzene	600		µg/L	9.4 U	9.6 U
1,3-Dichlorobenzene			µg/L	9.4 U	9.6 U
1,4-Dichlorobenzene	5		µg/L	9.4 U	9.6 U
2,4-Dimethylphenol			µg/L	9.4 U	9.6 U
Dimethylphthalate			µg/L	9.4 U	9.6 U
Fluoranthene			µg/L	**1.3 J**	9.6 U
Fluorene			µg/L	**0.75 J**	**1.4 J**
2-Methylnaphthalene			µg/L	9.4 U	9.6 U
2-Methylphenol			µg/L	9.4 U	9.6 U
Naphthalene			µg/L	9.4 U	9.6 U
Phenanthrene			µg/L	**0.96 J**	**0.88 J**
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 U	
Jet Fuel #5 (JP5)			µg/L	50 U	
TPH, as motor oil			µg/L	300 U	
TPH as Gasoline					
TPH, as gasoline			µg/L	79 Uh	
TPH (calculated)					
Total TPH (calculated)			µg/L	300 U	
Metals					
Aluminum	1,000	439	µg/L	**34 J**	100 U
Antimony	6	46	µg/L	**0.054 J**	50 U
Arsenic	50	28	µg/L	**0.71 J**	5 U

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M029-A					
Metals					
Barium	1,000	575	µg/L	**260**	**220**
Beryllium	4	3.8	µg/L	2 U	2 U
Cadmium	5	5.4	µg/L	5 U	5 U
Chromium	50	14	µg/L	**0.66 J**	10 U
Cobalt		12	µg/L	**0.081 J**	10 U
Copper	1,000	27	µg/L	**0.19 J**	10 U
Iron		7,135	µg/L	**230**	**190**
Lead	15	3.9	µg/L	3 U	3 U
Manganese		5,213	µg/L	**49**	**51**
Mercury	2	0.15	µg/L	0.2 U	0.2 U
Molybdenum		12	µg/L	20 U	**0.64 J**
Nickel	100	19	µg/L	**0.21 J**	20 U
Selenium	50	6.0	µg/L	**0.55 J**	5 U
Silver		3.3	µg/L	5 UJ	5 U
Vanadium		29	µg/L	**0.17 J**	10 U
Zinc		43	µg/L	20 U	20 U
Calcium		379	mg/L	**23**	**20**
Magnesium		500	mg/L	**52 J**	**50**
Potassium		182	mg/L	**30**	**30**
Sodium		4,540	mg/L	**180**	**170**
Cyanide					
Total Cyanide	0.2		mg/L	**0.03**	0.01 U
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	**0.93**	0.774 U2
Gross Beta	50		pCi/L	**15.1**	**30.8**
Radium					
Radium			pCi/L	0.067 U3	0.248 U4J
M029-E					
Volatile Organic Compounds					
Acetone			µg/L	10 U	
Benzene	1		µg/L	**1.2**	
tert-butyl alcohol			µg/L	20 U	
N-butylbenzene			µg/L	0.5 U	
sec-butylbenzene			µg/L	0.5 U	
tert-butylbenzene			µg/L	0.5 U	
Carbon Disulfide			µg/L	**1.5**	
Chlorobenzene	70		µg/L	0.5 U	
Chloroethane			µg/L	1 U	
1,2-Dichlorobenzene	600		µg/L	0.5 U	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M029-E					
Volatile Organic Compounds					
1,3-Dichlorobenzene			µg/L	0.5 U	
1,4-Dichlorobenzene	5		µg/L	0.5 U	
1,1-Dichloroethane	5		µg/L	0.5 U	
1,2-Dichloroethane	0.5		µg/L	0.5 U	
1,1-Dichloroethene	6		µg/L	0.5 U	
cis-1,2-Dichloroethene	6		µg/L	**0.4 J**	
trans-1,2-Dichloroethene	10		µg/L	**0.4 J**	
1,2-Dichloropropane	5		µg/L	0.5 U	
Ethylbenzene	300		µg/L	0.5 U	
Isopropyl Ether			µg/L	0.5 U	
Isopropylbenzene			µg/L	0.5 U	
p-Isopropyltoluene			µg/L	0.5 U	
Methyl tert-butyl ether	13		µg/L	0.5 U	
N-propylbenzene			µg/L	0.5 U	
Naphthalene			µg/L	2 U	
Tetrachloroethene	5		µg/L	0.5 U	
Toluene	150		µg/L	0.5 U	
1,1,1-Trichloroethane	200		µg/L	0.5 U	
Trichloroethene	5		µg/L	0.5 U	
1,2,4-Trimethylbenzene			µg/L	0.5 U	
1,3,5-Trimethylbenzene			µg/L	0.5 U	
Vinyl Chloride	0.5		µg/L	0.5 U	
M,p-xylene	1,750		µg/L	0.5 U	
O-xylene	1,750		µg/L	0.5 U	
Semivolatile Organic Compounds					
Acenaphthene			µg/L	**1.1 J**	
Anthracene			µg/L	**1.4 J**	
bis(2-Chloroethyl)ether			µg/L	**0.79 J**	
bis(2-chloroisopropyl) ether			µg/L	9.4 U	
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	
Dibenzofuran			µg/L	**0.89 J**	
1,2-Dichlorobenzene	600		µg/L	9.4 U	
1,3-Dichlorobenzene			µg/L	9.4 U	
1,4-Dichlorobenzene	5		µg/L	9.4 U	
2,4-Dimethylphenol			µg/L	9.4 U	
Dimethylphthalate			µg/L	9.4 U	
Fluoranthene			µg/L	**1.6 J**	
Fluorene			µg/L	9.4 U	
2-Methylnaphthalene			µg/L	9.4 U	
2-Methylphenol			µg/L	9.4 U	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M029-E					
Semivolatile Organic Compounds					
Naphthalene			µg/L	**4.1 J**	
Phenanthrene			µg/L	**0.99 J**	
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 U	
Jet Fuel #5 (JP5)			µg/L	50 U	
TPH, as motor oil			µg/L	300 U	
TPH as Gasoline					
TPH, as gasoline			µg/L	50 U	
TPH (calculated)					
Total TPH (calculated)			µg/L	300 U	
Metals					
Aluminum	1,000	439	µg/L	100 U	
Antimony	6	46	µg/L	**0.077 J**	
Arsenic	50	28	µg/L	**0.8 J**	
Barium	1,000	575	µg/L	**390**	
Beryllium	4	3.8	µg/L	2 U	
Cadmium	5	5.4	µg/L	5 U	
Chromium	50	14	µg/L	**0.47 J**	
Cobalt		12	µg/L	**0.049 J**	
Copper	1,000	27	µg/L	**0.088 J**	
Iron		7,135	µg/L	**280**	
Lead	15	3.9	µg/L	3 U	
Manganese		5,213	µg/L	**25**	
Mercury	2	0.15	µg/L	0.2 U	
Molybdenum		12	µg/L	20 U	
Nickel	100	19	µg/L	**0.23 J**	
Selenium	50	6.0	µg/L	**1.2 J**	
Silver		3.3	µg/L	5 UJ	
Vanadium		29	µg/L	**0.11 J**	
Zinc		43	µg/L	20 U	
Calcium		379	mg/L	**23**	
Magnesium		500	mg/L	**33 J**	
Potassium		182	mg/L	**26**	
Sodium		4,540	mg/L	**270**	
Cyanide					
Total Cyanide	0.2		mg/L	**0.03**	
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	0.623 U2	
Gross Beta	50		pCi/L	**9.49**	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M029-E					
Radium					
Radium			pCi/L	0.333 U2	
M030-A					
Volatile Organic Compounds					
Acetone			µg/L	10 U	10 U
Benzene	1		µg/L	0.5 U	0.5 U
tert-butyl alcohol			µg/L	20 U	20 U
N-butylbenzene			µg/L	0.5 U	0.5 U
sec-butylbenzene			µg/L	0.5 U	0.5 U
tert-butylbenzene			µg/L	0.5 U	0.5 U
Carbon Disulfide			µg/L	0.5 U	0.5 U
Chlorobenzene	70		µg/L	0.5 U	0.5 U
Chloroethane			µg/L	1 U	1 U
1,2-Dichlorobenzene	600		µg/L	0.5 U	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U	0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U	0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U	0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U	0.5 U
Ethylbenzene	300		µg/L	0.5 U	0.5 U
Isopropyl Ether			µg/L	0.5 U	0.5 U
Isopropylbenzene			µg/L	0.5 U	0.5 U
p-Isopropyltoluene			µg/L	0.5 U	0.5 U
Methyl tert-butyl ether	13		µg/L	0.5 U	0.5 U
N-propylbenzene			µg/L	0.5 U	0.5 U
Naphthalene			µg/L	**0.7 J**	2 U
Tetrachloroethene	5		µg/L	0.5 U	0.5 U
Toluene	150		µg/L	0.5 U	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U	0.5 U
Trichloroethene	5		µg/L	0.5 U	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U	0.5 U
M,p-xylene	1,750		µg/L	0.5 U	0.5 U
O-xylene	1,750		µg/L	0.5 U	0.5 U
Semivolatile Organic Compounds					
Acenaphthene			µg/L	9.4 U	9.4 U
Anthracene			µg/L	9.4 U	9.4 U

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M030-A					
Semivolatile Organic Compounds					
bis(2-Chloroethyl)ether			µg/L	9.4 U	9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U	9.4 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	**350**
Dibenzofuran			µg/L	9.4 U	9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U	9.4 U
1,3-Dichlorobenzene			µg/L	9.4 U	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U	9.4 U
Dimethylphthalate			µg/L	9.4 U	9.4 U
Fluoranthene			µg/L	9.4 U	9.4 U
Fluorene			µg/L	9.4 U	9.4 U
2-Methylnaphthalene			µg/L	9.4 U	9.4 U
2-Methylphenol			µg/L	9.4 U	9.4 U
Naphthalene			µg/L	9.4 U	9.4 U
Phenanthrene			µg/L	9.4 U	9.4 U
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 U	
Jet Fuel #5 (JP5)			µg/L	50 U	
TPH, as motor oil			µg/L	300 U	
TPH as Gasoline					
TPH, as gasoline			µg/L	50 U	
TPH (calculated)					
Total TPH (calculated)			µg/L	300 U	
Metals					
Aluminum	1,000	439	µg/L	**3.4 J**	100 U
Antimony	6	46	µg/L	**0.89 J**	**0.72 J**
Arsenic	50	28	µg/L	**2.2 J**	5 U
Barium	1,000	575	µg/L	**26**	**33**
Beryllium	4	3.8	µg/L	2 U	2 U
Cadmium	5	5.4	µg/L	5 U	5 U
Chromium	50	14	µg/L	**0.22 J**	10 U
Cobalt		12	µg/L	**0.042 J**	10 U
Copper	1,000	27	µg/L	**1.4 J**	**5.3 J**
Iron		7,135	µg/L	**57 J**	110 U
Lead	15	3.9	µg/L	3 U	3 U
Manganese		5,213	µg/L	**1.7 J**	**29**
Mercury	2	0.15	µg/L	0.2 U	0.2 U
Molybdenum		12	µg/L	20 U	**2.2 J**
Nickel	100	19	µg/L	**2.5 J**	**2.6 J**
Selenium	50	6.0	µg/L	**0.36 J**	5 U

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M030-A					
Metals					
Silver		3.3	µg/L	5 UJ	5 U
Vanadium		29	µg/L	**3.1 J**	10 UJ
Zinc		43	µg/L	20 U	20 U
Calcium		379	mg/L	**30**	**33**
Magnesium		500	mg/L	**6.2**	**8.5**
Potassium		182	mg/L	**6.9**	**8.9**
Sodium		4,540	mg/L	**17**	17 U
Cyanide					
Total Cyanide	0.2		mg/L	**0.02**	0.01 U
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	0.105 U2	1.01 U4
Gross Beta	50		pCi/L	**3.56**	**9.21**
Radium					
Radium			pCi/L	0.068 U3	0.057 U3J
M030-C					
Volatile Organic Compounds					
Acetone			µg/L	**1.5 J**	
Benzene	1		µg/L	0.5 U	
tert-butyl alcohol			µg/L	**8.4 J**	
N-butylbenzene			µg/L	0.5 U	
sec-butylbenzene			µg/L	0.5 U	
tert-butylbenzene			µg/L	0.5 U	
Carbon Disulfide			µg/L	0.5 U	
Chlorobenzene	70		µg/L	0.5 U	
Chloroethane			µg/L	1 U	
1,2-Dichlorobenzene	600		µg/L	0.5 U	
1,3-Dichlorobenzene			µg/L	0.5 U	
1,4-Dichlorobenzene	5		µg/L	0.5 U	
1,1-Dichloroethane	5		µg/L	0.5 U	
1,2-Dichloroethane	0.5		µg/L	0.5 U	
1,1-Dichloroethene	6		µg/L	0.5 U	
cis-1,2-Dichloroethene	6		µg/L	0.5 U	
trans-1,2-Dichloroethene	10		µg/L	0.5 U	
1,2-Dichloropropane	5		µg/L	0.5 U	
Ethylbenzene	300		µg/L	0.5 U	
Isopropyl Ether			µg/L	0.5 U	
Isopropylbenzene			µg/L	0.5 U	
p-Isopropyltoluene			µg/L	0.5 U	
Methyl tert-butyl ether	13		µg/L	0.5 U	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M030-C					
Volatile Organic Compounds					
N-propylbenzene			µg/L	0.5 U	
Naphthalene			µg/L	2 U	
Tetrachloroethene	5		µg/L	0.5 U	
Toluene	150		µg/L	0.5 U	
1,1,1-Trichloroethane	200		µg/L	0.5 U	
Trichloroethene	5		µg/L	0.5 U	
1,2,4-Trimethylbenzene			µg/L	0.5 U	
1,3,5-Trimethylbenzene			µg/L	0.5 U	
Vinyl Chloride	0.5		µg/L	0.5 U	
M,p-xylene	1,750		µg/L	0.5 U	
O-xylene	1,750		µg/L	0.5 U	
Semivolatile Organic Compounds					
Acenaphthene			µg/L	9.7 U	
Anthracene			µg/L	9.7 U	
bis(2-Chloroethyl)ether			µg/L	9.7 U	
bis(2-chloroisopropyl) ether			µg/L	9.7 U	
bis(2-Ethylhexyl)phthalate	4		µg/L	9.7 U	
Dibenzofuran			µg/L	9.7 U	
1,2-Dichlorobenzene	600		µg/L	9.7 U	
1,3-Dichlorobenzene			µg/L	9.7 U	
1,4-Dichlorobenzene	5		µg/L	9.7 U	
2,4-Dimethylphenol			µg/L	9.7 U	
Dimethylphthalate			µg/L	9.7 U	
Fluoranthene			µg/L	9.7 U	
Fluorene			µg/L	9.7 U	
2-Methylnaphthalene			µg/L	9.7 U	
2-Methylphenol			µg/L	9.7 U	
Naphthalene			µg/L	9.7 U	
Phenanthrene			µg/L	9.7 U	
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 UJ	
Jet Fuel #5 (JP5)			µg/L	50 UJ	
TPH, as motor oil			µg/L	300 UJ	
TPH as Gasoline					
TPH, as gasoline			µg/L	50 U	
TPH (calculated)					
Total TPH (calculated)			µg/L	300 U	
Metals					
Aluminum	1,000	439	µg/L	100 UJ	
Antimony	6	46	µg/L	50 U	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M030-C					
Metals					
Arsenic	50	28	µg/L	5 U	
Barium	1,000	575	µg/L	**53**	
Beryllium	4	3.8	µg/L	2 U	
Cadmium	5	5.4	µg/L	5 U	
Chromium	50	14	µg/L	10 U	
Cobalt		12	µg/L	10 U	
Copper	1,000	27	µg/L	10 U	
Iron		7,135	µg/L	**370**	
Lead	15	3.9	µg/L	3 U	
Manganese		5,213	µg/L	**3,900**	
Mercury	2	0.15	µg/L	**0.27**	
Molybdenum		12	µg/L	20 U	
Nickel	100	19	µg/L	20 U	
Selenium	50	6.0	µg/L	5 U	
Silver		3.3	µg/L	5 U	
Vanadium		29	µg/L	**6.8 J**	
Zinc		43	µg/L	20 U	
Calcium		379	mg/L	**390**	
Magnesium		500	mg/L	**1,000**	
Potassium		182	mg/L	**150**	
Sodium		4,540	mg/L	**8,100**	
Cyanide					
Total Cyanide	0.2		mg/L	0.01 UR	
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	**8.12**	
Gross Beta	50		pCi/L	**261**	
Radium					
Radium			pCi/L	**0.754**	
M031-A					
Volatile Organic Compounds					
Acetone			µg/L	10 U	10 U
Benzene	1		µg/L	0.5 U	0.5 U
tert-butyl alcohol			µg/L	20 U	20 U
N-butylbenzene			µg/L	0.5 U	0.5 U
sec-butylbenzene			µg/L	0.5 U	0.5 U
tert-butylbenzene			µg/L	0.5 U	0.5 U
Carbon Disulfide			µg/L	0.5 U	0.5 U
Chlorobenzene	70		µg/L	0.5 U	0.5 U
Chloroethane			µg/L	1 U	1 U

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M031-A					
Volatile Organic Compounds					
1,2-Dichlorobenzene	600		µg/L	0.5 U	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**0.8**	**0.6**
trans-1,2-Dichloroethene	10		µg/L	0.5 U	0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U	0.5 U
Ethylbenzene	300		µg/L	0.5 U	0.5 U
Isopropyl Ether			µg/L	0.5 U	0.5 U
Isopropylbenzene			µg/L	0.5 U	0.5 U
p-Isopropyltoluene			µg/L	0.5 U	0.5 U
Methyl tert-butyl ether	13		µg/L	0.5 U	0.5 U
N-propylbenzene			µg/L	0.5 U	0.5 U
Naphthalene			µg/L	2 U	2 U
Tetrachloroethene	5		µg/L	0.5 U	0.5 U
Toluene	150		µg/L	0.5 U	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U	0.5 U
Trichloroethene	5		µg/L	0.5 U	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U	0.5 U
M,p-xylene	1,750		µg/L	0.5 U	0.5 U
O-xylene	1,750		µg/L	0.5 U	0.5 U
Semivolatile Organic Compounds					
Acenaphthene			µg/L	9.4 U	9.6 U
Anthracene			µg/L	9.4 U	9.6 U
bis(2-Chloroethyl)ether			µg/L	9.4 U	9.6 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U	9.6 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	9.6 U
Dibenzofuran			µg/L	9.4 U	9.6 U
1,2-Dichlorobenzene	600		µg/L	9.4 U	9.6 U
1,3-Dichlorobenzene			µg/L	9.4 U	9.6 U
1,4-Dichlorobenzene	5		µg/L	9.4 U	9.6 U
2,4-Dimethylphenol			µg/L	9.4 U	9.6 U
Dimethylphthalate			µg/L	9.4 U	9.6 U
Fluoranthene			µg/L	9.4 U	9.6 U
Fluorene			µg/L	9.4 U	9.6 U
2-Methylnaphthalene			µg/L	9.4 U	9.6 U

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M031-A					
Semivolatile Organic Compounds					
2-Methylphenol			µg/L	9.4 U	9.6 U
Naphthalene			µg/L	9.4 U	9.6 U
Phenanthrene			µg/L	9.4 U	9.6 U
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 UJ	
Jet Fuel #5 (JP5)			µg/L	50 UJ	
TPH, as motor oil			µg/L	300 UJ	
TPH as Gasoline					
TPH, as gasoline			µg/L	50 U	
TPH (calculated)					
Total TPH (calculated)			µg/L	300 U	
Metals					
Aluminum	1,000	439	µg/L	100 U	100 U
Antimony	6	46	µg/L	50 U	50 U
Arsenic	50	28	µg/L	**3 J**	**3.5 J**
Barium	1,000	575	µg/L	**34**	**39**
Beryllium	4	3.8	µg/L	2 U	2 U
Cadmium	5	5.4	µg/L	5 U	5 U
Chromium	50	14	µg/L	**0.35 J**	10 U
Cobalt		12	µg/L	10 U	10 U
Copper	1,000	27	µg/L	10 U	10 U
Iron		7,135	µg/L	**150**	**200**
Lead	15	3.9	µg/L	3 U	3 U
Manganese		5,213	µg/L	**330**	**210**
Mercury	2	0.15	µg/L	0.2 U	0.2 U
Molybdenum		12	µg/L	**3.4 J**	**2.9 J**
Nickel	100	19	µg/L	**1.4 J**	20 U
Selenium	50	6.0	µg/L	**0.37 J**	5 U
Silver		3.3	µg/L	5 UR	5 U
Vanadium		29	µg/L	**1 J**	**6.4 J**
Zinc		43	µg/L	20 U	20 UJ
Calcium		379	mg/L	**33**	**30**
Magnesium		500	mg/L	**12**	**11**
Potassium		182	mg/L	**13**	**16**
Sodium		4,540	mg/L	**65**	**72**
Cyanide					
Total Cyanide	0.2		mg/L	0.01 U	0.01 U
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	0.868 U2	0.193 U2

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M031-A					
Gross Alpha/Beta					
Gross Beta	50		pCi/L	**14.9**	**17.6**
Radium					
Radium			pCi/L	0.066 U3	0.276 U2J
M031-C					
Volatile Organic Compounds					
Acetone			µg/L	10 U	
Benzene	1		µg/L	0.5 U	
tert-butyl alcohol			µg/L	20 U	
N-butylbenzene			µg/L	0.5 U	
sec-butylbenzene			µg/L	0.5 U	
tert-butylbenzene			µg/L	0.5 U	
Carbon Disulfide			µg/L	0.5 U	
Chlorobenzene	70		µg/L	0.5 U	
Chloroethane			µg/L	1 U	
1,2-Dichlorobenzene	600		µg/L	0.5 U	
1,3-Dichlorobenzene			µg/L	0.5 U	
1,4-Dichlorobenzene	5		µg/L	0.5 U	
1,1-Dichloroethane	5		µg/L	0.5 U	
1,2-Dichloroethane	0.5		µg/L	0.5 U	
1,1-Dichloroethene	6		µg/L	0.5 U	
cis-1,2-Dichloroethene	6		µg/L	0.5 U	
trans-1,2-Dichloroethene	10		µg/L	0.5 U	
1,2-Dichloropropane	5		µg/L	0.5 U	
Ethylbenzene	300		µg/L	0.5 U	
Isopropyl Ether			µg/L	0.5 U	
Isopropylbenzene			µg/L	0.5 U	
p-Isopropyltoluene			µg/L	0.5 U	
Methyl tert-butyl ether	13		µg/L	0.5 U	
N-propylbenzene			µg/L	0.5 U	
Naphthalene			µg/L	2 U	
Tetrachloroethene	5		µg/L	0.5 U	
Toluene	150		µg/L	0.5 U	
1,1,1-Trichloroethane	200		µg/L	0.5 U	
Trichloroethene	5		µg/L	0.5 U	
1,2,4-Trimethylbenzene			µg/L	0.5 U	
1,3,5-Trimethylbenzene			µg/L	0.5 U	
Vinyl Chloride	0.5		µg/L	0.5 U	
M,p-xylene	1,750		µg/L	0.5 U	
O-xylene	1,750		µg/L	0.5 U	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M031-C					
Semivolatile Organic Compounds					
Acenaphthene			µg/L	9.5 U	
Anthracene			µg/L	9.5 U	
bis(2-Chloroethyl)ether			µg/L	9.5 U	
bis(2-chloroisopropyl) ether			µg/L	9.5 U	
bis(2-Ethylhexyl)phthalate	4		µg/L	9.5 U	
Dibenzofuran			µg/L	9.5 U	
1,2-Dichlorobenzene	600		µg/L	9.5 U	
1,3-Dichlorobenzene			µg/L	9.5 U	
1,4-Dichlorobenzene	5		µg/L	9.5 U	
2,4-Dimethylphenol			µg/L	9.5 U	
Dimethylphthalate			µg/L	9.5 U	
Fluoranthene			µg/L	9.5 U	
Fluorene			µg/L	9.5 U	
2-Methylnaphthalene			µg/L	9.5 U	
2-Methylphenol			µg/L	9.5 U	
Naphthalene			µg/L	9.5 U	
Phenanthrene			µg/L	9.5 U	
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 UJ	
Jet Fuel #5 (JP5)			µg/L	50 UJ	
TPH, as motor oil			µg/L	300 UJ	
TPH as Gasoline					
TPH, as gasoline			µg/L	50 U	
TPH (calculated)					
Total TPH (calculated)			µg/L	300 U	
Metals					
Aluminum	1,000	439	µg/L	100 U	
Antimony	6	46	µg/L	50 U	
Arsenic	50	28	µg/L	**0.94 J**	
Barium	1,000	575	µg/L	**92**	
Beryllium	4	3.8	µg/L	2 U	
Cadmium	5	5.4	µg/L	5 U	
Chromium	50	14	µg/L	**2.8 J**	
Cobalt		12	µg/L	10 U	
Copper	1,000	27	µg/L	**3.6 J**	
Iron		7,135	µg/L	**2,900**	
Lead	15	3.9	µg/L	3 U	
Manganese		5,213	µg/L	**5,700**	
Mercury	2	0.15	µg/L	0.2 U	
Molybdenum		12	µg/L	20 U	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M031-C					
Metals					
Nickel	100	19	µg/L	20 U	
Selenium	50	6.0	µg/L	5 U	
Silver		3.3	µg/L	**1.6 J**	
Vanadium		29	µg/L	**1.1 J**	
Zinc		43	µg/L	**470**	
Calcium		379	mg/L	**450**	
Magnesium		500	mg/L	**860**	
Potassium		182	mg/L	**100**	
Sodium		4,540	mg/L	**5,000**	
Cyanide					
Total Cyanide	0.2		mg/L	0.01 U	
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	**4.19**	
Gross Beta	50		pCi/L	**250**	
Radium					
Radium			pCi/L	**0.618**	
M032-A					
Volatile Organic Compounds					
Acetone			µg/L	10 U	
Benzene	1		µg/L	0.5 U	
tert-butyl alcohol			µg/L	20 U	
N-butylbenzene			µg/L	0.5 U	
sec-butylbenzene			µg/L	0.5 U	
tert-butylbenzene			µg/L	**0.2 J**	
Carbon Disulfide			µg/L	0.5 U	
Chlorobenzene	70		µg/L	0.5 U	
Chloroethane			µg/L	1 U	
1,2-Dichlorobenzene	600		µg/L	0.5 U	
1,3-Dichlorobenzene			µg/L	0.5 U	
1,4-Dichlorobenzene	5		µg/L	0.5 U	
1,1-Dichloroethane	5		µg/L	0.5 U	
1,2-Dichloroethane	0.5		µg/L	**0.8**	
1,1-Dichloroethene	6		µg/L	0.5 U	
cis-1,2-Dichloroethene	6		µg/L	**1**	
trans-1,2-Dichloroethene	10		µg/L	0.5 U	
1,2-Dichloropropane	5		µg/L	0.5 U	
Ethylbenzene	300		µg/L	0.5 U	
Isopropyl Ether			µg/L	0.5 U	
Isopropylbenzene			µg/L	0.5 U	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M032-A					
Volatile Organic Compounds					
p-Isopropyltoluene			µg/L	0.5 U	
Methyl tert-butyl ether	13		µg/L	0.5 U	
N-propylbenzene			µg/L	0.5 U	
Naphthalene			µg/L	2 U	
Tetrachloroethene	5		µg/L	0.5 U	
Toluene	150		µg/L	0.5 U	
1,1,1-Trichloroethane	200		µg/L	0.5 U	
Trichloroethene	5		µg/L	0.5 U	
1,2,4-Trimethylbenzene			µg/L	0.5 U	
1,3,5-Trimethylbenzene			µg/L	0.5 U	
Vinyl Chloride	0.5		µg/L	**1**	
M,p-xylene	1,750		µg/L	0.5 U	
O-xylene	1,750		µg/L	0.5 U	
Semivolatile Organic Compounds					
Acenaphthene			µg/L	9.4 U	
Anthracene			µg/L	9.4 U	
bis(2-Chloroethyl)ether			µg/L	9.4 U	
bis(2-chloroisopropyl) ether			µg/L	9.4 U	
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	
Dibenzofuran			µg/L	9.4 U	
1,2-Dichlorobenzene	600		µg/L	9.4 U	
1,3-Dichlorobenzene			µg/L	9.4 U	
1,4-Dichlorobenzene	5		µg/L	9.4 U	
2,4-Dimethylphenol			µg/L	9.4 U	
Dimethylphthalate			µg/L	9.4 U	
Fluoranthene			µg/L	**1.2 J**	
Fluorene			µg/L	9.4 U	
2-Methylnaphthalene			µg/L	9.4 U	
2-Methylphenol			µg/L	9.4 U	
Naphthalene			µg/L	9.4 U	
Phenanthrene			µg/L	9.4 U	
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 U	
Jet Fuel #5 (JP5)			µg/L	50 U	
TPH, as motor oil			µg/L	300 U	
TPH as Gasoline					
TPH, as gasoline			µg/L	**17 J**	
TPH (calculated)					
Total TPH (calculated)			µg/L	**17 J**	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M032-A					
Metals					
Aluminum	1,000	439	µg/L	100 U	
Antimony	6	46	µg/L	**0.059 J**	
Arsenic	50	28	µg/L	5 U	
Barium	1,000	575	µg/L	**83**	
Beryllium	4	3.8	µg/L	2 U	
Cadmium	5	5.4	µg/L	5 U	
Chromium	50	14	µg/L	10 U	
Cobalt		12	µg/L	**0.18 J**	
Copper	1,000	27	µg/L	**0.28 J**	
Iron		7,135	µg/L	**1,800**	
Lead	15	3.9	µg/L	3 U	
Manganese		5,213	µg/L	**530 J**	
Mercury	2	0.15	µg/L	0.2 U	
Molybdenum		12	µg/L	**1.7 J**	
Nickel	100	19	µg/L	**0.77 J**	
Selenium	50	6.0	µg/L	5 U	
Silver		3.3	µg/L	5 U	
Vanadium		29	µg/L	10 U	
Zinc		43	µg/L	**7.4 J**	
Calcium		379	mg/L	**74**	
Magnesium		500	mg/L	**30 J**	
Potassium		182	mg/L	**16**	
Sodium		4,540	mg/L	**27**	
Cyanide					
Total Cyanide	0.2		mg/L	0.01 U	
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	**15.1**	
Gross Beta	50		pCi/L	**13.6**	
Radium					
Radium			pCi/L	0.278 U2	
Sulfide					
Sulfide			mg/L	0.04 U	
M033-A					
Volatile Organic Compounds					
Acetone			µg/L	10 U	10 U
Benzene	1		µg/L	0.5 U	0.5 U
tert-butyl alcohol			µg/L	20 U	20 U
N-butylbenzene			µg/L	0.5 U	0.5 U
sec-butylbenzene			µg/L	0.5 U	0.5 U

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M033-A					
Volatile Organic Compounds					
tert-butylbenzene			µg/L	**0.2 J**	**0.2 J**
Carbon Disulfide			µg/L	0.5 U	0.5 U
Chlorobenzene	70		µg/L	0.5 U	0.5 U
Chloroethane			µg/L	1 U	1 U
1,2-Dichlorobenzene	600		µg/L	0.5 U	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U	0.5 U
1,2-Dichloroethane	0.5		µg/L	**0.3 J**	**0.3 J**
1,1-Dichloroethene	6		µg/L	0.5 U	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**7.9**	**5**
trans-1,2-Dichloroethene	10		µg/L	**0.5 J**	0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U	0.5 U
Ethylbenzene	300		µg/L	0.5 U	0.5 U
Isopropyl Ether			µg/L	0.5 U	0.5 U
Isopropylbenzene			µg/L	0.5 U	0.5 U
p-Isopropyltoluene			µg/L	0.5 U	0.5 U
Methyl tert-butyl ether	13		µg/L	0.5 U	0.5 U
N-propylbenzene			µg/L	0.5 U	0.5 U
Naphthalene			µg/L	2 U	2 U
Tetrachloroethene	5		µg/L	0.5 U	0.5 U
Toluene	150		µg/L	0.5 U	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U	0.5 U
Trichloroethene	5		µg/L	0.5 U	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U	0.5 U
Vinyl Chloride	0.5		µg/L	**2.2**	**1.5**
M,p-xylene	1,750		µg/L	0.5 U	0.5 U
O-xylene	1,750		µg/L	0.5 U	0.5 U
Semivolatile Organic Compounds					
Acenaphthene			µg/L	9.4 U	**1 J**
Anthracene			µg/L	9.4 U	9.4 U
bis(2-Chloroethyl)ether			µg/L	9.4 U	9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U	9.4 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	9.4 U
Dibenzofuran			µg/L	9.4 U	9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U	9.4 U
1,3-Dichlorobenzene			µg/L	9.4 U	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U	9.4 U

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M033-A					
Semivolatile Organic Compounds					
Dimethylphthalate			µg/L	9.4 U	9.4 U
Fluoranthene			µg/L	9.4 U	9.4 U
Fluorene			µg/L	9.4 U	9.4 U
2-Methylnaphthalene			µg/L	9.4 U	9.4 U
2-Methylphenol			µg/L	9.4 U	9.4 U
Naphthalene			µg/L	9.4 U	9.4 U
Phenanthrene			µg/L	9.4 U	9.4 U
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 UJ	
Jet Fuel #5 (JP5)			µg/L	50 UJ	
TPH, as motor oil			µg/L	300 UJ	
TPH as Gasoline					
TPH, as gasoline			µg/L	140 Uly	
TPH (calculated)					
Total TPH (calculated)			µg/L	300 U	
Metals					
Aluminum	1,000	439	µg/L	100 U	100 U
Antimony	6	46	µg/L	50 U	50 U
Arsenic	50	28	µg/L	**5 J**	**4 J**
Barium	1,000	575	µg/L	**23**	**27**
Beryllium	4	3.8	µg/L	2 U	2 U
Cadmium	5	5.4	µg/L	5 U	5 U
Chromium	50	14	µg/L	**0.44 J**	10 U
Cobalt		12	µg/L	10 U	10 U
Copper	1,000	27	µg/L	10 U	10 U
Iron		7,135	µg/L	**960**	**1,100**
Lead	15	3.9	µg/L	**0.026 J**	3 U
Manganese		5,213	µg/L	**320**	**410**
Mercury	2	0.15	µg/L	0.2 U	0.2 U
Molybdenum		12	µg/L	20 U	**2.2 J**
Nickel	100	19	µg/L	**0.59 J**	20 U
Selenium	50	6.0	µg/L	5 U	5 U
Silver		3.3	µg/L	5 UR	5 U
Vanadium		29	µg/L	**0.48 J**	10 U
Zinc		43	µg/L	20 U	20 UJ
Calcium		379	mg/L	**51**	**65**
Magnesium		500	mg/L	**15**	**25**
Potassium		182	mg/L	**14**	**18**
Sodium		4,540	mg/L	**100**	**66**

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M033-A					
Cyanide					
Total Cyanide	0.2		mg/L	0.01 U	0.01 U
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	**1**	0.19 U3
Gross Beta	50		pCi/L	**18.2**	**11.7**
Radium					
Radium			pCi/L	0.066 U3	0.068 U3J
Anions					
Chloride			mg/L	**58**	
Sulfate			mg/L	**2.5**	
Sulfide					
Sulfide			mg/L	0.04 U	
Alkalinity					
Alkalinity			mg/L	**340**	
Alkalinity, bicarbonate			mg/L	**340**	
Dissolved Gases					
Ethane			mg/L	0.01 U	
Ethene			mg/L	0.01 U	
Methane			mg/L	**2.5**	
M034-A					
Volatile Organic Compounds					
Acetone			µg/L	10 U	10 U
Benzene	1		µg/L	**30**	**45**
tert-butyl alcohol			µg/L	20 U	20 U
N-butylbenzene			µg/L	0.5 U	**2.3**
sec-butylbenzene			µg/L	**3.4**	**3.9**
tert-butylbenzene			µg/L	**0.4 J**	**0.4 J**
Carbon Disulfide			µg/L	0.5 U	**0.8**
Chlorobenzene	70		µg/L	**13**	**28**
Chloroethane			µg/L	1 U	1 U
1,2-Dichlorobenzene	600		µg/L	**2.6**	**3.4**
1,3-Dichlorobenzene			µg/L	**0.6**	**0.8**
1,4-Dichlorobenzene	5		µg/L	**2.6**	**4.5**
1,1-Dichloroethane	5		µg/L	**0.5 J**	**2.2**
1,2-Dichloroethane	0.5		µg/L	0.5 U	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**0.4 J**	0.5 U
trans-1,2-Dichloroethene	10		µg/L	**0.3 J**	**0.4 J**
1,2-Dichloropropane	5		µg/L	0.5 U	0.5 U
Ethylbenzene	300		µg/L	**4**	**6.5**

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M034-A					
Volatile Organic Compounds					
Isopropyl Ether			µg/L	**0.7**	**0.3 J**
Isopropylbenzene			µg/L	**4.9**	**6.2**
p-Isopropyltoluene			µg/L	**1.6**	**2.3**
Methyl tert-butyl ether	13		µg/L	0.5 U	0.5 U
N-propylbenzene			µg/L	**4.6**	**6.6**
Naphthalene			µg/L	**82**	**46**
Tetrachloroethene	5		µg/L	0.5 U	0.5 U
Toluene	150		µg/L	**1.2**	**1.7**
1,1,1-Trichloroethane	200		µg/L	0.5 U	0.5 U
Trichloroethene	5		µg/L	0.5 U	0.5 U
1,2,4-Trimethylbenzene			µg/L	**17**	**27**
1,3,5-Trimethylbenzene			µg/L	**0.4 J**	**1.9**
Vinyl Chloride	0.5		µg/L	**0.5 J**	0.5 U
M,p-xylene	1,750		µg/L	**10**	**29**
O-xylene	1,750		µg/L	**0.4 J**	**1.6**
Semivolatile Organic Compounds					
Acenaphthene			µg/L	**3.4 J**	**1.9 J**
Anthracene			µg/L	9.4 U	9.6 U
bis(2-Chloroethyl)ether			µg/L	9.4 U	9.6 U
bis(2-chloroisopropyl) ether			µg/L	**1.8 J**	**1.9 J**
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	9.6 U
Dibenzofuran			µg/L	**1.4 J**	9.6 U
1,2-Dichlorobenzene	600		µg/L	**1.9 J**	**2.5 J**
1,3-Dichlorobenzene			µg/L	9.4 U	**0.57 J**
1,4-Dichlorobenzene	5		µg/L	**1.8 J**	**3.2 J**
2,4-Dimethylphenol			µg/L	9.4 U	9.6 U
Dimethylphthalate			µg/L	9.4 U	9.6 U
Fluoranthene			µg/L	9.4 U	9.6 U
Fluorene			µg/L	9.4 U	**0.85 J**
2-Methylnaphthalene			µg/L	**3.8 J**	**6.7 J**
2-Methylphenol			µg/L	9.4 U	9.6 U
Naphthalene			µg/L	**59**	**32**
Phenanthrene			µg/L	9.4 U	9.6 U
TPH as Diesel					
TPH, as diesel fuel			µg/L	**46 Jly**	
Jet Fuel #5 (JP5)			µg/L	**190 J**	
TPH, as motor oil			µg/L	300 UJ	
TPH as Gasoline					
TPH, as gasoline			µg/L	**490 h**	

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M034-A					
TPH (calculated)					
Total TPH (calculated)			µg/L	**726 J**	
Metals					
Aluminum	1,000	439	µg/L	100 U	100 U
Antimony	6	46	µg/L	50 U	50 U
Arsenic	50	28	µg/L	**12**	**13**
Barium	1,000	575	µg/L	**120**	**110**
Beryllium	4	3.8	µg/L	2 U	2 U
Cadmium	5	5.4	µg/L	5 U	5 U
Chromium	50	14	µg/L	**0.8 J**	10 U
Cobalt		12	µg/L	**0.61 J**	**0.73 J**
Copper	1,000	27	µg/L	10 U	10 U
Iron		7,135	µg/L	**5,800**	**5,900**
Lead	15	3.9	µg/L	**0.031 J**	3 U
Manganese		5,213	µg/L	**720**	**570**
Mercury	2	0.15	µg/L	0.2 U	0.2 U
Molybdenum		12	µg/L	20 U	**0.8 J**
Nickel	100	19	µg/L	**0.59 J**	20 U
Selenium	50	6.0	µg/L	**0.76 J**	5 U
Silver		3.3	µg/L	5 UR	5 U
Vanadium		29	µg/L	**0.44 J**	**6.4 J**
Zinc		43	µg/L	**4.6 J**	20 UJ
Calcium		379	mg/L	**59**	**56**
Magnesium		500	mg/L	**15**	**11**
Potassium		182	mg/L	**21**	**18**
Sodium		4,540	mg/L	**70**	**53**
Cyanide					
Total Cyanide	0.2		mg/L	0.01 U	0.01 U
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	**2.6**	**29.3**
Gross Beta	50		pCi/L	**26.2**	**27.7**
Radium					
Radium			pCi/L	0.066 U3	0.068 U3J
M035-A					
Volatile Organic Compounds					
Acetone			µg/L	10 U	10 U
Benzene	1		µg/L	0.5 U	0.5 U
tert-butyl alcohol			µg/L	20 U	20 U
N-butylbenzene			µg/L	0.5 U	0.5 U
sec-butylbenzene			µg/L	0.5 U	0.5 U

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M035-A					
Volatile Organic Compounds					
tert-butylbenzene			µg/L	0.5 U	0.5 U
Carbon Disulfide			µg/L	0.5 U	0.5 U
Chlorobenzene	70		µg/L	0.5 U	0.5 U
Chloroethane			µg/L	1 U	1 U
1,2-Dichlorobenzene	600		µg/L	0.5 U	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U	0.5 U
1,1-Dichloroethene	6		µg/L	**0.5 J**	**0.5**
cis-1,2-Dichloroethene	6		µg/L	**4.9**	**5.5**
trans-1,2-Dichloroethene	10		µg/L	**2.9**	**3.8**
1,2-Dichloropropane	5		µg/L	0.5 U	0.5 U
Ethylbenzene	300		µg/L	0.5 U	0.5 U
Isopropyl Ether			µg/L	0.5 U	0.5 U
Isopropylbenzene			µg/L	0.5 U	0.5 U
p-Isopropyltoluene			µg/L	0.5 U	0.5 U
Methyl tert-butyl ether	13		µg/L	0.5 U	0.5 U
N-propylbenzene			µg/L	0.5 U	0.5 U
Naphthalene			µg/L	2 U	2 U
Tetrachloroethene	5		µg/L	**0.3 J**	0.5 U
Toluene	150		µg/L	0.5 U	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U	0.5 U
Trichloroethene	5		µg/L	**6.5**	**5.2**
1,2,4-Trimethylbenzene			µg/L	0.5 U	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U	**0.5**
M,p-xylene	1,750		µg/L	0.5 U	0.5 U
O-xylene	1,750		µg/L	0.5 U	0.5 U
Semivolatile Organic Compounds					
Acenaphthene			µg/L	9.4 U	9.4 U
Anthracene			µg/L	9.4 U	9.4 U
bis(2-Chloroethyl)ether			µg/L	9.4 U	9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U	9.4 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	9.4 U
Dibenzofuran			µg/L	9.4 U	9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U	9.4 U
1,3-Dichlorobenzene			µg/L	9.4 U	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U	9.4 U

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M035-A					
Semivolatile Organic Compounds					
Dimethylphthalate			µg/L	9.4 U	9.4 U
Fluoranthene			µg/L	9.4 U	9.4 U
Fluorene			µg/L	9.4 U	9.4 U
2-Methylnaphthalene			µg/L	9.4 U	9.4 U
2-Methylphenol			µg/L	9.4 U	9.4 U
Naphthalene			µg/L	9.4 U	9.4 U
Phenanthrene			µg/L	9.4 U	9.4 U
TPH as Diesel					
TPH, as diesel fuel			µg/L	50 UJ	
Jet Fuel #5 (JP5)			µg/L	50 UJ	
TPH, as motor oil			µg/L	300 UJ	
TPH as Gasoline					
TPH, as gasoline			µg/L	50 U	
TPH (calculated)					
Total TPH (calculated)			µg/L	300 U	
Metals					
Aluminum	1,000	439	µg/L	100 U	100 U
Antimony	6	46	µg/L	**0.34 J**	50 U
Arsenic	50	28	µg/L	**11**	**11**
Barium	1,000	575	µg/L	**55**	**50**
Beryllium	4	3.8	µg/L	2 U	2 U
Cadmium	5	5.4	µg/L	5 U	5 U
Chromium	50	14	µg/L	**0.42 J**	10 U
Cobalt		12	µg/L	**0.53 J**	10 U
Copper	1,000	27	µg/L	10 U	10 U
Iron		7,135	µg/L	**470**	**690**
Lead	15	3.9	µg/L	3 U	3 U
Manganese		5,213	µg/L	**920**	**770**
Mercury	2	0.15	µg/L	0.2 U	0.2 U
Molybdenum		12	µg/L	20 U	**1.7 J**
Nickel	100	19	µg/L	**2.5 J**	20 U
Selenium	50	6.0	µg/L	5 U	5 U
Silver		3.3	µg/L	5 UR	5 U
Vanadium		29	µg/L	**1.3 J**	10 U
Zinc		43	µg/L	**11 J**	20 UJ
Calcium		379	mg/L	**99**	**94**
Magnesium		500	mg/L	**28**	**27**
Potassium		182	mg/L	**8.3**	**8.7**
Sodium		4,540	mg/L	**32**	**36**

Table 5-2: Detected Parameters at Installation Restoration Site 1 (Continued)
Summer and Fall 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002
M035-A					
Cyanide					
Total Cyanide	0.2		mg/L	0.01 U	0.01 U
Gross Alpha/Beta					
Gross Alpha	15		pCi/L	1.76 U4	0.409 U2
Gross Beta	50		pCi/L	**9.64**	**8.73**
Radium					
Radium			pCi/L	0.262 U2	0.069 U3J

MCL California Maximum Contaminant Level
BV Background value (Tetra Tech Environmental Management, Inc., January 18, 1999)
TPH Total Petroleum Hydrocarbon
µg/L micrograms per liter
mg/L milligrams per liter
pCi/L pico curies per liter
U Not detected at or above the reporting limit.
UJ Not detected at or above the reporting limit. The reporting limit is an estimate.
UR The analyte was not detected. The analyte is rejected due to deficiencies in the ability to analyze the sample and meet QC criteria.
U2 The reported value is <= the reported analytical uncertainty.
U3 The reported value is <= both the minimum detected activity and the analytical uncertainty.
U4 The reported value is <= the sum of the minimum detected activity and the analytical uncertainty.
J Estimated value.
Detected values are bolded.
Detected values greater than the California Maximum Contaminant Level are circled.
Detected values greater than the Background value are underlined.
Blank entries under well names indicate compound not analyzed. Blank entries under MCL and BV indicate no California Maximum Contaminant Levels or background values available, respectively.

- Vinyl chloride was detected above the California State MCL of 0.5 μg/L in samples taken from wells M028-A (2.2 μg/L) and M033-A (1.5 μg/L)
- Benzene was detected above the California State MCL of 1 μg/L in 4 wells (M001-E, M028-A, M029-A, and M034-A) at concentrations ranging from 2.0 to 53 μg/L
- Chlorobenzene exceeded the California State MCL of 70 μg/L in samples taken from well M028-A at a concentration of 77 μg/L
- 1,4-dichlorobenzene exceeded the California State MCL of 5 μg/L in samples taken from well M028-A at a concentration of 6.5 μg/L
- Gross alpha was detected at the California State MCL of 15 pico curies per liter (pCi/L) in samples taken from well M034-A (29.3 ± 4.02 pCi/L)
- Gross beta was detected above the California State MCL of 50 pCi/L in samples taken from wells M027-A (58.1 ± 15.9 pCi/L) and M028-C (92.9 ± 46.6 pCi/L)

Bis(2-ethylhexyl)phthalate was detected above the California State MCL of 4 μg/L in samples taken from well M030-A at a concentration of 350 μg/L. However, this constituent is a common laboratory contaminant, and, except for an estimated detection in M025-C, there were no other detections in any other wells or in M030-A during the Summer 2002 sampling event.

Trichloroethene was detected in samples taken from three of the thirteen wells analyzed for VOCs. However, the TCE concentration was detected above the MCL in only two wells (M002-A and M035-A), which are located in the southern portion north and western sections of IR Site 1.

Cis-1,2-Dichlorethene was detected in two samples taken from the thirteen program wells analyzed for VOCs. However, the 1,2-DCE content exceeded the MCL only in one sample the sample taken from well (M002-A) which is also the location of elevated TCE.

1,1-dichloroethane was detected in two samples taken from the program wells. Six wells had detections of vinyl chloride and samples from wells M028-A and M033-A had vinyl chloride concentration above the MCLs.

1,4-dichlorobenzene was detected in samples from two wells, chlorobenzene was detected in samples collected from four of the wells. The sample collected from well M028-A yielded the only concentrations exceeding MCLs for 1,1-dichloroethane, 1,4-dichlorobenzene.

Benzene was detected in samples from five wells with four of those detections exceeding the MCL including samples from wells M028-A, M029-A M034-A and M001-A.

Gross alpha activity was detected in seven wells with one well (M034-A) located in the western part of the site exceeding the MCL. Gross beta activity was detected in thirteen wells but only two of them M028-C and M027-C showing activity exceeding MCLs.

The detections of VOCs and other constituents are consistent with previous Groundwater Monitoring Program results. The concentrations of VOCs reported for the Fall 2002 quarter are generally similar to those detected in groundwater samples collected during the Summer 2002 sampling event at IR Site 1.

5.3.2 Analyte Concentration versus Water Level Elevation Summary

Combined plots of groundwater elevations and COPCs above California State MCLs versus time for wells (Time Series) are provided as Figures 5-2 through 5-12. These plots are used to help evaluate if variations in chemical concentrations are possibly related to changes in groundwater elevation. Eleven time series plots are included for ten wells on Site 1: these include organic and radiological constituent plots (Figures 5-2 through 5-12).

Groundwater elevations generally decreased for the plotted wells from the Summer 2002 event to the Fall 2002 sampling event. Nine of the wells show no change or a decrease in water levels, with well M030-A showing the greatest decline (0.5 feet). The exceptions to this were two wells (M028-A and M028-C) with groundwater elevations higher than the Summer event. The greatest increase, 1.08 feet, was observed in well M028-C. The relationship of constituents to water elevation was mixed, with increases and decreases in constituents relating to the decrease of water table. For example, for samples from wells M030-A and M034-A, wells with decreases in water levels reflected increases in bis(2-Ethylhexyl)phthalate, and benzene, respectively. The increase in concentrations ranged from non-detect to 250 µg/L for bis(2-Ethylhexyl)phthalate and 30 µg/L to 40 µg/L for benzene. Gross beta concentrations increased from 30 Ci/L to 58 Ci/L in well M027-A: a well with water levels that were unchanged between the two quarterly measurements. In contrast, gross beta concentrations decreased in well M028-C from 265pCi/L to 92pCi/L while the groundwater elevation increased over 1 foot. Water level increased in Well M028-A and a corresponding increase of 1,1-DCA, benzene and chlorobenzene was observed at from a factor of three to a factor of five, involving changes in concentrations of 8 µg/L (1,1-DCA) to 56 µg/L (chlorobenzene).

The relationship between COPCs and water levels should be reviewed over the next several quarters to assess whether the relationship between changes in groundwater elevation concentrations show any consistent trends.

5.3.3 Natural Attenuation Summary

Data used to evaluate the natural attenuation of chemicals in groundwater were collected during the Fall 2002 sampling event. Natural attenuation is the reduction in concentration and mass of a

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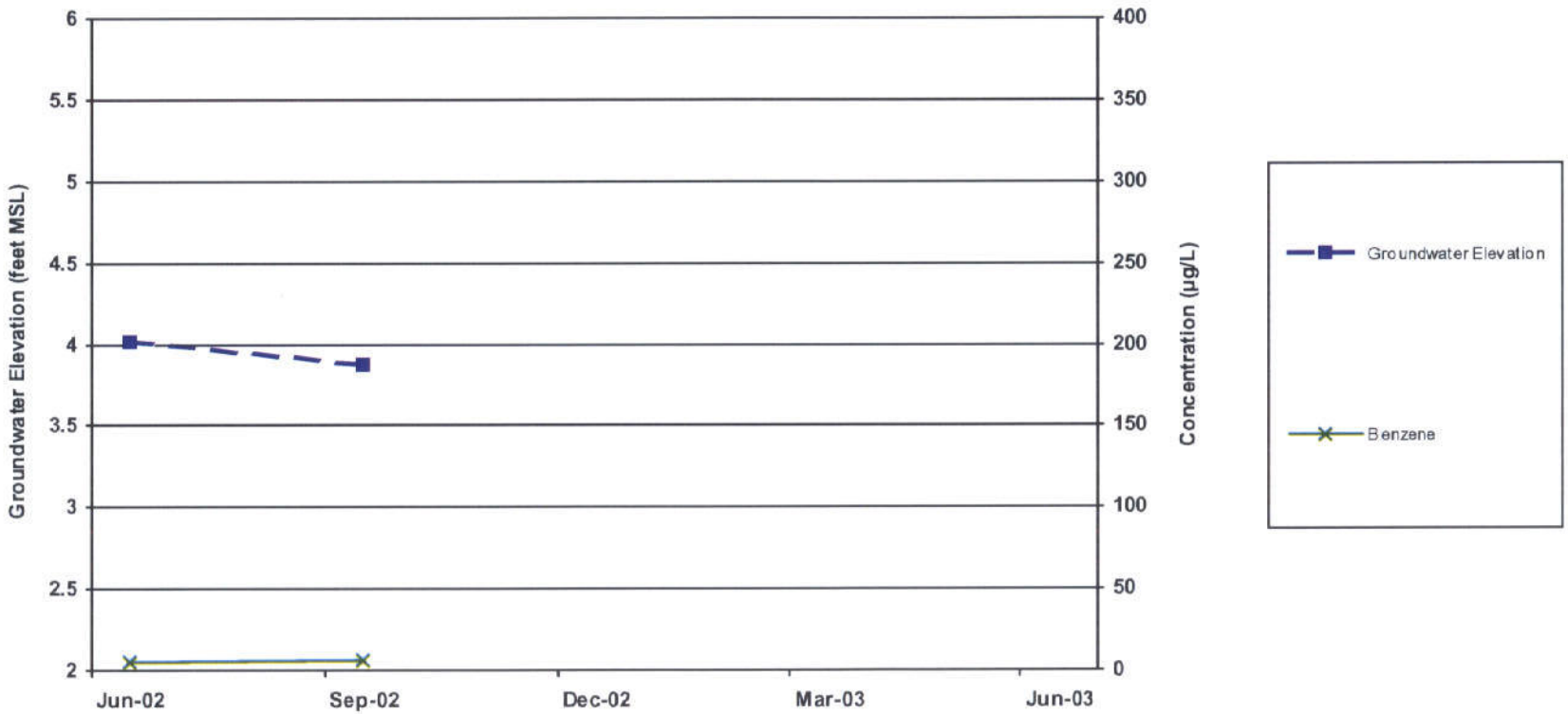
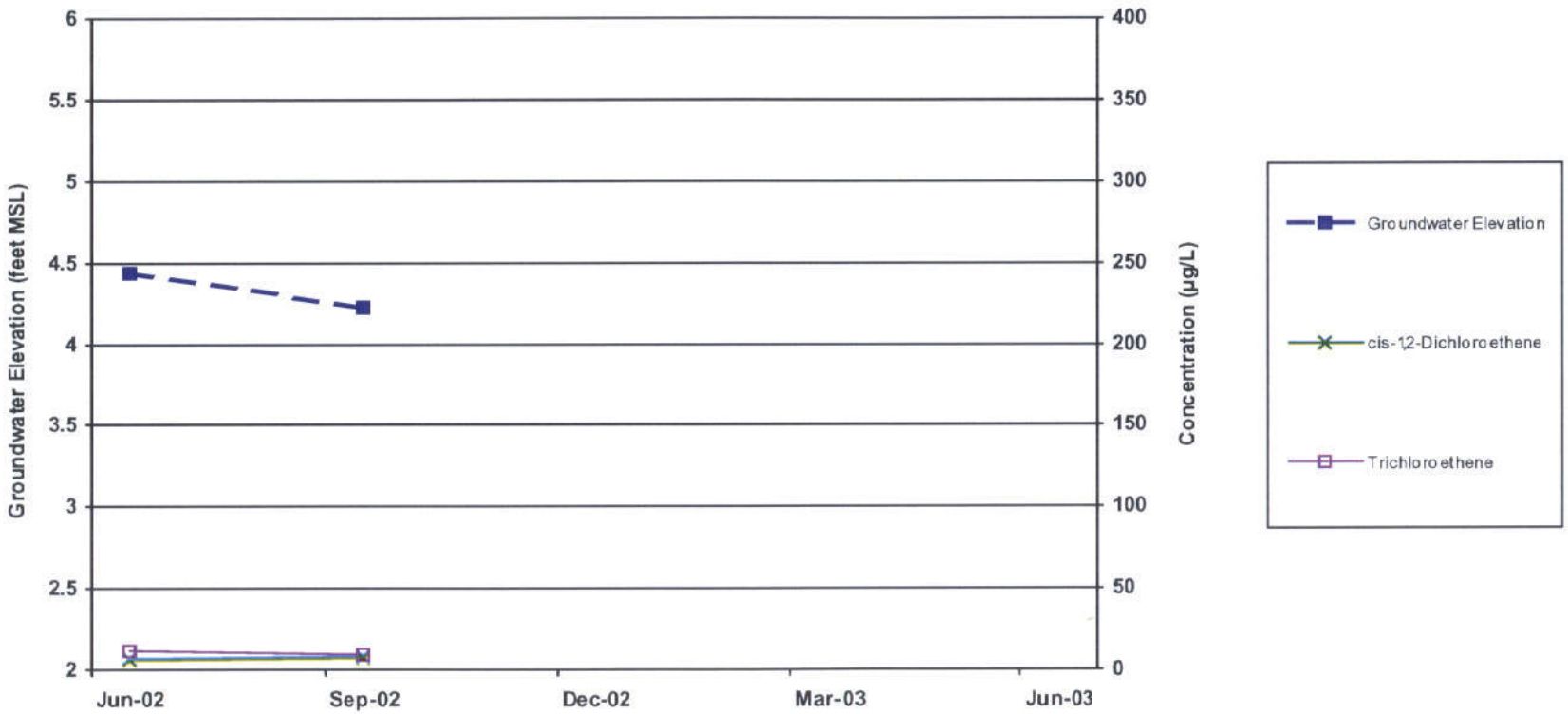
Figure 5-2
Time Series, Groundwater Elevations and Organic Concentrations at M001-E
Installation Restoration Site 1
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California



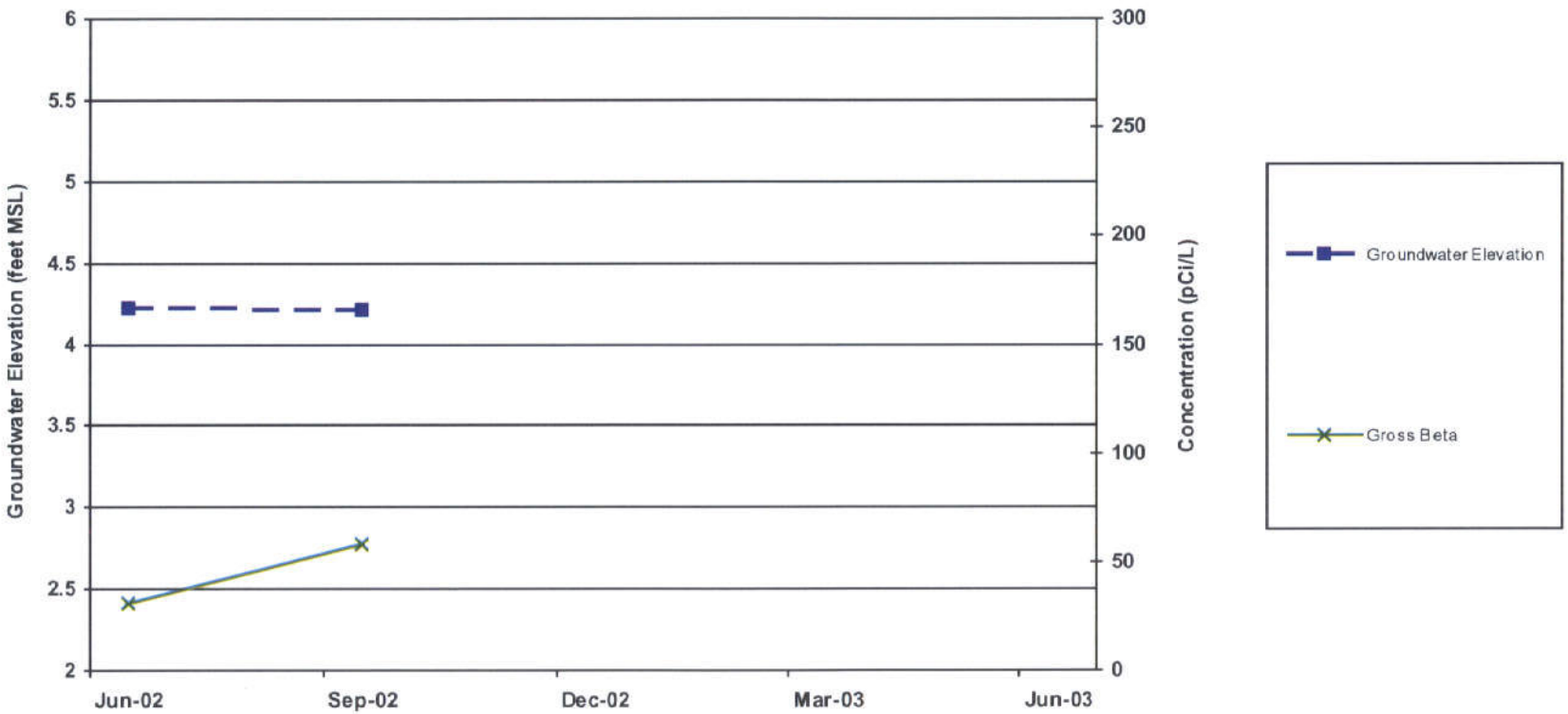
MSL Mean Sea Level
µg/L micrograms per liter

Figure 5-3
Time Series, Groundwater Elevations and Organic Concentrations at M002-A
Installation Restoration Site 1
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California



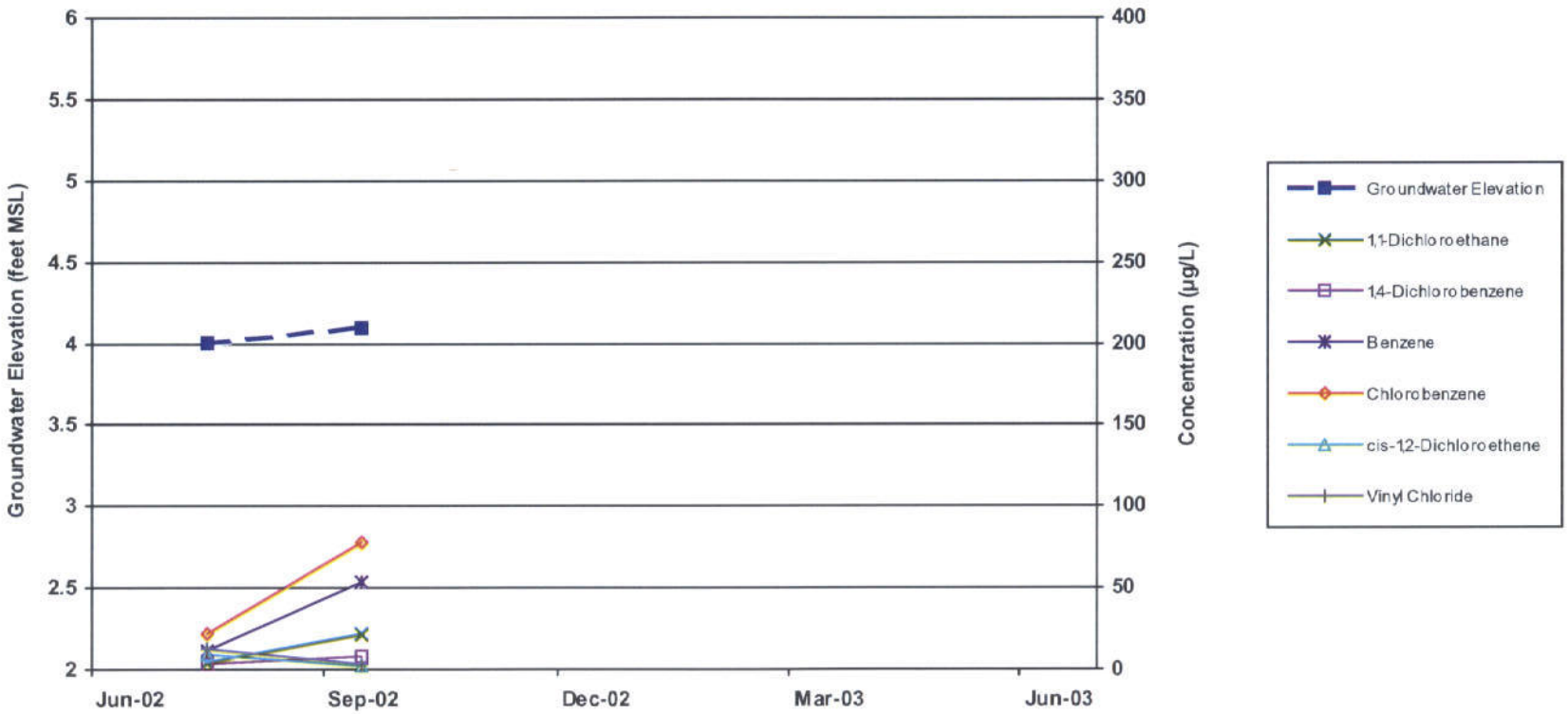
MSL Mean Sea Level
µg/L micrograms per liter

Figure 5-4
Time Series, Groundwater Elevations and Radiological Concentrations at M027-A
Installation Restoration Site 1
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California



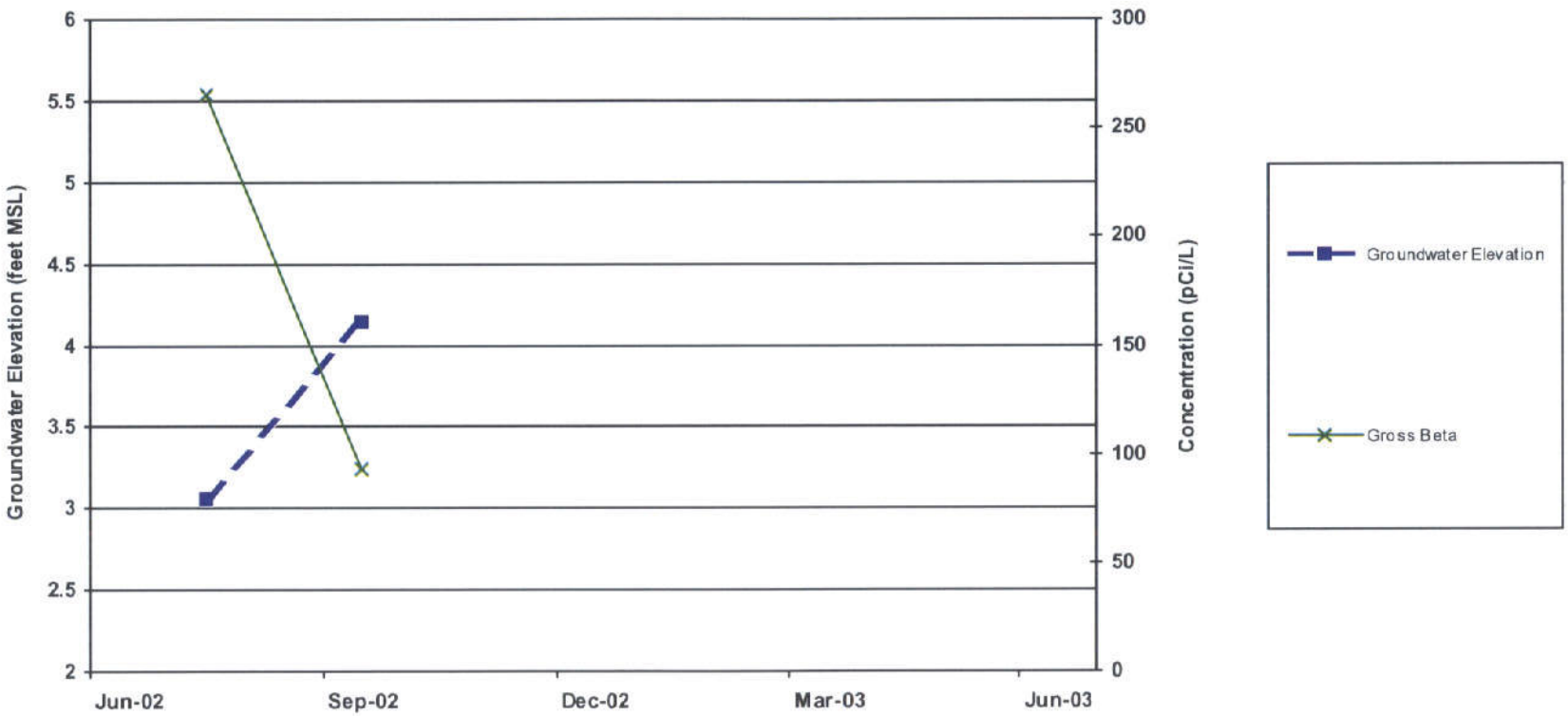
MSL Mean Sea Level
pCi/L pico curies per liter

Figure 5-5
Time Series, Groundwater Elevations and Organic Concentrations at M028-A
Installation Restoration Site 1
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California



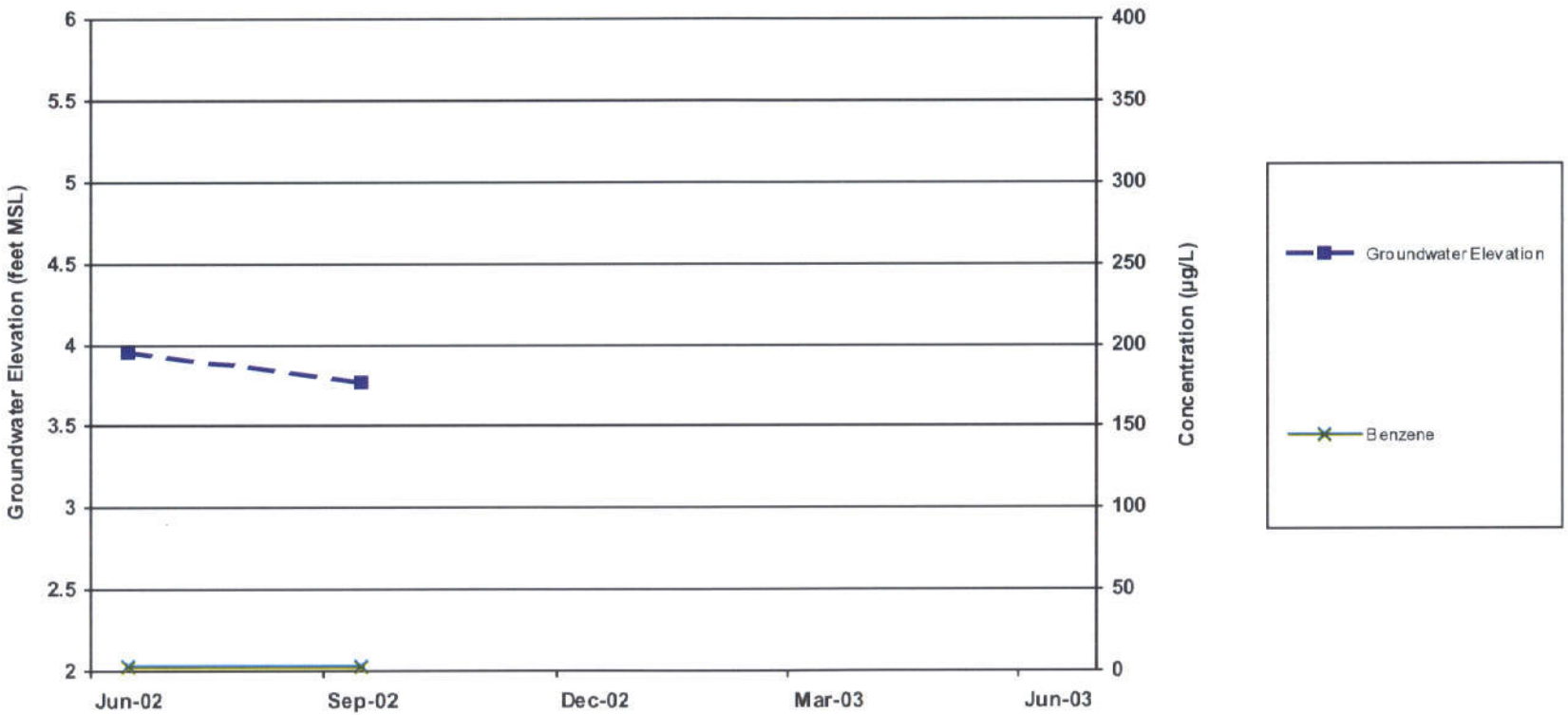
MSL Mean Sea Level
µg/L micrograms per liter

Figure 5-6
Time Series, Groundwater Elevations and Radiological Concentrations at M028-C
Installation Restoration Site 1
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California



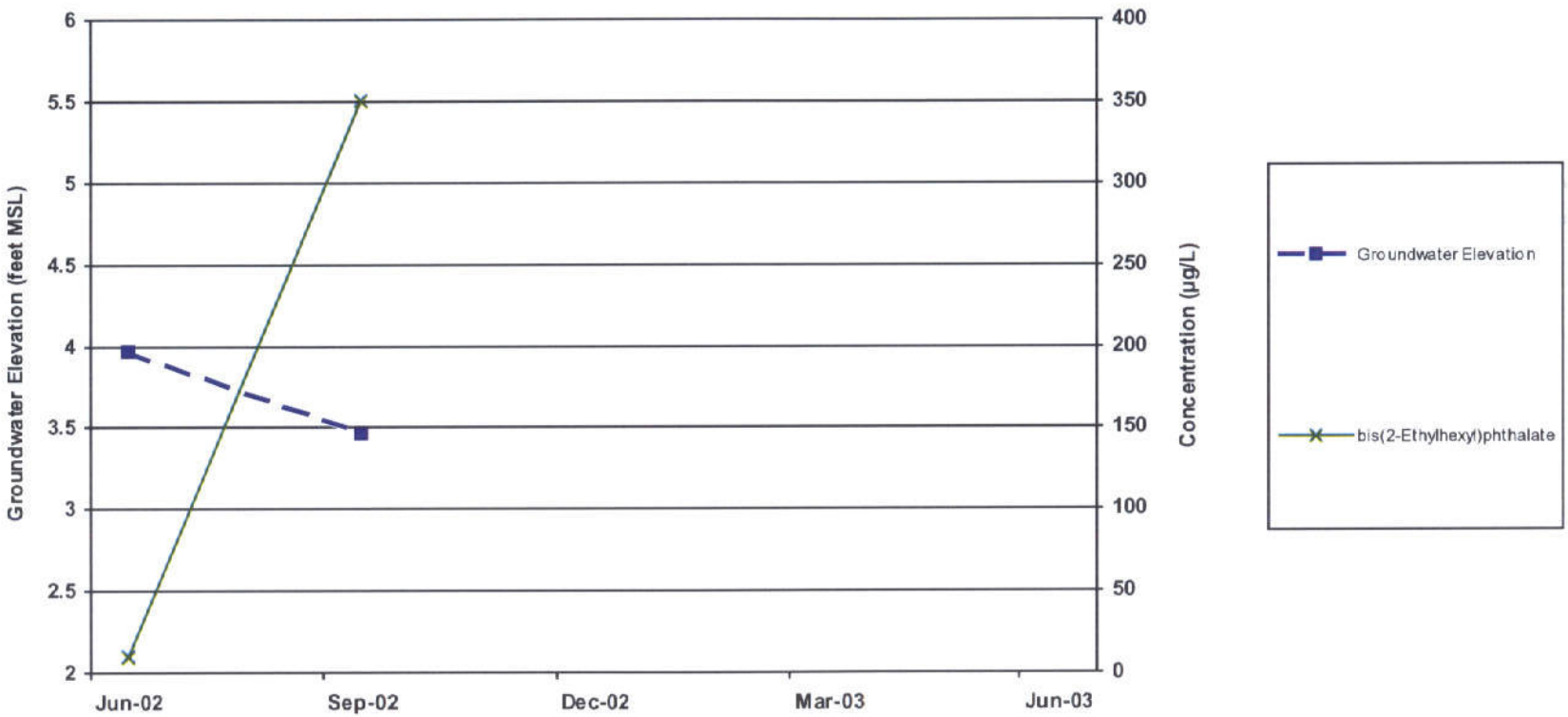
MSL Mean Sea Level
pCi/L pico curies per liter

Figure 5-7
Time Series, Groundwater Elevations and Organic Concentrations at M029-A
Installation Restoration Site 1
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California



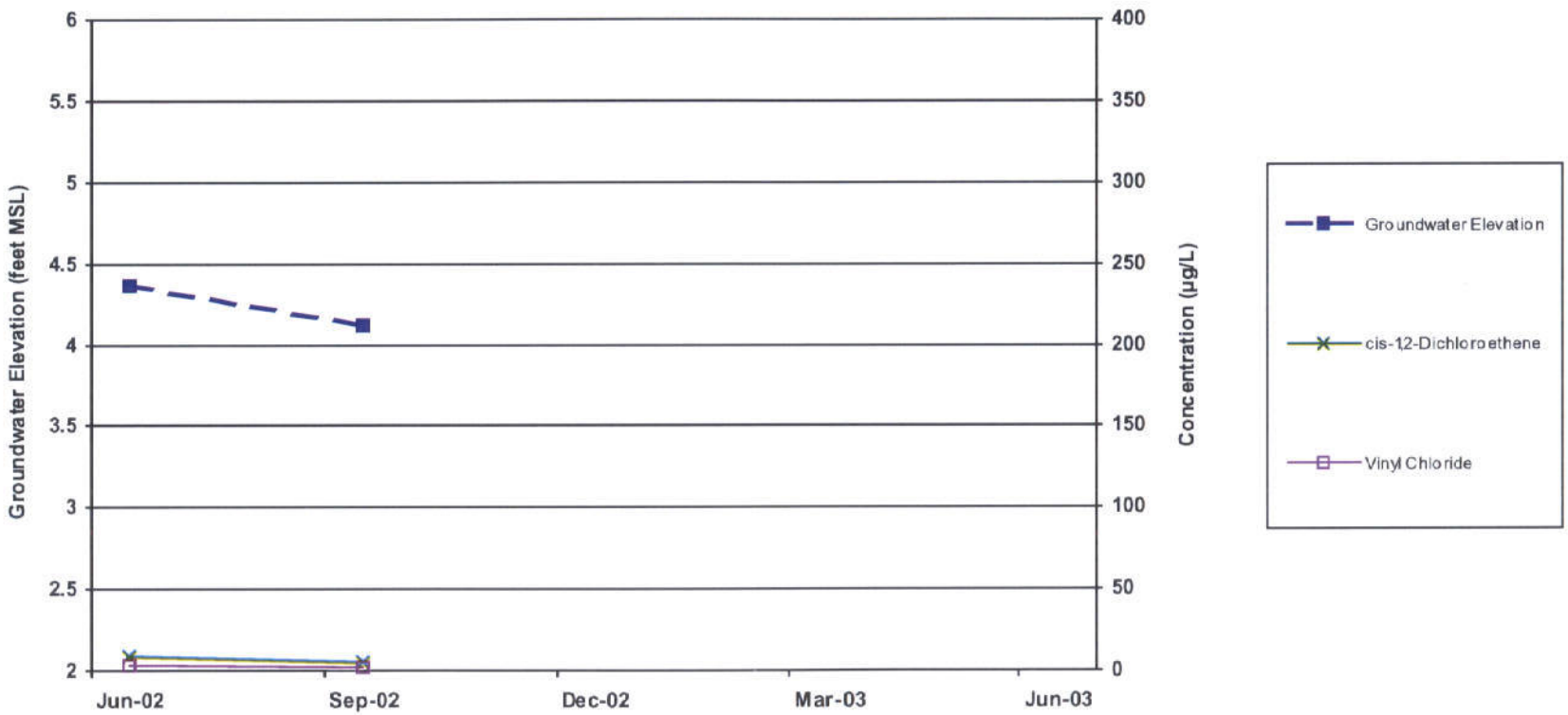
MSL Mean Sea Level
µg/L micrograms per liter

Figure 5-8
Time Series, Groundwater Elevations and Organic Concentrations at M030-A
Installation Restoration Site 1
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California



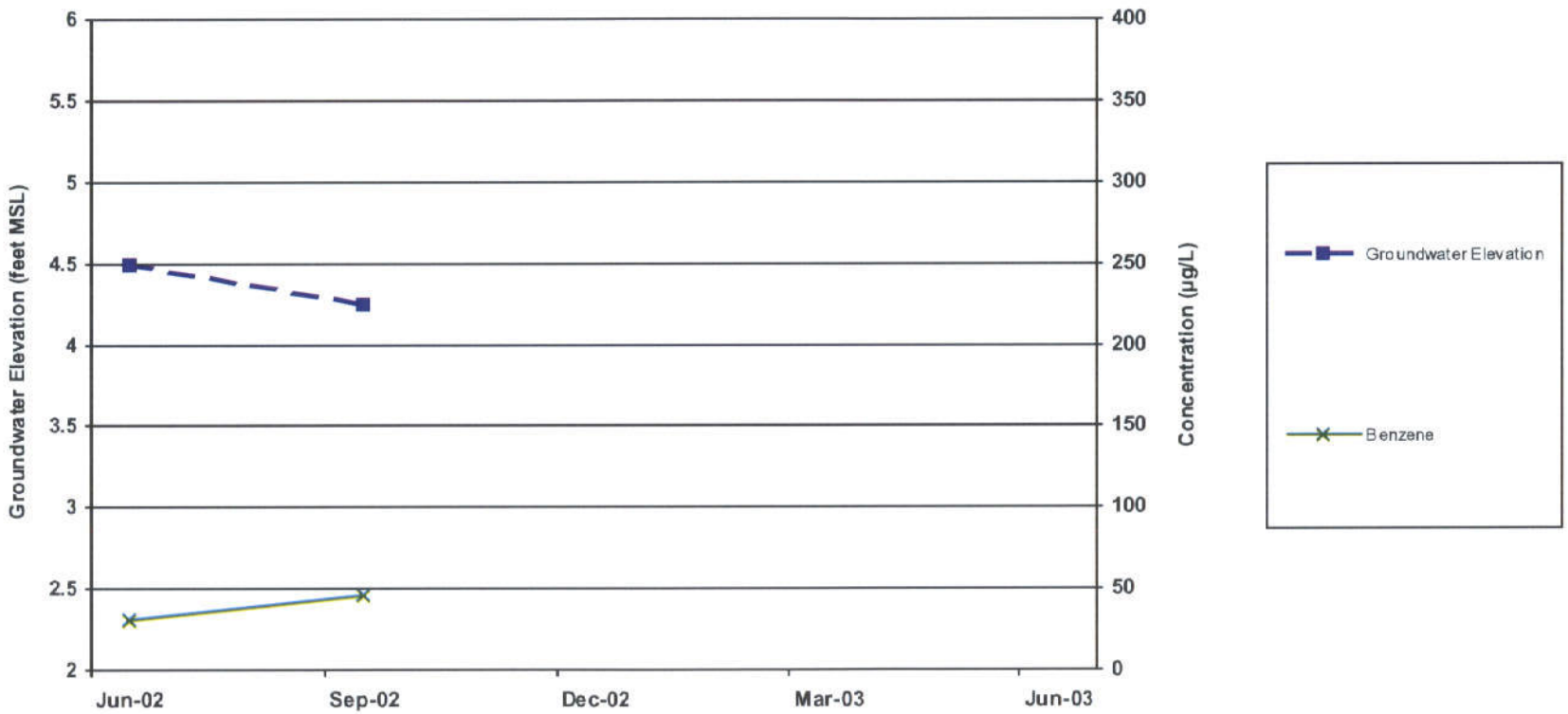
MSL Mean Sea Level
µg/L micrograms per liter

Figure 5-9
Time Series, Groundwater Elevations and Organic Concentrations at M033-A
Installation Restoration Site 1
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California



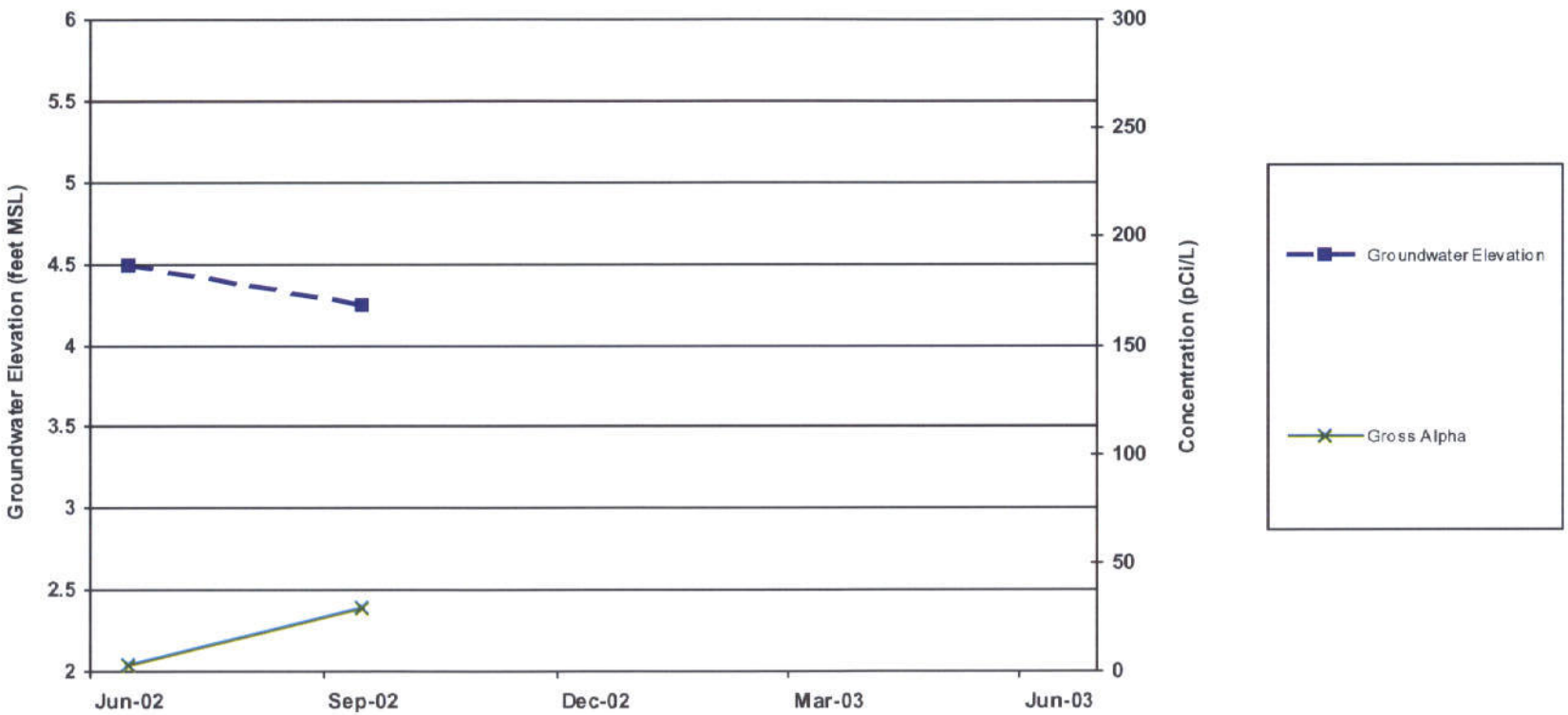
MSL Mean Sea Level
µg/L micrograms per liter

Figure 5-10
Time Series, Groundwater Elevations and Organic Concentrations at M034-A
Installation Restoration Site 1
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California



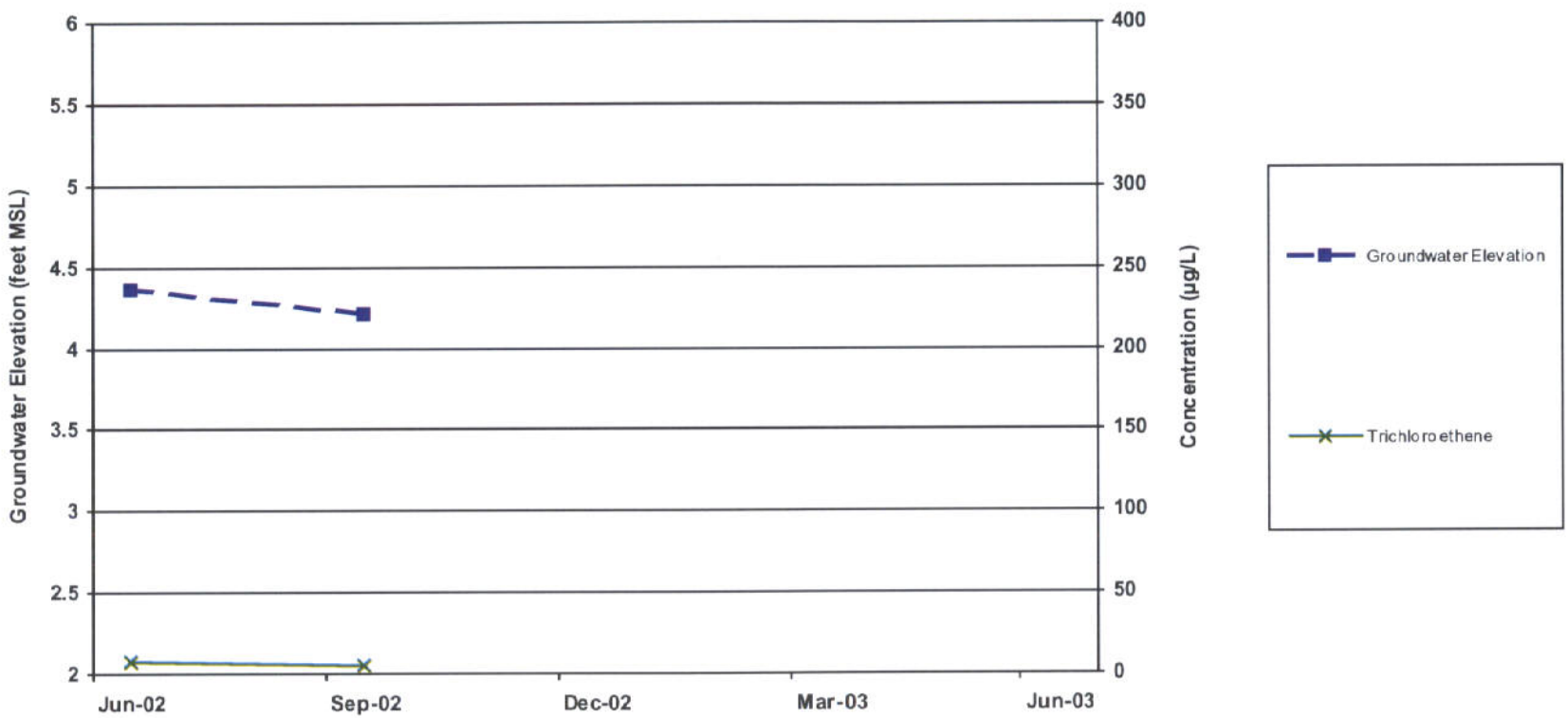
MSL Mean Sea Level
µg/L micrograms per liter

Figure 5-11
Time Series, Groundwater Elevations and Radiological Concentrations at M034-A
Installation Restoration Site 1
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California



MSL Mean Sea Level
pCi/L pico curies per liter

Figure 5-12
Time Series, Groundwater Elevations and Organic Concentrations at M035-A
Installation Restoration Site 1
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California



MSL Mean Sea Level
µg/L micrograms per liter

contaminant plume due to processes occurring naturally in the subsurface environment. Natural attenuation data measured during the Fall 2002 sampling event were:

- pH
- Dissolved oxygen
- Oxidation/reduction potential

Due to the limited number of analyses conducted no listing of results is presented for the Fall 2002 event.

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6.0 Winter 2002 Monitoring Event Summary and Results

The Winter 2002 sampling activities for the Basewide Groundwater Monitoring Program were performed between December 9, 2002 and January 8, 2003. Sampling of twenty-nine Groundwater Monitoring Program wells at Installation Restoration (IR) Site 1 was conducted between December 26 and 31, 2002 (see Figure 1-2, "Site and Well Location Map, IR Site 1 Operable Unit 3"). Twenty-one wells were completed in the Fill or Fill-Bay Sediment Unit (BSU) in the first water-bearing zone (FWBZ). Eight wells were completed in the BSU, Merritt Sand, or Upper San Antonio within the second water-bearing zone (SWBZ). These Groundwater Monitoring Program wells and analytical parameters were as recommended in and in accordance with the *Work Plan for Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California* (Work Plan) (Shaw, 2003a).

Included in these twenty-nine monitoring wells, is one monitoring well (M028-E) that was not included in the original program. The well was added to the sampling and analysis program for the Winter 2002 event. This well, although not located during the initial well inventory was found subsequent to the Fall sampling event and was included in the Winter sampling event. The sampling was conducted in accordance with the Work Plan (Shaw, 2003a).

6.1 Groundwater Level Measurement Summary

At IR Site 1, the water levels in sampled wells were measured on December 10, 2002, with the exception of two wells. Water levels in wells M028-A and M035-A were measured on December 27, and 30, 2002 respectively. Table 6-1, "Summary of Groundwater Level Measurements, Installation Restoration Site 1, Summer, Fall, and Winter 2002," provides a summary of the groundwater levels measured.

Groundwater levels within the FWBZ for Winter 2002 were approximately 2.3 to 6.2 feet below ground surface (bgs) with elevations ranging between 3.8 and 5.9 feet above mean sea level (msl). Groundwater levels within the SWBZ for Winter 2002 were approximately 3.4 to 7.1 feet bgs with elevations ranging between 3.81 and 4.5 feet (msl). Figure 6-1, "Groundwater Elevation Map, First Water-Bearing Zone, IR Site 1 Operable Unit 3, Winter 2002," provides a potentiometric surface map for the FWBZ from water levels measured during the Winter 2002 sampling event. Even though water levels were measured in wells M028-A and M035-A, they were not shown on Figure 6-1 because of the later date of measurement as compared to the other wells in the Groundwater Monitoring Program.

The interpreted flow directions in the FWBZ were outward from the center of the area toward the Oakland Inner Harbor, San Francisco Bay and IR Site 2. Groundwater gradients in the northwest

Table 6-1: Summary of Groundwater Level Measurements, Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Water-Bearing Zone	Well Name	Date	Top of Casing Elevation (feet MSL)	Depth to Water† (feet)	Groundwater Elevation (feet MSL)
First	M001-A	06/27/02	9.02 *	7.90	1.12
		09/13/02	9.02 *	5.50	3.52
		12/10/02	9.02 *	4.64	4.38
First	M001-E	06/27/02	9.74 *	5.73	4.01
		09/13/02	9.74 *	5.87	3.87
		12/10/02	9.74 *	5.92	3.82
First	M002-A	06/26/02	10.94 *	6.51	4.43
		09/13/02	10.94 *	6.72	4.22
		12/10/02	10.94 *	6.00	4.94
First	M003-A	06/26/02	10.81 *	6.14	4.67
		09/13/02	10.81 *	6.59	4.22
		12/10/02	10.81 *	6.19	4.62
First	M004-A	06/26/02	10.27 *	6.05	4.22
		09/13/02	10.27 *	6.35	3.92
		12/10/02	10.27 *	6.00	4.27
First	M006-A	06/26/02	10.29 *	4.30	5.99
		09/13/02	10.29 *	4.96	5.33
		12/10/02	10.29 *	4.78	5.51
First	M007-A	06/26/02	8.22 *	2.35	5.87
		09/13/02	8.22 *	2.87	5.35
		12/10/02	8.22 *	2.30	5.92
First	M025-A	07/01/02	8.51 *	5.58	2.93
		09/13/02	8.51 *	5.03	3.48
		12/10/02	8.51 *	4.04	4.47
First	M026-A	07/12/02	8.61 *	5.55	3.06
		09/13/02	8.61 *	5.06	3.55
		12/10/02	8.61 *	4.21	4.40
First	M026-E	07/01/02	8.65 *	5.40	3.25
		09/13/02	8.65 *	5.17	3.48
		12/10/02	8.65 *	4.20	4.45
First	M027-A	06/28/02	9.38 *	5.16	4.22
		09/13/02	9.38 *	5.18	4.20
		12/10/02	9.38 *	4.76	4.62
First	M027-E	09/13/02	9.24 **	4.95	4.29
First	M028-A	07/01/02	10.67 *	6.68	3.99
		09/13/02	10.67 *	6.58	4.09
		12/27/02	10.67 *	4.61 §	6.06

Table 6-1: Summary of Groundwater Level Measurements, Installation Restoration Site 1 (Continued)
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Water-Bearing Zone	Well Name	Date	Top of Casing Elevation (feet MSL)	Depth to Water† (feet)	Groundwater Elevation (feet MSL)
First	M028-E	09/13/02	10.46 **	6.27	4.19
		12/10/02	10.46 **	6.03	4.43
First	M029-A	06/27/02	9.46 *	5.51	3.95
		09/13/02	9.46 *	5.70	3.76
		12/10/02	9.46 *	5.23	4.23
First	M029-E	06/27/02	8.62 *	4.67	3.95
		09/13/02	8.62 *	4.80	3.82
		12/10/02	8.62 *	4.41	4.21
First	M030-A	06/27/02	10.08 *	6.12	3.96
		09/13/02	10.08 *	6.62	3.46
		12/10/02	10.08 *	5.04	5.04
First	M030-E	09/13/02	10.10 **	5.59	4.51
First	M031-A	06/28/02	8.47 *	3.79	4.68
		09/13/02	8.47 *	4.16	4.31
		12/10/02	8.47 *	3.54	4.93
First	M031-E	09/13/02	8.53 **	4.17	4.36
First	M032-A	06/26/02	9.84 *	4.20	5.64
		09/13/02	9.84 *	4.70	5.14
		12/10/02	9.84 *	4.56	5.28
First	M033-A	06/28/02	10.14 *	5.78	4.36
		09/13/02	10.14 *	6.03	4.11
		12/10/02	10.14 *	5.67	4.47
First	M034-A	06/28/02	8.87 *	4.39	4.48
		09/13/02	8.87 *	4.63	4.24
		12/10/02	8.87 *	4.32	4.55
First	M035-A	06/28/02	10.58 *	6.23	4.35
		09/13/02	10.58 *	6.38	4.20
		12/30/02	10.58 *	4.12 §	6.46
Second	M001-B	07/02/02	9.57 *	6.18	3.39
		09/13/02	9.57 *	2.35	7.22
		12/10/02	9.57 *	5.54	4.03
Second	M003-B	07/01/02	11.23 *	8.81	2.42
		09/13/02	11.23 *	6.95	4.28
		12/10/02	11.23 *	7.11	4.12
Second	M025-C	07/01/02	7.97 *	3.60	4.37
		09/13/02	7.97 *	3.46	4.51
		12/10/02	7.97 *	3.43	4.54

Table 6-1: Summary of Groundwater Level Measurements, Installation Restoration Site 1 (Continued)
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Water-Bearing Zone	Well Name	Date	Top of Casing Elevation (feet MSL)	Depth to Water† (feet)	Groundwater Elevation (feet MSL)
Second	M025-E	09/13/02	8.34 **	4.97	3.37
Second	M027-B	07/02/02	9.33 *	6.18	3.15
		09/13/02	9.33 *	5.10	4.23
		12/10/02	9.33 *	5.00	4.33
Second	M027-C	07/02/02	8.92 *	5.60	3.32
		09/13/02	8.92 *	4.90	4.02
		12/10/02	8.92 *	4.78	4.14
Second	M028-C	07/02/02	10.86 *	7.81	3.05
		09/13/02	10.86 *	6.73	4.13
		12/10/02	10.86 *	6.65	4.21
Second	M030-C	07/15/02	10.41 *	7.86	2.55
		09/13/02	10.41 *	6.28	4.13
		12/10/02	10.41 *	6.60	3.81
Second	M031-C	07/02/02	8.87 *	5.28	3.59
		09/13/02	8.87 *	4.86	4.01
		12/10/02	8.87 *	4.93	3.94

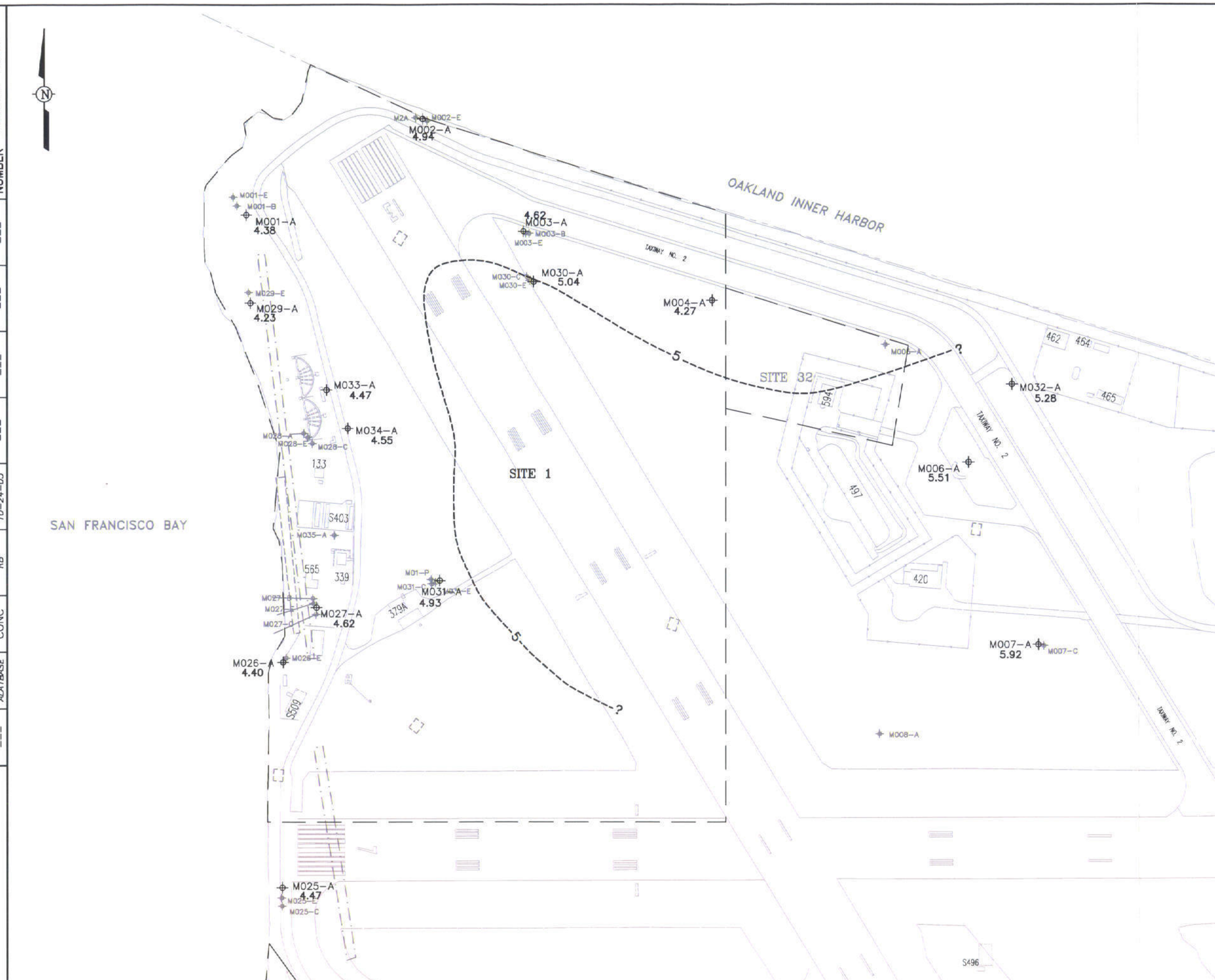
† Depth to water from top of casing

MSL Mean Sea Level

* Surveyed to NGVD 29 by Calvada Surveying in September 2002
Subsequently converted to NAVD 88 by Shaw E&I using the Corpscon software

** Converted from Mean Lower Low Water to NAVD 88 by Shaw E&I using the Tidal Datum Epoch (1960-1978) at Tidal Bench Mark 9414750

§ Measured prior to purging well for sampling



LEGEND

⊕	PROGRAM MONITORING WELL
⊕	MONITORING WELL NOT IN PROGRAM OR NOT SCREENED IN SPECIFIED HYDROLOGIC UNIT
— —	CERCLA SITE BOUNDARY
— · —	BARGE LINES (1949 AERIAL SURVEY)
- - - - -	BARGE LINES (1957 AERIAL SURVEY)
— - - -	GROUNDWATER ELEVATION FEET ABOVE MEAN SEA LEVEL, QUERIED WHERE UNCERTAIN
5.28	GROUNDWATER ELEVATION
	CONTOUR INTERVAL 1 FOOT
NC	DATA FROM WELL NOT USED IN CONTOURING

NOTES:

1. POSITION OF BARGE LINES ARE INFERRED.
2. THE WINTER 2002 WATER LEVELS WERE MEASURED ON DECEMBER 10, 2002, EXCEPT FOR WELLS M028-A AND M035-A WHICH WERE MEASURED ON DECEMBER 27 AND 30 RESPECTIVELY.
3. MONITORING WELLS LABELED A & E SCREENED AT DIFFERNT DEPTHS. GROUNDWATER CONTOURS ONLY REFLECT WELLS LABELED A.

SCALE
0 150 300 FEET

Shaw Environmental, Inc.

DEPARTMENT OF THE NAVY, SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
SAN DIEGO, CALIFORNIA

FIGURE 6-1
GROUNDWATER ELEVATION MAP
FIRST WATER-BEARING ZONE
IR SITE 1 OPERABLE UNIT 3
WINTER 2002

ALAMEDA POINT ALAMEDA, CALIFORNIA

IMAGE	X-REF	OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
---	ALA1BASE	CONC	RB 10-24-03	---	---	843780-D107

corner of the site are toward the Inner Harbor flowed and San Francisco Bay. Gradients in the southern section of Site 1 are southwest toward Site 2.

6.2 Analytical Program

The analytical samples were collected and analyzed according to the requirements presented in the Work Plan (Shaw, 2003a). Table 2-3, "Groundwater Monitoring Program, Installation Restoration Site 1 Wells and Analytical Program," summarized the collection frequency for the following analytical parameters:

- Volatile organic compounds (VOCs), including oxygenated additives and naphthalene by U.S. Environmental Protection Agency (EPA) Method 8260B
- Semivolatile organic compounds (SVOCs) by EPA Method 8270C
- Dissolved metals by EPA Methods 6010B/6020/7470
- Total cyanide by EPA Method 335.2
- Anions (chloride, nitrate, nitrite, and sulfate) by EPA Method 9056 or 300.0
- Sulfide by EPA Method 376.2
- Alkalinity by EPA Method 310.1
- Gross alpha and gross beta by EPA Method 900.0
- Radium by EPA Method 903
- Cyanide by EPA Method 9010B
- Anions (nitrate, nitrite, chloride, and sulfate) by EPA Method 9056 or 300.0
- Natural attenuation: ferrous iron by Hach field test kit; alkalinity by EPA Method 310.1, sulfide by EPA Method 376.2, and dissolved gases (methane, ethane, and ethene) by R.S. Kerr Laboratory SOP

The samples were analyzed by Curtis and Tompkins, Ltd., which subcontracted the dissolved gases analyses to Air Toxics, Ltd. Both laboratories are State of California-certified and have successfully completed the Naval Facilities Engineering Service Center's Laboratory Evaluation Program.

6.3 Analytical Results Summary

This section presents a brief summary of the analytical results. Analytical data were compared to previous results and to the more stringent of Federal (40CFR141) or State of California Maximum Contaminant Levels (MCLs) (California Code of Regulations Title 22). The MCLs were used only for comparison purposes. Criteria for comparison of analytical results were

presented in Table 2-2, "Summary of Regulatory Limits, Installation Restoration Site 1." Discussion of the analytical results is limited to observations made relative to regulatory criteria and previous data.

A listing of analytical results is provided on compact disc in Appendix A, "Analytical Data with Data Qualifiers and Reason Code Definitions." The analytical data were validated at EPA Level III by a third-party validator (Laboratory Data Consultants of Carlsbad, California) and reviewed by the Shaw Project Chemist. The findings of the data validation process are also provided on compact disc and presented in Appendix B, "Data Quality Summary Report, Summer 2002 to Spring 2003."

6.3.1 Detected Chemicals of Potential Concern Results

Detected analytical results are provided in Tables 6-2 through 6-157. Detected analytes are bolded and those compounds found at concentrations exceeding the respective California State MCLs are circled on the table. A listing of analytical results is provided on a compact disc in Appendix A.

Constituents detected during the Winter 2002 monitoring event included VOCs, SVOCs, metals, radium, gross alpha and beta. Samples from 3 of the 29 monitoring wells at IR Site 1 had constituents above the MCLs. These include the following:

- Trichloroethene (TCE) was detected above the MCL of 5 micrograms per liter (µg/L) in samples from wells M002-A (39 µg/L), M028-E (13 µg/L) and M035-A (7.2 µg/L).
- Cis-1,2-dichloroethene (DCE) was detected above the MCL of 6 µg/L in samples from five wells: M002-A (15 µg/L), M028-A (43 µg/L), M028-E (6,400 µg/L), M033-A (16 µg/L) and M034-A (32 µg/L).
- 1,1-dichloroethane (DCA) exceeded the MCL of 5 µg/L in a sample from well M028-E at a concentration of 18 µg/L.
- 1,2-DCA exceeded the MCL of 0.5 µg/L in a sample from well M032-A at a concentration of 0.8 µg/L.
- 1,4-Dichlorobenzene (DCB) was detected above the MCL of 5 µg/L in samples from two wells, M028-E (13 µg/L) and M034-A (5.4 µg/L)
- Vinyl chloride was detected above the MCL of 0.5 µg/L in samples from eight wells ranging from 0.6 µg/L to 11,000µg/L. Samples from well M028-E (11,000 µg/L) and M034-A (65 µg/L) yielded the highest vinyl chloride concentrations. Analysis of samples from six other wells (M001-E, M025-A, M028-A, M029-E, M032-A, and M033-A) indicated concentrations between 0.6 µg/L and 3.6 µg/L.

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TABLES 6-2 THROUGH 6-157 – DETECTED PARAMETERS AT INSTALLATION RESTORATION SITE 1, SUMMER, FALL, AND WINTER 2002

GROUNDWATER MONITORING REPORT FOR INSTALLATION RESTORATION SITE 1 SUMMER 2002 TO SPRING 2003

DATED 22 DECEMBER 2004

Table 6-2: Well M001-A, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	10 U	10 U	10 UJ
Benzene	1		µg/L	**0.7**	**0.8**	0.5 U
tert-butyl alcohol			µg/L	20 U	20 U	10 UJ
N-butylbenzene			µg/L	0.5 U	0.5 UJ	0.5 U
sec-butylbenzene			µg/L	0.5 U	0.5 UJ	0.5 U
tert-butylbenzene			µg/L	0.5 U	0.5 UJ	0.5 U
Carbon Disulfide			µg/L	0.5 U	0.5 UJ	0.5 U
Carbon Tetrachloride	0.5		µg/L	0.5 U	0.5 U	0.5 U
Chlorobenzene	70		µg/L	0.5 U	0.5 U	0.5 U
Chloroethane			µg/L	1 U	1 U	1 U
Chloroform			µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U	**0.1 J**	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U	0.5 UJ	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**0.4 J**	**0.3 J**	0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U	**0.1 J**	**0.3 J**
Ethylbenzene	300		µg/L	0.5 U	**0.3 J**	0.5 U
2-Hexanone			µg/L	10 U	10 U	10 U
Isopropyl Ether			µg/L	0.5 U	0.5 U	0.5 UJ
Isopropylbenzene			µg/L	0.5 U	0.5 U	0.5 U
p-Isopropyltoluene			µg/L	0.5 U	0.5 UJ	0.5 U
Methyl isobutyl ketone			µg/L	10 U	10 U	10 U
Methyl tert-butyl ether	13		µg/L	0.5 U	**0.1 J**	0.5 U
N-propylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Naphthalene			µg/L	**0.3 J**	2 U	2 U
Tetrachloroethene	5		µg/L	0.5 U	0.5 U	0.5 U
Toluene	150		µg/L	0.5 U	**0.1 J**	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U	0.5 U	0.5 U
Trichloroethene	5		µg/L	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U	0.5 UJ	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U	**0.2 J**	0.5 U
M,p-xylene	1,750		µg/L	0.5 U	**0.2 J**	0.5 U
O-xylene	1,750		µg/L	0.5 U	**0.2 J**	0.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-3: Well M001-A, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	10 U	9.9 U	9.7 U
Anthracene			µg/L	10 U	9.9 U	9.7 U
Benzoic acid			µg/L	50 U	50 U	49 U
bis(2-Chloroethyl)ether			µg/L	10 U	9.9 U	**0.99 J**
bis(2-chloroisopropyl) ether			µg/L	10 U	9.9 U	9.7 U
bis(2-Ethylhexyl)phthalate	4		µg/L	10 U	9.9 U	9.7 U
Dibenzofuran			µg/L	10 U	9.9 U	9.7 U
1,2-Dichlorobenzene	600		µg/L	10 U	9.9 U	9.7 U
1,3-Dichlorobenzene			µg/L	10 U	9.9 U	9.7 U
1,4-Dichlorobenzene	5		µg/L	10 U	9.9 U	9.7 U
2,4-Dimethylphenol			µg/L	10 U	9.9 U	9.7 U
Dimethylphthalate			µg/L	10 U	9.9 U	9.7 U
Fluoranthene			µg/L	10 U	9.9 U	9.7 U
Fluorene			µg/L	10 U	9.9 U	9.7 U
2-Methylnaphthalene			µg/L	10 U	9.9 U	9.7 U
2-Methylphenol			µg/L	10 U	9.9 U	9.7 U
4-Methylphenol			µg/L	10 U	9.9 U	9.7 U
N-Nitrosodiphenylamine			µg/L	10 U	9.9 U	9.7 U
Naphthalene			µg/L	10 U	9.9 U	9.7 U
Phenanthrene			µg/L	10 U	9.9 U	9.7 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-4: Well M001-A, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 U		
Jet Fuel #5 (JP5)			µg/L	50 U		
TPH, as motor oil		.	µg/L	300 U		
TPH as Gasoline						
TPH, as gasoline			µg/L	50 U		
TPH (calculated)						
Total TPH (calculated)			µg/L	300 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-5: Well M001-A, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000	439	µg/L	**8.5 J**	100 U	**4.9 J**
Antimony	6	46	µg/L	**0.38 J**	**0.4 J**	**10 J**
Arsenic	50	28	µg/L	**1.3 J**	5 U	5 U
Barium	1,000	575	µg/L	**160**	**120**	**78**
Beryllium	4	3.8	µg/L	**0.025 J**	2 U	2 U
Cadmium	5	5.4	µg/L	5 U	5 U	**0.87 J**
Chromium	50	14	µg/L	**0.46 J**	10 U	10 U
Cobalt		12	µg/L	**0.16 J**	10 U	**0.18 J**
Copper	1,000	27	µg/L	**0.51 J**	10 U	**13**
Iron		7,135	µg/L	**300**	**230**	**420**
Lead	15	3.9	µg/L	**0.42 J**	3 U	**0.55 J**
Manganese		5,213	µg/L	**92**	**39**	**28**
Mercury	2	0.15	µg/L	0.2 U	0.2 U	0.2 U
Molybdenum		12	µg/L	20 U	**2.4 J**	**6.9 J**
Nickel	100	19	µg/L	**0.83 J**	20 U	**4.2 J**
Selenium	50	6.0	µg/L	**1 J**	**0.62 J**	**0.91 J**
Silver		3.3	µg/L	5 UJ	5 U	5 U
Vanadium		29	µg/L	**0.59 J**	10 U	**8.4 J**
Zinc		43	µg/L	20 U	20 U	**33 J**
Calcium		379	mg/L	**47**	**25**	**89**
Magnesium		500	mg/L	**26 J**	**26**	**13**
Potassium		182	mg/L	**25**	**30**	**12**
Sodium		4,540	mg/L	**270**	**370**	**57**
Cyanide						
Total Cyanide	0.2		mg/L	**0.01 J**	0.01 U	0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-6: Well M001-A, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	0.671 U2	**1.75**	0.874 U3J
Gross Beta	50		pCi/L	**11**	**37.3**	**11.4**
Radium						
Radium			pCi/L	0.202 U2	0.248 U4J	0.9 U3

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-7: Well M001-B, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	10 U		10 U
Benzene	1		µg/L	0.5 U		0.5 U
tert-butyl alcohol			µg/L	20 U		10 U
N-butylbenzene			µg/L	0.5 U		0.5 U
sec-butylbenzene			µg/L	0.5 U		0.5 U
tert-butylbenzene			µg/L	0.5 U		0.5 U
Carbon Disulfide			µg/L	0.5 U		0.5 U
Carbon Tetrachloride	0.5		µg/L	0.5 U		0.5 U
Chlorobenzene	70		µg/L	0.5 U		0.5 U
Chloroethane			µg/L	1 U		1 U
Chloroform			µg/L	0.5 U		0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U		0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U		0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U		0.5 U
1,1-Dichloroethane	5		µg/L	**0.2 J**		0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U		0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U		0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U		0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U		0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U		0.5 U
Ethylbenzene	300		µg/L	0.5 U		0.5 U
2-Hexanone			µg/L	10 U		10 U
Isopropyl Ether			µg/L	0.5 U		0.5 U
Isopropylbenzene			µg/L	0.5 U		0.5 U
p-Isopropyltoluene			µg/L	0.5 U		0.5 U
Methyl isobutyl ketone			µg/L	10 U		10 U
Methyl tert-butyl ether	13		µg/L	0.5 U		0.5 U
N-propylbenzene			µg/L	0.5 U		0.5 U
Naphthalene			µg/L	2 U		2 U
Tetrachloroethene	5		µg/L	0.5 U		0.5 U
Toluene	150		µg/L	**3.3**		0.5 U
1,1,1-Trichloroethane	200		µg/L	**1.4**		0.5 U
Trichloroethene	5		µg/L	0.5 U		0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U		0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U		0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U		0.5 U
M,p-xylene	1,750		µg/L	0.5 U		0.5 U
O-xylene	1,750		µg/L	0.5 U		0.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-8: Well M001-B, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	9.4 U		9.4 U
Anthracene			µg/L	9.4 U		9.4 U
Benzoic acid			µg/L	47 U		47 U
bis(2-Chloroethyl)ether			µg/L	9.4 U		9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U		9.4 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U		9.4 U
Dibenzofuran			µg/L	9.4 U		9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U		9.4 U
1,3-Dichlorobenzene			µg/L	9.4 U		9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U		9.4 U
2,4-Dimethylphenol			µg/L	9.4 U		9.4 U
Dimethylphthalate			µg/L	**57**		**2 J**
Fluoranthene			µg/L	9.4 U		9.4 U
Fluorene			µg/L	9.4 U		9.4 U
2-Methylnaphthalene			µg/L	9.4 U		9.4 U
2-Methylphenol			µg/L	9.4 U		9.4 U
4-Methylphenol			µg/L	9.4 U		9.4 U
N-Nitrosodiphenylamine			µg/L	9.4 U		9.4 U
Naphthalene			µg/L	9.4 U		9.4 U
Phenanthrene			µg/L	9.4 U		9.4 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-9: Well M001-B, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 UJ		
Jet Fuel #5 (JP5)			µg/L	50 UJ		
TPH, as motor oil			µg/L	300 UJ		
TPH as Gasoline						
TPH, as gasoline			µg/L	50 U		
TPH (calculated)						
Total TPH (calculated)			µg/L	300 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-10: Well M001-B, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000		µg/L	100 U		**17 J**
Antimony	6		µg/L	50 U		50 U
Arsenic	50		µg/L	5 U		5 U
Barium	1,000		µg/L	**65**		**67**
Beryllium	4		µg/L	2 U		2 U
Cadmium	5		µg/L	5 U		5 U
Chromium	50		µg/L	**3.4 J**		10 U
Cobalt			µg/L	**9 J**		**8.4 J**
Copper	1,000		µg/L	**7.8 J**		**6.3 J**
Iron			µg/L	**1,400**		**2,700**
Lead	15		µg/L	3 U		**0.057 J**
Manganese			µg/L	**7,100**		**7,400**
Mercury	2		µg/L	0.2 U		0.2 U
Molybdenum			µg/L	20 U		**3.2 J**
Nickel	100		µg/L	20 U		**12 J**
Selenium	50		µg/L	5 U		5 U
Silver			µg/L	**4.8 J**		5 U
Vanadium			µg/L	**1.6 J**		**2.9 J**
Zinc			µg/L	28 U		20 U
Calcium			mg/L	**550**		**510**
Magnesium			mg/L	**1,000**		**970**
Potassium			mg/L	**110**		**110**
Sodium			mg/L	**5,200**		**4,800**
Cyanide						
Total Cyanide	0.2		mg/L	0.01 U		0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-11: Well M001-B, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	**12**		44.5 U3J
Gross Beta	50		pCi/L	**139**		67.4 U4
Radium						
Radium			pCi/L	0.406 U4		**2.17**

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-12: Well M001-E, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	20 U	10 U	10 U
Benzene	1		µg/L	**4.9**	**5.4**	**5.6**
tert-butyl alcohol			µg/L	40 U	20 U	10 U
N-butylbenzene			µg/L	1 U	0.5 U	0.5 U
sec-butylbenzene			µg/L	1 U	**0.2 J**	**0.4 J**
tert-butylbenzene			µg/L	1 U	0.5 U	**0.3 J**
Carbon Disulfide			µg/L	1 U	0.5 U	0.5 U
Carbon Tetrachloride	0.5		µg/L	1 U	0.5 U	0.5 UJ
Chlorobenzene	70		µg/L	**10**	**10**	**14**
Chloroethane			µg/L	2 U	1 U	1 U
Chloroform			µg/L	1 U	0.5 U	0.5 U
1,2-Dichlorobenzene	600		µg/L	**1.4**	**1.8**	**2.1**
1,3-Dichlorobenzene			µg/L	1 U	0.5 U	0.5 U
1,4-Dichlorobenzene	5		µg/L	1 U	**0.4 J**	**0.5**
1,1-Dichloroethane	5		µg/L	1 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5		µg/L	1 U	0.5 U	0.5 U
1,1-Dichloroethene	6		µg/L	1 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**0.9 J**	**1.1**	**1**
trans-1,2-Dichloroethene	10		µg/L	1 U	0.5 U	**0.2 J**
1,2-Dichloropropane	5		µg/L	1 U	0.5 U	0.5 U
Ethylbenzene	300		µg/L	**2.9**	**3.3**	**4.4**
2-Hexanone			µg/L	20 U	10 U	10 U
Isopropyl Ether			µg/L	1 U	0.5 U	0.5 U
Isopropylbenzene			µg/L	**0.6 J**	**0.6**	**0.8**
p-Isopropyltoluene			µg/L	1 U	**0.7**	**0.3 J**
Methyl isobutyl ketone			µg/L	20 U	10 U	10 U
Methyl tert-butyl ether	13		µg/L	1 U	0.5 U	0.5 U
N-propylbenzene			µg/L	1 U	**0.3 J**	**0.3 J**
Naphthalene			µg/L	**210**	**230**	**300**
Tetrachloroethene	5		µg/L	1 U	0.5 U	**0.2 J**
Toluene	150		µg/L	**0.8 J**	**0.9**	**0.9**
1,1,1-Trichloroethane	200		µg/L	1 U	0.5 U	0.5 U
Trichloroethene	5		µg/L	1 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene			µg/L	**0.8 J**	**0.8**	**1.2**
1,3,5-Trimethylbenzene			µg/L	1 U	0.5 U	0.5 U
Vinyl Chloride	0.5		µg/L	1 U	**0.5 J**	**0.6**
M,p-xylene	1,750		µg/L	**1.3**	**1.8**	**1.9**
O-xylene	1,750		µg/L	**8.4**	**11**	**14**

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-13: Well M001-E, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	**1.5 J**	**1.3 J**	**5.9 J**
Anthracene			µg/L	**1.5 J**	9.4 U	9.6 U
Benzoic acid			µg/L	47 U	47 U	48 U
bis(2-Chloroethyl)ether			µg/L	**0.94 J**	9.4 U	**0.97 J**
bis(2-chloroisopropyl) ether			µg/L	9.4 U	**2.8 J**	**2.8 J**
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	9.4 U	9.6 U
Dibenzofuran			µg/L	**0.96 J**	9.4 U	**1.4 J**
1,2-Dichlorobenzene	600		µg/L	**1.2 J**	9.4 U	**1.5 J**
1,3-Dichlorobenzene			µg/L	9.4 U	9.4 U	9.6 U
1,4-Dichlorobenzene	5		µg/L	9.4 U	9.4 U	9.6 U
2,4-Dimethylphenol			µg/L	**2.2 J**	**2.7 J**	**3.3 J**
Dimethylphthalate			µg/L	9.4 U	9.4 U	9.6 U
Fluoranthene			µg/L	**1.5 J**	9.4 U	9.6 U
Fluorene			µg/L	9.4 U	9.4 U	**2.3 J**
2-Methylnaphthalene			µg/L	9.4 U	9.4 U	**6.6 J**
2-Methylphenol			µg/L	9.4 U	9.4 U	9.6 U
4-Methylphenol			µg/L	9.4 U	9.4 U	9.6 U
N-Nitrosodiphenylamine			µg/L	9.4 U	9.4 U	9.6 U
Naphthalene			µg/L	**4.1 J**	9.4 U	**230**
Phenanthrene			µg/L	**1.2 J**	9.4 U	**2.1 J**

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-14: Well M001-E, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 U		
Jet Fuel #5 (JP5)			µg/L	50 U		
TPH, as motor oil			µg/L	300 U		
TPH as Gasoline						
TPH, as gasoline			µg/L	**140**		
TPH (calculated)						
Total TPH (calculated)			µg/L	**140**		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-15: Well M001-E, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000	439	µg/L	**10 J**	100 UJ	**20 J**
Antimony	6	46	µg/L	**1.8 J**	**2.4 J**	**3.1 J**
Arsenic	50	28	µg/L	**1.3 J**	5 UJ	**3.3 J**
Barium	1,000	575	µg/L	**110**	**120**	**140**
Beryllium	4	3.8	µg/L	**0.077 J**	2 U	2 U
Cadmium	5	5.4	µg/L	5 U	5 U	5 U
Chromium	50	14	µg/L	**0.88 J**	10 UJ	10 U
Cobalt		12	µg/L	**0.21 J**	10 UJ	**0.2 J**
Copper	1,000	27	µg/L	**0.29 J**	10 UJ	**0.6 J**
Iron		7,135	µg/L	**160**	**160 J**	260 U
Lead	15	3.9	µg/L	**0.64 J**	3 U	**0.79 J**
Manganese		5,213	µg/L	**32 J**	**31 J**	**34**
Mercury	2	0.15	µg/L	0.2 U	0.2 U	0.2 U
Molybdenum		12	µg/L	20 U	**5 J**	**5.2 J**
Nickel	100	19	µg/L	**0.76 J**	20 UJ	**1.4 J**
Selenium	50	6.0	µg/L	**1.7 J**	**1.4 J**	5 U
Silver		3.3	µg/L	5 UJ	5 U	5 U
Vanadium		29	µg/L	**1.2 J**	10 UJ	**4 J**
Zinc		43	µg/L	20 U	20 UJ	**7 J**
Calcium		379	mg/L	**5.8**	**7.7 J**	**5.2 J**
Magnesium		500	mg/L	**4.8 J**	**5.5 J**	**5**
Potassium		182	mg/L	**46**	**46**	**39**
Sodium		4,540	mg/L	**580**	**560**	**490**
Cyanide						
Total Cyanide	0.2		mg/L	**0.05**	0.01 U	0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-16: Well M001-E, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	2.43 U4	**1.21**	3.04 U3J
Gross Beta	50		pCi/L	**2.11**	**29.9**	**40.1**
Radium						
Radium			pCi/L	0.068 U3	0.124 U2J	1.04 U3

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-17: Well M002-A, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	10 U	10 U	10 U
Benzene	1		µg/L	0.5 U	0.5 U	0.5 U
tert-butyl alcohol			µg/L	20 U	20 U	10 U
N-butylbenzene			µg/L	0.5 U	0.5 U	0.5 U
sec-butylbenzene			µg/L	0.5 U	0.5 U	0.5 U
tert-butylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Carbon Disulfide			µg/L	0.5 U	0.5 U	0.5 U
Carbon Tetrachloride	0.5		µg/L	0.5 U	0.5 U	0.5 UJ
Chlorobenzene	70		µg/L	0.5 U	0.5 U	0.5 U
Chloroethane			µg/L	1 U	1 U	1 U
Chloroform			µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**6.2**	**7.3**	**15**
trans-1,2-Dichloroethene	10		µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U	0.5 U	0.5 U
Ethylbenzene	300		µg/L	0.5 U	0.5 U	0.5 U
2-Hexanone			µg/L	10 U	10 U	10 U
Isopropyl Ether			µg/L	0.5 U	0.5 U	0.5 U
Isopropylbenzene			µg/L	0.5 U	0.5 U	0.5 U
p-Isopropyltoluene			µg/L	0.5 U	0.5 U	0.5 U
Methyl isobutyl ketone			µg/L	10 U	10 U	10 U
Methyl tert-butyl ether	13		µg/L	0.5 U	0.5 U	0.5 U
N-propylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Naphthalene			µg/L	2 U	2 U	2 U
Tetrachloroethene	5		µg/L	0.5 U	0.5 U	0.5 UJ
Toluene	150		µg/L	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U	0.5 U	0.5 U
Trichloroethene	5		µg/L	**11**	**8.1**	**39**
1,2,4-Trimethylbenzene			µg/L	0.5 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U	0.5 U	0.5 U
M,p-xylene	1,750		µg/L	0.5 U	0.5 U	0.5 U
O-xylene	1,750		µg/L	0.5 U	0.5 U	0.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-18: Well M002-A, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	9.5 U	9.6 U	9.6 U
Anthracene			µg/L	9.5 U	9.6 U	9.6 U
Benzoic acid			µg/L	48 U	48 U	48 U
bis(2-Chloroethyl)ether			µg/L	9.5 U	9.6 U	9.6 U
bis(2-chloroisopropyl) ether			µg/L	9.5 U	9.6 U	9.6 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.5 U	9.6 U	9.6 U
Dibenzofuran			µg/L	9.5 U	9.6 U	9.6 U
1,2-Dichlorobenzene	600		µg/L	9.5 U	9.6 U	9.6 U
1,3-Dichlorobenzene			µg/L	9.5 U	9.6 U	9.6 U
1,4-Dichlorobenzene	5		µg/L	9.5 U	9.6 U	9.6 U
2,4-Dimethylphenol			µg/L	9.5 U	9.6 U	9.6 U
Dimethylphthalate			µg/L	9.5 U	9.6 U	9.6 U
Fluoranthene			µg/L	9.5 U	9.6 U	9.6 U
Fluorene			µg/L	9.5 U	9.6 U	9.6 U
2-Methylnaphthalene			µg/L	9.5 U	9.6 U	9.6 U
2-Methylphenol			µg/L	9.5 U	9.6 U	9.6 U
4-Methylphenol			µg/L	9.5 U	9.6 U	9.6 U
N-Nitrosodiphenylamine			µg/L	9.5 U	9.6 U	9.6 U
Naphthalene			µg/L	9.5 U	9.6 U	9.6 U
Phenanthrene			µg/L	9.5 U	9.6 U	9.6 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-19: Well M002-A, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 U		
Jet Fuel #5 (JP5)			µg/L	50 U		
TPH, as motor oil			µg/L	300 U		
TPH as Gasoline						
TPH, as gasoline			µg/L	50 U		
TPH (calculated)						
Total TPH (calculated)			µg/L	300 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-20: Well M002-A, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000	439	µg/L	**8.2 J**	100 U	**4.7 J**
Antimony	6	46	µg/L	**0.29 J**	**0.41 J**	**0.59 J**
Arsenic	50	28	µg/L	**2.6 J**	5 U	**2.8 J**
Barium	1,000	575	µg/L	**60**	**110**	**64**
Beryllium	4	3.8	µg/L	2 U	2 U	2 U
Cadmium	5	5.4	µg/L	5 U	5 U	5 U
Chromium	50	14	µg/L	10 U	10 U	10 U
Cobalt		12	µg/L	**0.69 J**	**1 J**	**0.57 J**
Copper	1,000	27	µg/L	**1.3 J**	10 U	**2.4 J**
Iron		7,135	µg/L	**390**	**900**	**720**
Lead	15	3.9	µg/L	3 U	3 U	**0.098 J**
Manganese		5,213	µg/L	**57**	**110**	**30**
Mercury	2	0.15	µg/L	0.2 U	0.2 U	0.2 U
Molybdenum		12	µg/L	**2 J**	**1.4 J**	**3 J**
Nickel	100	19	µg/L	**2.7 J**	**4.1 J**	**3.1 J**
Selenium	50	6.0	µg/L	**1.1 J**	**1.4 J**	**1.6 J**
Silver		3.3	µg/L	5 U	5 U	5 U
Vanadium		29	µg/L	10 U	10 UJ	**3.3 J**
Zinc		43	µg/L	**0.73 J**	20 U	**3.5 J**
Calcium		379	mg/L	**160**	**250**	**130**
Magnesium		500	mg/L	**26 J**	**46**	**22**
Potassium		182	mg/L	**15**	**25**	**12**
Sodium		4,540	mg/L	**220**	**250**	**240**
Cyanide						
Total Cyanide	0.2		mg/L	0.01 U	0.01 U	0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-21: Well M002-A, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	**3.3**	**3.59**	2.7 U4J
Gross Beta	50		pCi/L	**22.8**	**29**	**12.2**
Radium						
Radium			pCi/L	0.276 U2	0.056 U3J	1.02 U4

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-22: Well M002-A, Detected Natural Attenuation Data at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Sulfide						
Sulfide			mg/L	0.04 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-23: Well M003-A, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	10 U	10 U	**1.2 J**
Benzene	1		µg/L	0.5 U	0.5 U	0.5 U
tert-butyl alcohol			µg/L	20 U	20 U	10 U
N-butylbenzene			µg/L	0.5 U	0.5 U	0.5 U
sec-butylbenzene			µg/L	0.5 U	0.5 U	0.5 U
tert-butylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Carbon Disulfide			µg/L	0.5 U	0.5 U	0.5 U
Carbon Tetrachloride	0.5		µg/L	0.5 U	0.5 U	**0.3 J**
Chlorobenzene	70		µg/L	0.5 U	0.5 U	0.5 U
Chloroethane			µg/L	1 U	1 U	1 U
Chloroform			µg/L	0.5 U	0.5 U	**0.5 J**
1,2-Dichlorobenzene	600		µg/L	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U	0.5 U	0.5 U
Ethylbenzene	300		µg/L	0.5 U	0.5 U	0.5 U
2-Hexanone			µg/L	10 U	10 U	10 U
Isopropyl Ether			µg/L	0.5 U	0.5 U	0.5 U
Isopropylbenzene			µg/L	0.5 U	0.5 U	0.5 U
p-Isopropyltoluene			µg/L	0.5 U	**0.6**	0.5 U
Methyl isobutyl ketone			µg/L	10 U	10 U	10 U
Methyl tert-butyl ether	13		µg/L	0.5 U	0.5 U	0.5 U
N-propylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Naphthalene			µg/L	2 U	2 U	2 U
Tetrachloroethene	5		µg/L	0.5 U	0.5 U	0.5 U
Toluene	150		µg/L	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U	0.5 U	0.5 U
Trichloroethene	5		µg/L	**0.9**	**1.1**	**1.1**
1,2,4-Trimethylbenzene			µg/L	0.5 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U	0.5 U	0.5 U
M,p-xylene	1,750		µg/L	0.5 U	0.5 U	0.5 U
O-xylene	1,750		µg/L	0.5 U	0.5 U	0.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-24: Well M003-A, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	9.5 U	9.6 U	9.5 U
Anthracene			µg/L	9.5 U	9.6 U	9.5 U
Benzoic acid			µg/L	48 U	48 UJ	48 UJ
bis(2-Chloroethyl)ether			µg/L	9.5 U	9.6 U	9.5 U
bis(2-chloroisopropyl) ether			µg/L	9.5 U	9.6 U	9.5 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.5 U	9.6 U	9.5 U
Dibenzofuran			µg/L	9.5 U	9.6 U	9.5 U
1,2-Dichlorobenzene	600		µg/L	9.5 U	9.6 U	9.5 U
1,3-Dichlorobenzene			µg/L	9.5 U	9.6 U	9.5 U
1,4-Dichlorobenzene	5		µg/L	9.5 U	9.6 U	9.5 U
2,4-Dimethylphenol			µg/L	9.5 U	9.6 U	9.5 U
Dimethylphthalate			µg/L	9.5 U	9.6 U	9.5 U
Fluoranthene			µg/L	9.5 U	9.6 U	9.5 U
Fluorene			µg/L	9.5 U	9.6 U	9.5 U
2-Methylnaphthalene			µg/L	9.5 U	9.6 U	9.5 U
2-Methylphenol			µg/L	9.5 U	9.6 U	9.5 U
4-Methylphenol			µg/L	9.5 U	9.6 U	9.5 U
N-Nitrosodiphenylamine			µg/L	9.5 U	9.6 U	9.5 U
Naphthalene			µg/L	9.5 U	9.6 U	9.5 U
Phenanthrene			µg/L	9.5 U	9.6 U	9.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-25: Well M003-A, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 U		
Jet Fuel #5 (JP5)			µg/L	50 U		
TPH, as motor oil			µg/L	300 U		
TPH as Gasoline						
TPH, as gasoline			µg/L	50 U		
TPH (calculated)						
Total TPH (calculated)			µg/L	300 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-26: Well M003-A, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000	439	µg/L	**6 J**	100 U	100 U
Antimony	6	46	µg/L	**0.22 J**	**0.34 J**	50 U
Arsenic	50	28	µg/L	5 U	**3 J**	**5.9**
Barium	1,000	575	µg/L	**30**	**33**	**89**
Beryllium	4	3.8	µg/L	2 U	2 U	2 U
Cadmium	5	5.4	µg/L	5 U	5 U	5 U
Chromium	50	14	µg/L	**1 J**	10 U	10 U
Cobalt		12	µg/L	**0.97 J**	**6.1 J**	**0.87 J**
Copper	1,000	27	µg/L	**0.25 J**	**0.42 J**	**0.59 J**
Iron		7,135	µg/L	**570**	**1,400**	**600**
Lead	15	3.9	µg/L	3 U	**0.062 J**	**0.037 J**
Manganese		5,213	µg/L	**40**	**100**	**13**
Mercury	2	0.15	µg/L	0.2 U	0.2 U	0.2 U
Molybdenum		12	µg/L	**4.7 J**	**5.1 J**	**4.6 J**
Nickel	100	19	µg/L	**1.6 J**	**4.6 J**	**2.3 J**
Selenium	50	6.0	µg/L	5 U	5 U	**0.66 J**
Silver		3.3	µg/L	5 U	5 U	5 U
Vanadium		29	µg/L	**2.3 J**	**2.9 J**	**10**
Zinc		43	µg/L	**3.4 J**	**91**	**0.94 J**
Calcium		379	mg/L	**120**	**120**	**130**
Magnesium		500	mg/L	**9**	**9.9**	**9.8**
Potassium		182	mg/L	**3.5**	**3.9**	**1.8**
Sodium		4,540	mg/L	**9.9**	**8.9**	**14**
Cyanide						
Total Cyanide	0.2		mg/L	0.01 U	**0.01**	0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-27: Well M003-A, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	**3.29**	**2.92**	**1.36 J**
Gross Beta	50		pCi/L	**5.39**	**3.55**	**2.02**
Radium						
Radium			pCi/L	0.07 U3	0.397 U4J	0.628 U1

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-28: Well M003-A, Detected Natural Attenuation Data at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Sulfide						
Sulfide			mg/L	0.04 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-29: Well M003-B, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	10 U		10 U
Benzene	1		µg/L	0.5 U		0.5 U
tert-butyl alcohol			µg/L	20 U		10 U
N-butylbenzene			µg/L	0.5 U		0.5 U
sec-butylbenzene			µg/L	0.5 U		0.5 U
tert-butylbenzene			µg/L	0.5 U		0.5 U
Carbon Disulfide			µg/L	0.5 U		0.5 U
Carbon Tetrachloride	0.5		µg/L	0.5 U		0.5 U
Chlorobenzene	70		µg/L	0.5 U		0.5 U
Chloroethane			µg/L	1 U		1 U
Chloroform			µg/L	0.5 U		0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U		0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U		0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U		0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U		0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U		0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U		0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U		0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U		0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U		0.5 U
Ethylbenzene	300		µg/L	0.5 U		0.5 U
2-Hexanone			µg/L	10 U		10 U
Isopropyl Ether			µg/L	0.5 U		0.5 U
Isopropylbenzene			µg/L	0.5 U		0.5 U
p-Isopropyltoluene			µg/L	0.5 U		0.5 U
Methyl isobutyl ketone			µg/L	10 U		10 U
Methyl tert-butyl ether	13		µg/L	0.5 U		0.5 U
N-propylbenzene			µg/L	0.5 U		0.5 U
Naphthalene			µg/L	2 U		2 U
Tetrachloroethene	5		µg/L	0.5 U		0.5 U
Toluene	150		µg/L	0.5 U		0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U		0.5 U
Trichloroethene	5		µg/L	0.5 U		0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U		0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U		0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U		0.5 U
M,p-xylene	1,750		µg/L	0.5 U		0.5 U
O-xylene	1,750		µg/L	0.5 U		0.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-30: Well M003-B, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	9.4 U		9.5 U
Anthracene			µg/L	9.4 U		9.5 U
Benzoic acid			µg/L	47 U		48 UJ
bis(2-Chloroethyl)ether			µg/L	9.4 U		9.5 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U		9.5 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U		9.5 U
Dibenzofuran			µg/L	9.4 U		9.5 U
1,2-Dichlorobenzene	600		µg/L	9.4 U		9.5 U
1,3-Dichlorobenzene			µg/L	9.4 U		9.5 U
1,4-Dichlorobenzene	5		µg/L	9.4 U		9.5 U
2,4-Dimethylphenol			µg/L	9.4 U		9.5 U
Dimethylphthalate			µg/L	9.4 U		9.5 U
Fluoranthene			µg/L	9.4 U		9.5 U
Fluorene			µg/L	9.4 U		9.5 U
2-Methylnaphthalene			µg/L	9.4 U		9.5 U
2-Methylphenol			µg/L	9.4 U		9.5 U
4-Methylphenol			µg/L	9.4 U		9.5 U
N-Nitrosodiphenylamine			µg/L	9.4 U		9.5 U
Naphthalene			µg/L	9.4 U		9.5 U
Phenanthrene			µg/L	9.4 U		9.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-31: Well M003-B, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 UJ		
Jet Fuel #5 (JP5)			µg/L	50 UJ		
TPH, as motor oil			µg/L	300 UJ		
TPH as Gasoline						
TPH, as gasoline			µg/L	50 U		
TPH (calculated)						
Total TPH (calculated)			µg/L	300 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-32: Well M003-B, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000		µg/L	2500 U		**3.5 J**
Antimony	6		µg/L	**0.13 J**		50 U
Arsenic	50		µg/L	5 U		5 U
Barium	1,000		µg/L	**130**		**130**
Beryllium	4		µg/L	50 U		2 U
Cadmium	5		µg/L	**0.089 J**		5 U
Chromium	50		µg/L	**7.9 J**		10 U
Cobalt			µg/L	**2.5 J**		**3.3 J**
Copper	1,000		µg/L	**4.6 J**		**9.8 J**
Iron			µg/L	**7,300**		**9,200**
Lead	15		µg/L	3 U		**0.077 J**
Manganese			µg/L	**7,300**		**7,800**
Mercury	2		µg/L	**0.061 J**		0.2 U
Molybdenum			µg/L	20 U		**3.5 J**
Nickel	100		µg/L	**5.8 J**		**13 J**
Selenium	50		µg/L	5 U		**58**
Silver			µg/L	**3 J**		5 U
Vanadium			µg/L	**2.4 J**		**3.6 J**
Zinc			µg/L	20 U		20 U
Calcium			mg/L	**370**		**370**
Magnesium			mg/L	**1,000**		**1,000**
Potassium			mg/L	**210**		**230**
Sodium			mg/L	**6,900**		**7,000**
Cyanide						
Total Cyanide	0.2		mg/L	0.01 U		0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-33: Well M003-B, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	**7.34**		46 U1J
Gross Beta	50		pCi/L	**182**		**194**
Radium						
Radium			pCi/L	**0.75**		**3.13**

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-34: Well M003-B, Detected Natural Attenuation Data at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Anions						
Chloride			mg/L	**13,000**		**14,000**
Nitrate	45		mg/L	0.5 U		1.3 U
Nitrite	1		mg/L	0.5 U		1.3 U
Sulfate			mg/L	**600**		**630**
Sulfide						
Sulfide			mg/L	0.04 U		0.04 U
Alkalinity						
Alkalinity			mg/L	**1,000**		**1,000**
Alkalinity, bicarbonate			mg/L	**1,000**		**1,000**
Dissolved Gases						
Ethane			mg/L	0.01 U		0.01 U
Ethene			mg/L	0.01 U		0.01 U
Methane			mg/L	**0.062**		**0.077**

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-35: Well M004-A, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	10 U		10 U
Benzene	1		µg/L	0.5 U		0.5 U
tert-butyl alcohol			µg/L	20 U		10 U
N-butylbenzene			µg/L	0.5 U		0.5 U
sec-butylbenzene			µg/L	0.5 U		0.5 U
tert-butylbenzene			µg/L	0.5 U		0.5 U
Carbon Disulfide			µg/L	0.5 U		0.5 U
Carbon Tetrachloride	0.5		µg/L	0.5 U		0.5 U
Chlorobenzene	70		µg/L	0.5 U		0.5 U
Chloroethane			µg/L	1 U		1 U
Chloroform			µg/L	0.5 U		0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U		0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U		0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U		0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U		0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U		0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U		0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U		0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U		0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U		0.5 U
Ethylbenzene	300		µg/L	0.5 U		0.5 U
2-Hexanone			µg/L	10 U		10 U
Isopropyl Ether			µg/L	0.5 U		0.5 U
Isopropylbenzene			µg/L	0.5 U		0.5 U
p-Isopropyltoluene			µg/L	0.5 U		0.5 U
Methyl isobutyl ketone			µg/L	10 U		10 U
Methyl tert-butyl ether	13		µg/L	0.5 U		0.5 U
N-propylbenzene			µg/L	0.5 U		0.5 U
Naphthalene			µg/L	2 U		2 U
Tetrachloroethene	5		µg/L	0.5 U		0.5 U
Toluene	150		µg/L	**0.5 J**		0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U		0.5 U
Trichloroethene	5		µg/L	0.5 U		0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U		0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U		0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U		0.5 U
M,p-xylene	1,750		µg/L	0.5 U		0.5 U
O-xylene	1,750		µg/L	0.5 U		0.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-36: Well M004-A, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	9.6 U		9.5 U
Anthracene			µg/L	9.6 U		9.5 U
Benzoic acid			µg/L	48 U		48 UJ
bis(2-Chloroethyl)ether			µg/L	9.6 U		9.5 U
bis(2-chloroisopropyl) ether			µg/L	9.6 U		9.5 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.6 U		9.5 U
Dibenzofuran			µg/L	9.6 U		9.5 U
1,2-Dichlorobenzene	600		µg/L	9.6 U		9.5 U
1,3-Dichlorobenzene			µg/L	9.6 U		9.5 U
1,4-Dichlorobenzene	5		µg/L	9.6 U		9.5 U
2,4-Dimethylphenol			µg/L	9.6 U		9.5 U
Dimethylphthalate			µg/L	9.6 U		9.5 U
Fluoranthene			µg/L	9.6 U		9.5 U
Fluorene			µg/L	9.6 U		9.5 U
2-Methylnaphthalene			µg/L	9.6 U		9.5 U
2-Methylphenol			µg/L	9.6 U		9.5 U
4-Methylphenol			µg/L	9.6 U		9.5 U
N-Nitrosodiphenylamine			µg/L	9.6 U		9.5 U
Naphthalene			µg/L	9.6 U		9.5 U
Phenanthrene			µg/L	9.6 U		9.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-37: Well M004-A, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 U		
Jet Fuel #5 (JP5)			µg/L	50 U		
TPH, as motor oil			µg/L	300 U		
TPH as Gasoline						
TPH, as gasoline			µg/L	50 U		
TPH (calculated)						
Total TPH (calculated)			µg/L	300 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-38: Well M004-A, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000	439	µg/L	100 U		**4.9 J**
Antimony	6	46	µg/L	**0.37 J**		50 U
Arsenic	50	28	µg/L	**4.6 J**		**3.7 J**
Barium	1,000	575	µg/L	**16**		**10**
Beryllium	4	3.8	µg/L	2 U		2 U
Cadmium	5	5.4	µg/L	5 U		5 U
Chromium	50	14	µg/L	**0.95 J**		10 U
Cobalt		12	µg/L	**1.1 J**		**0.19 J**
Copper	1,000	27	µg/L	**0.52 J**		**2.9 J**
Iron		7,135	µg/L	**140**		**360**
Lead	15	3.9	µg/L	3 U		**0.036 J**
Manganese		5,213	µg/L	**98**		**0.33 J**
Mercury	2	0.15	µg/L	0.2 U		0.2 U
Molybdenum		12	µg/L	**2.4 J**		**5.4 J**
Nickel	100	19	µg/L	**2 J**		**2.2 J**
Selenium	50	6.0	µg/L	**0.81 J**		**0.71 J**
Silver		3.3	µg/L	**0.27 J**		5 U
Vanadium		29	µg/L	**3.4 J**		**5.5 J**
Zinc		43	µg/L	**2.3 J**		**0.72 J**
Calcium		379	mg/L	**64**		**70**
Magnesium		500	mg/L	**34 J**		**28**
Potassium		182	mg/L	**25**		**15**
Sodium		4,540	mg/L	**240**		**120**
Cyanide						
Total Cyanide	0.2		mg/L	0.01 U		0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-39: Well M004-A, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	**2.76**		**2.05 J**
Gross Beta	50		pCi/L	**19.3**		**13.6**
Radium						
Radium			pCi/L	0.069 U3		0.637 U1

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-40: Well M004-A, Detected Natural Attenuation Data at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Anions						
Chloride			mg/L	**130**		**53**
Nitrate	45		mg/L	0.05 U		**2.4**
Nitrite	1		mg/L	0.05 U		0.05 U
Sulfate			mg/L	**26**		**63**
Sulfide						
Sulfide			mg/L	0.04 U		0.04 U
Alkalinity						
Alkalinity			mg/L	**450**		**450**
Alkalinity, bicarbonate			mg/L	**450**		**450**
Dissolved Gases						
Ethane			mg/L	0.01 U		0.01 U
Ethene			mg/L	0.01 U		0.01 U
Methane			mg/L	**0.2**		0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-41: Well M006-A, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	10 U		10 U
Benzene	1		µg/L	0.5 U		0.5 U
tert-butyl alcohol			µg/L	20 U		10 U
N-butylbenzene			µg/L	0.5 U		0.5 U
sec-butylbenzene			µg/L	0.5 U		0.5 U
tert-butylbenzene			µg/L	0.5 U		0.5 U
Carbon Disulfide			µg/L	0.5 U		0.5 U
Carbon Tetrachloride	0.5		µg/L	0.5 U		0.5 U
Chlorobenzene	70		µg/L	0.5 U		0.5 U
Chloroethane			µg/L	1 U		1 U
Chloroform			µg/L	0.5 U		0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U		0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U		0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U		0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U		0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U		**0.2 J**
1,1-Dichloroethene	6		µg/L	0.5 U		0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U		0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U		0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U		0.5 U
Ethylbenzene	300		µg/L	0.5 U		0.5 U
2-Hexanone			µg/L	10 U		10 U
Isopropyl Ether			µg/L	0.5 U		0.5 U
Isopropylbenzene			µg/L	0.5 U		0.5 U
p-Isopropyltoluene			µg/L	0.5 U		0.5 U
Methyl isobutyl ketone			µg/L	10 U		10 U
Methyl tert-butyl ether	13		µg/L	0.5 U		0.5 U
N-propylbenzene			µg/L	0.5 U		0.5 U
Naphthalene			µg/L	2 U		2 U
Tetrachloroethene	5		µg/L	0.5 U		0.5 U
Toluene	150		µg/L	0.5 U		0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U		0.5 U
Trichloroethene	5		µg/L	0.5 U		0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U		0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U		0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U		0.5 U
M,p-xylene	1,750		µg/L	0.5 U		0.5 U
O-xylene	1,750		µg/L	0.5 U		0.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-42: Well M006-A, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L			9.5 U
Anthracene			µg/L			9.5 U
Benzoic acid			µg/L			48 UJ
bis(2-Chloroethyl)ether			µg/L			9.5 U
bis(2-chloroisopropyl) ether			µg/L			9.5 U
bis(2-Ethylhexyl)phthalate	4		µg/L			**4.2 J**
Dibenzofuran			µg/L			9.5 U
1,2-Dichlorobenzene	600		µg/L			9.5 U
1,3-Dichlorobenzene			µg/L			9.5 U
1,4-Dichlorobenzene	5		µg/L			9.5 U
2,4-Dimethylphenol			µg/L			9.5 U
Dimethylphthalate			µg/L			9.5 U
Fluoranthene			µg/L			9.5 U
Fluorene			µg/L			9.5 U
2-Methylnaphthalene			µg/L			9.5 U
2-Methylphenol			µg/L			9.5 U
4-Methylphenol			µg/L			9.5 U
N-Nitrosodiphenylamine			µg/L			9.5 U
Naphthalene			µg/L			9.5 U
Phenanthrene			µg/L			9.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-43: Well M006-A, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 U		
Jet Fuel #5 (JP5)			µg/L	50 U		
TPH, as motor oil			µg/L	**54 Jy**		
TPH as Gasoline						
TPH, as gasoline			µg/L	50 U		
TPH (calculated)						
Total TPH (calculated)			µg/L	**54 J**		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-44: Well M006-A, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000	439	µg/L	100 U		100 U
Antimony	6	46	µg/L	**0.077 J**		50 U
Arsenic	50	28	µg/L	**2.8 J**		**2.5 J**
Barium	1,000	575	µg/L	**110**		**180**
Beryllium	4	3.8	µg/L	2 U		2 U
Cadmium	5	5.4	µg/L	5 U		5 U
Chromium	50	14	µg/L	10 U		10 U
Cobalt		12	µg/L	**0.36 J**		**1.1 J**
Copper	1,000	27	µg/L	**0.79 J**		**1.3 J**
Iron		7,135	µg/L	**1,400**		**1,900**
Lead	15	3.9	µg/L	3 U		**0.12 J**
Manganese		5,213	µg/L	**910 J**		**1,500**
Mercury	2	0.15	µg/L	**0.061 J**		0.2 U
Molybdenum		12	µg/L	**0.51 J**		**0.47 J**
Nickel	100	19	µg/L	**6.6 J**		**9.4 J**
Selenium	50	6.0	µg/L	5 U		5 U
Silver		3.3	µg/L	5 U		5 U
Vanadium		29	µg/L	10 U		10 U
Zinc		43	µg/L	**16 J**		**7.2 J**
Calcium		379	mg/L	**97**		**150**
Magnesium		500	mg/L	**24 J**		**34**
Potassium		182	mg/L	**12**		**17**
Sodium		4,540	mg/L	**31**		**39**
Cyanide						
Total Cyanide	0.2		mg/L			0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-45: Well M006-A, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	**2.73**		1.47 U4J
Gross Beta	50		pCi/L	**9.86**		**14.5**
Radium						
Radium			pCi/L	0.068 U3		1.1 U4

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-46: Well M006-A, Detected Natural Attenuation Data at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Sulfide						
Sulfide			mg/L	0.04 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-47: Well M007-A, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	10 U		10 U
Benzene	1		µg/L	0.5 U		0.5 U
tert-butyl alcohol			µg/L	20 U		10 U
N-butylbenzene			µg/L	0.5 U		0.5 U
sec-butylbenzene			µg/L	0.5 U		0.5 U
tert-butylbenzene			µg/L	0.5 U		0.5 U
Carbon Disulfide			µg/L	0.5 U		0.5 U
Carbon Tetrachloride	0.5		µg/L	0.5 U		0.5 U
Chlorobenzene	70		µg/L	0.5 U		0.5 U
Chloroethane			µg/L	1 U		1 U
Chloroform			µg/L	0.5 U		0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U		0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U		0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U		0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U		0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U		0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U		0.5 U
cis-1,2-Dichloroethene	6		µg/L	**3.2**		**2.7**
trans-1,2-Dichloroethene	10		µg/L	0.5 U		0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U		0.5 U
Ethylbenzene	300		µg/L	0.5 U		0.5 U
2-Hexanone			µg/L	10 U		10 U
Isopropyl Ether			µg/L	0.5 U		0.5 U
Isopropylbenzene			µg/L	0.5 U		0.5 U
p-Isopropyltoluene			µg/L	0.5 U		0.5 U
Methyl isobutyl ketone			µg/L	10 U		10 U
Methyl tert-butyl ether	13		µg/L	0.5 U		0.5 U
N-propylbenzene			µg/L	0.5 U		0.5 U
Naphthalene			µg/L	2 U		2 U
Tetrachloroethene	5		µg/L	0.5 U		0.5 U
Toluene	150		µg/L	0.5 U		0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U		0.5 U
Trichloroethene	5		µg/L	**0.5 J**		**0.5**
1,2,4-Trimethylbenzene			µg/L	0.5 U		0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U		0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U		0.5 U
M,p-xylene	1,750		µg/L	0.5 U		0.5 U
O-xylene	1,750		µg/L	0.5 U		0.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-48: Well M007-A, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	9.4 U		9.5 U
Anthracene			µg/L	9.4 U		9.5 U
Benzoic acid			µg/L	47 U		48 UJ
bis(2-Chloroethyl)ether			µg/L	9.4 U		9.5 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U		9.5 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U		**2.4 J**
Dibenzofuran			µg/L	9.4 U		9.5 U
1,2-Dichlorobenzene	600		µg/L	9.4 U		9.5 U
1,3-Dichlorobenzene			µg/L	9.4 U		9.5 U
1,4-Dichlorobenzene	5		µg/L	9.4 U		9.5 U
2,4-Dimethylphenol			µg/L	9.4 U		9.5 U
Dimethylphthalate			µg/L	9.4 U		9.5 U
Fluoranthene			µg/L	9.4 U		9.5 U
Fluorene			µg/L	9.4 U		9.5 U
2-Methylnaphthalene			µg/L	9.4 U		9.5 U
2-Methylphenol			µg/L	9.4 U		9.5 U
4-Methylphenol			µg/L	9.4 U		9.5 U
N-Nitrosodiphenylamine			µg/L	9.4 U		9.5 U
Naphthalene			µg/L	9.4 U		9.5 U
Phenanthrene			µg/L	9.4 U		9.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-49: Well M007-A, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 U		
Jet Fuel #5 (JP5)			µg/L	50 U		
TPH, as motor oil			µg/L	300 U		
TPH as Gasoline						
TPH, as gasoline			µg/L	50 U		
TPH (calculated)						
Total TPH (calculated)			µg/L	300 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-50: Well M007-A, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000	439	µg/L	**4 J**		**5.3 J**
Antimony	6	46	µg/L	**0.081 J**		50 U
Arsenic	50	28	µg/L	**19**		**16**
Barium	1,000	575	µg/L	**17**		**12**
Beryllium	4	3.8	µg/L	2 U		2 U
Cadmium	5	5.4	µg/L	5 U		5 U
Chromium	50	14	µg/L	**1.2 J**		10 U
Cobalt		12	µg/L	**0.2 J**		**0.16 J**
Copper	1,000	27	µg/L	**0.49 J**		**0.83 J**
Iron		7,135	µg/L	**230**		**260**
Lead	15	3.9	µg/L	3 U		**0.094 J**
Manganese		5,213	µg/L	**570 J**		**420**
Mercury	2	0.15	µg/L	0.2 U		0.2 U
Molybdenum		12	µg/L	**1.2 J**		**2.2 J**
Nickel	100	19	µg/L	**1.4 J**		**1.8 J**
Selenium	50	6.0	µg/L	5 U		5 U
Silver		3.3	µg/L	5 U		5 U
Vanadium		29	µg/L	**2.6 J**		**4.2 J**
Zinc		43	µg/L	**0.53 J**		**2.7 J**
Calcium		379	mg/L	**17**		**15**
Magnesium		500	mg/L	**8.3**		**5.9**
Potassium		182	mg/L	**10**		**9.7**
Sodium		4,540	mg/L	**110**		**170**
Cyanide						
Total Cyanide	0.2		mg/L	0.01 U		0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-51: Well M007-A, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	2.85 U4		0.908 U3J
Gross Beta	50		pCi/L	**12.5**		**7.74**
Radium						
Radium			pCi/L	0.069 U3		1.1 U4

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-52: Well M007-A, Detected Natural Attenuation Data at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Sulfide						
Sulfide			mg/L	0.04 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-53: Well M025-A, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	10 U		10 U
Benzene	1		µg/L	**0.6**		0.5 U
tert-butyl alcohol			µg/L	20 U		10 U
N-butylbenzene			µg/L	0.5 U		0.5 U
sec-butylbenzene			µg/L	0.5 U		0.5 U
tert-butylbenzene			µg/L	0.5 U		0.5 U
Carbon Disulfide			µg/L	0.5 U		0.5 U
Carbon Tetrachloride	0.5		µg/L	0.5 U		0.5 U
Chlorobenzene	70		µg/L	0.5 U		0.5 U
Chloroethane			µg/L	1 U		1 U
Chloroform			µg/L	0.5 U		0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U		0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U		0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U		0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U		0.5 U
1,2-Dichloroethane	0.5		µg/L	**0.5 J**		0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U		0.5 U
cis-1,2-Dichloroethene	6		µg/L	**1.8**		**0.5 J**
trans-1,2-Dichloroethene	10		µg/L	0.5 U		0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U		0.5 U
Ethylbenzene	300		µg/L	0.5 U		0.5 U
2-Hexanone			µg/L	10 U		10 U
Isopropyl Ether			µg/L	0.5 U		0.5 U
Isopropylbenzene			µg/L	0.5 U		0.5 U
p-Isopropyltoluene			µg/L	0.5 U		0.5 U
Methyl isobutyl ketone			µg/L	10 U		10 U
Methyl tert-butyl ether	13		µg/L	0.5 U		0.5 U
N-propylbenzene			µg/L	0.5 U		0.5 U
Naphthalene			µg/L	2 U		2 U
Tetrachloroethene	5		µg/L	0.5 U		0.5 U
Toluene	150		µg/L	0.5 U		0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U		0.5 U
Trichloroethene	5		µg/L	0.5 U		**0.3 J**
1,2,4-Trimethylbenzene			µg/L	0.5 U		0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U		0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U		**0.7**
M,p-xylene	1,750		µg/L	0.5 U		0.5 U
O-xylene	1,750		µg/L	0.5 U		0.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-54: Well M025-A, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	9.4 U	9.4 U	9.4 U
Anthracene			µg/L	9.4 U	9.4 U	9.4 U
Benzoic acid			µg/L	47 U	47 U	47 U
bis(2-Chloroethyl)ether			µg/L	9.4 U	9.4 U	9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U	9.4 U	9.4 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	9.4 U	9.4 U
Dibenzofuran			µg/L	9.4 U	9.4 U	9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U	9.4 U	9.4 U
1,3-Dichlorobenzene			µg/L	9.4 U	9.4 U	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U	9.4 U	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U	9.4 U	9.4 U
Dimethylphthalate			µg/L	9.4 U	9.4 U	9.4 U
Fluoranthene			µg/L	9.4 U	9.4 U	9.4 U
Fluorene			µg/L	9.4 U	9.4 U	9.4 U
2-Methylnaphthalene			µg/L	9.4 U	9.4 U	9.4 U
2-Methylphenol			µg/L	9.4 U	9.4 U	9.4 U
4-Methylphenol			µg/L	9.4 U	9.4 U	9.4 U
N-Nitrosodiphenylamine			µg/L	9.4 U	9.4 U	9.4 U
Naphthalene			µg/L	9.4 U	9.4 U	9.4 U
Phenanthrene			µg/L	9.4 U	9.4 U	9.4 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-55: Well M025-A, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 UJ		
Jet Fuel #5 (JP5)			µg/L	50 UJ		
TPH, as motor oil			µg/L	300 UJ		
TPH as Gasoline						
TPH, as gasoline			µg/L	50 U		
TPH (calculated)						
Total TPH (calculated)			µg/L	300 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-56: Well M025-A, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000	439	µg/L	**5.8 J**	100 U	**17 J**
Antimony	6	46	µg/L	**4.1 J**	**0.2 J**	**2.9 J**
Arsenic	50	28	µg/L	**1.7 J**	5 U	**4.1 J**
Barium	1,000	575	µg/L	**800**	**250**	180 U
Beryllium	4	3.8	µg/L	**0.1 J**	2 U	2 U
Cadmium	5	5.4	µg/L	**0.056 J**	5 U	5 U
Chromium	50	14	µg/L	**2.3 J**	10 U	10 U
Cobalt		12	µg/L	10 U	**0.47 J**	**0.39 J**
Copper	1,000	27	µg/L	**0.95 J**	10 U	**1.6 J**
Iron		7,135	µg/L	**390**	**920**	**570**
Lead	15	3.9	µg/L	**0.3 J**	3 U	**0.12 J**
Manganese		5,213	µg/L	**350**	**650**	**130**
Mercury	2	0.15	µg/L	0.2 U	0.2 U	0.2 U
Molybdenum		12	µg/L	20 U	**0.83 J**	**1.5 J**
Nickel	100	19	µg/L	**0.82 J**	**3.1 J**	**3.5 J**
Selenium	50	6.0	µg/L	**12**	5 U	**11**
Silver		3.3	µg/L	5 U	5 U	**0.056 J**
Vanadium		29	µg/L	**1.7 J**	10 U	10 U
Zinc		43	µg/L	20 U	20 U	**19 J**
Calcium		379	mg/L	**140**	**360**	**160**
Magnesium		500	mg/L	**240**	**750**	**230**
Potassium		182	mg/L	**62**	**180**	**66**
Sodium		4,540	mg/L	**1,100**	**4,700**	**1,900**
Cyanide						
Total Cyanide	0.2		mg/L	0.01 U	**0.01**	0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-57: Well M025-A, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	**1.26**		18.9 U3J
Gross Beta	50		pCi/L	2.8 U3		**95.5**
Radium						
Radium			pCi/L	0.274 U2		1.21 U4

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-58: Well M025-C, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	10 U		10 U
Benzene	1		µg/L	0.5 U		0.5 U
tert-butyl alcohol			µg/L	20 U		10 U
N-butylbenzene			µg/L	0.5 U		0.5 U
sec-butylbenzene			µg/L	0.5 U		0.5 U
tert-butylbenzene			µg/L	0.5 U		0.5 U
Carbon Disulfide			µg/L	**0.3 J**		0.5 U
Carbon Tetrachloride	0.5		µg/L	0.5 U		0.5 UJ
Chlorobenzene	70		µg/L	0.5 U		0.5 U
Chloroethane			µg/L	1 U		1 U
Chloroform			µg/L	0.5 U		0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U		0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U		0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U		0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U		0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U		0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U		0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U		0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U		0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U		0.5 U
Ethylbenzene	300		µg/L	0.5 U		0.5 U
2-Hexanone			µg/L	10 U		10 U
Isopropyl Ether			µg/L	0.5 U		0.5 U
Isopropylbenzene			µg/L	0.5 U		0.5 U
p-Isopropyltoluene			µg/L	0.5 U		0.5 U
Methyl isobutyl ketone			µg/L	10 U		10 U
Methyl tert-butyl ether	13		µg/L	0.5 U		0.5 U
N-propylbenzene			µg/L	0.5 U		0.5 U
Naphthalene			µg/L	2 U		2 U
Tetrachloroethene	5		µg/L	0.5 U		**0.4 J**
Toluene	150		µg/L	0.5 U		**0.2 J**
1,1,1-Trichloroethane	200		µg/L	0.5 U		0.5 U
Trichloroethene	5		µg/L	0.5 U		0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U		0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U		0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U		0.5 U
M,p-xylene	1,750		µg/L	0.5 U		0.5 U
O-xylene	1,750		µg/L	0.5 U		0.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-59: Well M025-C, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	9.4 U	9.4 U	9.7 U
Anthracene			µg/L	9.4 U	9.4 U	9.7 U
Benzoic acid			µg/L	47 U	47 U	49 U
bis(2-Chloroethyl)ether			µg/L	9.4 U	9.4 U	9.7 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U	9.4 U	9.7 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	**3 J**	9.7 U
Dibenzofuran			µg/L	9.4 U	9.4 U	9.7 U
1,2-Dichlorobenzene	600		µg/L	9.4 U	9.4 U	9.7 U
1,3-Dichlorobenzene			µg/L	9.4 U	9.4 U	9.7 U
1,4-Dichlorobenzene	5		µg/L	9.4 U	9.4 U	9.7 U
2,4-Dimethylphenol			µg/L	9.4 U	9.4 U	9.7 U
Dimethylphthalate			µg/L	9.4 U	9.4 U	9.7 U
Fluoranthene			µg/L	9.4 U	9.4 U	9.7 U
Fluorene			µg/L	9.4 U	9.4 U	9.7 U
2-Methylnaphthalene			µg/L	9.4 U	9.4 U	9.7 U
2-Methylphenol			µg/L	9.4 U	9.4 U	9.7 U
4-Methylphenol			µg/L	9.4 U	9.4 U	9.7 U
N-Nitrosodiphenylamine			µg/L	9.4 U	9.4 U	9.7 U
Naphthalene			µg/L	9.4 U	9.4 U	9.7 U
Phenanthrene			µg/L	9.4 U	9.4 U	9.7 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-60: Well M025-C, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 UJ		
Jet Fuel #5 (JP5)			µg/L	50 UJ		
TPH, as motor oil			µg/L	300 UJ		
TPH as Gasoline						
TPH, as gasoline			µg/L	50 U		
TPH (calculated)						
Total TPH (calculated)			µg/L	300 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-61: Well M025-C, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000		µg/L	100 U	100 U	100 U
Antimony	6		µg/L	50 U	**0.082 J**	50 U
Arsenic	50		µg/L	**4.5 J**	**5.7**	**5.3**
Barium	1,000		µg/L	**280**	**230**	**380**
Beryllium	4		µg/L	2 U	2 U	2 U
Cadmium	5		µg/L	5 U	5 U	5 U
Chromium	50		µg/L	**10 J**	10 U	10 U
Cobalt			µg/L	10 U	**0.48 J**	**0.5 J**
Copper	1,000		µg/L	**0.95 J**	10 U	**1.1 J**
Iron			µg/L	**6,300**	**3,100**	**8,900**
Lead	15		µg/L	3 U	3 U	**0.051 J**
Manganese			µg/L	**2,000**	**2,000**	**2,400**
Mercury	2		µg/L	0.2 U	0.2 U	0.2 U
Molybdenum			µg/L	20 U	**1.2 J**	**1.3 J**
Nickel	100		µg/L	20 U	**2.1 J**	**2.4 J**
Selenium	50		µg/L	5 U	5 U	5 U
Silver			µg/L	5 U	5 U	5 U
Vanadium			µg/L	**2.3 J**	10 UJ	10 U
Zinc			µg/L	26 U	20 U	20 U
Calcium			mg/L	**100**	**110**	**130**
Magnesium			mg/L	**200**	**190**	**220**
Potassium			mg/L	**66**	**63**	**73**
Sodium			mg/L	**1,300**	**1,200**	**1,400**
Cyanide						
Total Cyanide	0.2		mg/L	0.01 U	0.01 U	0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-62: Well M025-C, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	0.559 U4		6.13 U3J
Gross Beta	50		pCi/L	31.6 U2		**56.4**
Radium						
Radium			pCi/L	0.472 U		**1.77**

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-63: Well M026-A, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	10 U		**0.6 J**
Benzene	1		µg/L	0.5 U		0.5 U
tert-butyl alcohol			µg/L	20 U		10 U
N-butylbenzene			µg/L	0.5 U		0.5 U
sec-butylbenzene			µg/L	0.5 U		0.5 U
tert-butylbenzene			µg/L	0.5 U		0.5 U
Carbon Disulfide			µg/L	0.5 U		0.5 U
Carbon Tetrachloride	0.5		µg/L	0.5 U		0.5 U
Chlorobenzene	70		µg/L	0.5 U		0.5 U
Chloroethane			µg/L	1 U		1 U
Chloroform			µg/L	0.5 U		0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U		0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U		0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U		0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U		0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U		0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U		0.5 U
cis-1,2-Dichloroethene	6		µg/L	**0.3 J**		**0.2 J**
trans-1,2-Dichloroethene	10		µg/L	0.5 U		0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U		0.5 U
Ethylbenzene	300		µg/L	0.5 U		0.5 U
2-Hexanone			µg/L	10 U		10 U
Isopropyl Ether			µg/L	0.5 U		0.5 U
Isopropylbenzene			µg/L	0.5 U		0.5 U
p-Isopropyltoluene			µg/L	0.5 U		0.5 U
Methyl isobutyl ketone			µg/L	10 U		10 U
Methyl tert-butyl ether	13		µg/L	0.5 U		0.5 U
N-propylbenzene			µg/L	0.5 U		0.5 U
Naphthalene			µg/L	2 U		2 U
Tetrachloroethene	5		µg/L	0.5 U		0.5 U
Toluene	150		µg/L	0.5 U		0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U		0.5 U
Trichloroethene	5		µg/L	0.5 U		0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U		0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U		0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U		0.5 U
M,p-xylene	1,750		µg/L	0.5 U		0.5 U
O-xylene	1,750		µg/L	0.5 U		0.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-64: Well M026-A, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	9.8 U		9.4 U
Anthracene			µg/L	9.8 U		9.4 U
Benzoic acid			µg/L	49 U		47 U
bis(2-Chloroethyl)ether			µg/L	9.8 U		9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.8 U		9.4 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.8 U		9.4 U
Dibenzofuran			µg/L	9.8 U		9.4 U
1,2-Dichlorobenzene	600		µg/L	9.8 U		9.4 U
1,3-Dichlorobenzene			µg/L	9.8 U		9.4 U
1,4-Dichlorobenzene	5		µg/L	9.8 U		9.4 U
2,4-Dimethylphenol			µg/L	9.8 U		9.4 U
Dimethylphthalate			µg/L	9.8 U		9.4 U
Fluoranthene			µg/L	9.8 U		9.4 U
Fluorene			µg/L	9.8 U		9.4 U
2-Methylnaphthalene			µg/L	9.8 U		9.4 U
2-Methylphenol			µg/L	9.8 U		9.4 U
4-Methylphenol			µg/L	9.8 U		9.4 U
N-Nitrosodiphenylamine			µg/L	9.8 U		9.4 U
Naphthalene			µg/L	9.8 U		9.4 U
Phenanthrene			µg/L	9.8 U		9.4 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-65: Well M026-A, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 UJ		
Jet Fuel #5 (JP5)			µg/L	50 UJ		
TPH, as motor oil			µg/L	300 UJ		
TPH as Gasoline						
TPH, as gasoline			µg/L	50 U		
TPH (calculated)						
Total TPH (calculated)			µg/L	300 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-66: Well M026-A, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000	439	µg/L	**3.5 J**		**4.9 J**
Antimony	6	46	µg/L	**0.79 J**		**0.48 J**
Arsenic	50	28	µg/L	**5.8**		**7.9**
Barium	1,000	575	µg/L	**46**		**4.9 J**
Beryllium	4	3.8	µg/L	2 U		2 U
Cadmium	5	5.4	µg/L	5 U		5 U
Chromium	50	14	µg/L	**1.8 J**		10 U
Cobalt		12	µg/L	10 U		**0.27 J**
Copper	1,000	27	µg/L	**4.8 J**		**5.5 J**
Iron		7,135	µg/L	**490**		360 U
Lead	15	3.9	µg/L	3 U		**0.099 J**
Manganese		5,213	µg/L	**23**		**180**
Mercury	2	0.15	µg/L	**0.14 J**		0.2 U
Molybdenum		12	µg/L	**7.3 J**		**5.8 J**
Nickel	100	19	µg/L	**2.5 J**		**1.8 J**
Selenium	50	6.0	µg/L	**10**		**6.3**
Silver		3.3	µg/L	**0.53 J**		5 U
Vanadium		29	µg/L	**3.2 J**		**6.5 J**
Zinc		43	µg/L	20 U		**6.9 J**
Calcium		379	mg/L	**310**		**110**
Magnesium		500	mg/L	**820**		**140**
Potassium		182	mg/L	**240**		**56**
Sodium		4,540	mg/L	**6,700**		**1,300**
Cyanide						
Total Cyanide	0.2		mg/L	0.01 U		0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-67: Well M026-A, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	0.7 U3		10 U3J
Gross Beta	50		pCi/L	**271**		**59.5**
Radium						
Radium			pCi/L	0.067 U3		0.675 U3

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-68: Well M026-E, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	10 U		**0.8 J**
Benzene	1		µg/L	0.5 U		0.5 U
tert-butyl alcohol			µg/L	20 U		10 U
N-butylbenzene			µg/L	0.5 U		0.5 U
sec-butylbenzene			µg/L	0.5 U		0.5 U
tert-butylbenzene			µg/L	0.5 U		0.5 U
Carbon Disulfide			µg/L	0.5 U		0.5 U
Carbon Tetrachloride	0.5		µg/L	0.5 U		0.5 U
Chlorobenzene	70		µg/L	0.5 U		0.5 U
Chloroethane			µg/L	1 U		1 U
Chloroform			µg/L	0.5 U		0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U		0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U		0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U		0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U		0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U		0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U		0.5 U
cis-1,2-Dichloroethene	6		µg/L	**0.4 J**		**0.6**
trans-1,2-Dichloroethene	10		µg/L	0.5 U		0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U		0.5 U
Ethylbenzene	300		µg/L	0.5 U		0.5 U
2-Hexanone			µg/L	10 U		10 U
Isopropyl Ether			µg/L	0.5 U		0.5 U
Isopropylbenzene			µg/L	0.5 U		0.5 U
p-Isopropyltoluene			µg/L	0.5 U		0.5 U
Methyl isobutyl ketone			µg/L	10 U		10 U
Methyl tert-butyl ether	13		µg/L	0.5 U		0.5 U
N-propylbenzene			µg/L	0.5 U		0.5 U
Naphthalene			µg/L	2 U		2 U
Tetrachloroethene	5		µg/L	0.5 U		0.5 U
Toluene	150		µg/L	0.5 U		0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U		0.5 U
Trichloroethene	5		µg/L	0.5 U		0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U		0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U		0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U		0.5 U
M,p-xylene	1,750		µg/L	0.5 U		0.5 U
O-xylene	1,750		µg/L	0.5 U		0.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-69: Well M026-E, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	9.7 U		9.4 U
Anthracene			µg/L	9.7 U		9.4 U
Benzoic acid			µg/L	49 U		47 U
bis(2-Chloroethyl)ether			µg/L	9.7 U		9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.7 U		9.4 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.7 U		**5.5 J**
Dibenzofuran			µg/L	9.7 U		9.4 U
1,2-Dichlorobenzene	600		µg/L	9.7 U		9.4 U
1,3-Dichlorobenzene			µg/L	9.7 U		9.4 U
1,4-Dichlorobenzene	5		µg/L	9.7 U		9.4 U
2,4-Dimethylphenol			µg/L	9.7 U		9.4 U
Dimethylphthalate			µg/L	9.7 U		9.4 U
Fluoranthene			µg/L	9.7 U		9.4 U
Fluorene			µg/L	9.7 U		9.4 U
2-Methylnaphthalene			µg/L	9.7 U		9.4 U
2-Methylphenol			µg/L	9.7 U		9.4 U
4-Methylphenol			µg/L	9.7 U		9.4 U
N-Nitrosodiphenylamine			µg/L	9.7 U		9.4 U
Naphthalene			µg/L	9.7 U		9.4 U
Phenanthrene			µg/L	9.7 U		9.4 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-70: Well M026-E, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 UJ		
Jet Fuel #5 (JP5)			µg/L	50 UJ		
TPH, as motor oil			µg/L	300 UJ		
TPH as Gasoline						
TPH, as gasoline			µg/L	50 U		
TPH (calculated)						
Total TPH (calculated)			µg/L	300 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-71: Well M026-E, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000	439	µg/L	100 U		**3.1 J**
Antimony	6	46	µg/L	**0.091 J**		**0.13 J**
Arsenic	50	28	µg/L	**6**		**13**
Barium	1,000	575	µg/L	**120**		**200**
Beryllium	4	3.8	µg/L	2 U		2 U
Cadmium	5	5.4	µg/L	5 U		5 U
Chromium	50	14	µg/L	**2.7 J**		10 U
Cobalt		12	µg/L	10 U		**1.2 J**
Copper	1,000	27	µg/L	**0.81 J**		**2.5 J**
Iron		7,135	µg/L	**1,800**		**4,600**
Lead	15	3.9	µg/L	3 U		**0.058 J**
Manganese		5,213	µg/L	**860**		**2,900**
Mercury	2	0.15	µg/L	**0.052 J**		0.2 U
Molybdenum		12	µg/L	20 U		**1.4 J**
Nickel	100	19	µg/L	**1.1 J**		**3 J**
Selenium	50	6.0	µg/L	**7**		**22**
Silver		3.3	µg/L	**0.055 J**		5 U
Vanadium		29	µg/L	**1.7 J**		10 U
Zinc		43	µg/L	20 U		20 U
Calcium		379	mg/L	**110**		**380**
Magnesium		500	mg/L	**180**		**620**
Potassium		182	mg/L	**55**		**160**
Sodium		4,540	mg/L	**1,600**		**4,200**
Cyanide						
Total Cyanide	0.2		mg/L	0.01 U		0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-72: Well M026-E, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	0.14 U2		38.3 U3J
Gross Beta	50		pCi/L	**64.3**		**150**
Radium						
Radium			pCi/L	**0.869**		**1.4**

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-73: Well M027-A, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	10 U	10 U	**0.7 J**
Benzene	1		µg/L	0.5 U	0.5 U	0.5 U
tert-butyl alcohol			µg/L	20 U	20 U	10 U
N-butylbenzene			µg/L	0.5 U	0.5 U	0.5 U
sec-butylbenzene			µg/L	0.5 U	0.5 U	0.5 U
tert-butylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Carbon Disulfide			µg/L	0.5 U	0.5 U	0.5 U
Carbon Tetrachloride	0.5		µg/L	0.5 U	0.5 U	0.5 U
Chlorobenzene	70		µg/L	0.5 U	0.5 U	0.5 U
Chloroethane			µg/L	1 U	1 U	1 U
Chloroform			µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U	0.5 U	**0.5 J**
1,3-Dichlorobenzene			µg/L	0.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U	0.5 U	**0.2 J**
1,1-Dichloroethane	5		µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**1.4**	**1.6**	**0.3 J**
trans-1,2-Dichloroethene	10		µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U	0.5 U	0.5 U
Ethylbenzene	300		µg/L	0.5 U	0.5 U	0.5 U
2-Hexanone			µg/L	10 U	10 U	10 U
Isopropyl Ether			µg/L	0.5 U	0.5 U	0.5 U
Isopropylbenzene			µg/L	0.5 U	0.5 U	0.5 U
p-Isopropyltoluene			µg/L	0.5 U	0.5 U	0.5 U
Methyl isobutyl ketone			µg/L	10 U	10 U	10 U
Methyl tert-butyl ether	13		µg/L	0.5 U	0.5 U	0.5 U
N-propylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Naphthalene			µg/L	2 U	2 U	2 U
Tetrachloroethene	5		µg/L	0.5 U	0.5 U	**0.5**
Toluene	150		µg/L	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U	0.5 U	0.5 U
Trichloroethene	5		µg/L	0.5 U	0.5 U	**0.7**
1,2,4-Trimethylbenzene			µg/L	0.5 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U	0.5 U	0.5 U
M,p-xylene	1,750		µg/L	0.5 U	0.5 U	0.5 U
O-xylene	1,750		µg/L	0.5 U	0.5 U	0.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-74: Well M027-A, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	9.4 U	9.4 U	9.4 U
Anthracene			µg/L	9.4 U	9.4 U	9.4 U
Benzoic acid			µg/L	47 U	47 U	47 UJ
bis(2-Chloroethyl)ether			µg/L	9.4 U	9.4 U	9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U	9.4 U	9.4 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	9.4 U	9.4 U
Dibenzofuran			µg/L	9.4 U	9.4 U	9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U	9.4 U	9.4 U
1,3-Dichlorobenzene			µg/L	9.4 U	9.4 U	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U	9.4 U	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U	9.4 U	9.4 U
Dimethylphthalate			µg/L	9.4 U	9.4 U	9.4 U
Fluoranthene			µg/L	9.4 U	9.4 U	9.4 U
Fluorene			µg/L	9.4 U	9.4 U	9.4 U
2-Methylnaphthalene			µg/L	9.4 U	9.4 U	9.4 U
2-Methylphenol			µg/L	9.4 U	9.4 U	9.4 U
4-Methylphenol			µg/L	9.4 U	9.4 U	9.4 U
N-Nitrosodiphenylamine			µg/L	9.4 U	9.4 U	9.4 U
Naphthalene			µg/L	9.4 U	9.4 U	9.4 U
Phenanthrene			µg/L	9.4 U	9.4 U	9.4 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-75: Well M027-A, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 UJ		
Jet Fuel #5 (JP5)			µg/L	50 UJ		
TPH, as motor oil			µg/L	300 UJ		
TPH as Gasoline						
TPH, as gasoline			µg/L	50 U		
TPH (calculated)						
Total TPH (calculated)			µg/L	300 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-76: Well M027-A, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000	439	µg/L	100 U	100 U	100 U
Antimony	6	46	µg/L	**2.2 J**	**2.2 J**	**13 J**
Arsenic	50	28	µg/L	**2.8 J**	5 U	5 U
Barium	1,000	575	µg/L	**190**	**180**	**97**
Beryllium	4	3.8	µg/L	2 U	2 U	2 U
Cadmium	5	5.4	µg/L	**0.58 J**	**0.5 J**	**3.2 J**
Chromium	50	14	µg/L	**0.96 J**	10 U	10 U
Cobalt		12	µg/L	10 U	10 U	**0.21 J**
Copper	1,000	27	µg/L	10 U	10 U	**5.2 J**
Iron		7,135	µg/L	**900**	**700**	340 U
Lead	15	3.9	µg/L	3 U	3 U	**0.058 J**
Manganese		5,213	µg/L	**390**	**420**	**63**
Mercury	2	0.15	µg/L	0.2 U	0.2 U	0.2 U
Molybdenum		12	µg/L	20 U	**2.4 J**	**1.7 J**
Nickel	100	19	µg/L	**1.6 J**	20 U	**2.1 J**
Selenium	50	6.0	µg/L	**1.9 J**	**0.88 J**	**0.65 J**
Silver		3.3	µg/L	5 UR	5 U	5 U
Vanadium		29	µg/L	**0.74 J**	10 U	10 U
Zinc		43	µg/L	**6.3 J**	20 U	**22 J**
Calcium		379	mg/L	**97**	**110**	**100**
Magnesium		500	mg/L	**57**	**55**	**53**
Potassium		182	mg/L	**42**	**44**	**33**
Sodium		4,540	mg/L	**370**	**370**	**130**
Cyanide						
Total Cyanide	0.2		mg/L		0.01 U	0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-77: Well M027-A, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	**7.47**	**1.87**	1.78 U3J
Gross Beta	50		pCi/L	**30.2**	**58.1**	**33.5**
Radium						
Radium			pCi/L	0.131 U2	0.373 UJ	1.3 U4

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-78: Well M027-A, Detected Natural Attenuation Data at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Anions						
Chloride			mg/L	**420**		**110**
Nitrate	45		mg/L	0.1 U		**3.2**
Nitrite	1		mg/L	0.1 U		**0.03 J**
Sulfate			mg/L	**190**		**260**
Sulfide						
Sulfide			mg/L			0.04 U
Alkalinity						
Alkalinity			mg/L	**570**		**510**
Alkalinity, bicarbonate			mg/L	**570**		**510**
Dissolved Gases						
Ethane			mg/L	0.01 U		0.01 U
Ethene			mg/L	0.01 U		0.01 U
Methane			mg/L	**0.025**		**0.018**

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-79: Well M027-B, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	10 U		10 U
Benzene	1		µg/L	0.5 U		0.5 U
tert-butyl alcohol			µg/L	20 U		10 U
N-butylbenzene			µg/L	0.5 U		0.5 U
sec-butylbenzene			µg/L	0.5 U		0.5 U
tert-butylbenzene			µg/L	0.5 U		0.5 U
Carbon Disulfide			µg/L	0.5 U		0.5 U
Carbon Tetrachloride	0.5		µg/L	0.5 U		0.5 U
Chlorobenzene	70		µg/L	0.5 U		0.5 U
Chloroethane			µg/L	1 U		1 U
Chloroform			µg/L	0.5 U		0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U		**0.7**
1,3-Dichlorobenzene			µg/L	0.5 U		0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U		0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U		0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U		0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U		0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U		0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U		0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U		0.5 U
Ethylbenzene	300		µg/L	0.5 U		0.5 U
2-Hexanone			µg/L	10 U		10 U
Isopropyl Ether			µg/L	0.5 U		0.5 U
Isopropylbenzene			µg/L	0.5 U		0.5 U
p-Isopropyltoluene			µg/L	0.5 U		0.5 U
Methyl isobutyl ketone			µg/L	10 U		10 U
Methyl tert-butyl ether	13		µg/L	0.5 U		0.5 U
N-propylbenzene			µg/L	0.5 U		0.5 U
Naphthalene			µg/L	2 U		**1 J**
Tetrachloroethene	5		µg/L	0.5 U		0.5 U
Toluene	150		µg/L	**0.4 J**		0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U		0.5 U
Trichloroethene	5		µg/L	0.5 U		0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U		0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U		0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U		0.5 U
M,p-xylene	1,750		µg/L	0.5 U		0.5 U
O-xylene	1,750		µg/L	0.5 U		0.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-80: Well M027-B, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	9.4 U		9.4 U
Anthracene			µg/L	9.4 U		9.4 U
Benzoic acid			µg/L	47 U		47 UJ
bis(2-Chloroethyl)ether			µg/L	9.4 U		9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U		9.4 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U		9.4 U
Dibenzofuran			µg/L	9.4 U		9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U		9.4 U
1,3-Dichlorobenzene			µg/L	9.4 U		9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U		9.4 U
2,4-Dimethylphenol			µg/L	9.4 U		9.4 U
Dimethylphthalate			µg/L	**6.6 J**		9.4 U
Fluoranthene			µg/L	9.4 U		9.4 U
Fluorene			µg/L	9.4 U		9.4 U
2-Methylnaphthalene			µg/L	9.4 U		9.4 U
2-Methylphenol			µg/L	9.4 U		9.4 U
4-Methylphenol			µg/L	9.4 U		9.4 U
N-Nitrosodiphenylamine			µg/L	9.4 U		9.4 U
Naphthalene			µg/L	9.4 U		9.4 U
Phenanthrene			µg/L	9.4 U		9.4 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-81: Well M027-B, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 UJ		
Jet Fuel #5 (JP5)			µg/L	50 UJ		
TPH, as motor oil			µg/L	300 UJ		
TPH as Gasoline						
TPH, as gasoline			µg/L	50 U		
TPH (calculated)						
Total TPH (calculated)			µg/L	300 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-82: Well M027-B, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000		µg/L	100 U		**4.5 J**
Antimony	6		µg/L	50 U		50 U
Arsenic	50		µg/L	**40**		**42**
Barium	1,000		µg/L	**500**		**400**
Beryllium	4		µg/L	2 U		2 U
Cadmium	5		µg/L	5 U		5 U
Chromium	50		µg/L	**5.6 J**		10 U
Cobalt			µg/L	10 U		**0.53 J**
Copper	1,000		µg/L	**2.6 J**		**2.2 J**
Iron			µg/L	**11,000**		**9,700**
Lead	15		µg/L	3 U		**0.036 J**
Manganese			µg/L	**5,600**		**4,600**
Mercury	2		µg/L	0.2 U		0.2 U
Molybdenum			µg/L	20 U		**2.1 J**
Nickel	100		µg/L	20 U		**2.6 J**
Selenium	50		µg/L	5 U		**18**
Silver			µg/L	**0.92 J**		5 U
Vanadium			µg/L	**1.3 J**		10 U
Zinc			µg/L	**260**		20 U
Calcium			mg/L	**260**		**230**
Magnesium			mg/L	**550**		**490**
Potassium			mg/L	**63**		**54**
Sodium			mg/L	**3,000**		**2,800**
Cyanide						
Total Cyanide	0.2		mg/L	0.01 U		0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-83: Well M027-B, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	2.8 U		25.8 U3J
Gross Beta	50		pCi/L	**173**		35.9 U4
Radium						
Radium			pCi/L	0.277 U2		1.2 U4

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-84: Well M027-C, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	10 U		10 U
Benzene	1		µg/L	0.5 U		0.5 U
tert-butyl alcohol			µg/L	20 U		10 U
N-butylbenzene			µg/L	0.5 U		0.5 U
sec-butylbenzene			µg/L	0.5 U		0.5 U
tert-butylbenzene			µg/L	0.5 U		0.5 U
Carbon Disulfide			µg/L	0.5 U		0.5 U
Carbon Tetrachloride	0.5		µg/L	0.5 U		0.5 U
Chlorobenzene	70		µg/L	0.5 U		0.5 U
Chloroethane			µg/L	1 U		1 U
Chloroform			µg/L	0.5 U		0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U		**0.7**
1,3-Dichlorobenzene			µg/L	0.5 U		0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U		0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U		0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U		0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U		0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U		0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U		0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U		0.5 U
Ethylbenzene	300		µg/L	0.5 U		0.5 U
2-Hexanone			µg/L	10 U		10 U
Isopropyl Ether			µg/L	0.5 U		0.5 U
Isopropylbenzene			µg/L	0.5 U		0.5 U
p-Isopropyltoluene			µg/L	0.5 U		0.5 U
Methyl isobutyl ketone			µg/L	10 U		10 U
Methyl tert-butyl ether	13		µg/L	0.5 U		0.5 U
N-propylbenzene			µg/L	0.5 U		0.5 U
Naphthalene			µg/L	2 U		2 U
Tetrachloroethene	5		µg/L	0.5 U		0.5 U
Toluene	150		µg/L	**0.2 J**		0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U		0.5 U
Trichloroethene	5		µg/L	0.5 U		0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U		0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U		0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U		0.5 U
M,p-xylene	1,750		µg/L	0.5 U		0.5 U
O-xylene	1,750		µg/L	0.5 U		0.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-85: Well M027-C, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	9.5 U		9.4 U
Anthracene			µg/L	9.5 U		9.4 U
Benzoic acid			µg/L	48 U		47 UJ
bis(2-Chloroethyl)ether			µg/L	9.5 U		9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.5 U		9.4 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.5 U		9.4 U
Dibenzofuran			µg/L	9.5 U		9.4 U
1,2-Dichlorobenzene	600		µg/L	9.5 U		9.4 U
1,3-Dichlorobenzene			µg/L	9.5 U		9.4 U
1,4-Dichlorobenzene	5		µg/L	9.5 U		9.4 U
2,4-Dimethylphenol			µg/L	9.5 U		9.4 U
Dimethylphthalate			µg/L	**1.3 J**		9.4 U
Fluoranthene			µg/L	9.5 U		9.4 U
Fluorene			µg/L	9.5 U		9.4 U
2-Methylnaphthalene			µg/L	9.5 U		9.4 U
2-Methylphenol			µg/L	9.5 U		9.4 U
4-Methylphenol			µg/L	9.5 U		9.4 U
N-Nitrosodiphenylamine			µg/L	9.5 U		9.4 U
Naphthalene			µg/L	9.5 U		9.4 U
Phenanthrene			µg/L	9.5 U		9.4 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-86: Well M027-C, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 UJ		
Jet Fuel #5 (JP5)			µg/L	50 UJ		
TPH, as motor oil			µg/L	300 UJ		
TPH as Gasoline						
TPH, as gasoline			µg/L	50 U		
TPH (calculated)						
Total TPH (calculated)			µg/L	300 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-87: Well M027-C, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000		µg/L	100 U		100 U
Antimony	6		µg/L	50 U		50 U
Arsenic	50		µg/L	**6**		**11**
Barium	1,000		µg/L	**75 J**		**88**
Beryllium	4		µg/L	2 U		2 U
Cadmium	5		µg/L	5 U		5 U
Chromium	50		µg/L	**3.6 J**		10 U
Cobalt			µg/L	10 U		**1.3 J**
Copper	1,000		µg/L	**2.8 J**		**2.7 J**
Iron			µg/L	**2,500**		**3,200**
Lead	15		µg/L	3 U		**0.09 J**
Manganese			µg/L	**6,100**		**6,400**
Mercury	2		µg/L	0.2 U		0.2 U
Molybdenum			µg/L	20 U		**2.2 J**
Nickel	100		µg/L	20 U		**3.4 J**
Selenium	50		µg/L	5 U		**22**
Silver			µg/L	**3.5 J**		5 U
Vanadium			µg/L	**1.1 J**		10 U
Zinc			µg/L	20 U		20 U
Calcium			mg/L	**390**		**370**
Magnesium			mg/L	**830 J**		**780**
Potassium			mg/L	**95**		**87**
Sodium			mg/L	**4,200**		**4,000**
Cyanide						
Total Cyanide	0.2		mg/L	0.01 U		0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-88: Well M027-C, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	1.12 U2		30.4 U3J
Gross Beta	50		pCi/L	**117**		**101**
Radium						
Radium			pCi/L	0.551 U		**2.51**

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-89: Well M028-A, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	10 U	10 U	**0.8 J**
Benzene	1		µg/L	**10**	**53**	0.5 U
tert-butyl alcohol			µg/L	20 U	20 U	10 UJ
N-butylbenzene			µg/L	**0.4 J**	**1.4**	0.5 U
sec-butylbenzene			µg/L	**1.2**	**2.3**	0.5 UJ
tert-butylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Carbon Disulfide			µg/L	**1.1**	**4.9**	0.5 U
Carbon Tetrachloride	0.5		µg/L	0.5 U	0.5 U	0.5 U
Chlorobenzene	70		µg/L	**21**	**77**	**1.1**
Chloroethane			µg/L	1 U	**2.4**	1 U
Chloroform			µg/L	0.5 U	0.5 U	**0.4 J**
1,2-Dichlorobenzene	600		µg/L	**5.1**	**9.6**	**0.3 J**
1,3-Dichlorobenzene			µg/L	**0.4 J**	**0.8**	0.5 U
1,4-Dichlorobenzene	5		µg/L	**2.7**	**6.5**	0.5 U
1,1-Dichloroethane	5		µg/L	**3.1**	**21**	**0.4 J**
1,2-Dichloroethane	0.5		µg/L	0.5 U	**0.4 J**	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**7.7**	**1.7**	**43**
trans-1,2-Dichloroethene	10		µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U	0.5 U	0.5 U
Ethylbenzene	300		µg/L	**2.8**	**20**	**0.5 J**
2-Hexanone			µg/L	10 U	10 U	10 U
Isopropyl Ether			µg/L	0.5 U	**0.9**	0.5 UJ
Isopropylbenzene			µg/L	**2.1**	**5.4**	0.5 U
p-Isopropyltoluene			µg/L	0.5 U	**1.7**	0.5 U
Methyl isobutyl ketone			µg/L	10 U	10 U	10 U
Methyl tert-butyl ether	13		µg/L	0.5 U	0.5 U	0.5 U
N-propylbenzene			µg/L	**0.9**	**5**	0.5 U
Naphthalene			µg/L	2 U	**11**	**1.3 J**
Tetrachloroethene	5		µg/L	0.5 U	0.5 U	**0.3 J**
Toluene	150		µg/L	**0.6**	**15**	**3.9**
1,1,1-Trichloroethane	200		µg/L	0.5 U	0.5 U	0.5 U
Trichloroethene	5		µg/L	0.5 U	0.5 U	**3.8**
1,2,4-Trimethylbenzene			µg/L	**1**	**41**	**1.1**
1,3,5-Trimethylbenzene			µg/L	**0.4 J**	**8.8**	**0.3 J**
Vinyl Chloride	0.5		µg/L	**12**	**2.2**	**3.6**
M,p-xylene	1,750		µg/L	**1.4**	**56**	**1.6**
O-xylene	1,750		µg/L	**1.3**	**30**	**0.7**

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-90: Well M028-A, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	9.7 U	14 U	9.6 U
Anthracene			µg/L	9.7 U	14 U	9.6 U
Benzoic acid			µg/L	49 U	72 U	48 U
bis(2-Chloroethyl)ether			µg/L	9.7 U	14 U	9.6 U
bis(2-chloroisopropyl) ether			µg/L	9.7 U	**1.9 J**	9.6 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.7 U	14 U	9.6 U
Dibenzofuran			µg/L	9.7 U	14 U	9.6 U
1,2-Dichlorobenzene	600		µg/L	**3.2 J**	**7.3 J**	9.6 U
1,3-Dichlorobenzene			µg/L	9.7 U	14 U	9.6 U
1,4-Dichlorobenzene	5		µg/L	**1.6 J**	**4.9 J**	9.6 U
2,4-Dimethylphenol			µg/L	9.7 U	**290**	9.6 U
Dimethylphthalate			µg/L	9.7 U	14 U	9.6 U
Fluoranthene			µg/L	9.7 U	14 U	9.6 U
Fluorene			µg/L	9.7 U	14 U	9.6 U
2-Methylnaphthalene			µg/L	9.7 U	14 U	9.6 U
2-Methylphenol			µg/L	9.7 U	**4.6 J**	9.6 U
4-Methylphenol			µg/L	9.7 U	14 U	9.6 U
N-Nitrosodiphenylamine			µg/L	9.7 U	14 U	9.6 U
Naphthalene			µg/L	9.7 U	**8.4 J**	9.6 U
Phenanthrene			µg/L	9.7 U	14 U	9.6 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-91: Well M028-A, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 UJ		
Jet Fuel #5 (JP5)			µg/L	50 UJ		
TPH, as motor oil			µg/L	300 UJ		
TPH as Gasoline						
TPH, as gasoline			µg/L	150 U		
TPH (calculated)						
Total TPH (calculated)			µg/L	300 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-92: Well M028-A, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000	439	µg/L	100 U	100 U	**3.4 J**
Antimony	6	46	µg/L	**0.17 J**	**0.2 J**	**5.9 J**
Arsenic	50	28	µg/L	**4.7 J**	**14**	5 U
Barium	1,000	575	µg/L	**170**	**240**	**91**
Beryllium	4	3.8	µg/L	2 U	2 U	2 U
Cadmium	5	5.4	µg/L	5 U	5 U	**3.5 J**
Chromium	50	14	µg/L	**2.2 J**	10 U	10 U
Cobalt		12	µg/L	10 U	**0.53 J**	**0.16 J**
Copper	1,000	27	µg/L	**0.59 J**	10 U	**12**
Iron		7,135	µg/L	**4,700**	**12,000**	270 U
Lead	15	3.9	µg/L	3 U	3 U	**0.43 J**
Manganese		5,213	µg/L	**350**	**810**	**25**
Mercury	2	0.15	µg/L	0.2 U	0.2 U	0.2 U
Molybdenum		12	µg/L	20 U	20 U	**2.2 J**
Nickel	100	19	µg/L	**0.48 J**	20 U	**8.7 J**
Selenium	50	6.0	µg/L	**0.63 J**	5 U	**0.35 J**
Silver		3.3	µg/L	5 U	5 U	5 U
Vanadium		29	µg/L	**0.47 J**	10 U	10 U
Zinc		43	µg/L	20 U	20 U	**100 J**
Calcium		379	mg/L	**67**	**100**	**100**
Magnesium		500	mg/L	**30**	**41**	**34**
Potassium		182	mg/L	**33**	**47**	**23**
Sodium		4,540	mg/L	**74**	**88**	**78**
Cyanide						
Total Cyanide	0.2		mg/L	0.01 U	0.01 U	0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-93: Well M028-A, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	0.888 U2	**2.88**	1.18 U1J
Gross Beta	50		pCi/L	**30.1**	**44.3**	**22.6**
Radium						
Radium			pCi/L	**0.671**	**0.873 J**	0.759 U4

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-94: Well M028-A, Detected Natural Attenuation Data at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Anions						
Chloride			mg/L	**74**		**67**
Nitrate	45		mg/L	0.05 U		**2**
Nitrite	1		mg/L	0.05 U		0.05 U
Sulfate			mg/L	**10**		**160**
Sulfide						
Sulfide			mg/L	**0.09**		0.04 U
Alkalinity						
Alkalinity			mg/L	**350**		**380**
Alkalinity, bicarbonate			mg/L	**350**		**380**
Dissolved Gases						
Ethane			mg/L	**0.83**		0.01 U
Ethene			mg/L	**0.13**		0.01 U
Methane			mg/L	**3.2**		0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-95: Well M028-C, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	10 U	10 U	10 U
Benzene	1		µg/L	0.5 U	0.5 U	0.5 U
tert-butyl alcohol			µg/L	20 U	20 U	10 UJ
N-butylbenzene			µg/L	0.5 U	0.5 U	0.5 U
sec-butylbenzene			µg/L	0.5 U	0.5 U	0.5 UJ
tert-butylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Carbon Disulfide			µg/L	0.5 U	0.5 U	**2.5**
Carbon Tetrachloride	0.5		µg/L	0.5 U	0.5 U	0.5 U
Chlorobenzene	70		µg/L	0.5 U	0.5 U	0.5 U
Chloroethane			µg/L	1 U	1 U	1 U
Chloroform			µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U	0.5 U	0.5 U
Ethylbenzene	300		µg/L	0.5 U	0.5 U	0.5 U
2-Hexanone			µg/L	10 U	10 U	10 U
Isopropyl Ether			µg/L	0.5 U	0.5 U	0.5 UJ
Isopropylbenzene			µg/L	0.5 U	0.5 U	0.5 U
p-Isopropyltoluene			µg/L	0.5 U	0.5 U	0.5 U
Methyl isobutyl ketone			µg/L	10 U	10 U	10 U
Methyl tert-butyl ether	13		µg/L	0.5 U	0.5 U	0.5 U
N-propylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Naphthalene			µg/L	2 U	2 U	2 U
Tetrachloroethene	5		µg/L	0.5 U	0.5 U	0.5 U
Toluene	150		µg/L	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U	0.5 U	0.5 U
Trichloroethene	5		µg/L	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U	0.5 U	0.5 U
M,p-xylene	1,750		µg/L	0.5 U	0.5 U	0.5 U
O-xylene	1,750		µg/L	0.5 U	0.5 U	0.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-96: Well M028-C, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	9.4 U	9.6 U	9.6 U
Anthracene			µg/L	9.4 U	9.6 U	9.6 U
Benzoic acid			µg/L	47 U	48 U	48 U
bis(2-Chloroethyl)ether			µg/L	9.4 U	9.6 U	9.6 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U	9.6 U	9.6 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	9.6 U	9.6 U
Dibenzofuran			µg/L	9.4 U	9.6 U	9.6 U
1,2-Dichlorobenzene	600		µg/L	9.4 U	9.6 U	9.6 U
1,3-Dichlorobenzene			µg/L	9.4 U	9.6 U	9.6 U
1,4-Dichlorobenzene	5		µg/L	9.4 U	9.6 U	9.6 U
2,4-Dimethylphenol			µg/L	9.4 U	9.6 U	9.6 U
Dimethylphthalate			µg/L	9.4 U	9.6 U	9.6 U
Fluoranthene			µg/L	9.4 U	9.6 U	9.6 U
Fluorene			µg/L	9.4 U	9.6 U	9.6 U
2-Methylnaphthalene			µg/L	9.4 U	9.6 U	9.6 U
2-Methylphenol			µg/L	9.4 U	9.6 U	9.6 U
4-Methylphenol			µg/L	9.4 U	9.6 U	9.6 U
N-Nitrosodiphenylamine			µg/L	9.4 U	9.6 U	9.6 U
Naphthalene			µg/L	9.4 U	9.6 U	9.6 U
Phenanthrene			µg/L	9.4 U	9.6 U	9.6 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-97: Well M028-C, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 UJ		
Jet Fuel #5 (JP5)			µg/L	50 UJ		
TPH, as motor oil			µg/L	300 UJ		
TPH as Gasoline						
TPH, as gasoline			µg/L	50 U		
TPH (calculated)						
Total TPH (calculated)			µg/L	300 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-98: Well M028-C, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000		µg/L	100 U	100 U	100 U
Antimony	6		µg/L	50 U	50 U	50 U
Arsenic	50		µg/L	**0.52 J**	5 U	**15 J**
Barium	1,000		µg/L	**150**	**200**	270 U
Beryllium	4		µg/L	2 U	2 U	2 U
Cadmium	5		µg/L	5 U	5 U	5 U
Chromium	50		µg/L	**2.9 J**	10 U	10 UJ
Cobalt			µg/L	10 U	**0.59 J**	**0.47 J**
Copper	1,000		µg/L	**4.2 J**	10 U	**3.3 J**
Iron			µg/L	**6,300**	**7,200**	**6,100 J**
Lead	15		µg/L	3 U	3 U	**0.035 J**
Manganese			µg/L	**6,100**	**5,400**	**6,500**
Mercury	2		µg/L	0.2 U	0.2 U	0.2 U
Molybdenum			µg/L	20 U	**2.1 J**	**1.5 J**
Nickel	100		µg/L	20 U	**3.7 J**	**2.7 J**
Selenium	50		µg/L	5 U	5 U	**28 J**
Silver			µg/L	**1.5 J**	5 U	5 U
Vanadium			µg/L	**1.3 J**	10 U	10 UJ
Zinc			µg/L	20 U	20 U	20 U
Calcium			mg/L	**530**	**620**	**660**
Magnesium			mg/L	**1,000**	**940**	**950**
Potassium			mg/L	**110**	**100**	**110**
Sodium			mg/L	**5,700**	**5,300**	**5,600**
Cyanide						
Total Cyanide	0.2		mg/L	0.01 U	0.01 U	0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-99: Well M028-C, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	2.1 U	**5.68**	31.5 U3J
Gross Beta	50		pCi/L	**265**	**92.9**	**119**
Radium						
Radium			pCi/L	0.463 U	**0.913 J**	**1.92**

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-100: Well M028-C, Detected Natural Attenuation Data at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Anions						
Chloride			mg/L	**12,000**		**11,000**
Nitrate	45		mg/L	0.5 U		1.3 U
Nitrite	1		mg/L	0.5 U		1.3 U
Sulfate			mg/L	**1,300**		**1,400**
Sulfide						
Sulfide			mg/L	0.04 U		**0.18**
Alkalinity						
Alkalinity			mg/L	**450**		**440**
Alkalinity, bicarbonate			mg/L	**450**		**440**
Dissolved Gases						
Ethane			mg/L	0.01 U		0.01 U
Ethene			mg/L	0.01 U		0.01 U
Methane			mg/L	0.01 U		0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-101: Well M028-E, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L			**24 J**
Benzene	1		µg/L			**66**
tert-butyl alcohol			µg/L			250 U
N-butylbenzene			µg/L			13 U
sec-butylbenzene			µg/L			**13**
tert-butylbenzene			µg/L			13 U
Carbon Disulfide			µg/L			13 U
Carbon Tetrachloride	0.5		µg/L			13 U
Chlorobenzene	70		µg/L			**66**
Chloroethane			µg/L			25 U
Chloroform			µg/L			13 U
1,2-Dichlorobenzene	600		µg/L			**53**
1,3-Dichlorobenzene			µg/L			13 U
1,4-Dichlorobenzene	5		µg/L			**13**
1,1-Dichloroethane	5		µg/L			**18**
1,2-Dichloroethane	0.5		µg/L			13 U
1,1-Dichloroethene	6		µg/L			**4.9 J**
cis-1,2-Dichloroethene	6		µg/L			**6,400**
trans-1,2-Dichloroethene	10		µg/L			**8.5 J**
1,2-Dichloropropane	5		µg/L			13 U
Ethylbenzene	300		µg/L			**72**
2-Hexanone			µg/L			250 U
Isopropyl Ether			µg/L			13 U
Isopropylbenzene			µg/L			**20**
p-Isopropyltoluene			µg/L			15 U
Methyl isobutyl ketone			µg/L			250 U
Methyl tert-butyl ether	13		µg/L			13 U
N-propylbenzene			µg/L			**15**
Naphthalene			µg/L			200 U
Tetrachloroethene	5		µg/L			13 U
Toluene	150		µg/L			**1,400**
1,1,1-Trichloroethane	200		µg/L			13 U
Trichloroethene	5		µg/L			**13**
1,2,4-Trimethylbenzene			µg/L			**160**
1,3,5-Trimethylbenzene			µg/L			**30**
Vinyl Chloride	0.5		µg/L			**11,000**
M,p-xylene	1,750		µg/L			**240**
O-xylene	1,750		µg/L			**110**

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-102: Well M028-E, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L			240 U
Anthracene			µg/L			240 U
Benzoic acid			µg/L			**1,600 J**
bis(2-Chloroethyl)ether			µg/L			240 U
bis(2-chloroisopropyl) ether			µg/L			240 U
bis(2-Ethylhexyl)phthalate	4		µg/L			240 U
Dibenzofuran			µg/L			240 U
1,2-Dichlorobenzene	600		µg/L			240 U
1,3-Dichlorobenzene			µg/L			240 U
1,4-Dichlorobenzene	5		µg/L			240 U
2,4-Dimethylphenol			µg/L			**2,200**
Dimethylphthalate			µg/L			240 U
Fluoranthene			µg/L			240 U
Fluorene			µg/L			240 U
2-Methylnaphthalene			µg/L			240 U
2-Methylphenol			µg/L			**410**
4-Methylphenol			µg/L			**38 J**
N-Nitrosodiphenylamine			µg/L			240 U
Naphthalene			µg/L			**64 J**
Phenanthrene			µg/L			240 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-103: Well M028-E, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000	439	µg/L			**34 J**
Antimony	6	46	µg/L			**0.34 J**
Arsenic	50	28	µg/L			**20**
Barium	1,000	575	µg/L			**140**
Beryllium	4	3.8	µg/L			2 U
Cadmium	5	5.4	µg/L			5 U
Chromium	50	14	µg/L			10 U
Cobalt		12	µg/L			**0.72 J**
Copper	1,000	27	µg/L			**0.52 J**
Iron		7,135	µg/L			**18,000**
Lead	15	3.9	µg/L			**0.078 J**
Manganese		5,213	µg/L			**1,700**
Mercury	2	0.15	µg/L			0.2 U
Molybdenum		12	µg/L			20 U
Nickel	100	19	µg/L			**1.5 J**
Selenium	50	6.0	µg/L			5 U
Silver		3.3	µg/L			5 U
Vanadium		29	µg/L			10 UJ
Zinc		43	µg/L			**7.4 J**
Calcium		379	mg/L			**130**
Magnesium		500	mg/L			**35**
Potassium		182	mg/L			**42**
Sodium		4,540	mg/L			**79**
Cyanide						
Total Cyanide	0.2		mg/L			0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-104: Well M028-E, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L			1.49 U3J
Gross Beta	50		pCi/L			**36.3**
Radium						
Radium			pCi/L			**0.943**

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-105: Well M028-E, Detected Natural Attenuation Data at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Anions						
Chloride			mg/L			**190**
Nitrate	45		mg/L			0.05 U
Nitrite	1		mg/L			0.05 U
Sulfate			mg/L			0.5 U
Sulfide						
Sulfide			mg/L			**0.11**
Alkalinity						
Alkalinity			mg/L			**360**
Alkalinity, bicarbonate			mg/L			**360**
Dissolved Gases						
Ethane			mg/L			**1.9**
Ethene			mg/L			**9.2**
Methane			mg/L			**14**

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-106: Well M029-A, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	10 U	10 U	10 U
Benzene	1		µg/L	**2.4**	**2**	**3**
tert-butyl alcohol			µg/L	20 U	20 U	10 U
N-butylbenzene			µg/L	**0.8**	0.5 U	0.5 U
sec-butylbenzene			µg/L	**0.7**	**0.7**	**0.8**
tert-butylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Carbon Disulfide			µg/L	0.5 U	0.5 U	0.5 U
Carbon Tetrachloride	0.5		µg/L	0.5 U	0.5 U	0.5 U
Chlorobenzene	70		µg/L	**0.3 J**	**0.5**	**0.5**
Chloroethane			µg/L	1 U	1 U	1 U
Chloroform			µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U	0.5 U	**0.2 J**
1,1-Dichloroethene	6		µg/L	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**0.3 J**	0.5 U	**0.3 J**
trans-1,2-Dichloroethene	10		µg/L	**0.2 J**	0.5 U	**0.3 J**
1,2-Dichloropropane	5		µg/L	0.5 U	0.5 U	0.5 U
Ethylbenzene	300		µg/L	0.5 U	0.5 U	0.5 U
2-Hexanone			µg/L	10 U	10 U	10 U
Isopropyl Ether			µg/L	0.5 U	0.5 U	0.5 U
Isopropylbenzene			µg/L	**0.7**	**0.7**	**0.9**
p-Isopropyltoluene			µg/L	0.5 U	0.5 U	0.5 U
Methyl isobutyl ketone			µg/L	10 U	10 U	10 U
Methyl tert-butyl ether	13		µg/L	0.5 U	0.5 U	0.5 U
N-propylbenzene			µg/L	**0.7**	**0.7**	**0.6**
Naphthalene			µg/L	2 U	2 U	2 U
Tetrachloroethene	5		µg/L	0.5 U	0.5 U	0.5 U
Toluene	150		µg/L	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U	0.5 U	0.5 U
Trichloroethene	5		µg/L	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U	0.5 U	**0.5 J**
1,3,5-Trimethylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U	**0.4 J**	0.5 U
M,p-xylene	1,750		µg/L	0.5 U	0.5 U	0.5 U
O-xylene	1,750		µg/L	0.5 U	0.5 U	**0.2 J**

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-107: Well M029-A, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	**4.1 J**	**6.6 J**	**6 J**
Anthracene			µg/L	**1.4 J**	9.6 U	9.4 U
Benzoic acid			µg/L	47 U	48 U	47 UJ
bis(2-Chloroethyl)ether			µg/L	**1.2 J**	9.6 U	9.4 U
bis(2-chloroisopropyl) ether			µg/L	**1.9 J**	**1.9 J**	**1.2 J**
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	9.6 U	9.4 U
Dibenzofuran			µg/L	**1.2 J**	**0.8 J**	9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U	9.6 U	9.4 U
1,3-Dichlorobenzene			µg/L	9.4 U	9.6 U	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U	9.6 U	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U	9.6 U	9.4 U
Dimethylphthalate			µg/L	9.4 U	9.6 U	9.4 U
Fluoranthene			µg/L	**1.3 J**	9.6 U	9.4 U
Fluorene			µg/L	**0.75 J**	**1.4 J**	**1.4 J**
2-Methylnaphthalene			µg/L	9.4 U	9.6 U	9.4 U
2-Methylphenol			µg/L	9.4 U	9.6 U	9.4 U
4-Methylphenol			µg/L	9.4 U	9.6 U	9.4 U
N-Nitrosodiphenylamine			µg/L	9.4 U	9.6 U	9.4 U
Naphthalene			µg/L	9.4 U	9.6 U	9.4 U
Phenanthrene			µg/L	**0.96 J**	**0.88 J**	9.4 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-108: Well M029-A, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 U		
Jet Fuel #5 (JP5)			µg/L	50 U		
TPH, as motor oil			µg/L	300 U		
TPH as Gasoline						
TPH, as gasoline			µg/L	79 Uh		
TPH (calculated)						
Total TPH (calculated)			µg/L	300 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-109: Well M029-A, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000	439	µg/L	**34 J**	100 U	**39 J**
Antimony	6	46	µg/L	**0.054 J**	50 U	**0.34 J**
Arsenic	50	28	µg/L	**0.71 J**	5 U	5 U
Barium	1,000	575	µg/L	**260**	**220**	**200**
Beryllium	4	3.8	µg/L	2 U	2 U	2 U
Cadmium	5	5.4	µg/L	5 U	5 U	5 U
Chromium	50	14	µg/L	**0.66 J**	10 U	10 U
Cobalt		12	µg/L	**0.081 J**	10 U	**0.14 J**
Copper	1,000	27	µg/L	**0.19 J**	10 U	**0.59 J**
Iron		7,135	µg/L	**230**	**190**	300 U
Lead	15	3.9	µg/L	3 U	3 U	**0.081 J**
Manganese		5,213	µg/L	**49**	**51**	**64**
Mercury	2	0.15	µg/L	0.2 U	0.2 U	0.2 U
Molybdenum		12	µg/L	20 U	**0.64 J**	**0.79 J**
Nickel	100	19	µg/L	**0.21 J**	20 U	**1.7 J**
Selenium	50	6.0	µg/L	**0.55 J**	5 U	5 U
Silver		3.3	µg/L	5 UJ	5 U	5 U
Vanadium		29	µg/L	**0.17 J**	10 U	10 U
Zinc		43	µg/L	20 U	20 U	**4.5 J**
Calcium		379	mg/L	**23**	**20**	**23**
Magnesium		500	mg/L	**52 J**	**50**	**41**
Potassium		182	mg/L	**30**	**30**	**25**
Sodium		4,540	mg/L	**180**	**170**	**150**
Cyanide						
Total Cyanide	0.2		mg/L	**0.03**	0.01 U	0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-110: Well M029-A, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	**0.93**	0.774 U2	1.37 U4J
Gross Beta	50		pCi/L	**15.1**	**30.8**	**26.4**
Radium						
Radium			pCi/L	0.067 U3	0.248 U4J	0.834 U4

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-111: Well M029-E, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	10 U		10 U
Benzene	1		µg/L	**1.2**		**1**
tert-butyl alcohol			µg/L	20 U		10 U
N-butylbenzene			µg/L	0.5 U		0.5 U
sec-butylbenzene			µg/L	0.5 U		0.5 U
tert-butylbenzene			µg/L	0.5 U		0.5 U
Carbon Disulfide			µg/L	**1.5**		0.5 U
Carbon Tetrachloride	0.5		µg/L	0.5 U		0.5 U
Chlorobenzene	70		µg/L	0.5 U		**0.3 J**
Chloroethane			µg/L	1 U		1 U
Chloroform			µg/L	0.5 U		0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U		0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U		0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U		0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U		0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U		0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U		0.5 U
cis-1,2-Dichloroethene	6		µg/L	**0.4 J**		**0.4 J**
trans-1,2-Dichloroethene	10		µg/L	**0.4 J**		**0.3 J**
1,2-Dichloropropane	5		µg/L	0.5 U		0.5 U
Ethylbenzene	300		µg/L	0.5 U		**0.2 J**
2-Hexanone			µg/L	10 U		10 U
Isopropyl Ether			µg/L	0.5 U		0.5 U
Isopropylbenzene			µg/L	0.5 U		**0.5 J**
p-Isopropyltoluene			µg/L	0.5 U		0.5 U
Methyl isobutyl ketone			µg/L	10 U		10 U
Methyl tert-butyl ether	13		µg/L	0.5 U		0.5 U
N-propylbenzene			µg/L	0.5 U		0.5 U
Naphthalene			µg/L	2 U		**1 J**
Tetrachloroethene	5		µg/L	0.5 U		0.5 U
Toluene	150		µg/L	0.5 U		0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U		0.5 U
Trichloroethene	5		µg/L	0.5 U		0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U		0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U		0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U		**0.6**
M,p-xylene	1,750		µg/L	0.5 U		0.5 U
O-xylene	1,750		µg/L	0.5 U		**0.2 J**

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-112: Well M029-E, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	**1.1 J**		9.4 U
Anthracene			µg/L	**1.4 J**		9.4 U
Benzoic acid			µg/L	47 U		47 U
bis(2-Chloroethyl)ether			µg/L	**0.79 J**		9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U		9.4 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U		**20**
Dibenzofuran			µg/L	**0.89 J**		9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U		9.4 U
1,3-Dichlorobenzene			µg/L	9.4 U		9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U		9.4 U
2,4-Dimethylphenol			µg/L	9.4 U		9.4 U
Dimethylphthalate			µg/L	9.4 U		9.4 U
Fluoranthene			µg/L	**1.6 J**		9.4 U
Fluorene			µg/L	9.4 U		9.4 U
2-Methylnaphthalene			µg/L	9.4 U		9.4 U
2-Methylphenol			µg/L	9.4 U		9.4 U
4-Methylphenol			µg/L	9.4 U		9.4 U
N-Nitrosodiphenylamine			µg/L	9.4 U		9.4 U
Naphthalene			µg/L	**4.1 J**		9.4 U
Phenanthrene			µg/L	**0.99 J**		9.4 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-113: Well M029-E, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 U		
Jet Fuel #5 (JP5)			µg/L	50 U		
TPH, as motor oil			µg/L	300 U		
TPH as Gasoline						
TPH, as gasoline			µg/L	50 U		
TPH (calculated)						
Total TPH (calculated)			µg/L	300 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-114: Well M029-E, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000	439	µg/L	100 U		**5.2 J**
Antimony	6	46	µg/L	**0.077 J**		**0.25 J**
Arsenic	50	28	µg/L	**0.8 J**		5 U
Barium	1,000	575	µg/L	**390**		**310**
Beryllium	4	3.8	µg/L	2 U		2 U
Cadmium	5	5.4	µg/L	5 U		5 U
Chromium	50	14	µg/L	**0.47 J**		10 U
Cobalt		12	µg/L	**0.049 J**		**0.057 J**
Copper	1,000	27	µg/L	**0.088 J**		**0.44 J**
Iron		7,135	µg/L	**280**		290 U
Lead	15	3.9	µg/L	3 U		**0.051 J**
Manganese		5,213	µg/L	**25**		**24**
Mercury	2	0.15	µg/L	0.2 U		**0.095 J**
Molybdenum		12	µg/L	20 U		**0.89 J**
Nickel	100	19	µg/L	**0.23 J**		**0.16 J**
Selenium	50	6.0	µg/L	**1.2 J**		**0.41 J**
Silver		3.3	µg/L	5 UJ		5 U
Vanadium		29	µg/L	**0.11 J**		10 U
Zinc		43	µg/L	20 U		**0.92 J**
Calcium		379	mg/L	**23**		**19**
Magnesium		500	mg/L	**33 J**		**27**
Potassium		182	mg/L	**26**		**22**
Sodium		4,540	mg/L	**270**		**220**
Cyanide						
Total Cyanide	0.2		mg/L	**0.03**		0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-115: Well M029-E, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	0.623 U2		1.41 U4J
Gross Beta	50		pCi/L	**9.49**		**22.1**
Radium						
Radium			pCi/L	0.333 U2		1.11 U4

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-116: Well M030-A, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	10 U	10 U	10 U
Benzene	1		µg/L	0.5 U	0.5 U	0.5 U
tert-butyl alcohol			µg/L	20 U	20 U	10 U
N-butylbenzene			µg/L	0.5 U	0.5 U	0.5 U
sec-butylbenzene			µg/L	0.5 U	0.5 U	0.5 U
tert-butylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Carbon Disulfide			µg/L	0.5 U	0.5 U	0.5 U
Carbon Tetrachloride	0.5		µg/L	0.5 U	0.5 U	0.5 UJ
Chlorobenzene	70		µg/L	0.5 U	0.5 U	0.5 U
Chloroethane			µg/L	1 U	1 U	1 U
Chloroform			µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U	0.5 U	0.5 U
Ethylbenzene	300		µg/L	0.5 U	0.5 U	0.5 U
2-Hexanone			µg/L	10 U	10 U	10 U
Isopropyl Ether			µg/L	0.5 U	0.5 U	0.5 U
Isopropylbenzene			µg/L	0.5 U	0.5 U	0.5 U
p-Isopropyltoluene			µg/L	0.5 U	0.5 U	0.5 U
Methyl isobutyl ketone			µg/L	10 U	10 U	10 U
Methyl tert-butyl ether	13		µg/L	0.5 U	0.5 U	0.5 U
N-propylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Naphthalene			µg/L	**0.7 J**	2 U	2 U
Tetrachloroethene	5		µg/L	0.5 U	0.5 U	0.5 UJ
Toluene	150		µg/L	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U	0.5 U	0.5 U
Trichloroethene	5		µg/L	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U	0.5 U	0.5 U
M,p-xylene	1,750		µg/L	0.5 U	0.5 U	0.5 U
O-xylene	1,750		µg/L	0.5 U	0.5 U	0.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-117: Well M030-A, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	9.4 U	9.4 U	9.6 U
Anthracene			µg/L	9.4 U	9.4 U	9.6 U
Benzoic acid			µg/L	47 U	47 UJ	48 U
bis(2-Chloroethyl)ether			µg/L	9.4 U	9.4 U	9.6 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U	9.4 U	9.6 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	**350**	9.6 U
Dibenzofuran			µg/L	9.4 U	9.4 U	9.6 U
1,2-Dichlorobenzene	600		µg/L	9.4 U	9.4 U	9.6 U
1,3-Dichlorobenzene			µg/L	9.4 U	9.4 U	9.6 U
1,4-Dichlorobenzene	5		µg/L	9.4 U	9.4 U	9.6 U
2,4-Dimethylphenol			µg/L	9.4 U	9.4 U	9.6 U
Dimethylphthalate			µg/L	9.4 U	9.4 U	9.6 U
Fluoranthene			µg/L	9.4 U	9.4 U	9.6 U
Fluorene			µg/L	9.4 U	9.4 U	9.6 U
2-Methylnaphthalene			µg/L	9.4 U	9.4 U	9.6 U
2-Methylphenol			µg/L	9.4 U	9.4 U	9.6 U
4-Methylphenol			µg/L	9.4 U	9.4 U	9.6 U
N-Nitrosodiphenylamine			µg/L	9.4 U	9.4 U	9.6 U
Naphthalene			µg/L	9.4 U	9.4 U	9.6 U
Phenanthrene			µg/L	9.4 U	9.4 U	9.6 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-118: Well M030-A, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 U		
Jet Fuel #5 (JP5)			µg/L	50 U		
TPH, as motor oil			µg/L	300 U		
TPH as Gasoline						
TPH, as gasoline			µg/L	50 U		
TPH (calculated)						
Total TPH (calculated)			µg/L	300 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-119: Well M030-A, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000	439	µg/L	**3.4 J**	100 U	**27 J**
Antimony	6	46	µg/L	**0.89 J**	**0.72 J**	50 U
Arsenic	50	28	µg/L	**2.2 J**	5 U	**2.6 J**
Barium	1,000	575	µg/L	**26**	**33**	**26**
Beryllium	4	3.8	µg/L	2 U	2 U	2 U
Cadmium	5	5.4	µg/L	5 U	5 U	5 U
Chromium	50	14	µg/L	**0.22 J**	10 U	10 U
Cobalt		12	µg/L	**0.042 J**	10 U	**0.59 J**
Copper	1,000	27	µg/L	**1.4 J**	**5.3 J**	**4.8 J**
Iron		7,135	µg/L	**57 J**	110 U	**250**
Lead	15	3.9	µg/L	3 U	3 U	**0.36 J**
Manganese		5,213	µg/L	**1.7 J**	**29**	**2.7 J**
Mercury	2	0.15	µg/L	0.2 U	0.2 U	0.2 U
Molybdenum		12	µg/L	20 U	**2.2 J**	**1.8 J**
Nickel	100	19	µg/L	**2.5 J**	**2.6 J**	**7.4 J**
Selenium	50	6.0	µg/L	**0.36 J**	5 U	**0.46 J**
Silver		3.3	µg/L	5 UJ	5 U	5 U
Vanadium		29	µg/L	**3.1 J**	10 UJ	**4.4 J**
Zinc		43	µg/L	20 U	20 U	**11 J**
Calcium		379	mg/L	**30**	**33**	**36**
Magnesium		500	mg/L	**6.2**	**8.5**	**8.6**
Potassium		182	mg/L	**6.9**	**8.9**	**3.7**
Sodium		4,540	mg/L	**17**	17 U	**15**
Cyanide						
Total Cyanide	0.2		mg/L	**0.02**	0.01 U	0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-120: Well M030-A, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	0.105 U2	1.01 U4	0.466 U4J
Gross Beta	50		pCi/L	**3.56**	**9.21**	**3**
Radium						
Radium			pCi/L	0.068 U3	0.057 U3J	1.34 U4

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-121: Well M030-C, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	**1.5 J**		10 U
Benzene	1		µg/L	0.5 U		0.5 U
tert-butyl alcohol			µg/L	**8.4 J**		10 U
N-butylbenzene			µg/L	0.5 U		0.5 U
sec-butylbenzene			µg/L	0.5 U		0.5 U
tert-butylbenzene			µg/L	0.5 U		0.5 U
Carbon Disulfide			µg/L	0.5 U		0.5 U
Carbon Tetrachloride	0.5		µg/L	0.5 U		0.5 UJ
Chlorobenzene	70		µg/L	0.5 U		0.5 U
Chloroethane			µg/L	1 U		1 U
Chloroform			µg/L	0.5 U		0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U		0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U		0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U		0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U		0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U		0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U		0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U		0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U		0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U		0.5 U
Ethylbenzene	300		µg/L	0.5 U		0.5 U
2-Hexanone			µg/L	10 UJ		10 U
Isopropyl Ether			µg/L	0.5 U		0.5 U
Isopropylbenzene			µg/L	0.5 U		0.5 U
p-Isopropyltoluene			µg/L	0.5 U		0.5 U
Methyl isobutyl ketone			µg/L	10 U		10 U
Methyl tert-butyl ether	13		µg/L	0.5 U		0.5 U
N-propylbenzene			µg/L	0.5 U		0.5 U
Naphthalene			µg/L	2 U		2 U
Tetrachloroethene	5		µg/L	0.5 U		0.5 UJ
Toluene	150		µg/L	0.5 U		0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U		0.5 U
Trichloroethene	5		µg/L	0.5 U		0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U		0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U		0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U		0.5 U
M,p-xylene	1,750		µg/L	0.5 U		0.5 U
O-xylene	1,750		µg/L	0.5 U		0.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-122: Well M030-C, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	9.7 U		9.4 U
Anthracene			µg/L	9.7 U		9.4 U
Benzoic acid			µg/L	49 U		47 U
bis(2-Chloroethyl)ether			µg/L	9.7 U		9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.7 U		9.4 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.7 U		**4.8 J**
Dibenzofuran			µg/L	9.7 U		9.4 U
1,2-Dichlorobenzene	600		µg/L	9.7 U		9.4 U
1,3-Dichlorobenzene			µg/L	9.7 U		9.4 U
1,4-Dichlorobenzene	5		µg/L	9.7 U		9.4 U
2,4-Dimethylphenol			µg/L	9.7 U		9.4 U
Dimethylphthalate			µg/L	9.7 U		9.4 U
Fluoranthene			µg/L	9.7 U		9.4 U
Fluorene			µg/L	9.7 U		9.4 U
2-Methylnaphthalene			µg/L	9.7 U		9.4 U
2-Methylphenol			µg/L	9.7 U		9.4 U
4-Methylphenol			µg/L	9.7 U		9.4 U
N-Nitrosodiphenylamine			µg/L	9.7 U		9.4 U
Naphthalene			µg/L	9.7 U		9.4 U
Phenanthrene			µg/L	9.7 U		9.4 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-123: Well M030-C, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 UJ		
Jet Fuel #5 (JP5)			µg/L	50 UJ		
TPH, as motor oil			µg/L	300 UJ		
TPH as Gasoline						
TPH, as gasoline			µg/L	50 U		
TPH (calculated)						
Total TPH (calculated)			µg/L	300 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-124: Well M030-C, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000		µg/L	100 UJ		**4.9 J**
Antimony	6		µg/L	50 U		50 U
Arsenic	50		µg/L	5 U		5 U
Barium	1,000		µg/L	**53**		**69**
Beryllium	4		µg/L	2 U		2 U
Cadmium	5		µg/L	5 U		5 U
Chromium	50		µg/L	10 U		10 U
Cobalt			µg/L	10 U		**1.5 J**
Copper	1,000		µg/L	10 U		**9.1 J**
Iron			µg/L	**370**		**2,100**
Lead	15		µg/L	3 U		**0.071 J**
Manganese			µg/L	**3,900**		**3,500**
Mercury	2		µg/L	**0.27**		0.2 U
Molybdenum			µg/L	20 U		**4.9 J**
Nickel	100		µg/L	20 U		**9.1 J**
Selenium	50		µg/L	5 U		**54**
Silver			µg/L	5 U		5 U
Vanadium			µg/L	**6.8 J**		**4.4 J**
Zinc			µg/L	20 U		20 U
Calcium			mg/L	**390**		**370**
Magnesium			mg/L	**1,000**		**980**
Potassium			mg/L	**150**		**170**
Sodium			mg/L	**8,100**		**7,700**
Cyanide						
Total Cyanide	0.2		mg/L	0.01 UR		0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-125: Well M030-C, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	**8.12**		66.8 U3J
Gross Beta	50		pCi/L	**261**		**142**
Radium						
Radium			pCi/L	**0.754**		**1.55**

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-126: Well M031-A, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	10 U	10 U	10 U
Benzene	1		µg/L	0.5 U	0.5 U	0.5 U
tert-butyl alcohol			µg/L	20 U	20 U	10 UJ
N-butylbenzene			µg/L	0.5 U	0.5 U	0.5 U
sec-butylbenzene			µg/L	0.5 U	0.5 U	0.5 U
tert-butylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Carbon Disulfide			µg/L	0.5 U	0.5 U	0.5 U
Carbon Tetrachloride	0.5		µg/L	0.5 U	0.5 U	0.5 U
Chlorobenzene	70		µg/L	0.5 U	0.5 U	0.5 U
Chloroethane			µg/L	1 U	1 U	1 U
Chloroform			µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**0.8**	**0.6**	**0.6**
trans-1,2-Dichloroethene	10		µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U	0.5 U	0.5 U
Ethylbenzene	300		µg/L	0.5 U	0.5 U	0.5 U
2-Hexanone			µg/L	10 U	10 U	10 U
Isopropyl Ether			µg/L	0.5 U	0.5 U	0.5 UJ
Isopropylbenzene			µg/L	0.5 U	0.5 U	0.5 U
p-Isopropyltoluene			µg/L	0.5 U	0.5 U	0.5 U
Methyl isobutyl ketone			µg/L	10 U	10 U	10 U
Methyl tert-butyl ether	13		µg/L	0.5 U	0.5 U	0.5 U
N-propylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Naphthalene			µg/L	2 U	2 U	2 U
Tetrachloroethene	5		µg/L	0.5 U	0.5 U	0.5 U
Toluene	150		µg/L	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U	0.5 U	0.5 U
Trichloroethene	5		µg/L	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U	0.5 U	0.5 U
M,p-xylene	1,750		µg/L	0.5 U	0.5 U	0.5 U
O-xylene	1,750		µg/L	0.5 U	0.5 U	0.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-127: Well M031-A, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	9.4 U	9.6 U	9.4 U
Anthracene			µg/L	9.4 U	9.6 U	9.4 U
Benzoic acid			µg/L	47 U	48 U	47 UJ
bis(2-Chloroethyl)ether			µg/L	9.4 U	9.6 U	9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U	9.6 U	9.4 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	9.6 U	9.4 U
Dibenzofuran			µg/L	9.4 U	9.6 U	9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U	9.6 U	9.4 U
1,3-Dichlorobenzene			µg/L	9.4 U	9.6 U	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U	9.6 U	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U	9.6 U	9.4 U
Dimethylphthalate			µg/L	9.4 U	9.6 U	9.4 U
Fluoranthene			µg/L	9.4 U	9.6 U	9.4 U
Fluorene			µg/L	9.4 U	9.6 U	9.4 U
2-Methylnaphthalene			µg/L	9.4 U	9.6 U	9.4 U
2-Methylphenol			µg/L	9.4 U	9.6 U	9.4 U
4-Methylphenol			µg/L	9.4 U	9.6 U	9.4 U
N-Nitrosodiphenylamine			µg/L	9.4 U	9.6 U	9.4 U
Naphthalene			µg/L	9.4 U	9.6 U	9.4 U
Phenanthrene			µg/L	9.4 U	9.6 U	9.4 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-128: Well M031-A, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 UJ		
Jet Fuel #5 (JP5)			µg/L	50 UJ		
TPH, as motor oil			µg/L	300 UJ		
TPH as Gasoline						
TPH, as gasoline			µg/L	50 U		
TPH (calculated)						
Total TPH (calculated)			µg/L	300 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-129: Well M031-A, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000	439	µg/L	100 U	100 U	**54 J**
Antimony	6	46	µg/L	50 U	50 U	**0.86 J**
Arsenic	50	28	µg/L	**3 J**	**3.5 J**	**3.3 J**
Barium	1,000	575	µg/L	**34**	**39**	**46**
Beryllium	4	3.8	µg/L	2 U	2 U	2 U
Cadmium	5	5.4	µg/L	5 U	5 U	5 U
Chromium	50	14	µg/L	**0.35 J**	10 U	10 U
Cobalt		12	µg/L	10 U	10 U	**0.22 J**
Copper	1,000	27	µg/L	10 U	10 U	**7.1 J**
Iron		7,135	µg/L	**150**	**200**	210 U
Lead	15	3.9	µg/L	3 U	3 U	**0.11 J**
Manganese		5,213	µg/L	**330**	**210**	**300**
Mercury	2	0.15	µg/L	0.2 U	0.2 U	0.2 U
Molybdenum		12	µg/L	**3.4 J**	**2.9 J**	**3.1 J**
Nickel	100	19	µg/L	**1.4 J**	20 U	**2.2 J**
Selenium	50	6.0	µg/L	**0.37 J**	5 U	5 U
Silver		3.3	µg/L	5 UR	5 U	5 U
Vanadium		29	µg/L	**1 J**	**6.4 J**	**2.7 J**
Zinc		43	µg/L	20 U	20 UJ	**3.8 J**
Calcium		379	mg/L	**33**	**30**	**48**
Magnesium		500	mg/L	**12**	**11**	**15**
Potassium		182	mg/L	**13**	**16**	**12**
Sodium		4,540	mg/L	**65**	**72**	**50**
Cyanide						
Total Cyanide	0.2		mg/L	0.01 U	0.01 U	0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-130: Well M031-A, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	0.868 U2	0.193 U2	0.787 U4J
Gross Beta	50		pCi/L	**14.9**	**17.6**	**10.7**
Radium						
Radium			pCi/L	0.066 U3	0.276 U2J	0.696 U3

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-131: Well M031-C, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	10 U		10 U
Benzene	1		µg/L	0.5 U		0.5 U
tert-butyl alcohol			µg/L	20 U		10 UJ
N-butylbenzene			µg/L	0.5 U		0.5 U
sec-butylbenzene			µg/L	0.5 U		0.5 UJ
tert-butylbenzene			µg/L	0.5 U		0.5 U
Carbon Disulfide			µg/L	0.5 U		**2.6**
Carbon Tetrachloride	0.5		µg/L	0.5 U		0.5 U
Chlorobenzene	70		µg/L	0.5 U		0.5 U
Chloroethane			µg/L	1 U		1 U
Chloroform			µg/L	0.5 U		0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U		0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U		0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U		0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U		0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U		0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U		0.5 U
cis-1,2-Dichloroethene	6		µg/L	0.5 U		0.5 U
trans-1,2-Dichloroethene	10		µg/L	0.5 U		0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U		0.5 U
Ethylbenzene	300		µg/L	0.5 U		0.5 U
2-Hexanone			µg/L	10 U		**0.5 J**
Isopropyl Ether			µg/L	0.5 U		0.5 UJ
Isopropylbenzene			µg/L	0.5 U		0.5 U
p-Isopropyltoluene			µg/L	0.5 U		0.5 U
Methyl isobutyl ketone			µg/L	10 U		10 U
Methyl tert-butyl ether	13		µg/L	0.5 U		0.5 U
N-propylbenzene			µg/L	0.5 U		0.5 U
Naphthalene			µg/L	2 U		**0.9 J**
Tetrachloroethene	5		µg/L	0.5 U		0.5 U
Toluene	150		µg/L	0.5 U		0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U		0.5 U
Trichloroethene	5		µg/L	0.5 U		0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U		0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U		0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U		0.5 U
M,p-xylene	1,750		µg/L	0.5 U		0.5 U
O-xylene	1,750		µg/L	0.5 U		0.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-132: Well M031-C, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	9.5 U		9.6 U
Anthracene			µg/L	9.5 U		9.6 U
Benzoic acid			µg/L	48 U		48 U
bis(2-Chloroethyl)ether			µg/L	9.5 U		9.6 U
bis(2-chloroisopropyl) ether			µg/L	9.5 U		9.6 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.5 U		9.6 U
Dibenzofuran			µg/L	9.5 U		9.6 U
1,2-Dichlorobenzene	600		µg/L	9.5 U		9.6 U
1,3-Dichlorobenzene			µg/L	9.5 U		9.6 U
1,4-Dichlorobenzene	5		µg/L	9.5 U		9.6 U
2,4-Dimethylphenol			µg/L	9.5 U		9.6 U
Dimethylphthalate			µg/L	9.5 U		9.6 U
Fluoranthene			µg/L	9.5 U		9.6 U
Fluorene			µg/L	9.5 U		9.6 U
2-Methylnaphthalene			µg/L	9.5 U		9.6 U
2-Methylphenol			µg/L	9.5 U		9.6 U
4-Methylphenol			µg/L	9.5 U		9.6 U
N-Nitrosodiphenylamine			µg/L	9.5 U		9.6 U
Naphthalene			µg/L	9.5 U		9.6 U
Phenanthrene			µg/L	9.5 U		9.6 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-133: Well M031-C, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 UJ		
Jet Fuel #5 (JP5)			µg/L	50 UJ		
TPH, as motor oil			µg/L	300 UJ		
TPH as Gasoline						
TPH, as gasoline			µg/L	50 U		
TPH (calculated)						
Total TPH (calculated)			µg/L	300 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-134: Well M031-C, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000		µg/L	100 U		100 U
Antimony	6		µg/L	50 U		50 U
Arsenic	50		µg/L	**0.94 J**		**9.7 J**
Barium	1,000		µg/L	**92**		**99**
Beryllium	4		µg/L	2 U		2 U
Cadmium	5		µg/L	5 U		5 U
Chromium	50		µg/L	**2.8 J**		10 UJ
Cobalt			µg/L	10 U		**0.64 J**
Copper	1,000		µg/L	**3.6 J**		**2.6 J**
Iron			µg/L	**2,900**		**2,400 J**
Lead	15		µg/L	3 U		**0.048 J**
Manganese			µg/L	**5,700**		**6,800**
Mercury	2		µg/L	0.2 U		0.2 U
Molybdenum			µg/L	20 U		**1.4 J**
Nickel	100		µg/L	20 U		**3.8 J**
Selenium	50		µg/L	5 U		**27 J**
Silver			µg/L	**1.6 J**		5 U
Vanadium			µg/L	**1.1 J**		10 UJ
Zinc			µg/L	**470**		20 U
Calcium			mg/L	**450**		**510**
Magnesium			mg/L	**860**		**960**
Potassium			mg/L	**100**		**110**
Sodium			mg/L	**5,000**		**6,200**
Cyanide						
Total Cyanide	0.2		mg/L	0.01 U		0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-135: Well M031-C, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	**4.19**		38.6 U3J
Gross Beta	50		pCi/L	**250**		**108**
Radium						
Radium			pCi/L	**0.618**		**1.56**

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-136: Well M032-A, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	10 U		10 U
Benzene	1		µg/L	0.5 U		0.5 U
tert-butyl alcohol			µg/L	20 U		10 U
N-butylbenzene			µg/L	0.5 U		0.5 U
sec-butylbenzene			µg/L	0.5 U		0.5 U
tert-butylbenzene			µg/L	**0.2 J**		0.5 U
Carbon Disulfide			µg/L	0.5 U		0.5 U
Carbon Tetrachloride	0.5		µg/L	0.5 U		0.5 U
Chlorobenzene	70		µg/L	0.5 U		0.5 U
Chloroethane			µg/L	1 U		1 U
Chloroform			µg/L	0.5 U		0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U		0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U		0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U		0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U		0.5 U
1,2-Dichloroethane	0.5		µg/L	**0.8**		**0.8**
1,1-Dichloroethene	6		µg/L	0.5 U		0.5 U
cis-1,2-Dichloroethene	6		µg/L	**1**		**0.9**
trans-1,2-Dichloroethene	10		µg/L	0.5 U		0.5 U
1,2-Dichloropropane	5		µg/L	0.5 U		0.5 U
Ethylbenzene	300		µg/L	0.5 U		0.5 U
2-Hexanone			µg/L	10 U		10 U
Isopropyl Ether			µg/L	0.5 U		0.5 U
Isopropylbenzene			µg/L	0.5 U		0.5 U
p-Isopropyltoluene			µg/L	0.5 U		0.5 U
Methyl isobutyl ketone			µg/L	10 U		10 U
Methyl tert-butyl ether	13		µg/L	0.5 U		0.5 U
N-propylbenzene			µg/L	0.5 U		0.5 U
Naphthalene			µg/L	2 U		2 U
Tetrachloroethene	5		µg/L	0.5 U		0.5 U
Toluene	150		µg/L	0.5 U		0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U		0.5 U
Trichloroethene	5		µg/L	0.5 U		0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U		0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U		0.5 U
Vinyl Chloride	0.5		µg/L	**1**		**1.1**
M,p-xylene	1,750		µg/L	0.5 U		0.5 U
O-xylene	1,750		µg/L	0.5 U		0.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-137: Well M032-A, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	9.4 U		9.4 U
Anthracene			µg/L	9.4 U		9.4 U
Benzoic acid			µg/L	47 U		47 UJ
bis(2-Chloroethyl)ether			µg/L	9.4 U		9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U		9.4 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U		9.4 U
Dibenzofuran			µg/L	9.4 U		9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U		9.4 U
1,3-Dichlorobenzene			µg/L	9.4 U		9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U		9.4 U
2,4-Dimethylphenol			µg/L	9.4 U		9.4 U
Dimethylphthalate			µg/L	9.4 U		9.4 U
Fluoranthene			µg/L	**1.2 J**		9.4 U
Fluorene			µg/L	9.4 U		9.4 U
2-Methylnaphthalene			µg/L	9.4 U		9.4 U
2-Methylphenol			µg/L	9.4 U		9.4 U
4-Methylphenol			µg/L	9.4 U		9.4 U
N-Nitrosodiphenylamine			µg/L	9.4 U		9.4 U
Naphthalene			µg/L	9.4 U		9.4 U
Phenanthrene			µg/L	9.4 U		9.4 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-138: Well M032-A, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 U		
Jet Fuel #5 (JP5)			µg/L	50 U		
TPH, as motor oil			µg/L	300 U		
TPH as Gasoline						
TPH, as gasoline			µg/L	**17 J**		
TPH (calculated)						
Total TPH (calculated)			µg/L	**17 J**		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-139: Well M032-A, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000	439	µg/L	100 U		100 U
Antimony	6	46	µg/L	**0.059 J**		**0.064 J**
Arsenic	50	28	µg/L	5 U		**1.6 J**
Barium	1,000	575	µg/L	**83**		**110**
Beryllium	4	3.8	µg/L	2 U		2 U
Cadmium	5	5.4	µg/L	5 U		5 U
Chromium	50	14	µg/L	10 U		10 U
Cobalt		12	µg/L	**0.18 J**		**0.24 J**
Copper	1,000	27	µg/L	**0.28 J**		**0.56 J**
Iron		7,135	µg/L	**1,800**		**1,800**
Lead	15	3.9	µg/L	3 U		**0.052 J**
Manganese		5,213	µg/L	**530 J**		**560**
Mercury	2	0.15	µg/L	0.2 U		0.2 U
Molybdenum		12	µg/L	**1.7 J**		20 U
Nickel	100	19	µg/L	**0.77 J**		**1.4 J**
Selenium	50	6.0	µg/L	5 U		5 U
Silver		3.3	µg/L	5 U		5 U
Vanadium		29	µg/L	10 U		**0.66 J**
Zinc		43	µg/L	**7.4 J**		**3.3 J**
Calcium		379	mg/L	**74**		**81**
Magnesium		500	mg/L	**30 J**		**33**
Potassium		182	mg/L	**16**		**17**
Sodium		4,540	mg/L	**27**		**38**
Cyanide						
Total Cyanide	0.2		mg/L	0.01 U		0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-140: Well M032-A, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	**15.1**		7.29 U3
Gross Beta	50		pCi/L	**13.6**		**158**
Radium						
Radium			pCi/L	0.278 U2		0.45 U4

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-141: Well M032-A, Detected Natural Attenuation Data at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Sulfide						
Sulfide			mg/L	0.04 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-142: Well M033-A, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	10 U	10 U	10 U
Benzene	1		µg/L	0.5 U	0.5 U	0.5 U
tert-butyl alcohol			µg/L	20 U	20 U	10 UJ
N-butylbenzene			µg/L	0.5 U	0.5 U	0.5 U
sec-butylbenzene			µg/L	0.5 U	0.5 U	0.5 U
tert-butylbenzene			µg/L	**0.2 J**	**0.2 J**	0.5 U
Carbon Disulfide			µg/L	0.5 U	0.5 U	0.5 U
Carbon Tetrachloride	0.5		µg/L	0.5 U	0.5 U	0.5 U
Chlorobenzene	70		µg/L	0.5 U	0.5 U	0.5 U
Chloroethane			µg/L	1 U	1 U	1 U
Chloroform			µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U	0.5 U	**0.5 J**
1,3-Dichlorobenzene			µg/L	0.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5		µg/L	**0.3 J**	**0.3 J**	0.5 U
1,1-Dichloroethene	6		µg/L	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**7.9**	**5**	**16**
trans-1,2-Dichloroethene	10		µg/L	**0.5 J**	0.5 U	**0.8**
1,2-Dichloropropane	5		µg/L	0.5 U	0.5 U	0.5 U
Ethylbenzene	300		µg/L	0.5 U	0.5 U	0.5 U
2-Hexanone			µg/L	10 U	10 U	10 U
Isopropyl Ether			µg/L	0.5 U	0.5 U	0.5 UJ
Isopropylbenzene			µg/L	0.5 U	0.5 U	0.5 U
p-Isopropyltoluene			µg/L	0.5 U	0.5 U	0.5 U
Methyl isobutyl ketone			µg/L	10 U	10 U	10 U
Methyl tert-butyl ether	13		µg/L	0.5 U	0.5 U	0.5 U
N-propylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Naphthalene			µg/L	2 U	2 U	2 U
Tetrachloroethene	5		µg/L	0.5 U	0.5 U	0.5 U
Toluene	150		µg/L	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U	0.5 U	0.5 U
Trichloroethene	5		µg/L	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene			µg/L	0.5 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Vinyl Chloride	0.5		µg/L	**2.2**	**1.5**	**1.7**
M,p-xylene	1,750		µg/L	0.5 U	0.5 U	0.5 U
O-xylene	1,750		µg/L	0.5 U	0.5 U	0.5 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-143: Well M033-A, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	9.4 U	**1 J**	9.4 U
Anthracene			µg/L	9.4 U	9.4 U	9.4 U
Benzoic acid			µg/L	47 U	47 U	47 UJ
bis(2-Chloroethyl)ether			µg/L	9.4 U	9.4 U	9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U	9.4 U	9.4 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	9.4 U	**4.6 J**
Dibenzofuran			µg/L	9.4 U	9.4 U	9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U	9.4 U	9.4 U
1,3-Dichlorobenzene			µg/L	9.4 U	9.4 U	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U	9.4 U	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U	9.4 U	9.4 U
Dimethylphthalate			µg/L	9.4 U	9.4 U	9.4 U
Fluoranthene			µg/L	9.4 U	9.4 U	9.4 U
Fluorene			µg/L	9.4 U	9.4 U	9.4 U
2-Methylnaphthalene			µg/L	9.4 U	9.4 U	9.4 U
2-Methylphenol			µg/L	9.4 U	9.4 U	9.4 U
4-Methylphenol			µg/L	9.4 U	9.4 U	9.4 U
N-Nitrosodiphenylamine			µg/L	9.4 U	9.4 U	9.4 U
Naphthalene			µg/L	9.4 U	9.4 U	9.4 U
Phenanthrene			µg/L	9.4 U	9.4 U	9.4 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-144: Well M033-A, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 UJ		
Jet Fuel #5 (JP5)			µg/L	50 UJ		
TPH, as motor oil			µg/L	300 UJ		
TPH as Gasoline						
TPH, as gasoline			µg/L	140 Uly		
TPH (calculated)						
Total TPH (calculated)			µg/L	300 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-145: Well M033-A, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000	439	µg/L	100 U	100 U	**4.7 J**
Antimony	6	46	µg/L	50 U	50 U	**0.12 J**
Arsenic	50	28	µg/L	**5 J**	**4 J**	**4.6 J**
Barium	1,000	575	µg/L	**23**	**27**	**31**
Beryllium	4	3.8	µg/L	2 U	2 U	2 U
Cadmium	5	5.4	µg/L	5 U	5 U	5 U
Chromium	50	14	µg/L	**0.44 J**	10 U	10 U
Cobalt		12	µg/L	10 U	10 U	**0.13 J**
Copper	1,000	27	µg/L	10 U	10 U	**0.29 J**
Iron		7,135	µg/L	**960**	**1,100**	**890**
Lead	15	3.9	µg/L	**0.026 J**	3 U	**0.044 J**
Manganese		5,213	µg/L	**320**	**410**	**420**
Mercury	2	0.15	µg/L	0.2 U	0.2 U	0.2 U
Molybdenum		12	µg/L	20 U	**2.2 J**	**2.6 J**
Nickel	100	19	µg/L	**0.59 J**	20 U	**0.35 J**
Selenium	50	6.0	µg/L	5 U	5 U	5 U
Silver		3.3	µg/L	5 UR	5 U	5 U
Vanadium		29	µg/L	**0.48 J**	10 U	10 U
Zinc		43	µg/L	20 U	20 UJ	**0.78 J**
Calcium		379	mg/L	**51**	**65**	**69**
Magnesium		500	mg/L	**15**	**25**	**27**
Potassium		182	mg/L	**14**	**18**	**16**
Sodium		4,540	mg/L	**100**	**66**	**100**
Cyanide						
Total Cyanide	0.2		mg/L	0.01 U	0.01 U	0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-146: Well M033-A, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	**1**	0.19 U3	0.972 U1J
Gross Beta	50		pCi/L	**18.2**	**11.7**	**15.9**
Radium						
Radium			pCi/L	0.066 U3	0.068 U3J	0.849 U3

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-147: Well M033-A, Detected Natural Attenuation Data at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Anions						
Chloride			mg/L	**58**		**57**
Nitrate	45		mg/L	0.05 U		0.05 U
Nitrite	1		mg/L	0.05 U		0.05 U
Sulfate			mg/L	**2.5**		**15**
Sulfide						
Sulfide			mg/L	0.04 U		**0.06**
Alkalinity						
Alkalinity			mg/L	**340**		**440**
Alkalinity, bicarbonate			mg/L	**340**		**440**
Dissolved Gases						
Ethane			mg/L	0.01 U		0.01 U
Ethene			mg/L	0.01 U		0.01 U
Methane			mg/L	**2.5**		**2.1**

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-148: Well M034-A, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	10 U	10 U	20 U
Benzene	1		µg/L	**30**	**45**	**35**
tert-butyl alcohol			µg/L	20 U	20 U	20 U
N-butylbenzene			µg/L	0.5 U	**2.3**	**3.2**
sec-butylbenzene			µg/L	**3.4**	**3.9**	**3.9**
tert-butylbenzene			µg/L	**0.4 J**	**0.4 J**	1 U
Carbon Disulfide			µg/L	0.5 U	**0.8**	1 U
Carbon Tetrachloride	0.5		µg/L	0.5 U	0.5 U	1 U
Chlorobenzene	70		µg/L	**13**	**28**	**25**
Chloroethane			µg/L	1 U	1 U	2 U
Chloroform			µg/L	0.5 U	0.5 U	1 U
1,2-Dichlorobenzene	600		µg/L	**2.6**	**3.4**	**9.2**
1,3-Dichlorobenzene			µg/L	**0.6**	**0.8**	**1**
1,4-Dichlorobenzene	5		µg/L	**2.6**	**4.5**	**5.4**
1,1-Dichloroethane	5		µg/L	**0.5 J**	**2.2**	**2**
1,2-Dichloroethane	0.5		µg/L	0.5 U	0.5 U	1 U
1,1-Dichloroethene	6		µg/L	0.5 U	0.5 U	**2.9**
cis-1,2-Dichloroethene	6		µg/L	**0.4 J**	0.5 U	**32**
trans-1,2-Dichloroethene	10		µg/L	**0.3 J**	**0.4 J**	**1 J**
1,2-Dichloropropane	5		µg/L	0.5 U	0.5 U	**2.2**
Ethylbenzene	300		µg/L	**4**	**6.5**	**16**
2-Hexanone			µg/L	10 U	10 U	20 U
Isopropyl Ether			µg/L	**0.7**	**0.3 J**	1 U
Isopropylbenzene			µg/L	**4.9**	**6.2**	**5.6**
p-Isopropyltoluene			µg/L	**1.6**	**2.3**	**2.8**
Methyl isobutyl ketone			µg/L	10 U	10 U	**4.4 J**
Methyl tert-butyl ether	13		µg/L	0.5 U	0.5 U	1 U
N-propylbenzene			µg/L	**4.6**	**6.6**	**5.3**
Naphthalene			µg/L	**82**	**46**	**63**
Tetrachloroethene	5		µg/L	0.5 U	0.5 U	1 U
Toluene	150		µg/L	**1.2**	**1.7**	**530**
1,1,1-Trichloroethane	200		µg/L	0.5 U	0.5 U	1 U
Trichloroethene	5		µg/L	0.5 U	0.5 U	**0.7 J**
1,2,4-Trimethylbenzene			µg/L	**17**	**27**	**31**
1,3,5-Trimethylbenzene			µg/L	**0.4 J**	**1.9**	**4.2**
Vinyl Chloride	0.5		µg/L	**0.5 J**	0.5 U	**65**
M,p-xylene	1,750		µg/L	**10**	**29**	**50**
O-xylene	1,750		µg/L	**0.4 J**	**1.6**	**22**

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-149: Well M034-A, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	**3.4 J**	**1.9 J**	**1.7 J**
Anthracene			µg/L	9.4 U	9.6 U	9.4 U
Benzoic acid			µg/L	47 U	48 U	47 UJ
bis(2-Chloroethyl)ether			µg/L	9.4 U	9.6 U	9.4 U
bis(2-chloroisopropyl) ether			µg/L	**1.8 J**	**1.9 J**	9.4 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	9.6 U	9.4 U
Dibenzofuran			µg/L	**1.4 J**	9.6 U	**0.63 J**
1,2-Dichlorobenzene	600		µg/L	**1.9 J**	**2.5 J**	**4 J**
1,3-Dichlorobenzene			µg/L	9.4 U	**0.57 J**	9.4 U
1,4-Dichlorobenzene	5		µg/L	**1.8 J**	**3.2 J**	**5 J**
2,4-Dimethylphenol			µg/L	9.4 U	9.6 U	**25**
Dimethylphthalate			µg/L	9.4 U	9.6 U	9.4 U
Fluoranthene			µg/L	9.4 U	9.6 U	9.4 U
Fluorene			µg/L	9.4 U	**0.85 J**	9.4 U
2-Methylnaphthalene			µg/L	**3.8 J**	**6.7 J**	**7.8 J**
2-Methylphenol			µg/L	9.4 U	9.6 U	**1.4 J**
4-Methylphenol			µg/L	9.4 U	9.6 U	**2.9 J**
N-Nitrosodiphenylamine			µg/L	9.4 U	9.6 U	**1.9 J**
Naphthalene			µg/L	**59**	**32**	**50**
Phenanthrene			µg/L	9.4 U	9.6 U	9.4 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-150: Well M034-A, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	**46 Jly**		
Jet Fuel #5 (JP5)			µg/L	**190 J**		
TPH, as motor oil			µg/L	300 UJ		
TPH as Gasoline						
TPH, as gasoline			µg/L	**490 h**		
TPH (calculated)						
Total TPH (calculated)			µg/L	**726 J**		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-151: Well M034-A, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000	439	µg/L	100 U	100 U	100 U
Antimony	6	46	µg/L	50 U	50 U	**0.17 J**
Arsenic	50	28	µg/L	**12**	**13**	**13**
Barium	1,000	575	µg/L	**120**	**110**	**100**
Beryllium	4	3.8	µg/L	2 U	2 U	2 U
Cadmium	5	5.4	µg/L	5 U	5 U	**0.091 J**
Chromium	50	14	µg/L	**0.8 J**	10 U	10 U
Cobalt		12	µg/L	**0.61 J**	**0.73 J**	**0.82 J**
Copper	1,000	27	µg/L	10 U	10 U	**0.33 J**
Iron		7,135	µg/L	**5,800**	**5,900**	**4,700**
Lead	15	3.9	µg/L	**0.031 J**	3 U	**0.046 J**
Manganese		5,213	µg/L	**720**	**570**	**510**
Mercury	2	0.15	µg/L	0.2 U	0.2 U	0.2 U
Molybdenum		12	µg/L	20 U	**0.8 J**	20 U
Nickel	100	19	µg/L	**0.59 J**	20 U	**0.97 J**
Selenium	50	6.0	µg/L	**0.76 J**	5 U	5 U
Silver		3.3	µg/L	5 UR	5 U	5 U
Vanadium		29	µg/L	**0.44 J**	**6.4 J**	**0.72 J**
Zinc		43	µg/L	**4.6 J**	20 UJ	**1.3 J**
Calcium		379	mg/L	**59**	**56**	**56**
Magnesium		500	mg/L	**15**	**11**	**9.2**
Potassium		182	mg/L	**21**	**18**	**16**
Sodium		4,540	mg/L	**70**	**53**	**56**
Cyanide						
Total Cyanide	0.2		mg/L	0.01 U	0.01 U	0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-152: Well M034-A, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	**2.6**	**29.3**	0.823 U3
Gross Beta	50		pCi/L	**26.2**	**27.7**	**18.3**
Radium						
Radium			pCi/L	0.066 U3	0.068 U3J	0.639 U4

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-153: Well M035-A, Detected Volatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Volatile Organic Compounds						
Acetone			µg/L	10 U	10 U	10 U
Benzene	1		µg/L	0.5 U	0.5 U	0.5 U
tert-butyl alcohol			µg/L	20 U	20 U	10 U
N-butylbenzene			µg/L	0.5 U	0.5 U	0.5 U
sec-butylbenzene			µg/L	0.5 U	0.5 U	0.5 U
tert-butylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Carbon Disulfide			µg/L	0.5 U	0.5 U	0.5 U
Carbon Tetrachloride	0.5		µg/L	0.5 U	0.5 U	0.5 U
Chlorobenzene	70		µg/L	0.5 U	0.5 U	0.5 U
Chloroethane			µg/L	1 U	1 U	1 U
Chloroform			µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	600		µg/L	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene			µg/L	0.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	5		µg/L	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	5		µg/L	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5		µg/L	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	6		µg/L	**0.5 J**	**0.5**	0.5 U
cis-1,2-Dichloroethene	6		µg/L	**4.9**	**5.5**	**2.7**
trans-1,2-Dichloroethene	10		µg/L	**2.9**	**3.8**	**0.8**
1,2-Dichloropropane	5		µg/L	0.5 U	0.5 U	0.5 U
Ethylbenzene	300		µg/L	0.5 U	0.5 U	**0.2 J**
2-Hexanone			µg/L	10 U	10 U	10 U
Isopropyl Ether			µg/L	0.5 U	0.5 U	0.5 U
Isopropylbenzene			µg/L	0.5 U	0.5 U	0.5 U
p-Isopropyltoluene			µg/L	0.5 U	0.5 U	0.5 U
Methyl isobutyl ketone			µg/L	10 U	10 U	10 U
Methyl tert-butyl ether	13		µg/L	0.5 U	0.5 U	0.5 U
N-propylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Naphthalene			µg/L	2 U	2 U	**1.9 J**
Tetrachloroethene	5		µg/L	**0.3 J**	0.5 U	**0.3 J**
Toluene	150		µg/L	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	200		µg/L	0.5 U	0.5 U	0.5 U
Trichloroethene	5		µg/L	**6.5**	**5.2**	**7.2**
1,2,4-Trimethylbenzene			µg/L	0.5 U	0.5 U	**0.8**
1,3,5-Trimethylbenzene			µg/L	0.5 U	0.5 U	0.5 U
Vinyl Chloride	0.5		µg/L	0.5 U	**0.5 J**	0.5 U
M,p-xylene	1,750		µg/L	0.5 U	0.5 U	0.5 U
O-xylene	1,750		µg/L	0.5 U	0.5 U	**0.4 J**

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-154: Well M035-A, Detected Semivolatile Organic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Semivolatile Organic Compounds						
Acenaphthene			µg/L	9.4 U	9.4 U	9.4 U
Anthracene			µg/L	9.4 U	9.4 U	9.4 U
Benzoic acid			µg/L	47 U	47 U	47 UJ
bis(2-Chloroethyl)ether			µg/L	9.4 U	9.4 U	9.4 U
bis(2-chloroisopropyl) ether			µg/L	9.4 U	9.4 U	9.4 U
bis(2-Ethylhexyl)phthalate	4		µg/L	9.4 U	9.4 U	9.4 U
Dibenzofuran			µg/L	9.4 U	9.4 U	9.4 U
1,2-Dichlorobenzene	600		µg/L	9.4 U	9.4 U	9.4 U
1,3-Dichlorobenzene			µg/L	9.4 U	9.4 U	9.4 U
1,4-Dichlorobenzene	5		µg/L	9.4 U	9.4 U	9.4 U
2,4-Dimethylphenol			µg/L	9.4 U	9.4 U	9.4 U
Dimethylphthalate			µg/L	9.4 U	9.4 U	9.4 U
Fluoranthene			µg/L	9.4 U	9.4 U	9.4 U
Fluorene			µg/L	9.4 U	9.4 U	9.4 U
2-Methylnaphthalene			µg/L	9.4 U	9.4 U	9.4 U
2-Methylphenol			µg/L	9.4 U	9.4 U	9.4 U
4-Methylphenol			µg/L	9.4 U	9.4 U	9.4 U
N-Nitrosodiphenylamine			µg/L	9.4 U	9.4 U	9.4 U
Naphthalene			µg/L	9.4 U	9.4 U	9.4 U
Phenanthrene			µg/L	9.4 U	9.4 U	9.4 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-155: Well M035-A, Detected Total Petroleum Hydrocarbons at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
TPH as Diesel						
TPH, as diesel fuel			µg/L	50 UJ		
Jet Fuel #5 (JP5)			µg/L	50 UJ		
TPH, as motor oil			µg/L	300 UJ		
TPH as Gasoline						
TPH, as gasoline			µg/L	50 U		
TPH (calculated)						
Total TPH (calculated)			µg/L	300 U		

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-156: Well M035-A, Detected Inorganic Compounds at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Metals						
Aluminum	1,000	439	µg/L	100 U	100 U	100 U
Antimony	6	46	µg/L	**0.34 J**	50 U	**1.7 J**
Arsenic	50	28	µg/L	**11**	**11**	**3.3 J**
Barium	1,000	575	µg/L	**55**	**50**	**38**
Beryllium	4	3.8	µg/L	2 U	2 U	**0.043 J**
Cadmium	5	5.4	µg/L	5 U	5 U	**0.28 J**
Chromium	50	14	µg/L	**0.42 J**	10 U	10 U
Cobalt		12	µg/L	**0.53 J**	10 U	**0.24 J**
Copper	1,000	27	µg/L	10 U	10 U	**12**
Iron		7,135	µg/L	**470**	**690**	**460**
Lead	15	3.9	µg/L	3 U	3 U	**0.13 J**
Manganese		5,213	µg/L	**920**	**770**	**24**
Mercury	2	0.15	µg/L	0.2 U	0.2 U	0.2 U
Molybdenum		12	µg/L	20 U	**1.7 J**	20 U
Nickel	100	19	µg/L	**2.5 J**	20 U	**4.3 J**
Selenium	50	6.0	µg/L	5 U	5 U	5 U
Silver		3.3	µg/L	5 UR	5 U	5 U
Vanadium		29	µg/L	**1.3 J**	10 U	**2 J**
Zinc		43	µg/L	**11 J**	20 UJ	**11 J**
Calcium		379	mg/L	**99**	**94**	**92**
Magnesium		500	mg/L	**28**	**27**	**13**
Potassium		182	mg/L	**8.3**	**8.7**	**2.4**
Sodium		4,540	mg/L	**32**	**36**	**27**
Cyanide						
Total Cyanide	0.2		mg/L	0.01 U	0.01 U	0.01 U

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Table 6-157: Well M035-A, Detected Radionuclides at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

Compound	MCL	BV	Units	Summer 2002	Fall 2002	Winter 2002
Gross Alpha/Beta						
Gross Alpha	15		pCi/L	1.76 U4	0.409 U2	1.24 U4
Gross Beta	50		pCi/L	**9.64**	**8.73**	**2.74**
Radium						
Radium			pCi/L	0.262 U2	0.069 U3J	**0.696**

See "Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1" located behind Table 6-157 for notes and definitions.

Notes for Tables 6-2 through 6-157 at Installation Restoration Site 1
Summer, Fall, and Winter 2002
Basewide Groundwater Monitoring Program, Alameda Point, Alameda, California

MCL	California Maximum Contaminant Level
BV	Background value (Tetra Tech Environmental Management, Inc., January 18, 1999)
TPH	Total Petroleum Hydrocarbon
µg/L	micrograms per liter
mg/L	milligrams per liter
pCi/L	pico curies per liter
U	Not detected at or above the reporting limit.
UJ	Not detected at or above the reporting limit. The reporting limit is an estimate.
UR	The analyte was not detected. The analyte is rejected due to deficiencies in the ability to analyze the sample and meet QC criteria.
U1	The reported value is <= the minimum detected activity.
U2	The reported value is <= the reported analytical uncertainty.
U3	The reported value is <= both the minimum detected activity and the analytical uncertainty.
U4	The reported value is <= the sum of the minimum detected activity and the analytical uncertainty.
J	Estimated value.
h	Heavier hydrocarbons contributed to the quantitation.
l	Lighter hydrocarbons contributed to the quantitation.
y	Sample exhibits fuel pattern which does not resemble standard.

Detected values are bolded.

Detected values greater than the California Maximum Contaminant Level are circled.

Detected values greater than the Background value are underlined.

Total TPH (calculated) is the sum of all reported TPH results. Where all results are less than reporting limits, the highest reporting limit is used as the Total TPH value.

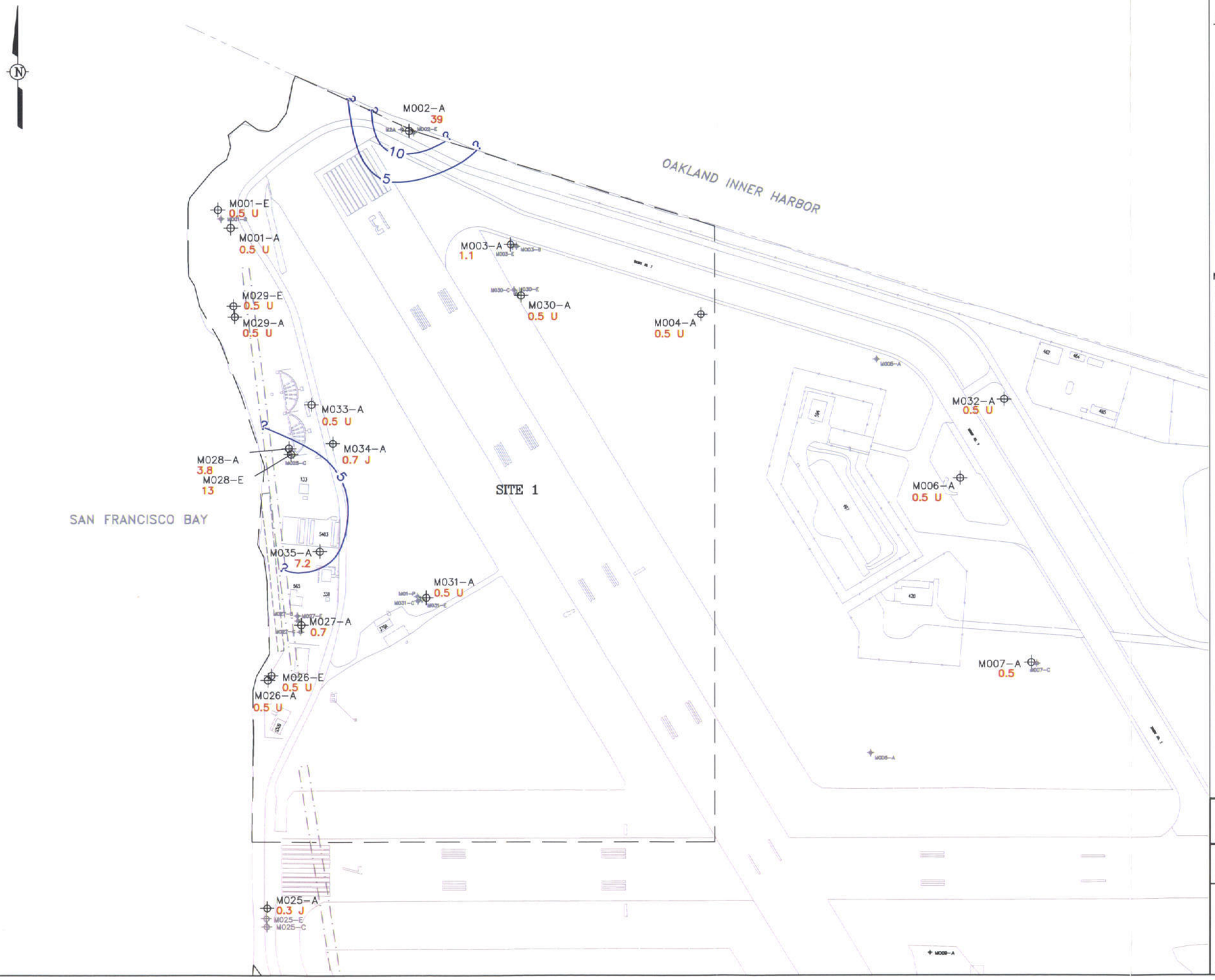
Blank entries in results section indicate compound not analyzed. Blank entries under MCL and BV indicate no regulatory limits or background values available, respectively.

- Benzene was detected above the MCL of 1 µg/L in samples from 4 wells (M001-E, M028-E, M029-A, and M034-A) at concentrations ranging from 3.0 to 66 µg/L.
- Toluene was detected above the MCL of 150 µg/L in samples from two wells M034-A and M028-E (530 µg/L and 1400 µg/L, respectively).
- Antimony was detected above the MCL of 6.0 µg/L in samples from two wells M001-A and M027-A (10 µg/L and 13 µg/L).
- Selenium was detected above the MCL of 50 µg/L in samples from two wells M003-B and M030-C (58 µg/L and 54 µg/L).
- Bis(2-ethylhexyl)phthalate was detected at levels above the MCL of 4 µg/L, ranging from 4.2 µg/L to 20 µg/L in samples from five wells (M006-A, M026-E, M029-E, M030-C and M033-A).
- Gross beta was detected above the MCL of 50 pico curies per liter (pCi/L) in samples from ten wells ranging from 56.4 ± 6.7 pCi/L to 194 ± 38.9 pCi/L. These wells are listed on Table 6-2.

Concentration contours for selected VOCs are presented in this report on the following figures:

- Figure 6-2, "Trichloroethene, First Water-Bearing Zone, IR Site 1 Operable Unit 3, Winter 2002"
- Figure 6-3, "Cis-1,2-Dichloroethene, First Water-Bearing Zone, IR Site 1 Operable Unit 3, Winter 2002"
- Figure 6-4, "Vinyl Chloride, First Water-Bearing Zone, IR Site 1 Operable Unit 3, Winter 2002"
- Figure 6-5, "Benzene, First Water-Bearing Zone, IR Site 1 Operable Unit 3, Winter 2002."

Trichloroethene contours in the FWBZ are presented on Figure 6-2. Trichloroethene was detected in samples from 9 of the 29 monitoring wells at IR Site 1. Samples from three wells (M002-A, M028-E, and M035-A) contained TCE concentrations above the MCL. These three wells are located in the northern and west-central portion of IR Site 1. Figure 6-2 shows TCE in samples above the MCL of 5 µg/L in the west-central part of the site near the M028-E and M035-A wells and along the western portion of the site and to the north at well M002-A, adjacent to the Oakland Inner Harbor. TCE at concentrations exceeding the MCL in the samples from the three wells was consistent with previous sampling results. The newly sampled well (M028-E) is included within the MCL contour line indicating higher TCE concentrations in samples from that area than in the Summer and Fall 2002 events.



LEGEND

⊕	PROGRAM MONITORING WELL
⊕	MONITORING WELL NOT IN PROGRAM OR NOT SCREENED IN SPECIFIED HYDROLOGIC UNIT
—5—?—	TRICHLOROETHENE ISOCONCENTRATION CONTOUR, QUERIED WHERE UNCERTAIN
13 U	RESULT (µg/L)/QUALIFIER
— —	CERCLA BOUNDARY
— · —	BARGE LINES (1949 AERIAL SURVEY)
- - - - -	BARGE LINES (1957 AERIAL SURVEY)
J	ESTIMATED RESULT (QUALIFIER)
D	DILUTION (QUALIFIER)
U	NOT DETECTED AT SPECIFIED REPORTING LIMIT (QUALIFIER)
NS	NOT SAMPLED

NOTES:

1. POSITION OF BARGE LINES ARE INFERRED.
2. MCL IS 5 µg/L (TITLE 22 CALIFORNIA CODE OF REGULATIONS, 2002).
3. µg/L CONCENTRATION IN MICROGRAMS PER LITER.

SCALE
0 150 300 FEET

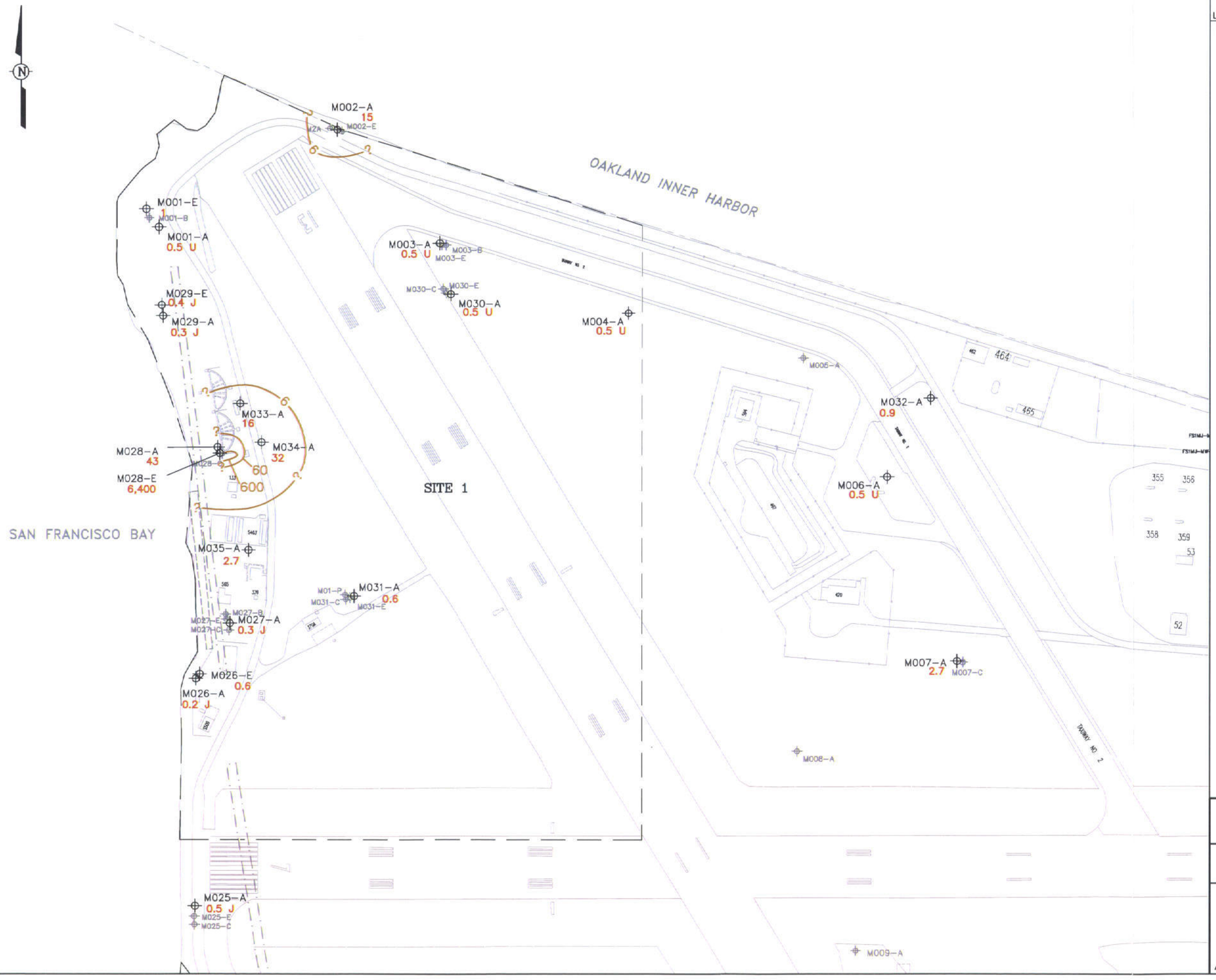
Shaw Environmental, Inc.

DEPARTMENT OF THE NAVY, SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
SAN DIEGO, CALIFORNIA

FIGURE 6-2
TRICHLOROETHENE
FIRST WATER-BEARING ZONE
IR SITE 1 OPERABLE UNIT 3
WINTER 2002

ALAMEDA POINT ALAMEDA, CALIFORNIA

IMAGE	X-REF	OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
---	ALA1BASE	CONC	B. JENSEN 8-29-03	---	---	8437[illegible]-D2



LEGEND

⊕	PROGRAM MONITORING WELL
⊕	MONITORING WELL NOT IN PROGRAM OR NOT SCREENED IN SPECIFIED HYDROLOGIC UNIT
6 ?	CIS-1,2-DICHLOROETHENE ISOCONCENTRATION CONTOUR, QUERIED WHERE UNCERTAIN
0.5 U	RESULT (µg/L)/QUALIFIER
— —	CERCLA BOUNDARY
— · —	BARGE LINES (1949 AERIAL SURVEY)
- - - -	BARGE LINES (1957 AERIAL SURVEY)

J	ESTIMATED RESULT	QUALIFIER
D	DILUTION	QUALIFIER
U	NOT DETECTED AT SPECIFIED REPORTING LIMIT	QUALIFIER
NS	NOT SAMPLED	

NOTES:

1. POSITION OF BARGE LINES ARE INFERRED.
2. MCL IS 6 µg/L (TITLE 22 CALIFORNIA CODE OF REGULATIONS, 2002).
3. µg/L CONCENTRATION IN MICROGRAMS PER LITER.

SCALE
0 150 300 FEET

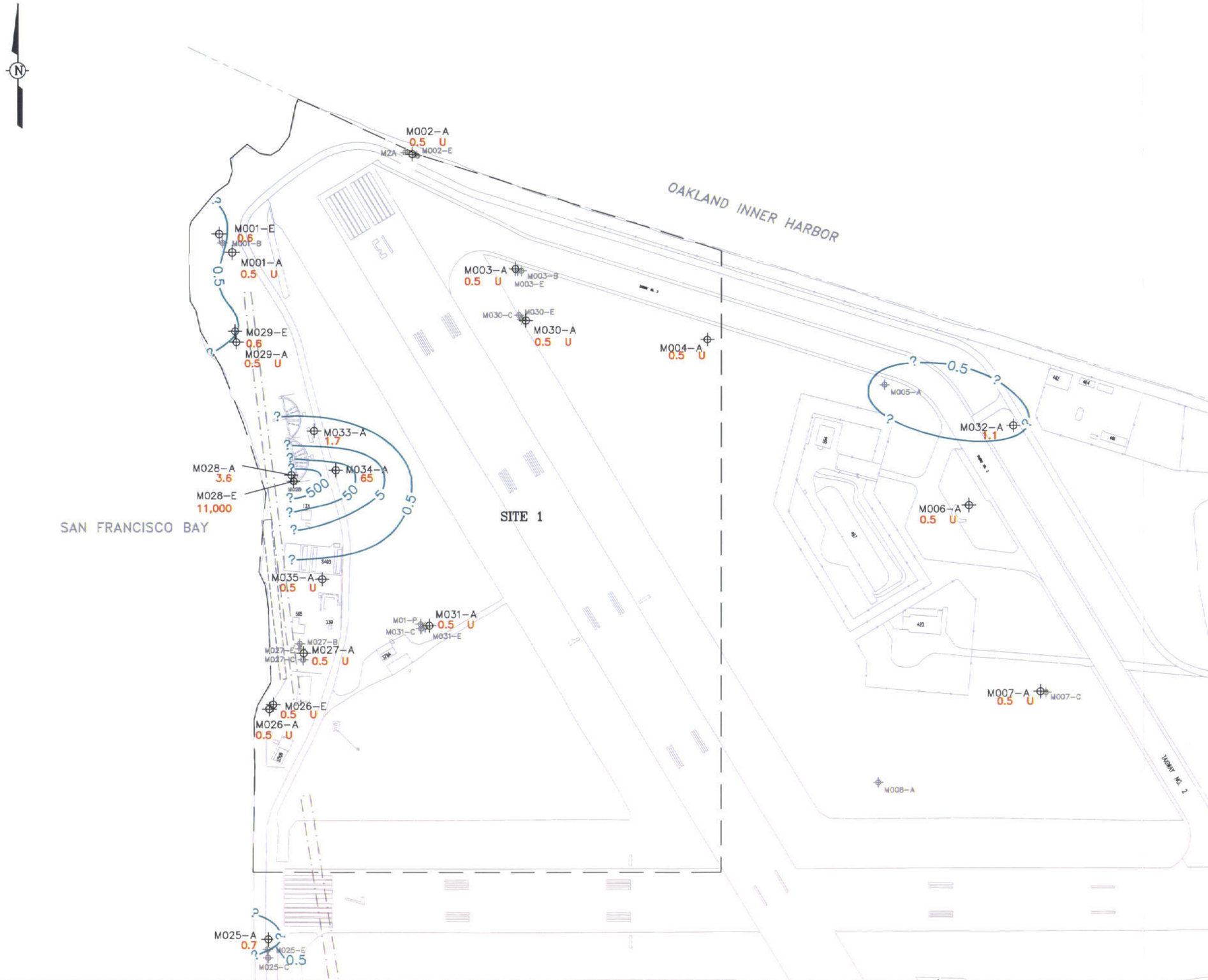
Shaw Environmental, Inc.

DEPARTMENT OF THE NAVY, SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
SAN DIEGO, CALIFORNIA

FIGURE 6-3
CIS-1,2-DICHLOROETHENE
FIRST WATER-BEARING ZONE
IR SITE 1 OPERABLE UNIT 3
WINTER 2002

ALAMEDA POINT ALAMEDA, CALIFORNIA

DRAWING NUMBER	APPROVED BY	CHECKED BY	DRAWN BY	OFFICE	X-REF	IMAGE
8437 -D3	---	---	8-29-03 B. JENSEN	CONC	ALA1BASE	---



LEGEND

⊕	PROGRAM MONITORING WELL
⊕	MONITORING WELL NOT IN PROGRAM OR NOT SCREENED IN SPECIFIED HYDROLOGIC UNIT
—0.5— ?	VINYL CHLORIDE ISOCONCENTRATION CONTOUR, QUERIED WHERE UNCERTAIN
11,000 U	RESULT (µg/L)/QUALIFIER
— —	CERCLA BOUNDARY
— · —	BARGE LINES (1949 AERIAL SURVEY)
- - - - -	BARGE LINES (1957 AERIAL SURVEY)
J	ESTIMATED RESULT (QUALIFIER)
D	DILUTION (QUALIFIER)
U	NOT DETECTED AT SPECIFIED REPORTING LIMIT (QUALIFIER)
NS	NOT SAMPLED

NOTES:

1. POSITION OF BARGE LINES ARE INFERRED.
2. MCL IS 0.5 µg/L (TITLE 22 CALIFORNIA CODE OF REGULATIONS, 2002).
3. µg/L CONCENTRATION IN MICROGRAMS PER LITER.

SCALE
0 150 300 FEET

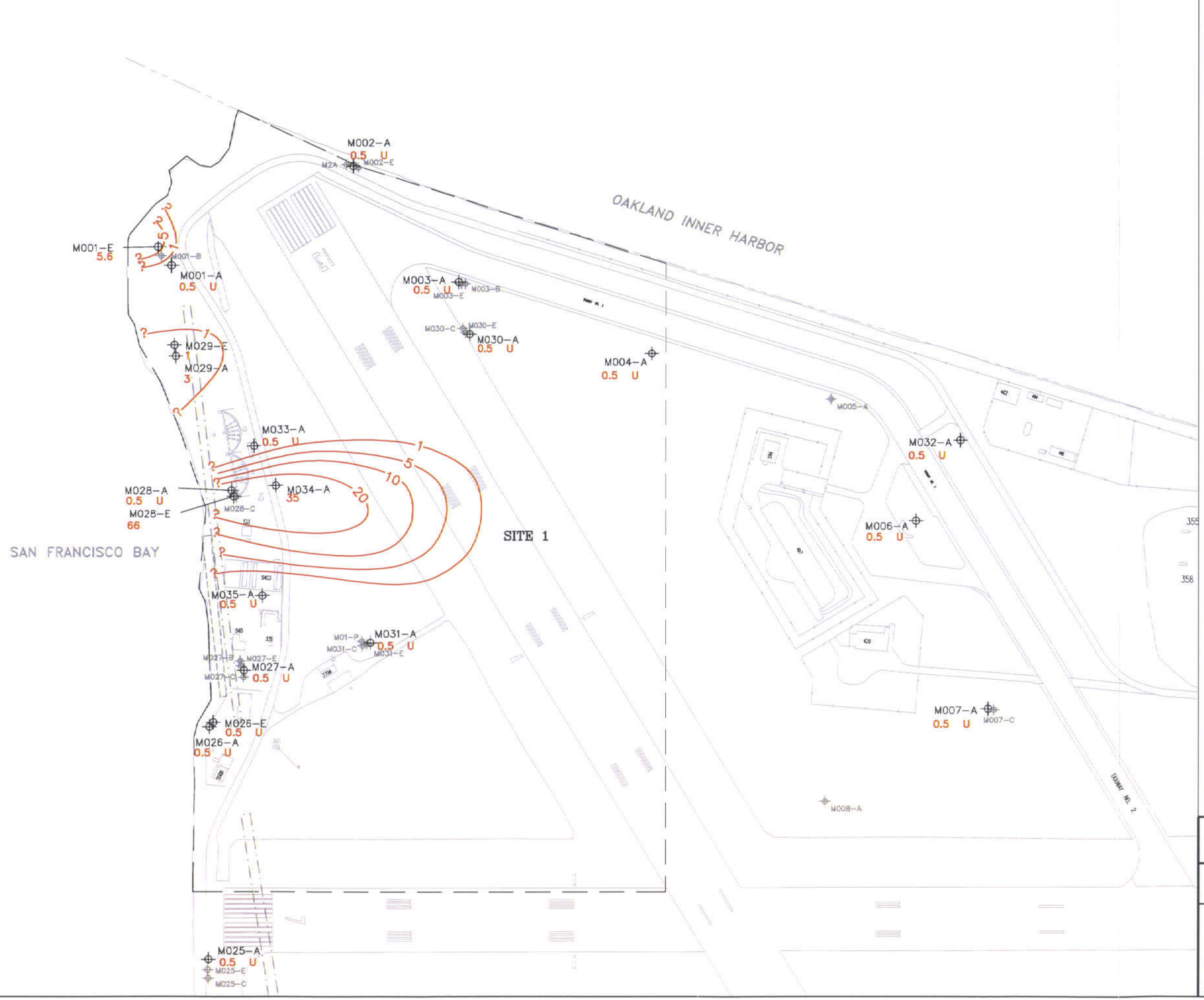
Shaw Environmental, Inc.

DEPARTMENT OF THE NAVY, SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
SAN DIEGO, CALIFORNIA

FIGURE 6-4
VINYL CHLORIDE
FIRST WATER-BEARING ZONE
IR SITE 1 OPERABLE UNIT 3
WINTER 2002

ALAMEDA POINT ALAMEDA, CALIFORNIA

IMAGE	X-REF	OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
---	ALA1BASE	CONC	B. JENSEN 8-29-03	---	---	8437-D4



LEGEND

⊕	PROGRAM MONITORING WELL
⊕	MONITORING WELL NOT IN PROGRAM OR NOT SCREENED IN SPECIFIED HYDROLOGIC UNIT
—1—?—	BENZENE ISOCONCENTRATION CONTOUR, QUERIED WHERE UNCERTAIN
66 U	RESULT (µg/L)/QUALIFIER
— —	CERCLA BOUNDARY
— · —	BARGE LINES (1949 AERIAL SURVEY)
- - - - -	BARGE LINES (1957 AERIAL SURVEY)
J	ESTIMATED RESULT (QUALIFIER)
D	DILUTION (QUALIFIER)
U	NOT DETECTED AT SPECIFIED REPORTING LIMIT (QUALIFIER)
NS	NOT SAMPLED

NOTES:

1. POSITION OF BARGE LINES ARE INFERRED.
2. MCL IS 1 µg/L. (TITLE 22 CALIFORNIA CODE OF REGULATIONS, 2002).
3. µg/L CONCENTRATION IN MICROGRAMS PER LITER.

SCALE
0 150 300 FEET

Shaw Environmental, Inc.

DEPARTMENT OF THE NAVY, SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
SAN DIEGO, CALIFORNIA

FIGURE 6-5
BENZENE
FIRST WATER-BEARING ZONE
IR SITE 1 OPERABLE UNIT 3
WINTER 2002

ALAMEDA POINT ALAMEDA, CALIFORNIA

DRAWING NUMBER	APPROVED BY	CHECKED BY	DRAWN BY	OFFICE	X-REF	IMAGE
8437__-D5	---	---	8-29-03	CONC	ALATBASE	---
			B. JENSEN			

Figure 6-3 presents contours for cis-1,2-dichloroethene (cis-1,2-DCE) within the FWBZ. Cis–1,2-Dichlroethene was detected in samples from 16 of the 29 Groundwater Monitoring Program wells. However, the cis-1,2-DCE content exceeded the MCL in only five samples. The distribution of cis-1,2-DCE was similar to that of TCE, although the analyte levels that exceed MCLs were present to the north of the limits of the TCE plume. Concentrations above the MCL of 6 µg/L were detected in samples from the west-central site in the area of M028-E, M033-A and M034-A, and to the north near well M002-A: adjacent to the Oakland Inner Harbor.

Vinyl chloride exceeded the MCL (0.5 µg/L) in 8 of the 29 samples collected for analysis. Samples from four general locations at the Site 1 area had vinyl chloride concentrations exceeding the MCL (Figure 6-4). One location is the well M028-series cluster at the west-center of the site, the second to the north near wells M029-A and M029-E, the third is east of Site 1 near Building 594 (well M032-A), and the fourth at the southwest site boundary near M025-A. Vinyl chloride was detected in samples above the MCL over a greater area during the Winter 2002 event as compared to the Summer 2002 event.

Benzene was detected in samples from 5 of the 29 Groundwater Monitoring Program wells sampled during the Winter 2002 event (Figure 6-5). Four of those samples exceeded the benzene MCL (1.0 µg/L). Benzene was found predominantly at the western section of the site, adjacent to the shoreline. The highest concentrations of benzene were detected in a sample from well M028-E, although benzene was found at lower concentrations near wells M029-A/E and wells M001-A/E to the north.

Generally, the detections of organic constituents at IR Site 1 were similar to those observed in the Summer and Fall 2002 sampling events. The character of the constituent contours and the relative magnitude of the analyte concentrations were similar to previous quarters. Contour maps for analytes detected at levels above the MCL, but with limited distribution or erratic detection, were not included in figures of this report. These include 1,4,-DCB, 1,1-DCA, 1,2-DCA, toluene, Bis(2-ethylhexyl)phthalate, antimony and selenium.

Gross beta activity for samples collected from ten wells during the Winter 2002 monitoring event exceeded the MCLs. The data were evaluated (*Memorandum: Evaluation of Gross Beta Measurements in December, 2002 Water Samples at Alameda NAS* [Shaw, 2003b]) to determine if elevated measurements of gross beta observed in some samples could be attributed to the natural presence of the beta-emitting isotope potassium-40 (K-40). For the majority of the samples, the calculated K-40 beta contribution falls within the uncertainty range of the gross beta measurements, indicating that natural K-40 was the dominant contributor to the gross beta measurements. One exception was sample M032-A, which has higher gross beta (158 pC/L) than can be accounted for by natural potassium -40 indicating that additional beta emitter may be present in this sample. Similar distributions of these constituents were observed in the Summer

Quarter with the exception of the elevated character in the sample from monitoring well M032-A.

6.3.2 Analyte Concentration versus Water Level Elevation Summary

Combined plots of groundwater elevations and chemicals of potential concern (COPCs) above MCLs versus time for wells are provided as Figures 6-6 through 6-25. These plots are used to help evaluate if variations in analyte concentrations are possibly related to changes in groundwater elevations. Time series plots are included for ten wells on Site 1: these include organic, inorganic and radiological constituent plots.

Groundwater elevations generally increased for the plotted wells from the Fall 2002 event to the Winter 2002 sampling event. The plots show that water levels increased in 25 wells and increases for the majority of wells were less than 1.0 foot. Well M035-A showed the greatest increase with a 2.26 feet rise in groundwater elevation. The exceptions to this were three wells with decreases in groundwater elevation (M001-B, M030-C, and M031-C), with the greatest change observed in well M001-B (-3.19 ft.).

The relationships of analytes to groundwater elevations were mixed, with increases and decreases in constituents relating to the increase of water table elevation. Results of samples from six wells show increases in concentrations that coincide with an increase in groundwater elevation. The concentration of TCE increased in samples collected from well M002-A from 8.1 µg/L to 39 µg/L between the Fall and Winter 2002 events with an increase in the groundwater table elevation of 0.72 feet. A change in water level of 0.36 feet was observed in well M033-A while cis,1-2,DCE increased in concentration from 7.9 µg/L to 16 µg/L. Selenium concentrations in samples from wells M003-A and M030-C increased by a factor of 5, from below 10 µg/L to greater than 50 as the groundwater elevation increased over a foot in each well. Most wells do not show a strong correlation between groundwater elevations and concentrations of analytes in groundwater.

The relationship between COPCs and water levels should be reviewed over the next several quarters to assess whether the relationship between changes in groundwater elevation concentrations show any consistent trends.

6.3.3 Hydrochemistry Results

An evaluation of metal concentrations shows that the primary inorganic components of the groundwater samples are cations (iron, manganese, calcium, magnesium, potassium, and sodium) and anions (chloride, sulfate, and bicarbonate).

Graphical presentations of anion and cation ratios were presented on the Piper diagram in Figure 6-26, "Groundwater Piper Diagram, Installation Restoration Site 1, Winter 2002." The