N60201.AR.000287
NS MAYPORT
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RESOURCE CONSERVATION AND RECOVERY ACT FACILITY INVESTIGATION GROUP II
SOLID WASTE MANAGEMENT UNITS NS MAYPORT FL
1/1/1996
ABB ENVIRONMENTAL SERVICES

NAVSTA Mayport Administrative Record
Document Index Number

32228-000
19.04.00.0005

RESOURCE CONSERVATION AND RECOVERY ACT FACILITY INVESTIGATION GROUP II SOLID WASTE MANAGEMENT UNITS

U.S. NAVAL STATION MAYPORT, FLORIDA

VOLUME 1: CHAPTERS 1.0 THROUGH 8.0 APPENDICES A THROUGH C

UNIT IDENTIFICATION CODE: N60201
CONTRACT NO. N62467-89-D-0317/028

JANUARY 1996

SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
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U.S. NAVAL STATION MAYPORT, FLORIDA

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Contract No. N62467-89-D-0317/028

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January 1996

This document Resource Conservation and Recovery Act (RCRA) Facility Investigation, Group II SWMUs, U.S. Naval Station, Mayport, Florida has been prepared under the direction of a Florida Registered Professional Geologist. The work and professional opinions rendered in this report were conducted or developed in accordance with commonly accepted procedures consistent with applicable standards of practice. If conditions are determined to exist that differ from those described, the undersigned geologist should be notified to evaluate the effects of any additional information on the assessment and recommendations in this document. This document was prepared for U.S. Naval Station, Mayport, Florida, and should not be construed to apply to any other site.

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Date: 11 Jan 96

CERTIFICATION OF TECHNICAL
DATA CONFORMITY (MAY 1987)

The Contractor, ABB Environmental Services, Inc., hereby certifies that, to the best of its knowledge and belief, the technical data delivered herewith under Contract No. N62467-89-D-0317/028 are complete and accurate and comply with all requirements of this contract.

DATE: January 11, 1996

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FOREWORD

To meet its mission objectives, the U.S. Navy performs a variety of operations, some requiring the use, handling, storage, or disposal of hazardous materials. Through accidental spills and leaks and conventional methods of past disposal, hazardous materials may have entered the environment in ways unacceptable by today's standards. With growing knowledge of the long-term effects of hazardous materials on the environment, the Department of Defense initiated various programs to investigate and remediate conditions related to suspected past releases of hazardous materials at their facilities.

One of these programs is the Installation Restoration (IR) program. This program complies with the Comprehensive Environmental Response, Compensation, and Liability Act, as amended by the Superfund Amendments and Reauthorization Act. The acts, passed by Congress in 1980 and 1986, respectively, established the means to assess and clean up hazardous waste sites for both private-sector and Federal facilities. These acts are the basis for what is commonly known as the Superfund program.

Originally, the Navy's part of this program was called the Navy Assessment and Control of Installation Pollutants (NACIP) program. Early reports reflect the NACIP process and terminology. The Navy eventually adapted the program structure and terminology of the standard IR program.

The IR program is conducted in several stages as follows.

- The preliminary assessment (PA) identifies potential sites through record searches and interviews.

- A site inspection (SI) then confirms which areas contain contamination, constituting actual "sites." (Together, the PA and SI steps were called the Initial Assessment Study under the NACIP program.)

- Next, the remedial investigation and the feasibility study (RI/FS) together determine the type and extent of contamination, establish criteria for cleanup, and identify and evaluate any necessary remedial action alternatives and their costs. As part of the RI/FS, a risk assessment identifies potential effects on human health or the environment to help evaluate remedial action alternatives.

- The selected alternative is planned and conducted in the remedial design and remedial action stages. Monitoring then ensures the effectiveness of the effort.

A second program to address present hazardous material management is the Resource Conservation and Recovery Act (RCRA) Corrective Action program. This program is designed to identify and clean up releases of hazardous substances at RCRA-permitted facilities. RCRA ensures that solid and hazardous wastes are managed in an environmentally sound manner. The law applies primarily to facilities that generate or handle hazardous waste.

The RCRA program is conducted in the following three stages.

- The RCRA facility assessment identifies solid waste management units, evaluates the potential for releases of contaminants, and determines the need for future investigations.

- The RCRA facility investigation then determines the nature, extent, and fate of contaminant releases.

- The corrective measures study identifies and recommends measures to correct the release.

The hazardous waste investigations at Naval Station (NAVSTA) Mayport are presently being conducted under the RCRA Corrective Action program. Earlier preliminary investigations had been conducted at NAVSTA Mayport under the Navy's NACIP program and IR program following Superfund guidelines. In 1988, in coordination with the U.S. Environmental Protection Agency (USEPA) and the Florida Department of Environmental Regulation now known as the Florida Department of Environmental Protection [FDEP]), the hazardous waste investigations were formalized under the RCRA program.

Mayport is conducting the cleanup at their facility by working through the Southern Division, Naval Facilities Engineering Command. The USEPA and the FDEP oversee the Navy environmental program. All aspects of the program are conducted in compliance with State and Federal regulations, as ensured by the participation of these regulatory agencies.

Questions regarding the RCRA program at NAVSTA Mayport should be addressed to Mr. David Driggers, Code 1852, at (803) 743-0501.

EXECUTIVE SUMMARY

ABB Environmental Services, Inc., has been contracted by the Department of the Navy, Southern Division, Naval Facilities Engineering Command to conduct a Resource Conservation and Recovery Act facility investigation (RFI) for U.S. Naval Station, Mayport, Florida. The RFI is being conducted in accordance with the Hazardous and Solid Waste Amendment permit No. FL9 170 024 260, issued by the U.S. Environmental Protection Agency (USEPA) on June 15, 1993.

This report presents the RFI and risk assessments for Group II Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, 11, 12, 15, and 16. SWMUs 6, 7, 8, 9, 10, and 11 are being evaluated as one area because they are associated with or located adjacent to the Oily Waste Treatment Plant (OWTP) Area. This draft RFI report presents the findings, conclusions, and recommendations for each SWMU or group of SWMUs investigated.

The purpose of the RFI is to provide the information necessary to conduct a human health and ecological risk assessment and to design corrective measures, if required, for each of the SWMUs that required an RFI. The following conclusions for each of the SWMUs investigated are based on the results of the human health and ecological risk assessments.

SWMUs 6, 7, 8, 9, 10, and 11 (OWTP Area). The following conclusions and recommendations are based on the field investigation, the human health risk assessment (HHRA), and the ecological risk assessment (ERA). The HHRA evaluated the risks associated with future domestic use of unfiltered groundwater. The ERA evaluated risks to aquatic life associated with exposures to groundwater as it discharges into the St. Johns River.

- Petroleum-related compounds have been released from the former Waste Oil Pit, the Sludge Drying Beds, and the Fuel Spill Area (SWMUs 6, 7, and 11, respectively), and free-phase hydrocarbons were identified downgradient of the OWTP Area. In addition, water discharged to the Percolation Pond (SWMU 8) has affected groundwater hydraulically downgradient. However, a corrective measures study (CMS) is not warranted for SWMU 8.

- The HHRA identified an excess lifetime cancer risk (ELCR) associated with future groundwater ingestion that exceeds the USEPA acceptable cancer risk range. The cancer risk is attributable to the concentrations of arsenic and lead. The noncancer risk associated with future groundwater ingestion, attributable to concentrations of manganese and iron, exceeds the USEPA target hazard index (HI) of 1.

- Groundwater discharging into the St. Johns River is not expected to pose a risk for aquatic receptors.

- A CMS is recommended for free-phase hydrocarbons and hydrocarbons detected in subsurface soil, in accordance with Florida petroleum cleanup standards. An interim measure is underway to recover free-phase hydrocarbons. A monitoring program to assess the effectiveness of the interim measures will be included in the CMS. A technology demonstration for thermal desorption of hydrocarbons in subsurface

soil will be conducted under the Navy Environmental Leadership program. The thermal desorption technology will likely be the final remedy on the soils containing hydrocarbons at SWMUs 6 and 7.

- No further investigation is recommended at this time for SWMUs 8, 9 and 10.

SWMU 12. The following conclusions and recommendations are based on the field investigation, the HHRA, and the ERA. The HHRA evaluated risks associated with future domestic use of unfiltered groundwater. The ERA evaluated risks to aquatic life associated with exposures to groundwater as it discharges into the St. Johns River.

- There are no indications that a release from the neutralization basin has occurred. However, the RFI data suggest that a reported release from a tank that contained sodium hydroxide has affected groundwater quality hydraulically downgradient from the release area.

- The HHRA identified an ELCR associated with future ingestion of groundwater that exceeds the USEPA acceptable cancer risk range. Arsenic is the only contaminant that contributes to the cancer risk. The noncancer risk associated with future groundwater ingestion, attributable to arsenic and vanadium, exceeds the USEPA target HI of 1.

- Groundwater discharging into the St. Johns River is not expected to pose a risk for aquatic receptors.

- No further investigation at this time is recommended for SWMU 12. However, a separate investigation of the reported sodium hydroxide release area should be conducted.

SWMU 15. The following conclusions and recommendations are based on the field investigation, the HHRA, and the ERA. The HHRA evaluated risks associated with exposure to surface soil, subsurface soil, and future domestic use of unfiltered groundwater. The ERA evaluated risks to terrestrial wildlife, terrestrial plants, and terrestrial soil invertebrates from exposures to surface soil. Risks were also characterized for aquatic receptors potentially exposed to groundwater discharging into the St. Johns River.

- The RFI data suggest that pesticides were released at SWMU 15.

- The HHRA identified ELCRs associated with surface soil ingestion, dermal contact, and fugitive dust inhalation under current and future land use that exceed the USEPA acceptable cancer risk range. The cancer risks are attributable to concentrations of chlordane, 4,4'-dichlorodiphenyltrichloroethane (DDT), and arsenic. The ELCR associated with future groundwater ingestion, attributable to concentrations of arsenic, alpha-benzene hexachloride (BHC), beta-BHC, and bis(2-ethylhexyl)phthalate, also exceeds the USEPA acceptable risk range. The noncancer risk for surface soil under future land use, attributable to chlordane and 4,4'-DDT, exceeds the USEPA target HI of 1. The noncancer risk for unfiltered groundwater

under future land use, attributable to arsenic and manganese, also exceeds the USEPA target HI of 1.

- The ERA identified risks (i.e., reduction of growth and reproduction) to small insectivorous mammals and birds associated with exposure to 4,4'-DDT in surface soil. Concentrations of chromium, mercury, and zinc in surface soil may be toxic to plant life. Based on the results of surface soil toxicity testing, risks may also be present for terrestrial invertebrates. Groundwater discharging to the St. Johns River is not expected to pose a risk to aquatic receptors.

- A CMS is recommended for soil and groundwater at SWMU 15.

SWMU 16. The following conclusions and recommendations are based on the field investigation, the HHRA, and the ERA. The HHRA evaluated risks associated with exposure to subsurface soil and future domestic use of unfiltered groundwater. The ERA evaluated risks to aquatic life associated with exposures to groundwater as it discharges into the St. Johns River.

- Subsequent to the completion of the RFI field investigation, the surface soils at SWMU 16 were removed. Therefore, an HHRA and an ERA were not completed for surface soil at this SWMU.

- No unacceptable risks associated with exposure to subsurface soil or groundwater were identified in the HHRA.

- Ecological risks associated with groundwater discharging to the St. Johns River are not expected for aquatic receptors.

- No further investigation at this time is recommended for SWMU 16.

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GLOSSARY

ABB-ES	ABB Environmental Services, Inc.
AOC	Area of Concern
APHA	American Public Health Association
ASTM	American Society for Testing and Materials
AWQC	Ambient Water Quality Criteria
BAF	bioaccumulation factor
BHC	benzene hexachloride
bls	below land surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR	Code of Federal Regulations
CLEAN	Comprehensive Long-Term Environmental Action, Navy
CMS	corrective measures study
COC	chemical of concern
CompQAP	Comprehensive Quality Assurance Plan
CRDL	contract-required detection limit
CRQL	contract-required quantitation limit
CSF	cancer slope factor
°C	degrees Celsius
D	intermediate well, >15 feet bls and <40 feet bls
DD	deep monitoring well, >40 feet bls
DAF	dissolved air flotation
DDE	dichlorodiphenyldichloroethene
DDT	dichlorodiphenyltrichloroethane
DO	dissolved oxygen
DOD	Department of Defense
DQO	data quality objectives
EA	ecological assessment
ECAO	Environmental Criteria Assessment Office
ECPC	ecological chemicals of potential concern
EIC	Engineer in Charge
ELCR	excess lifetime cancer risk
EPC	exposure point concentration
EPTOX	extraction procedure toxicity
ERA	ecological risk assessment
ESI	expanded site investigation
°F	degrees Fahrenheit
FAC	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FDER	Florida Department of Environmental Regulation
FDWS	Florida Drinking Water Standards
FPDWS	Florida Primary Drinking Water Standards

GLOSSARY (Continued)

GIR	General Information Report
γ-BHC	gamma-benzenehexachloride
HASP	Health and Safety Plan
HHCPC	human health chemicals of potential concern
HHRA	human health risk assessment
HI	hazard index
HQ	hazard quotient
HSWA	Hazardous and Solid Waste Amendments of 1984
IAS	initial assessment study
IC	inhalation concentration
ID	inner diameter
I.D.	identification
IRP	Installation Restoration program
IRIS	Integrated Risk Information System
kg	kilograms
LD_{50}	low dose where 50 percent of animals die
m^3	cubic meter
MDL	method detection limit
MCL	maximum contaminant level
$\mu g/\ell$	microgram per liter
$\mu g/kg$	microgram per kilogram
mg/ℓ	milligrams per liter
mg/kg	milligrams per kilogram
ml	milliliter
MPT	Mayport
MS/MSD	matrix spike/matrix spike duplicate
msl	mean sea level
NACIP	Navy Assessment and Control of Installation Pollutants
NADEP	Naval Aviation Depot
NAS	Naval Air Station
NAVSTA	Naval Station
NDIR	nondispersive infrared
NEESA	Naval Energy and Environmental Support Activity
NELP	Naval Environmental Leadership program
NFI	North Florida Shipyard, Inc.
NGVD	National Geodetic Vertical Datum of 1929
NHANES	National Health and Nutrition Examination Survey
NIRP	Navy/Marine Corps Installation Restoration program
NOAA	National Oceanic and Atmospheric Administration
NOEL	no-observed-effect-level
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NSC	Naval Supply Center

GLOSSARY (Continued)

PAH	polynuclear aromatic hydrocarbon (also, polycyclic aromatic hydrocarbon)
PARCC	precision, accuracy, representativeness, comparability, and completeness
PCB	polychlorinated biphenyl
PEA	Preliminary Ecological Assessment
PEL	permissible-exposure-limit
PDE	potential dietary exposure
PHEA	Preliminary Health and Environmental Assessment
PHHA	Preliminary Human Health Assessment
PM	Program Manager
PPE	personal protective equipment
ppm	parts per million
PVC	polyvinyl chloride
PWD	Public Works Department
%R	Percent Recovery
QA	quality assurance
QAO	Quality Assurance Officer
QAP	Quality Assurance Plan
QAPP	Quality Assurance Project Plan
QC	quality control
RBC	risk-based concentrations
RCRA	Resource Conservation and Recovery Act of 1976, as amended
RFA	RCRA facility assessment
RfC	Reference Concentration
RfD	reference dose
RFI	RCRA facility investigation
RGO	remedial goal options
RI/FS	remedial investigation/feasibility study
ROD	Record of Decision
RPD	relative percent difference
RSD	risk-specific dose
RTVs	reference toxicity values
SAP	Sampling and Analysis Plan
SARA	Superfund Amendments and Reauthorization Act of 1986
SAS	Special Analytical Services
SCS	Soil Conservation Service
SDG	sample delivery group
SDWA	Safe Drinking Water Act
SDWS	Secondary Drinking Water Standards
SI	Site Inspection
SIMA	Shore Intermediate Maintenance Activity
SMP	Site Management Plan
SOP	Standard Operating Procedure
SOUTHNAV-FACENGCOM	Southern Division, Naval Facilities Engineering Command
SOW	Statement of Work

SPHEM	Superfund Public Health Evaluation Manual
SQC	Sediment Quality Criteria
SQG	sediment quality goals
SQL	sample quantitation limit
STORET	Storage and Retrieval of Water-Related Data
SU	standard unit
SUPSHIP	Supervisor of Shipbuilding
SVC	screening criteria values
SVOCs	semivolatile organic compounds
SWDA	Solid Waste Disposal Act
SWMU	solid waste management unit
TAL	target analyte list
TBC	to be considered
TCL	target compound list
TCLP	Toxicity Characteristic Leaching Procedure
TD	Technical Director
TDS	total dissolved solids
TIC	tentatively identified compound
TOC	total organic carbon
TOM	Task Order Manager
TPH	total petroleum hydrocarbons
TRB	Technical Review Board
TRPH	total recoverable petroleum hydrocarbon
UCL	upper confidence limit
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USCS	Unified Soil Classification System
VOA	volatile organic analyte
VOC	volatile organic compound
VSI	visual site inspection

1.0 INTRODUCTION

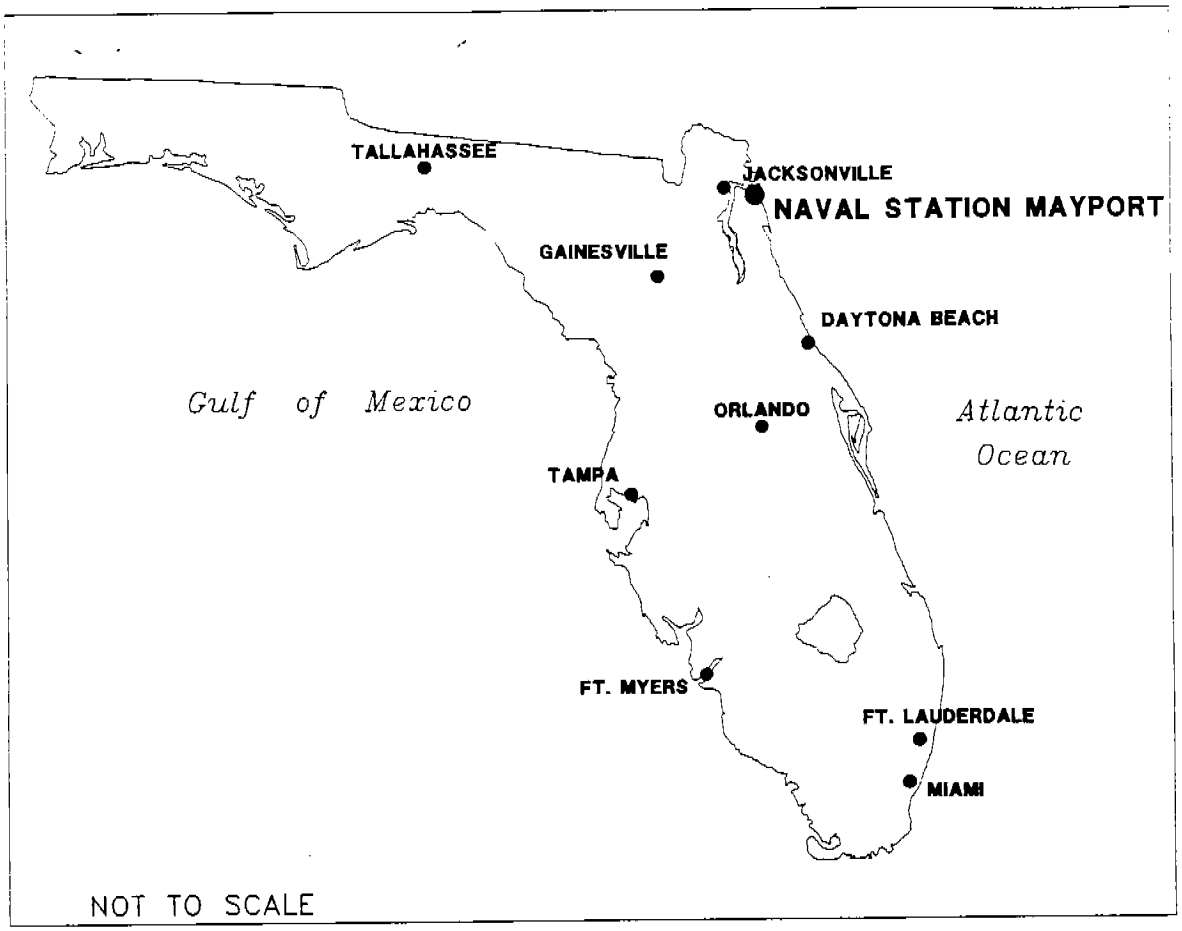
This report documents the activities, findings, conclusions, and recommendations developed as part of the Resource Conservation and Recovery Act (RCRA) facility investigation (RFI) performed at the U.S. Naval Station (NAVSTA), Mayport, Florida. NAVSTA Mayport is located in northeastern Duval County, Florida, at the mouth of the St. Johns River. Figure 1-1 presents the regional setting for NAVSTA Mayport.

The RCRA Corrective Action Program General Information Report (GIR) for NAVSTA Mayport (ABB Environmental Services, Inc., [ABB-ES, 1995a]) provides information common to all solid waste management Units (SWMUs) and areas of concern (AOCs) being investigated. The information includes background sampling information and analytical methodology, risk assessment approach, and the ecological characterization of NAVSTA Mayport. The NAVSTA Mayport GIR also includes (1) a summary of published information, including geography, physiography, demographics, climate, regional geology, and hydrogeology; (2) methods and procedures used to conduct risk assessments; and (3) characterization of stationwide background conditions including surface and subsurface soil, surface water, sludge, and groundwater that will be used to evaluate the data from each SWMU. The information contained in the NAVSTA Mayport GIR (ABB-ES, 1995a) will not be repeated in this RFI report. Table 1-1 presents an outline of the contents of the NAVSTA Mayport GIR.

1.1 BACKGROUND. Two investigations were conducted at NAVSTA Mayport prior to the commencement of RFI activities: (1) an initial assessment study (IAS) in 1985 (environmental Sciences and Engineering, 1986), and (2) an expanded site inspection (ESI) in 1987 (E.C. Jordan Company, 1988a). These studies identified several potentially contaminated sites at NAVSTA Mayport and provided site-specific recommendations for further investigation. The U.S. Environmental Protection Agency (USEPA) issued RCRA permit No. H016-118598 and Hazardous and Solid Waste Amendments (HSWA) permit FL9 170 024 260 to NAVSTA Mayport on March 25, 1988 (USEPA, 1988d). The HSWA permit was revised and reissued on June 15, 1993.

Eighteen sites have been identified in the HSWA permit as SWMUs requiring an RFI. Twenty-three SWMUs and two AOCs were identified as requiring confirmatory sampling.

Because of the number and complexity of the sites, USEPA recommended that a phased approach be used to implement RFI and other corrective action activities. A Corrective Action Management Plan (CAMP) describing the phased approach, proposed schedule, and strategy to implement the RCRA Corrective Action program at NAVSTA Mayport was prepared. The original CAMP is located in Appendix F of Volume I of the USEPA-approved RFI workplan (ABB-ES, 1991a). The CAMP identifies the operational groups of SWMUs, ranks them by their relative perceived risks to human health and the environment, and contains the proposed schedule for the field investigations and report submittals. A revised CAMP was submitted and received regulatory approval in March 1995 (ABB-ES, 1995b).



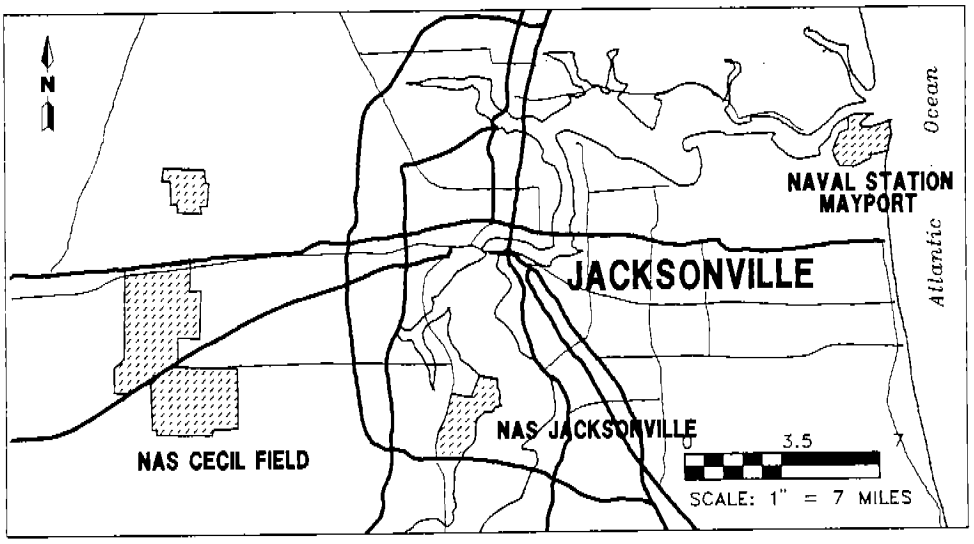


FIGURE 1-1
FACILITY LOCATION MAP

MAYPORT\MAYLOCAT\KGP-WDW-NP-GLC-JMK-SB\05-24-95

RCRA FACILITY INVESTIGATION REPORT, GROUP II SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

Table 1-1
Contents of RCRA Facility Investigation General Information Report

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chapter	Title	Contents
1.0	Introduction	Contains general background information; provides literature and previous investigation data for geography, climate, soil, geology, and hydrogeology.
2.0	NAVSTA Mayport RFI Activities	Describes field procedures used for collection, analysis, and evaluation of environmental samples. Describes data quality assessment techniques and QA/QC procedures. Describes methodology for risk assessments.
3.0	NAVSTA Mayport Background Investigation Findings	Contains the findings from background assessment activities, including hydrogeologic measurements, an ecological study, a tidal influence study, and soil, water, and sludge sample analyses.
4.0	Summary	Provides a summary of all findings and conditions associated with the NAVSTA Mayport SWMUs.

Notes: RCRA = Resource Conservation and Recovery Act.
NAVSTA = naval station.
RFI = RCRA facility investigation.
QA/QC = quality assurance and quality control.
SWMU = solid waste management unit.

Four SWMU groups are defined in the CAMP. SWMU Groups I through III were defined by grouping individual SWMUs within a geographic area that have similar past waste management practices and the potential for similar corrective measures. Group IV SWMUs are not directly associated with a given geographic area, but consist of utility networks and systems that span all of NAVSTA Mayport. The information in this report pertains only to the SWMUs of Group II (SWMUs 6, 7, 8, 9, 10, 11, 12, 15, and 16) (Figure 1-2).

The Group II SWMUs are located along the northern part of NAVSTA Mayport contiguous with the St. Johns River and include current and former hazardous and solid waste storage areas and petroleum waste treatment and disposal facilities. The SWMUs were incorporated into Group II because of their proximity to each other and to the St. Johns River and their potential for using similar or related corrective measures. Group II SWMUs were ranked as Priority 2 because of a "moderate perceived risk" for potential contaminants to impact moderate volumes of soil and groundwater and because these SWMUS have only a moderate potential for adversely impacting human and ecological receptors by soil and groundwater.

1.2 **PURPOSE**. The purpose of the RFI activities at NAVSTA Mayport is to provide data that will be used to:

(1) determine the nature and extent of contaminant releases from SWMUs;

(2) characterize the potential pathways of contaminant migration in the soil, surface water, and groundwater;

(3) identify potential receptors;

(4) assess potential risks to human health and the environment; and

(5) determine whether contaminants released from a SWMU require corrective measures to mitigate the risk to human health or the environment.

1.3 **SCOPE**. RFI field activities have occurred from January 1992 through April 1992, December 1992 through February 1993, and March 1994 through December 1994. Field activities at NAVSTA Mayport included:

- monitoring well and piezometer installation;
- surface soil and subsurface soil sample collection;
- surface water sample collection;
- sludge sample collection;
- groundwater sample collection;
- monitoring well, piezometer, and sample location topographic surveys;
- *in situ* slug testing of aquifer properties at selected monitoring wells and piezometers;

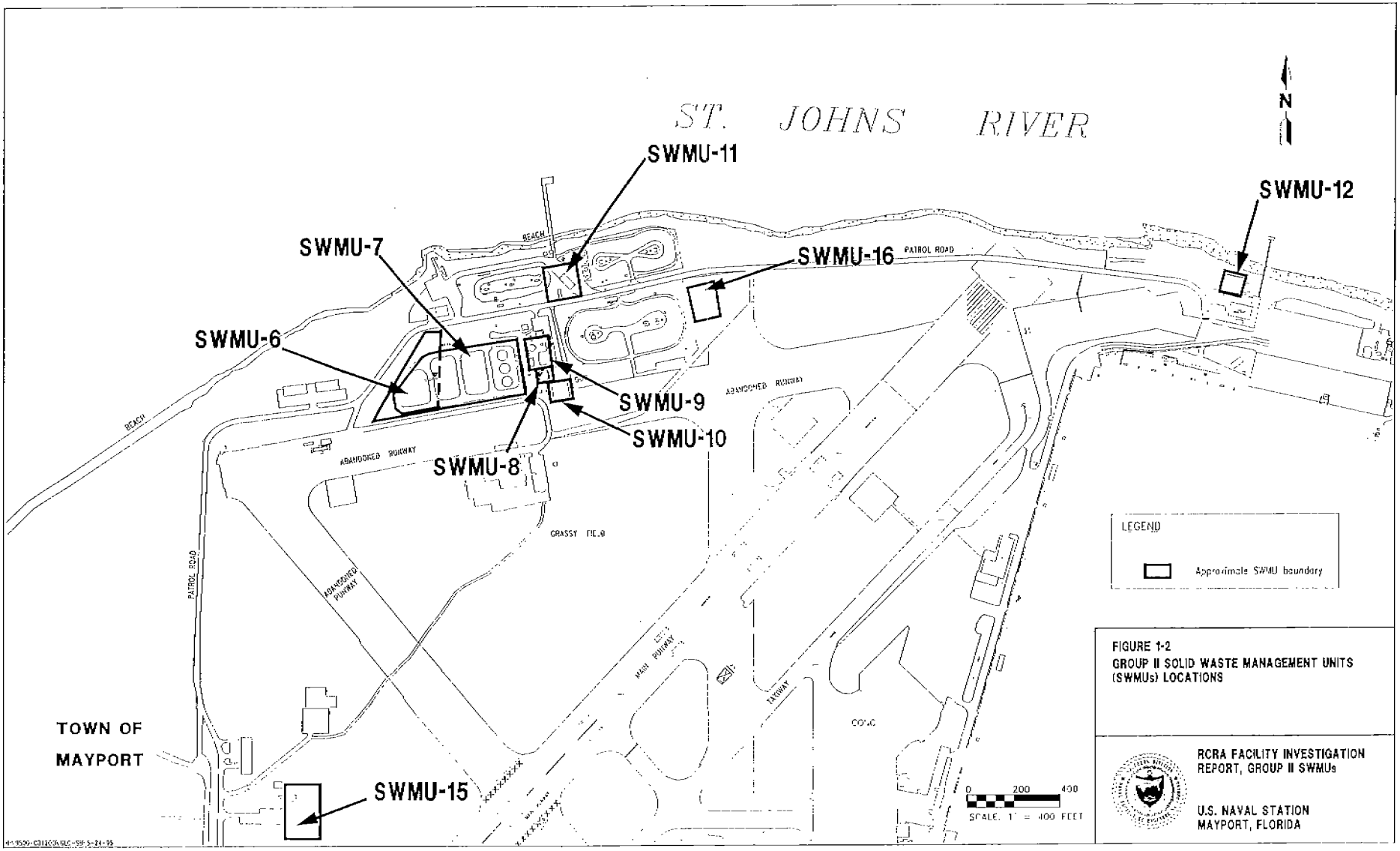


FIGURE 1-2
GROUP II SOLID WASTE MANAGEMENT UNITS (SWMUs) LOCATIONS

RCRA FACILITY INVESTIGATION REPORT, GROUP II SWMUs

U.S. NAVAL STATION
MAYPORT, FLORIDA

- tidal studies of selected monitoring wells and piezometers; • monthly groundwater elevation measurements (February 16, 1992, through January 31, 1993);

- a biological inventory of terrestrial and aquatic habitats; and

- laboratory analyses of selected Appendix IX Groundwater Monitoring List Compounds (40 Code of Federal Regulations [CFR] 264).

1.4 GROUP II RFI REPORT LAYOUT. The Group II RFI report is divided into eight chapters. Chapter 1.0 is an introduction, providing basic background information about NAVSTA Mayport, the Group II SWMUs, and the RFI process. More detailed geographic, demographic, and land-use information is available in the NAVSTA Mayport GIR (ABB-ES, 1995a).

Chapter 2.0 introduces the procedures used for analytical data management and evaluation of samples of soil, groundwater, surface water, and sludge. The discussion of data evaluation includes the procedures used for screening analytical data against stationwide background samples and human health-based benchmarks. This chapter also includes a summary of analytical data precision, accuracy, representativeness, comparability, and completeness (PARCC).

Chapter 3.0 includes discussion of physical characteristics of Group II SWMUs including site geology, hydrogeology, and physical characteristics of surface and subsurface soil. This information is the basis for assessing contaminant migration pathways and potential contaminant receptors, which are key elements of human health and ecological risk assessments.

Chapters 4.0 through 7.0 provide descriptions of each SWMU (or group of closely related SWMUs), characteristics of the release(s) at each SWMU, and human health and ecological risk assessments. Each chapter includes the following elements:

Site Description and Background provides SWMU descriptions, including waste management practices; summarizes previous investigations and findings; and characterizes the types and quantities of contaminants and affected media at each SWMU.

RFI Field Activities describes the data collection activities and deviations, if any, from the workplan that occurred during the Group II RFI.

Findings presents the results of laboratory analyses of environmental samples (surface and subsurface soil, surface water, sludge, and groundwater) collected during the Group II RFI.

Human Health and Ecological Risk Assessments presents the risk assessment for human health and ecological receptors at the SWMU or group of closely related SWMUs.

Chapter 8.0 presents conclusions and recommendations based on data interpretation and the human health and ecological risk assessments. The need for a corrective measures study (CMS) is determined based on evaluation of and conclusions derived from the human health and ecological risk assessments.

Except as noted within this report, field activities were conducted in accordance with the approved RFI workplan, Volumes I and II (ABB-ES, 1991b), and Addendum 4, Group I and II SWMUs (ABB-ES, 1993). The general operating guidelines for access, security, and field team organization implemented during RFI activities were consistent with RFI requirements as described in Chapter 2.0, Site Management Plan (SMP), of the RFI workplan, Volume II. In addition, Section 3.1, General Site Operations, of the RFI workplan, Volume II, provides descriptions of field personnel responsibilities, sample identification, sample management, chain of custody, project documentation, field changes, corrective actions, decontamination, waste management, and other general project standards and procedures. These general requirements were followed during the Group II RFI activities.

2.0 PROCEDURES FOR ANALYTICAL DATA MANAGEMENT AND EVALUATION

This chapter describes how the data generated during the 1993 and 1994 RFI field investigations at NAVSTA Mayport were managed and evaluated. Section 2.1 describes the analytical program and data management for the 1993 and 1994 field investigations. Section 2.2 summarizes the PARCCs report on the data. Section 2.3 describes how the data were managed and evaluated, and Section 2.4 describes how the data were screened for use in the site assessment and the risk assessment for human health and ecological receptors.

2.1 ANALYTICAL PROGRAM. Samples collected during the 1993 and 1994 RFI field investigations were analyzed using field screening and offsite laboratory analytical methods. Tables 2-1 and 2-2 summarize the 1993 and 1994 analytical programs. Sample results are presented in Appendix A and cross-reference lists of sample identifiers and sample locations are presented in Appendix B.

Screening-level analyses were performed at some of the SWMUs. Groundwater and subsurface soil samples, collected from the Oily Waste Treatment Plant (OWTP) Area using direct push technology (TerraProbe℠), were screened for total petroleum hydrocarbons (TPH) using infrared spectroscopy (modified USEPA Method 418.1). Samples collected in 1993 were screened in the field using a Horiba OCMA 2000 series analyzer; samples collected in 1994 were analyzed by an offsite laboratory. Surface and subsurface soil samples collected from SWMU 16 were screened for polychlorinated biphenyls (PCBs) using EnSys RIS℮™ immunoassay methodology screening kits.

Environmental samples (surface soil, subsurface soil, surface water, sludge, and groundwater) were collected and analyzed by offsite laboratories using SW846 methodology (USEPA, 1986a) for analysis of volatile organic compound (VOCs), semivolatile organic compounds (SVOCs), pesticides, PCBs, metals, and cyanide. The laboratory analytical program is described in more detail in Section 2.2 of the NAVSTA Mayport GIR (ABB-ES, 1995a). Some groundwater and subsurface soil samples also were analyzed for TPH (Method 418.1). Six surface soil samples collected from SWMU 15, the Old Pesticide Handling Area, were sent to an offsite laboratory for toxicity testing using the earthworm (*Eisenia foetida*). Portions of the six soil samples were analyzed for SVOCs, pesticides, and PCBs. Earthworms that survived the toxicity test (30 days) were analyzed for SVOCs, pesticides, and PCBs.

Analytical results obtained for all environmental samples during the 1993 sampling event were submitted as Naval Energy and Environmental Support Activity (NEESA) Level C (USEPA Level III) analytical packages for VOCs, SVOCs, pesticides, PCBs, and inorganics. Analytical results obtained from environmental samples during the 1994 sampling event were submitted as NEESA Level C for soil, sludge, and surface water samples for VOCs, SVOCs, pesticides, PCBs, metals, and cyanide. Analytical results for groundwater samples collected during the 1994 sampling event were submitted as NEESA Level E (USEPA Level II) for wet chemistry and general physical analyses; NEESA Level C for VOCs, SVOCs, pesticides, and PCBs; and NEESA Level D (USEPA Level IV) for metals and cyanide.

Table 2-1
Overview of Analytical Program

RCRA Facility investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyses	Media	Methods	DQL[1]	Laboratory	Validator
Field Screening	Groundwater and Subsurface Soil	TPH - USEPA 418.1 (modified)	E	Onsite	N/A
	Surface and Subsurface Soil	PCBs - RISc™ kit	E		
Offsite Analyses	Groundwater	TPH - USEPA 418.1	C	Quality Analytical Laboratories; Redding, California, and Montgomery, Alabama	1993 - Heartland Environmental, St. Peters, Missouri 1994 - Environmental Data Services Inc., Denver, Colorado
	Surface Soil, Subsurface Soil, Surface Water, Sludge, and Groundwater	Various - SW846	C and D		
Ecological Analyses	Surface Soil	Toxicity Testing - Green and others, 1989	C	Springborn Laboratories, Wareham, Massachusetts	Environmental Data Services Inc., Denver, Colorado
	Earthworms	Earthworm Analysis SW846 (pesticides, PCBs, and SVOCs)	C	Quality Analytical Laboratories, Montgomery, Alabama	

[1] E, C, and D represent Naval Energy and Environmental Support Activity (NEESA) data quality levels.

Notes: RCRA = Resource Conservation and Recovery Act.
SWMU = solid waste management unit.
DQL = data quality level.
TPH = total petroleum hydrocarbons.
USEPA = U.S. Environmental Protection Agency.
E = outside calibration range.
N/A = not applicable.
PCBs = polychlorinated biphenyls.
RISc™ = immunoassay screening kit.
SVOCs = semivolatile organic compounds.

Table 2-2
Analyses Performed by Media

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

SWMU No.	Medium Sampled	Number of Samples/ Duplicates	Analysis												
			Field Screening for TPH	Field Screening for PCB	VOA 8010	Pest/PCB 8080	PAH 8100	OPP 8140	Herb 8150	VOA 8240	SVOA 8270	TPH 418.1	Metals 6010, 7000	GWQ	Tox
SWMUs 6, 7, 8, 9, 10, and 11 (OWTP Area)	Soil boring (TerraProbe™) 1993	53/1	53/0									14/1			
	Soil boring (TerraProbe™) 1994	83/0										83/0			
	Groundwater (TerraProbe™) 1993	34/1	34/0		4/1							9/1			
	Groundwater (TerraProbe™) 1994	24/0										24/0			
	Surface water 1993	2/1				2/0				2/1	2/0		2/0		
	Sludge 1993	4/1				4/1				4/1	4/1		4/1		
	Sludge 1994	18/3				18/3				18/3	18/3		18/3		
	Subsurface Soil 1993	11/0				11/0				11/0	11/0		11/0		
	Subsurface Soil 1994	2/1					2/1								
	Groundwater 1993	12/1			1/0	12/1				12/1	12/1		12/1	12/0	
	Groundwater 1994	22/5			11/3	22/5				22/5	22/5	19/5	22/5	4/0	
	Groundwater (filtered) 1994	3/0											3/0		
SWMU 12	Groundwater 1993	3/1			3/0	3/1				3/1	3/1		3/1		
	Groundwater 1994	3/0				3/0				3/0	3/0		3/0		
	Groundwater (filtered) 1994	3/0											3/0		
SWMU 15	Surface Soil 1993	8/1				8/1				8/1	8/1		8/1		
	Surface Soil 1994	22/3				22/3		22/3	22/3						6/0
	Subsurface Soil 1993	10/1				10/1				10/1	10/1		10/1		
	Groundwater 1993	1/0				1/0				1/0	1/0		1/0	1/0	
	Groundwater 1994	6/1				6/1		6/1	6/1	6/1	6/1		6/1	6/0	
	Worm Tissue 1994	6/0				6/0					6/0				

See notes at end of table.

Table 2-2 (Continued)
Analyses Performed by Media

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

SWMU No.	Medium Sampled	Number of Samples/ Duplicates	Analysis												
			Field Screening for TPH	Field Screening for PCB	VOA 8010	Pest/PCB 8080	PAH 8100	OPP 8140	Herb 8150	VOA 8240	SVOA 8270	TPH 418.1	Metals 6010, 7000	GWQ	Tox
SWMU 16	Surface Soil 1993	44/1		37/0		7/1									
	Subsurface Soil 1993	13/0		5/0		8/0				6/0	6/0		6/0		
	Groundwater 1993	3/1			1/0	3/1				3/1	3/1		3/1	3/0	
	Groundwater 1994	4/0			1/0	4/0				4/0	4/0	4/0	4/0	3/0	

Notes: RCRA = Resource Conservation and Recovery Act.
SWMU = solid waste management unit.
PCB = polychlorinated biphenyls.
TPH = total petroleum hydrocarbons.
VOA = volatile organic analyses.
Pest/PCB = pesticides and polychlorinated biphenyls.
PAH = polynuclear aromatic hydrocarbons.
OPP = organophosphate pesticides.
Herb = herbicides.
SVOA = semivolatile organic analyses.
GWQ = groundwater quality parameters (pH, alkalinity, ammonia-nitrogen, chloride, color, hardness, phosphorus[total], sulfate, sulfide, total dissolved solids, total kjeldahl nitrogen, total organic carbon, and TPH).
Tox = toxicity testing.
OWTP = Oily Waste Treatment Plant.

2.2 DATA REVIEW. Data validation is the technical review of individual analytical results relative to the following criteria:

- data quality objectives (DQOs) and the Quality Assurance Project Plan (QAPP) in the NAVSTA Mayport RFI workplan (ABB-ES, 1991b);
- NEESA guidance document 20.2-047B, Sampling and Chemical Analysis Quality Assurance Requirements for the Navy Installation Restoration Program (NEESA, 1988);
- Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses (USEPA, 1988e); and
- National Functional Guidelines for Organic Data Review (USEPA, 1990).

The data validation process is described in Section 2.3 of the NAVSTA Mayport GIR (ABB-ES, 1995a).

After the data were reviewed and validated, they were evaluated using the PARCC criteria specified in the DQOs. PARCC criteria are described in Section 2.3 of the NAVSTA Mayport GIR (ABB-ES, 1995a). The evaluation of the 1993 and 1994 data according to the PARCC criteria are presented as Appendices C and D. The following subsections summarize the PARCC criteria evaluation of the 1993 and 1994 analytical data.

2.2.1 Precision Precision is a measure of the agreement or repeatability of a set of replicate results (relative percent difference [RPD]) obtained from duplicate laboratory analyses of samples collected from the same location and depth interval. Precision for analytical data collected during the 1993 and 1994 sampling events was evaluated using results of field duplicate samples, laboratory duplicate samples, matrix spike and matrix spike duplicate (MS/MSD) samples, and/or consecutive laboratory control samples. The following paragraphs summarize the evaluation of precision for the two sampling events.

1993 Sampling Activities. The RPD criteria were not met for some of the environmental samples (water, soil, and sludge matrices) and associated field duplicates because the target analytes were detected in one of the samples at concentrations below the method detection limit (MDL). None of the 1993 analytical results were qualified during the data validation process based on the RPD criteria for environmental and duplicate sample pairs.

The RPD criteria were not met for some of the MS/MSD samples because of possible laboratory contaminants and sample heterogeneity. None of the 1993 analytical results were qualified during the data validation process based on RPD criteria for MS/MSD samples.

1994 Sampling Activities. The RPD criteria were not met for environmental samples and associated duplicates for acetone, 2-butanone, 4,4'-dichlorodiphenyl-trichloroethane (DDT), and several inorganic analytes. The RPD criteria for acetone and 2-butanone may not have been met because they are commonly detected as laboratory-derived contaminants. The RPD criteria for 4,4'-DDT and inorganic analytes in soil and sludge samples may not have been met because of sample heterogeneity. None of the 1994 analytical results were qualified during the data

validation process based on RPD criteria for environmental and associated duplicate sample pairs.

The RPD criteria were not met for some organic analytes in the MS/MSD samples; however, qualification of associated environmental samples was not required. The RPD criteria were not met for some of the inorganic analytes in the MS sample and resulted in qualification of environmental samples (sludge) in the associated analytical batches.

2.2.2 Accuracy Accuracy is a measure of the agreement between the true value and the value measured using an analytical method (percent recovery). Accuracy also is evaluated during data validation by assessing initial and continuing calibration data for the analytical instrument. Accuracy for analytical data collected during the 1993 and 1994 sampling events was assessed by evaluating percentage recoveries for MS/MSD samples, surrogate recoveries, laboratory control samples, and initial and continuing calibration standard results. The following subsections summarize the evaluation of accuracy for the two sampling events.

1993 Sampling Activities. The percent recovery for some of the soil, sludge, and groundwater samples was above or below the target range; therefore, some analytical results may be biased high or low. With the exception of pesticide analyses, none of the samples was qualified based on percent recovery. The evaluation of percent recovery suggests matrix interference for some of the soil, sludge, and groundwater samples, resulting in the qualification of some data.

Analytical results for some of the Appendix IX VOCs (acrolein, acetonitrile, chloroprene, 1,4-dioxane, isobutyl alcohol, 2-chloroethylvinylether) and SVOCs (p-phenylenediamine, aramite, 4-nitroquinololine-1-oxide, 1-naphthalamine, phenyl-tert-butylamine, 5-nitro-o-toluidine, hexachlorophene and pentachloronitrobenzene) data were rejected because initial and continuing calibration criteria (Relative Response Factors) were not met. The number of samples not in compliance with the Relative Response Factor varied by compound. Positive results for these VOCs and SVOCs were not noted.

A limited number of inorganic analytical results for lead, thallium, and mercury were qualified because the percent recovery of spiked compounds in MS samples was less than 30 percent. When this condition occurred, the nondetect values were rejected, and positive values were qualified with a "J" qualifier.

1994 Sampling Activities. The percent recovery for some of the soil, sludge, and groundwater samples was above or below the target range; therefore, some analytical results may be biased high or low. Some of the analytical results for VOCs, SVOCs, pesticides, and PCBs were qualified based on the evaluation of percent recovery.

Analytical results for some of the Appendix IX VOCs (2-butanone, 1,4-dioxane, acrolein,isobutyl alcohol) and SVOC (4-nitroquinoline-1-oxide, benzoic acid, hexachloroethane, hexachlorophene, and hexachloropropene) data were rejected because initial and continuing calibration criteria (Relative Response Factors) were not met. The number of samples not in compliance with the Relative Response Factor varied by compound. With exception of 2-butanone, positive results for these VOCs and SVOCs were not noted. One group of samples (SDG SMU 28-003) had 19 VOCs rejected because the Relative Response Factor was less than 0.05 and no 5-point calibration was conducted.

Some of the inorganic analytical results (antimony, selenium, copper, lead, mercury, and cyanide) were qualified because the percent recovery of spiked compounds in MS samples was less than 30 percent. When this condition occurred, the nondetect values were rejected and positive values were qualified with a "J" qualifier.

2.2.3 **Representativeness** Representativeness is the degree to which the data obtained from an environmental sample accurately reflect the presence or absence of contamination at a site. Field quality control samples (including source water blanks, equipment rinse blanks, and trip blanks) and laboratory quality control samples (including method [organic analyses] and preparation blanks [inorganic analysis]) were used to assess representativeness. Representativeness also is assessed by review of the adherence to extraction and analysis holding times. The following subsections summarize the evaluation of representativeness for the two sampling events.

1993 Sampling Activities. Extraction and analysis holding time requirements were met for all analytical fractions. Qualification of the environmental samples was required because of the detection of target analytes in laboratory and field blanks. Qualification of 1993 data based on blank contamination was performed according to USEPA data validation guidelines (USEPA, 1988e and USEPA, 1990).

1994 Sampling Activities. Sampling and analysis holding times for each analytical fraction were met with the exception of the analysis for mercury in seven soil samples. In accordance with data validation guidelines (USEPA, 1988e), the data associated with the missed holding time were rejected.

Qualification of the environmental samples was required because of the detection of target analytes in laboratory and field blanks. Qualification of the 1994 data, based on blank contamination, was performed according to USEPA data validation guidelines (USEPA, 1988e and USEPA, 1990).

2.2.4 **Comparability** Comparability is the confidence with which one data set can be compared with another and the degree to which the environmental data from each sampling event are considered equivalent. Comparability of the analytical data was assured by using standard operating procedures for sample collection, by using standard chemical analytical methods, and by reporting the analytical results in standard units.

Sampling procedures that may result in data that are not directly comparable were collection of soil samples at SWMU 16 and collection of groundwater samples at all SWMUs. At SWMU 16, the Old Transformer Storage Yard, surface soil samples were collected from a horizon centered on the old asphalt surface, including about 0.25 inch of the overlying lime-rock material. The sample depth beneath the land surface was generally less than 6 inches below land surface (bls). Subsurface soil samples were collected from a 1-foot interval beneath the runway pavement. Subsequent to the sampling event at SWMU 16, the surficial zone of sand and shell overlying the runway and the runway materials have been removed and the exposed subgrade has been scarified (mixed) and then compacted. An asphalt layer has been placed over the prepared subgrade. Therefore, should additional sampling be required, the materials sampled in 1993 either do not exist or exist in a somewhat different form and may not provide directly comparable analytical results.

Variation occurred in the groundwater sample collection procedures for the 1993 and 1994 sampling events. In 1993, monitoring wells were purged and sampled using bailers. In 1994, monitoring wells were purged and sampled using low-flow sampling methods with a peristaltic pump. Low-flow purging and sampling produces water that is less turbid than the traditional bailer purging and sampling method. Because of the reduced turbidity, the samples collected for inorganic analyses are more representative of undisturbed groundwater. As a result, the difference in the turbidity of samples collected in 1993 and 1994 from the same monitoring wells may produce inorganic analytical results that are not directly comparable. The low-flow sampling method was originally used for collection of all sample aliquots; however, after July 7, 1994, only the inorganics fraction was collected using this method. This change in groundwater sampling procedures was initiated to improve the efficiency of groundwater sampling (some monitoring wells required a full day to sample). This procedural change did not affect the quality of the collected samples because the monitoring wells were still purged and sampled for the inorganic fractions using the low-flow sampling method.

2.2.5 Completeness Completeness is the percentage of usable data reported and validated compared with the total number of measurements made. Usable data are those measurements that were not rejected (qualified with an "R") during the validation process. The goal for analytical completeness for both the 1993 and 1994 sampling events was 95 percent useable data. The completeness goal of 95 percent was met for all matrices and all parameters. Overall, the data generated during both sampling events meet established data quality objectives and are acceptable for use in site characterization, risk assessment, and evaluation of corrective measures.

2.3 DATA MANAGEMENT AND EVALUATION. The analytical data for the Group II RFI consist of analytical results from samples collected in 1993 and 1994, including quality assurance and quality control (QA/QC) samples. Appendices A and B present the 1993 and 1994 analytical results.

2.3.1 Developing Final Data Sets Subsets of the complete analytical data set were used to evaluate the nature and distribution of analytes detected at each SWMU. The same subsets were used to evaluate human health and ecological risks associated with these analytes. In this report, these subsets of the complete data set are referred to as "final data sets." The following process was used to develop the final data sets:

1. The validated 1993 and 1994 data were compiled in electronic form.

2. Any detection, including estimated concentrations ("J" qualifiers) below the contract-required quantitation limits (CRQL) for organics and contract-required detection limits (CRDLs) for inorganics, and the MDLs were included in the data set.

3. Sample records rejected by the validators (i.e., "R" qualifiers) were not included in the final data set.

4. Quality control samples were not included in the final data set.

5. Some samples were reanalyzed by the laboratory. However, based on validator recommendations, the original results for all 1993 and 1994

analyses were used in the final data set with only two exceptions. The results for chlordane from the reanalysis of sample 08SL00401 and its duplicate 08SL00401D were used in the final data set (Appendix A).

6. In cases where samples were diluted to quantify specific compounds (denoted by DL suffix on sample identifier), the following guidelines were used to determine which result to use in the final data set.

   - If a compound was not detected or was quantified by the original analysis, the undiluted result was used.

   - If a compound was detected by the original analysis at a concentration outside the calibration range ("E" qualifier), the diluted result was used.

7. Results from SW846 Method 8010 analyses were not used in the final data set. The purpose of the Method 8010 analyses was to (1) confirm the results of the SW846 Method 8240 analyses and (2) evaluate whether target analytes were present at concentrations below the Method 8240 detection limits. Review of the analytical results from the two methods indicates that there are no discrepancies. Method 8010 results were not validated.

8. For 1,2-, 1,3-, and 1,4-dichlorobenzene, the analytical results from SW846 Method 8240 analyses were used in place of the results from SW846 Method 8270 analyses. The Method 8240 results were used because this method has lower detection limits for these compounds.

9. With the exception of monitoring wells MPT-8-MW07S, MPT-8-MW05S, MPT-8-MW05I, and MPT-8-MW05D, 1994 groundwater analytical data were used in the final data set. MPT-8-MW07S was not sampled in 1994 because of the presence of floating free-phase hydrocarbons; therefore, the 1993 data for this well were used in the final data set. Monitoring wells MPT-8-MW05S, MPT-8-MW05I, and MPT-8-MW05D are background monitoring wells and were not used in the site-specific evaluation. The 1994 groundwater analytical data were preferred because they are more current and were collected using low-flow purging and sampling that provides a more representative (less turbid) sample of groundwater than the traditional bailer techniques. However, both the 1993 and 1994 groundwater analytical results were used for assessing the nature and distribution of target analytes at the SWMUs.

2.3.2 **Statistical Calculations** Minimum concentrations, maximum concentrations, average concentrations, frequencies of detection, and 95 percent upper confidence intervals were calculated for detected analytes using standard statistical methods. However, because environmental and associated duplicate samples represent only one sampling location, duplicate results were averaged before these statistics were calculated. The following guidelines were used to calculate average values for the environmental and duplicate sample pairs:

- For target analytes detected in both the environmental and associated duplicate sample (i.e., "nonqualified positive detection" or "J" qualifier), the detected values were used to calculate the average value.

- For target analytes detected only in either the environmental or duplicate sample (i.e., one sample with nonqualified positive detection or a "J" qualifier and the other a nondetection with a "U" or "UJ" qualifier), the average was calculated by using the detected value and one-half the value of the "U" or "UJ" qualified sample.

2.4 SCREENING ANALYTICAL DATA. The analytical data for each environmental medium sampled during the 1993 and 1994 field investigations were screened against background data and various benchmarks for the purposes of assessing the nature and distribution of contamination and conducting the risk assessment for human health and ecological receptors. The initial screening of site-specific data is presented in the nature and distribution section associated with each SWMU (Chapters 4.0 through 8.0).

Analytical results for all media were compared to background screening concentrations (ABB-ES, 1995a) and Region III risk-based concentrations (RBCs) (USEPA, 1995). The OWTP sludge drying beds at SWMU 7 were constructed by excavating pits and using the excavated materials as berms. Analytes detected in sludge samples collected from beneath the sludge drying beds were compared to background screening concentrations for subsurface soil. In addition, surface soil, subsurface soil, and sludge results were compared with the Florida cleanup goals (residential for surface soil, industrial for subsurface soil and sludge) (Florida Department of Environmental Protection [FDEP], 1995). Surface water and groundwater were also compared to Florida guidance concentrations (FDEP, 1994). The background screening values and benchmark values for analytes detected in NAVSTA Mayport background samples are presented in the NAVSTA Mayport GIR.

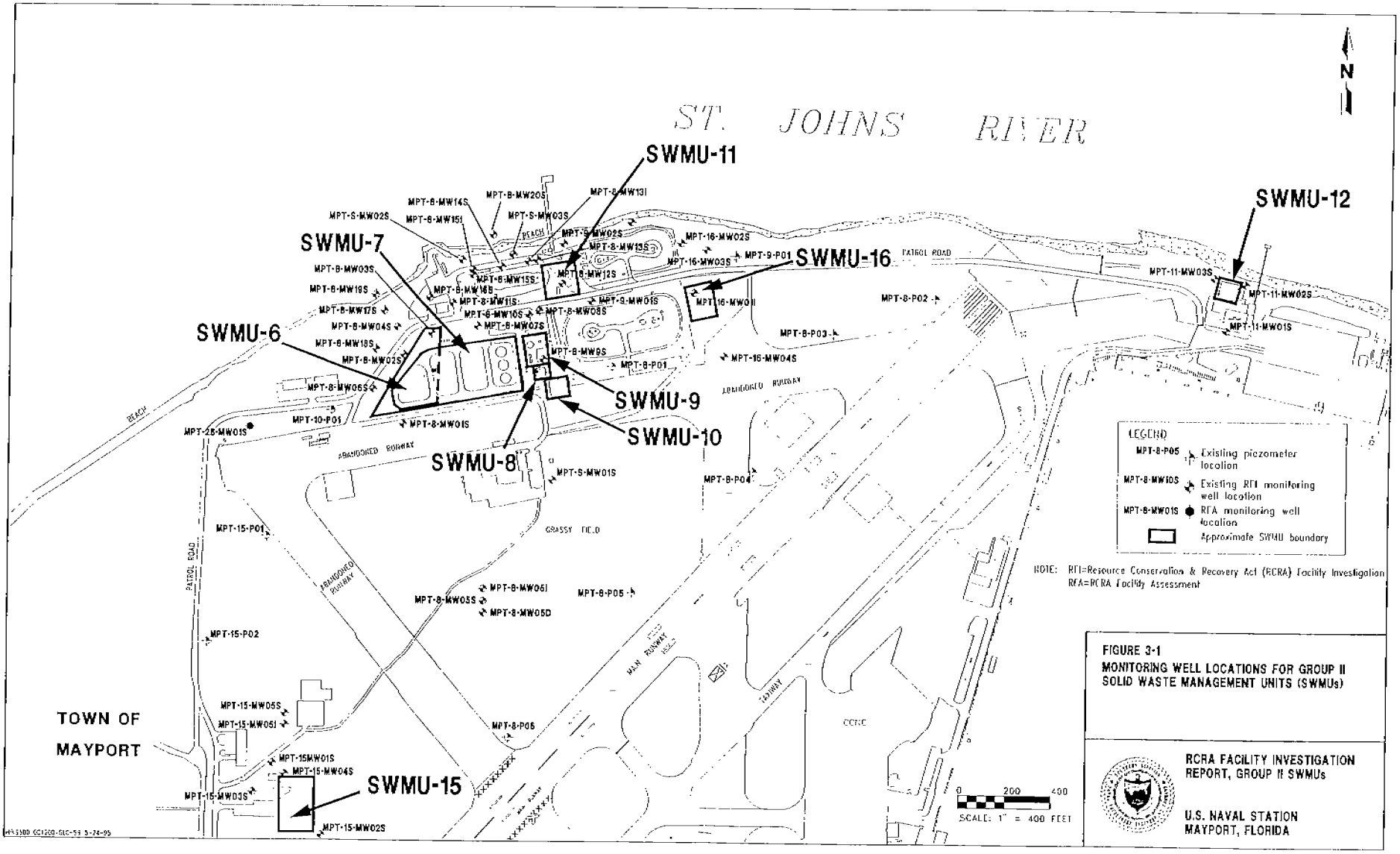
3.0 GROUP II SWMUs PHYSICAL CHARACTERISTICS

A detailed description of the physical characteristics of NAVSTA Mayport, including topography, demography, climate, soil types, and regional hydrogeology has been presented in Section 1.4 and Chapter 3.0 of the NAVSTA Mayport GIR (ABB-ES, 1995a). The following is a summary of geologic and hydrologic data collected at the Group II SWMUs during 1993 and 1994. These data are used in the evaluation of the nature and extent of contamination, if any, based on the geological and hydrogeological setting of the Group II SWMUs.

3.1 GEOLOGY. More than 100 borings have been completed at NAVSTA Mayport for various field investigation tasks. Approximately 55 borings have been completed as monitoring wells or piezometers within the Group II SWMUs (including background locations) (Figure 3-1). Tables 3-5 and 3-6 in the NAVSTA Mayport GIR (ABB-ES, 1995a) summarize the locations, designations, and screened interval information for all wells and piezometers installed at NAVSTA Mayport to date. Boring logs for all locations are included in Appendix A, Volume II of the NAVSTA Mayport GIR (ABB-ES, 1995a). The information summarized in the boring logs was used to generate a series of geologic cross-section traverses (Figure 3-1, NAVSTA Mayport GIR). A key to lithologic symbols used in the sections is presented on Figure 3-2 (NAVSTA Mayport GIR). Three of these cross-sections (Lines A-A', Figure 3-3; C-C', Figure 3-5; and D-D', Figure 3-6, NAVSTA Mayport GIR) traverse the area included in Group II SWMUs. The following is a description of the geologic units depicted in these cross-sections:

In the Group II SWMU area, dredge material overlies undifferentiated post-Hawthorn deposits to depths of approximately 8 to 16 feet bls. The thickness of the dredge material is a result of variations in the original topographic altitude of the depositional environments in which the dredge material was placed. The dredge material typically consists of fine-grained, well-sorted sands which may include mixtures of sand with marine shell fragments. In several localities, coarse shell fragments are the dominant material and typically appear as shell (mollusk) hash layers or seams. Color ranges from tan to light gray. Where color change occurs, the change is typically gradational over several feet. Underlying the dredge materials is sediment that comprises the undifferentiated post-Hawthorn deposits (Scott, 1988). This sediment consists of fairly uniform, well-sorted, very fine-grained sand (Unified Soil Classification System [USCS] designation SP), which typically contains minor amounts of fines consisting of silt and clay and frequently includes numerous shell fragments and subrounded pea-size gravel. The undifferentiated post-Hawthorn deposits are likely the product of Miocene to Holocene fluvial deposition and the erosion and redeposition of Hawthorn Group sediments. River depositional processes have produced a highly variable set of lithologic units that are horizontally and vertically anisotropic throughout the study area. Colors of these sediments range from tan to light gray and, where color change occurs, the change is typically gradational over several feet.

Because the undifferentiated post-Hawthorn deposits include eroded and redeposited sediments from the Upper Hawthorn Group, it was not possible to determine exactly where the Upper Hawthorn Group was encountered. Various factors such as lithologic description and lithologic resistance to split-spoon sampling were


ST. JOHNS RIVER
N
SWMU-11
SWMU-12
SWMU-7
SWMU-16
SWMU-6
SWMU-9
SWMU-10
SWMU-8
SWMU-15
TOWN OF MAYPORT
MPT-8-MW14S
MPT-8-MW20S
MPT-8-MW13I
MPT-8-MW15I
MPT-S-MW02S
MPT-S-MW03S
MPT-8-MW13S
MPT-16-MW02S
MPT-16-MW03S
MPT-9-P01
MPT-8-MW03S
MPT-8-MW19S
MPT-8-MW17S
MPT-8-MW04S
MPT-8-MW18S
MPT-8-MW02S
MPT-8-MW15S
MPT-8-MW16S
MPT-8-MW11S
MPT-8-MW10S
MPT-8-MW07S
MPT-8-MW08S
MPT-8-MW12S
MPT-9-MW01S
MPT-16-MW01
MPT-8-P02
MPT-8-P03
MPT-11-MW03S
MPT-11-MW02S
MPT-11-MW01S
MPT-8-MW09S
MPT-8-P01
MPT-16-MW04S
MPT-8-MW06S
MPT-10-P01
MPT-8-MW01S
MPT-25-MW01S
MPT-S-MW01S
MPT-8-P04
MPT-15-P01
MPT-8-MW05I
MPT-8-MW05S
MPT-8-MW05D
MPT-8-P05
MPT-15-P02
MPT-15-MW05S
MPT-15-MW05I
MPT-8-P06
MPT-15MW01S
MPT-15-MW04S
MPT-15-MW03S
MPT-15-MW02S
BEACH
PATROL ROAD
ABANDONED RUNWAY
GRASSY FIELD
MAIN RUNWAY
TAXIWAY
CONE
LEGEND
MPT-8-P05 Existing piezometer location
MPT-8-MW10S Existing RFI monitoring well location
MPT-8-MW01S RFA monitoring well location
Approximate SWMU boundary
NOTE: RFI=Resource Conservation & Recovery Act (RCRA) Facility Investigation
RFA=RCRA Facility Assessment
0 200 400
SCALE: 1" = 400 FEET
FIGURE 3-1
MONITORING WELL LOCATIONS FOR GROUP II SOLID WASTE MANAGEMENT UNITS (SWMUs)
RCRA FACILITY INVESTIGATION REPORT, GROUP II SWMUs
U.S. NAVAL STATION MAYPORT, FLORIDA

used to determine that the Upper Hawthorn Group was encountered at a depth of approximately 75 feet bls in the Group II area.

The undifferentiated post-Hawthorn deposits frequently include a very soft gray to dark gray silty clay (USCS designation CH or MH, based on visual observation) layer 3 to 7 feet thick that likely represents recent estuarine deposition (silt, clay, and organics of marsh deposition). The silty clay layer appears to be restricted to the interior of the station and typically is not found along higher energy depositional zones such as beach or river channel and bank environments of the St. Johns River (refer to Figures 3-3 and 3-4 in the NAVSTA Mayport GIR; ABB-ES, 1995a).

The following presents a description of the shallow soil encountered at Group II SWMUs 6 through 11, 12, 15, and 16. These summaries are based on lithologic descriptions on the boring logs which are included in Appendix A of the NAVSTA Mayport GIR (ABB-ES, 1995a). Except as noted, these summaries describe the interval from land surface to approximately 15 ft bls.

SWMUs 6 through 11 (OWTP Area). Shallow soil in the vicinity of the OWTP Area consists of fine- to medium-grained sand or silty sand which may have shell fragments incorporated in the matrix. At some of the soil boring locations, thin (less than 1 foot) seams of sand with organics were encountered at depths below 5 feet bls; these seams possibly are former soil horizons. Seams of clay were also encountered at several boring locations, but were not found to be a widespread feature across the SWMUs in the vicinity of the OWTP Area.

The boring for monitoring well MPT-8-MW05D was terminated at a depth of 87 feet bls. At this location, fine- to medium-grained sand occurred from the land surface to a depth of 10 feet bls. At this depth, an organic-rich soil horizon was found to occur. Below this horizon, the soil encountered was a gray silty fine-grained sand which occurred to a depth of 35 feet bls and was underlain by fine-grained sand interlayered with silty clay to a depth of 55 feet bls. Underlying these soils were alternating silty clay and shell hash seams and layers to a depth of 67 feet bls, which were underlain by organic-coated sand to a depth of 72 feet bls and a stiff gray clay with black phosphatic nodules to the termination depth of 87 feet bls. This clay is similar to low permeability confining units of the Hawthorn Group.

SWMU 12 (Neutralization Basin). The Neutralization Basin is located on a narrow peninsula between the St. Johns River and Mayport Turning Basin. Shallow soil in this area consists of relatively uniform, tan to gray fine-grained sand with shell fragments and some minor seams of concentrated shell material.

SWMU 15 (Old Pesticide Handling Area). Shallow soil in the vicinity of the Old Pesticide Handling Area consists of tan fine-grained sand or silty sand. Minor amounts of shell material are present in some of the borings. A relatively thin (less than 4 feet) layer of olive gray silty clay occurred in several borings at depths greater than 10 feet bls. This silty clay layer does not appear to be continuous within the SWMU.

SWMU 16 (Old Transformer Storage Yard). Shallow soil in the vicinity of the Old Transformer Storage Yard consists of a relatively thin organic soil horizon underlain by tan to gray, fine-grained sand or silty fine-grained sand with shell fragments or localized shell seams. One boring in this SWMU (MPT-16-MW01I) was

terminated at a depth of 30.5 feet bls; soil at this location below 15 feet consists of a uniform gray fine-grained sand with shell fragments.

3.2 HYDROGEOLOGY. The objective of the hydrogeologic investigation conducted at NAVSTA Mayport was to characterize variables that influence contaminant fate and transport. Hydrogeologic characterization activities included evaluation of tidal influence on the shallow aquifer and estimation of groundwater flow directions, hydraulic conductivity, seepage velocity, and determination of soil physical properties that may affect contaminant transport in groundwater.

3.2.1 Tidal Influence A tidal influence survey was conducted to assess the impact of tidal fluctuations on the surficial aquifer at NAVSTA Mayport. Monitoring wells located near the banks of the St. Johns River, tidally influenced creeks and drainage ditches, and areas distant from tidally affected surface water were included in the survey. The wells were monitored electronically during three data gathering cycles: February 15 and 16, 1992, during a waxing full moon cycle; December 8 through 16, 1992, during a new moon cycle; and January 27 through February 4, 1993. These intervals were selected because they coincided with local spring tides. Therefore, the survey data represent the maximum tidal fluctuations affecting local water bodies during the period of investigation. Refer to paragraph 2.1.5.2 of the NAVSTA Mayport GIR (ABB-ES, 1995a) for a description of specific methodologies used to conduct the survey.

The results of the tidal survey are presented in subsection 3.2.2 of the NAVSTA Mayport GIR (ABB-ES, 1995a). Ten monitoring wells at the Group II SWMUs were included in the tidal influence survey. These monitoring wells were all in the vicinity of the OWTP and the neutralization basin. The field data were compared to computer-generated tidal data produced by the U.S. Naval Observatory. Groundwater elevations, tidal displacement, and rainfall versus time were plotted for the wells included in the survey. Graphic presentations for wells located in Group II are included in the NAVSTA Mayport GIR as follows: MPT-9-P01 (Figure 3-10), MPT-11-MW01S and MPT-11-MW03S (Figure 3-11), MPT-8-MW01S (Figure 3-12), MPT-8-MW02S (Figure 3-13), MPT-8-MW03S (Figure 3-14), MPT-S-MW01S (Figure 3-15), MPT-8D-P01 (Figure 3-16), MPT-9-MW01S (Figure 3-17), and MPT-9-MW03S (Figure 3-18).

Significant findings and conclusions based on evaluation of the tidal survey data are as follows:

> In general, the water table responds strongly to diurnal tidal fluctuations in areas adjacent to tidally influenced water bodies. Response lag time varied from 7.5 to 11 hours in the monitored locations, including wells and piezometers in the OWTP Area. The water table also responds to lunar tidal fluctuations.
>
> No tidal influence on groundwater elevations was apparent at monitoring points MPT-8D-P01, MPT-S-MW01S, and MPT-11-MW01S. These locations were approximately 700 feet, 1,000 feet, and 400 feet, respectively, from the St. Johns River. Muted responses were noted at location MPT-8-MW01S, approximately 400 feet from the river. The implication is that tidal influence decreases with distance from the shoreline up to approximately 400 feet inland from the St. Johns River, where its impact is negligible. Tidal

influence on the shallow aquifer encompasses all Group II SWMUs except SWMU 15.

The surficial aquifer exhibited a recharge response to rainfall events during the second and third monitoring periods. This was measured in the vicinity of the westernmost OWTP sludge lagoon in SWMU 7, but is likely true for the entire area, given that the shallow surficial aquifer is composed primarily of dredge material throughout the Group II SWMUs.

The effect of diurnal and lunar tidal variations on the shallow groundwater table may result in variations in the groundwater flow directions that are not depicted by the groundwater flow direction maps. Additionally, contaminants in the shallow portion of the surficial aquifer, in particular, floating free-phase hydrocarbon, will be "smeared" across the sediment as the water table fluctuates. A result of the smearing effect is for the floating free-phase hydrocarbon to be either "trapped" beneath the rising water table or left in pore (void) spaces in the sediment as the water table declines. This smearing effect can result in considerable variations in the measurement of the thickness of floating free-phase hydrocarbon.

3.2.2 Potentiometric Surface A discussion of the potentiometric surface on a stationwide basis was summarized in subsection 3.2.5 of the NAVSTA Mayport GIR (ABB-ES, 1995a). Monitoring of water levels was conducted on a monthly basis throughout the various RFI investigation phases. These data were plotted, and stationwide maps of the potentiometric surface of the surficial aquifer are included in Appendix B, Volume II of the NAVSTA Mayport GIR.

Within the horizontal and vertical extent of subsurface explorations at Group II SWMUs, no confining unit of sufficient areal extent and thickness was found to indicate that the geologic units described in Section 3.1 are hydraulically isolated; therefore, the dredge material, undifferentiated post-Hawthorn deposits, and the Upper Hawthorn deposits appear to be in direct hydraulic connection and comprise the surficial aquifer in the vicinity of the Group II SWMUs.

Despite localized influences on groundwater flow, the overall flow direction of the surficial aquifer in the Group II SWMU area is toward the St. Johns River (Figure 3-2). In general, groundwater flow in the surficial aquifer at NAVSTA Mayport is recharged by or originates from four localized hydrologic mounds (refer to Figure 3-19, NAVSTA Mayport GIR). One of these mounds apparently influences flow in the Group II SWMUs; it is generally oval-shaped with the long axis trending northeast-southwest, roughly coincident with the main runway. The northeast end of the mound effect is apparent along the south edge of the area depicted on Figure 3-2.

The Group II SWMUs are divided into three subgroups for the following discussion of the potentiometric surface. These groupings are SWMUs 6, 7, 8, 9, 10, 11, and 16 (collectively, the OWTP Area and Old Transformer Storage Yard); SWMU 12 (the Neutralization Basin); and SWMU 15 (the Old Pesticide Handling Area). The rationale for grouping the SWMUs was the similarity of lithologic conditions and proximity of monitoring wells located at SWMUs 6, 7, 8, 9, 10, 11, and 16, and the fact that SWMUs 12 and 15 are separated from the other SWMUs by sufficient distance, approximately 2,000 feet for SWMU 12 and 1,500 feet for SWMU 15, to be influenced by separate hydraulic conditions and dissimilar topographic settings.

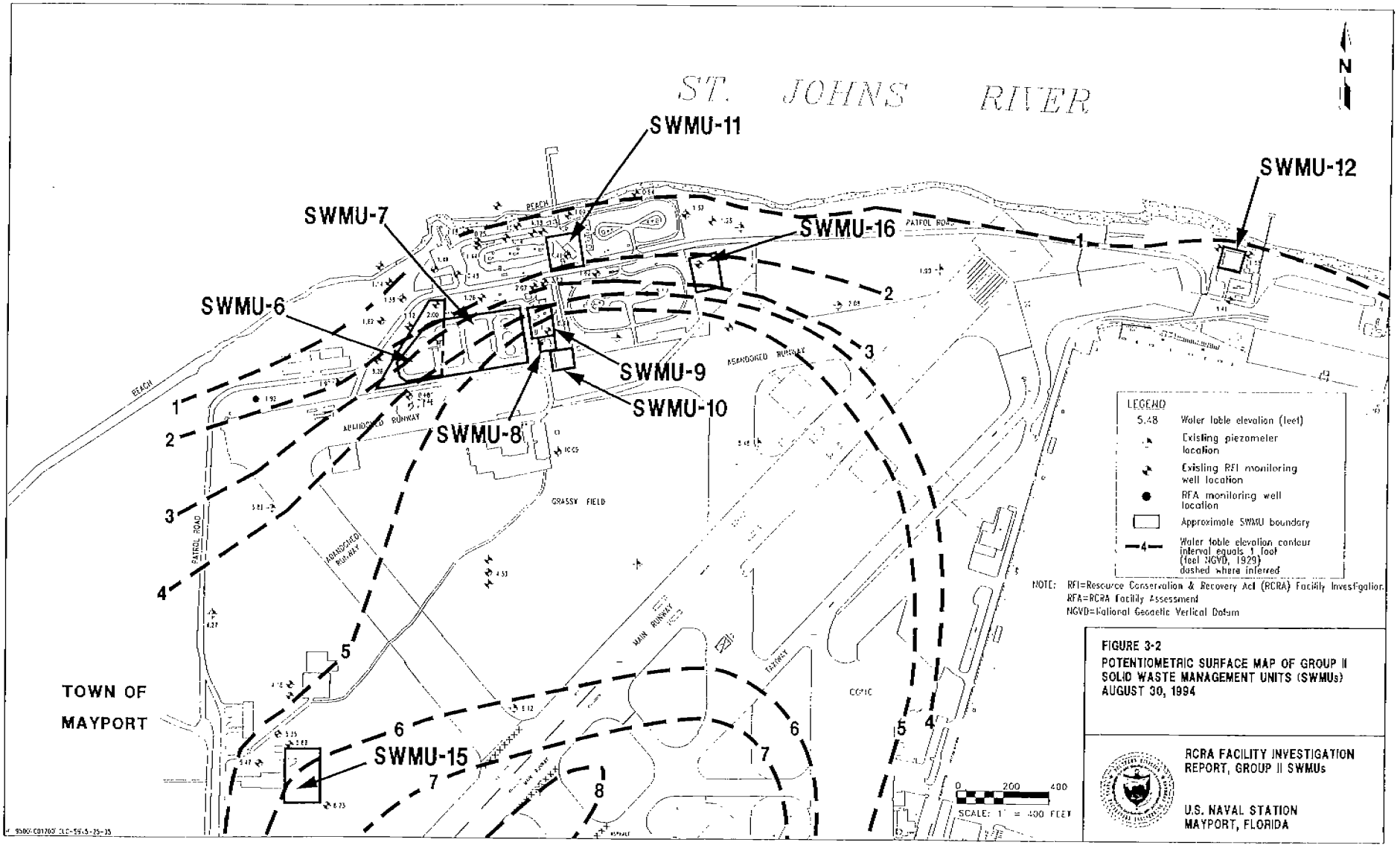


FIGURE 3-2
POTENTIOMETRIC SURFACE MAP OF GROUP II SOLID WASTE MANAGEMENT UNITS (SWMUs)
AUGUST 30, 1994

RCRA FACILITY INVESTIGATION REPORT, GROUP II SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

An estimation of the potentiometric surface of the surficial aquifer in the vicinity of the Group II SWMUs has been made from data collected on August 30, 1994 (Table 3-1 and Figure 3-2). The data collected on August 30, 1994, was selected because it represents the most current and complete data set for Group II SWMUs. The following is a summary of groundwater flow in each of the SWMU subgroups:

SWMUs 6, 7, 8, 9, 10, 11, and 16. The SWMUs comprising the OWTP Area and Old Transformer Storage Yard are located due south of the St. Johns River, in the northernmost part of NAVSTA Mayport. The direction of groundwater flow is generally to the north, toward the St. Johns River (Figure 3-2). The hydraulic positions of the monitoring wells in relation to the SWMUs are provided in Table 3-2. The potentiometric surface map, Figure 3-2, may not accurately depict anomalous water levels from tidal influences and from local topographic features such as the potential hydrologic mounding associated with the sludge drying bed lagoons at SWMU 7, the potential hydrologic barrier imposed by cut and cover fuel storage tanks, and the potential for underground piping that is constructed below the water table to be a preferred flow path conduit for the groundwater. Refer to paragraph 2.1.5.2 of the NAVSTA Mayport GIR (ABB-ES, 1995a) for a more detailed description of tidal influences.

Floating free-phase hydrocarbons have been measured in six of the SWMU 6 and 7 monitoring wells (MPT-8-MW02S, MPT-8-MW03S, MPT-8-MW04S, MPT-8-MW07S, MPT-8-MW11S, and MPT-8-MW15S); see Table B-1 in Appendix B of the NAVSTA Mayport GIR, (ABB-ES, 1995a). The thickness of floating free-phase hydrocarbons measured in each of these monitoring wells has varied over time and has not always been observed in monitoring wells MPT-8-MW04S and MPT-8-MW07S.

SWMU 12. The Neutralization Basin is located on a narrow peninsula between the St. Johns River to the north and the Mayport Turning Basin to the south. Groundwater flow appears to be to the northeast toward the St. Johns River. The hydraulic positions of the monitoring wells in relation to the SWMU are provided in Table 3-3. Tidal influences are observed at the location of monitoring wells MPT-11-MW02S and MPT-11-03S but not at MPT-11-MW01S. Refer to subsection 3.2.1 of this report and paragraph 2.1.5.2 of the NAVSTA Mayport GIR (ABB-ES, 1995a) for a more detailed description of tidal influences.

SWMU 15. The Old Pesticide Handling Area is located northwest of the active runway, approximately 1,800 feet from the St. Johns River. Groundwater flow is generally to the northwest, toward the St. Johns River. The hydraulic positions of the monitoring wells in relation to the SWMU are provided in Table 3-4. Because of the distance from SWMU 15 to the St. Johns River, tidal influence of the shallow aquifer is not expected to occur at SWMU 15.

Water-level data were used to assess horizontal and vertical hydraulic gradients. Stationwide data are summarized in Tables 3-7 and 3-8 in the NAVSTA Mayport GIR (ABB-ES, 1995a). Horizontal gradients at the Group II SWMUs were calculated as 0.011 and 0.014 foot per foot (ft/ft), using the averaged water-level data from four monitoring wells (Table 3-7, NAVSTA Mayport GIR). These gradients were not recalculated using the August 30, 1994, data.

The vertical hydraulic gradient at Group II SWMUs was calculated using data from well pair MPT-8-MW05S and MPT-8-MW05D. The calculated gradient using the averaged water-level data from 1992 and 1993 was 0.033 ft/ft (Table 3-8, NAVSTA Mayport

Table 3-1
Summary of Group II Water-Level Data for August 30, 1994

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Wells and Piezometers	Elevation of TOC (MSL)	Time (LCL)	Depth (TOC)	Elevation (MSL)	Wells and Piezometers	Elevation of TOC (MSL)	Time (LCL)	Depth (TOC)	Elevation (MSL)
MPT-S-MW01S	14.59	10:15 am	4.50	10.09	MPT-8-MW20S	NSTW	--	--	--
MPT-S-MW02S	10.08	1:45 pm	8.89	1.19	MPT-8-P01	12.89	--	--	--
MPT-S-MW03S	11.90	12:55 pm	10.80	1.10	MPT-8-P02	12.70	8:30 am	10.80	1.90
MPT-8-MW01S	~~10.19~~ 15.75	2:03 pm	10.01	5.74 ~~0.18~~	MPT-8-P03	13.17	8:35 am	11.09	2.08
MPT-8-MW02S	13.93	2:22 pm	12.81	1.12	MPT-8-P04	14.67	8:45 am	9.19	5.48
MPT-8-MW03S	13.72	2:25 pm	11.72	2.00	MPT-8-P05	14.00	--	--	--
MPT-8-MW04S	11.90	1:25 pm	10.52	1.38	MPT-8-P06	14.87	8:55 am	8.75	6.12
MPT-8-MW05S	13.00	10:07 am	8.67	4.33	MPT-9-MW01S	14.42	3:12 pm	12.80	1.62
MPT-8-MW05I	13.34	10:10 am	9.68	3.66	MPT-9-MW02S	13.39	1:00 pm	12.30	1.09
MPT-8-MW05D	13.29	10:05 am	9.99	3.30	MPT-9-MW03S	11.53	1:05 pm	10.59	0.94
MPT-8-MW06S	11.57	10:22 am	8.29	3.28	MPT-10-P01	10.68	--	--	--
MPT-8-MW07S	11.73	2:48 pm	10.47	1.26	MPT-11-MW01S	12.16	5:05 pm	10.75	1.41
MPT-8-MW08S	13.12	3:03 pm	9.95	3.17	MPT-11-MW02S	10.42	3:40 pm	9.29	1.13
MPT-8-MW09S	12.55	3:08 pm	7.37	5.18	MPT-11-MW03S	9.97	3:35 pm	NA	--
MPT-8-MW10S	13.11	3:00 pm	11.04	2.07	MPT-15-MW01S	12.14	5:25 pm	6.79	5.35
MPT-8-MW11S	11.46	12:50 pm	11.03	0.43	MPT-15-MW02S	11.77	5:05 pm	5.04	6.73
MPT-8-MW12S	12.93	11:05 am	11.52	1.41	MPT-15-MW03S	11.26	5:10 pm	5.79	5.47
MPT-8-MW13S	11.33	11:00 am	10.15	1.18	MPT-15-MW04S	12.18	5:35 pm	6.49	5.69
MPT-8-MW13I	11.46	NS	--	--	MPT-15-MW05S	12.37	5:30 pm	8.19	4.18
MPT-8-MW14S	10.72	11:10 am	9.58	1.14	MPT-15-MW15I	12.45	5:32 pm	8.67	3.78
MPT-8-MW15S	10.03	10:45 am	9.28	0.75	MPT-15-P01	13.28	5:20 pm	9.45	3.83
MPT-8-MW15I	9.96	NS	--	--	MPT-15-P02	10.83	5:15 pm	6.56	4.27
MPT-8-MW16S	NS	NS	--	--	MPT-16-MW01I	12.64	3:28 pm	10.86	1.78
MPT-8-MW17S	10.89	1:30 pm	9.48	1.14	MPT-16-MW02S	10.65	3:18 pm	9.28	1.37
MPT-8-MW18S	8.80	2:00 pm	7.18	1.62	MPT-16-MW03S	11.19	3:20 pm	9.96	1.23
MPT-8-MW19S	5.24	--	--	--	MPT-16-MW04S	14.65	--	--	--

Notes: RCRA = Resource Conservation and Recovery Act.
SWMU = solid waste management unit.
TOC = top of casing as datum.
msl = mean sea level; National Geodetic Vertical Datum, 1829.
LCL = local.
NSTW = not surveyed, temporary monitoring well.
NA = no access.
-- = no measurements made.
NS = not surveyed.

Table 3-2
Hydraulic Position of Monitoring Wells and Piezometers Relative to Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, 11, and 16

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

SWMU Number	Monitoring Well Number	Hydraulic Position	Diameter (inches)	Total Depth (feet)	Screened Interval (feet bls)
8	MPT-S-MW01S	U of 6 and 7	2	12.5	2 to 12
8	MPT-S-MW02S	D of 6 and 7	2	17.5	7 to 17
8	MPT-S-MW03S	D of 6 and 7	2	15	5 to 15
8	MPT-8-MW01S	U of 6 and 7	2	10	3 to 10
8	MPT-8-MW02S	D of 6 and 7	2	10	3 to 10
8	MPT-8-MW03S	D of 6 and 7	2	15	5 to 10
8	MPT-8-MW04S	D of 6 and 7	2	12.5	2 to 12
8	MPT-8-MW05S	U of 6 and 7	2	12	2 to 12
8	MPT-8-MW05I	U of 6 and 7	2	30	25 to 30
8	MPT-8-MW05D	U of 6 and 7	4	70	60 to 70
8	MPT-8-MW06S	S of 6 and 7	2	15.5	5 to 15
8	MPT-8-MW07S	D of 7	2	15	5 to 15
8	MPT-8-MW08S	D of 9 and 10	2	15	5 to 15
8	MPT-8-MW09S	D of 9 and 10	2	15	5 to 15
8	MPT-8-MW10S	D of 9 and 10	2	15.5	5 to 15
8	MPT-8-MW11S	D of 6 and 7	2	15.5	5 to 15
8	MPT-8-MW12S	D of 11	2	18	8 to 18
8	MPT-8-MW13S	D of 11	2	15.5	5 to 15
8	MPT-8-MW13I	D of 11	2	40	35 to 40
8	MPT-8-MW14S	D of 6 and 7	2	15.5	5 to 15
8	MPT-8-MW15S	D of 6 and 7	2	15.5	5 to 15
8	MPT-8-MW15I	D of 6 and 7	2	40	34 to 39
8	MPT-8-MW16S	D of 6 and 7	2	15.5	5 to 15
8	MPT-8-MW17S	D of 6 and 7	2	15.5	5 to 15
8	MPT-8-MW18S	S of 6 and 7	2	15	4.5 to 14.5
8	MPT-8-MW19S	D of 6 and 7	2	14.5	4 to 14
8	MPT-8-MW20S	D of 6 and 7	2	12.5	7 to 12
9	MPT-9-MW01S	S of 6 and 7	2	20	8 to 18
9	MPT-9-MW02S	S of 6, 7 and 11	2	15	5 to 15
9	MPT-9-MW03S	S of 6, 7 and 11	2	15	5 to 15
16	MPT-8-P01	S of 9, 10, and 16	2	15	10 to 15
16	MPT-8-P02	S of 16	2	15.5	5 to 15
16	MPT-8-P03	S of 16	2	15.5	5 to 15

See notes at end of table.

Table 3-2 (Continued)
Hydraulic Position of Monitoring Wells and Piezometers Relative to Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, 11, and 16

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

SWMU Number	Monitoring Well Number	Hydraulic Position	Diameter (inches)	Total Depth (feet)	Screened Interval (feet bls)
16	MPT-8-P04	U of 16	2	15.5	5 to 15
16	MPT-8-P05	U of 16	2	15.5	5 to 15
8	MPT-8-P06	U of 6 and 7	2	15.5	5 to 15
10	MPT-10-P01	S of 6 and 7	2	15.5	5 to 15
16	MPT-16-MW01I	D of 16	2	30	25 to 30
16	MPT-16-MW02S	D of 16	2	15.5	5 to 15
16	MPT-16-MW03S	D of 16	2	15.5	5 to 15
16	MPT-16-MW04S	U of 16	2	15.5	5 to 15

Notes: RCRA = Resource Conservation and Recovery Act.
SWMU = solid waste management unit.
bls = below land surface.
U = hydraulic upgradient.
D = hydraulic downgradient.
S = hydraulic sidegradient.

Table 3-3
Hydraulic Position of Monitoring Wells Relative to Solid Waste Management Unit (SWMU) 12

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

SWMU Number	Monitoring Well Number	Hydraulic Position	Diameter (inches)	Total Depth (feet)	Screened Interval (feet bls)
12	MPT-11-MW01S	U of 12	2	20	10 to 19.5
12	MPT-11-MW02S	D of 12	2	17	7 to 17
12	MPT-11-MW03S	D of 12	2	17	7 to 17

Notes: RCRA = Resource Conservation and Recovery Act.
SWMU = solid waste management unit.
bls = below land surface.
U = hydraulic upgradient.
D = hydraulic downgradient.

Table 3-4
Hydraulic Position of Monitoring Wells and Piezometers Relative to Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

SWMU Number	Monitoring Well Number	Hydraulic Position	Diameter (inches)	Total Depth (feet)	Screened Interval (feet bls)
15	MPT-15-MW01S	D of 15	2	15.5	5 to 15
15	MPT-15-MW02S	U of 15	2	14	2.5 to 12.5
15	MPT-15-MW03S	D of 15	2	17	6 to 16
15	MPT-15-MW04S	D of 15	2	15.5	5 to 15
15	MPT-15-MW05S	D of 15	2	18.5	8 to 18
15	MPT-15-MW05I	D of 15	2	32	25 to 30
15	MPT-15-P01	D of 15	2	15	5 to 15
15	MPT-15-P02	D of 15	2	15.5	5 to 15

Notes: RCRA = Resource Conservation and Recovery Act.
bls = below land surface.
SWMU = solid waste management unit.
D = hydraulic downgradient.
U = hydraulic upgradient.

GIR). The gradient at this well pair was recalculated (using the August 30, 1994, data) to be 0.019 ft/ft. These values represent a net downward gradient, which suggests that there is no significant artesian influence from the Floridan aquifer system on the surficial aquifer.

An evaluation of the horizontal and vertical groundwater hydraulic gradients and velocities at the Group II SWMUs indicates that contaminants may migrate both horizontally and vertically in the shallow surficial aquifer. Vertical gradients will be influenced by tidal fluctuations in those areas subject to tidal influence, as summarized in subsection 3.2.1 of this report.

3.2.3 Hydraulic Conductivity Hydraulic conductivity tests were conducted at locations across NAVSTA Mayport. Testing within Group II SWMUs consisted of (1) *in situ* "slug" tests in 17 well or piezometer locations to characterize radial hydraulic conductivity and (2) laboratory testing of three undisturbed soil samples to characterize vertical hydraulic conductivity. The results of the testing are described in more detail in subsection 3.2.4 of the NAVSTA Mayport GIR (ABB-ES, 1995a) with supporting documentation included in Appendix B of that report. Radial hydraulic conductivity values were estimated using the results from both rising- and falling-head slug tests. A minimum of two and a maximum of six tests were conducted on each well to provide a statistical average value for radial conductivity in the vicinity of each well. All but two of the test locations (MPT-8-MW05D and MPT-16-MW01I) in Group II SWMUs were from wells or piezometers screened across the water table; therefore, most of the conductivity estimates are for the shallow surficial aquifer. The results are summarized in Table 3-4 of the NAVSTA Mayport GIR (ABB-ES, 1995a). Values for radial hydraulic conductivity at Group II SWMUs ranged from approximately 0.2 to 32 feet per day (ft/d) with an overall average of 6 ft/d. The wide range of conductivity values is a reflection of the heterogeneity of the fine-grained dredge materials that comprise the shallow aquifer.

Vertical hydraulic conductivity values for the shallow surficial aquifer were derived from laboratory tests conducted on undisturbed soil samples in accordance with test method ASTM-D2216. Two of these samples were from the OWTP (MPT-8-MW05S and MPT-8-MW06S) and one was from the vicinity of the Old Transformer Storage Yard (MPT-16-MW01S). Results are summarized in Table 3-5 of the NAVSTA Mayport GIR (ABB-ES, 1995a). Values for vertical hydraulic conductivity ranged from 2.4 to 5.4 ft/d with an average of 3.5 ft/d.

The following is a summary of hydraulic conductivity in each of the SWMU subgroups, with the exception of SWMU 12. Hydraulic conductivity testing has not been conducted for the SWMU 12 monitoring wells.

SWMUs 6, 7, 8, 9, 10, and 11. Average radial hydraulic conductivity values in the vicinity of the OWTP Area ranged from approximately 1 to 7.1 ft/d with an average of 3.0 feet/d for the shallow aquifer. Results from MPT-8-MW05D (screened from 60 to 70 feet bls) indicated an average radial hydraulic conductivity of 0.17 ft/d. Vertical hydraulic conductivity values from samples in this area ranged from 2.4 to 5.4 ft/d with an average of 3.9 ft/d.

SWMU 15 (Old Pesticide Handling Area). Average radial hydraulic conductivity values in the vicinity of the Old Pesticide Handling Area ranged from 0.2 to 9.6 ft/d with an average of 4.8 ft/d for the shallow aquifer. No samples were submitted from this area for measurement of vertical hydraulic conductivity.

SWMU 16 (Old Transformer Storage Yard). Average radial hydraulic conductivity values in the vicinity of the Old Transformer Storage Yard ranged from 4.7 to 30 ft/d with an average of 15 ft/d for the shallow aquifer. Results from MPT-16-MW01I (screened from 25 to 30 feet bls) indicated an average radial hydraulic conductivity of 32 ft/d. The vertical hydraulic conductivity value from one sample in this area (MPT-16-MW01S) was 2.8 ft/d.

3.2.4 Groundwater Flow Velocity As discussed in Section 3.1 above, the shallow surficial aquifer in Group II consists primarily of dredge material fill. Horizontal and vertical groundwater flow rates were calculated for the shallow surficial aquifer across NAVSTA Mayport. These rates are expressed as average linear groundwater velocities, calculated from a modified form of Darcy's equation, and represent the ratio of linear travel distance to travel time. Refer to subsection 3.2.6 of the NAVSTA Mayport GIR (ABB-ES, 1995a) for the formula used and the assumptions made to calculate velocities.

Calculations for two sets of wells located in or near Group II SWMUs are included in the flow velocity evaluation (well designations MPT-S-MW01S, MPT-S-MW02S, and MPT-9-P01). The estimated horizontal groundwater flow rates in the shallow surficial aquifer (in or near Group II SWMUs) are 0.19 ft/d (69 feet per year [ft/yr]) and 0.24 ft/d (87 ft/yr) (Refer to Table 3-9 in the NAVSTA Mayport GIR [ABB-ES, 1995a]). These values are consistent with estimated rates for other wells screened in dredge materials at the station.

Vertical linear flow velocities were calculated from data collected from nested wells. Vertical flow was calculated for one well pair (wells MPT-8-MW05S and MPT-8-MW05D) located within Group II SWMUs. These wells were screened in the shallow surficial aquifer and the deep aquifer, respectively. The estimated vertical flow rate at SWMU 8 (well location 5) was 0.026 ft/d or approximately 10 ft/yr (Table 3-10, NAVSTA Mayport GIR).

Based on these data, horizontal linear groundwater flow rates exceed the vertical linear groundwater flow rates by an order of magnitude, indicating that potential contaminant migration will be biased toward horizontal migration in the shallow aquifer.

Assuming a value of 78 ft/yr (average of 69 and 87 ft/yr) for the horizontal linear groundwater velocity and no retardation of contaminants, the time for contaminants to migrate from SWMUs 6, 7, 8, 9, 10, 11, and 16 (which range from 100 to 750 feet from the St. Johns River) to the St. Johns River would range from approximately 1.2 to 9.6 years. Using the above assumptions, the time of travel for contaminants from SWMU 12, which is approximately 100 feet from the St. Johns River, would be in the range of 1.2 years; SWMU 15, which is approximately 1,500 feet from the St. Johns River, would be 19 years.

3.2.5 Physical Characteristics of Soil Physical characteristics of near surface soil and surficial aquifer sediment were described in subsection 3.2.3 of the NAVSTA Mayport GIR (ABB-ES, 1995a). Soil and sediment samples from locations across the entire station were submitted for laboratory analysis of grain size and other geotechnical parameters, moisture content, bulk density, cation exchange capacity (CEC), pH, and total organic carbon (TOC) content. All results except geotechnical parameters are summarized in Table 3-3 in the NAVSTA Mayport GIR (ABB-ES, 1995a). Grain size analysis data are included in Appendix A (volume II) of that report.

Shelby tube samples from three locations within Group II SWMUs were submitted to a geotechnical laboratory for analysis of grain size, moisture content, dry density, and coefficient of permeability. Two of the samples were collected from the OWTP Area and one was collected at the Old Transformer Storage Yard. These results are included in Appendix A, Volume II, NAVSTA Mayport GIR.

The pH of the soil samples from the Group II SWMUs ranged from slightly acidic (6.28 standard units [SUs]) to basic (8.17 SUs) and had low CEC values (0.6 to 2.5 milliequivalents per 100 grams), suggesting that inorganic elements with exchangeable cations, if in a mobile phase, would not likely be adsorbed.

The TOC concentrations in soils ranged from 1,140 to 8,030 milligrams per kilogram (mg/kg) and in the sediment samples ranged from 5,870 to 10,800 mg/kg. This implies that limited sorption of organic compounds may occur and that organic carbon is available as a nutrient source for microbial degradation.

The relatively low CEC and TOC values indicate that sediment in the Group II SWMUs has a limited ability to retard contaminant migration; contaminants dissolved in groundwater of the surficial aquifer may migrate at rates near the linear groundwater flow velocity.

4.0 SWMUs 6, 7, 8, 9, 10, AND 11, OWTP AREA

SWMUs 6, 7, 8, 9, 10, and 11 in the Group II area are associated with or located adjacent to the OWTP. These SWMUs are located within the northern part of NAVSTA Mayport near the southern shore of the St. Johns River. These SWMUs include SWMU 6, Waste Oil Pit and Sludge Drying Bed; SWMU 7, the OWTP Sludge Drying Beds; SWMU 8, the OWTP Percolation Pond; SWMU 9, the OWTP; SWMU 10, the Hazardous Waste Storage Area; and SWMU 11, the Fuel Spill Area. This section provides a description and history of each SWMU (including previous investigations), descriptions of the ecological setting, results and interpretation of environmental sample analyses, and human health and ecological risk assessments.

4.1 OWTP SWMU DESCRIPTIONS. This section describes the SWMUs that comprise the OWTP or are located adjacent to the OWTP.

Waste Oil Pit and Sludge Drying Bed (SWMU 6). SWMU 6 was located beneath the westernmost bed of the four existing OWTP Sludge Drying Beds (SWMU 7) (Figure 4-1). The Waste Oil Pit and Sludge Drying Bed was used from 1973 to 1978 to store bilge water that contained oily waste. It is believed that other items such as solvents and transformer oils may also have been disposed of in the Waste Oil Pit and Sludge Drying Bed. The Waste Oil Pit and Sludge Drying Bed was triangular in shape and approximately 0.2 acre in size and was excavated to a depth of approximately 6 feet bls (A.T. Kearney, 1989).

Bilge water and oily waste disposed of in the unlined pit were allowed to seep into the underlying soil. It is estimated that 250,000 gallons of bilge water and several thousand gallons of waste oil were disposed of in the Waste Oil Pit and Sludge Drying Bed. In 1979 the Waste Oil Pit was filled and covered, and the four sludge drying beds were constructed (A.T. Kearney, 1989).

Soils in the area of the Waste Oil Pit and Sludge Drying Bed are permeable, and the groundwater flow direction is toward the St. Johns River. The water table of the shallow surficial aquifer in the area of the Waste Oil Pit and Sludge Drying Bed ranges from approximately 4 to 9 feet bls.

OWTP Sludge Drying Beds (SWMU 7). SWMU 7 was constructed in 1979 to receive and dewater sludge from the OWTP (Figure 4-1). Each sludge drying bed is approximately 150 feet in length and 50 feet wide, is unlined, and is enclosed by earthen berms approximately 8 feet above the surrounding land surface. The four sludge drying beds received sludge collected from the clarifier of the OWTP (SWMU 9) and from bilge water receiving Tanks 99 and 100, which are 2 of the 15 tanks that comprise SWMU 51. Additionally, when these two holding tanks were at capacity, bilge water overflow was pumped directly into the sludge drying beds (A.T. Kearney, 1989).

Approximately 1,500 gallons of sludge were conveyed to the drying beds each day the OWTP was in operation, which at the time of the RCRA facility assessment (RFA) and visual site inspection (VSI) (A.T. Kearney, 1989) in 1989 was twice per week. It is reported that the design

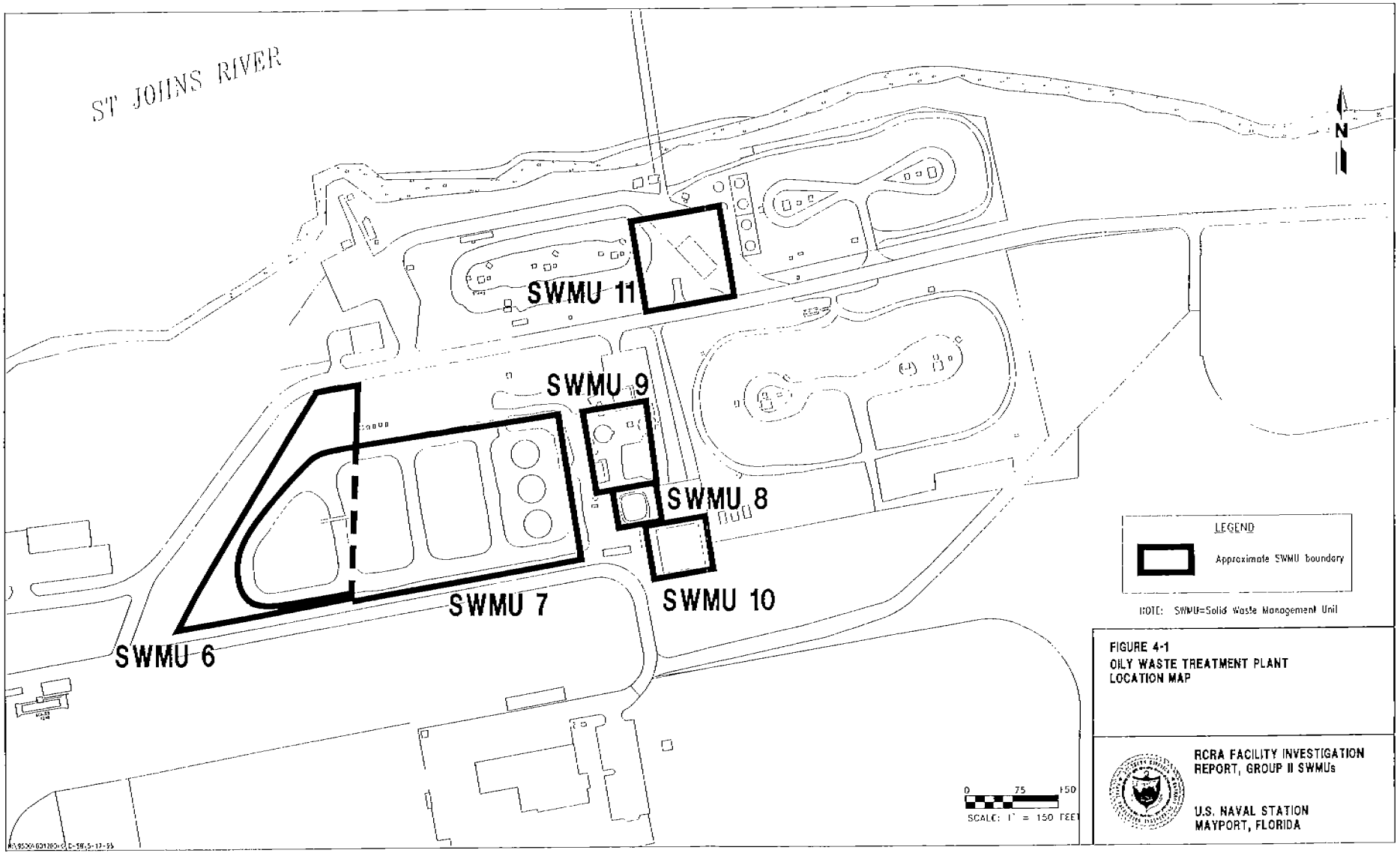


FIGURE 4-1
OILY WASTE TREATMENT PLANT
LOCATION MAP

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of the beds allowed the supernate to be recirculated back to the OWTP (A.T. Kearney, 1989).

No sludge has been taken offsite from the drying beds since operations began. However, during construction of three new bilge water receiving tanks in 1989, sludge from the easternmost bed was excavated and deposited into the adjacent bed. A lined, diked enclosure for three new bilge water receiving tanks was constructed in the easternmost sludge drying bed. The adjacent sludge drying bed that received the excavated sludge was taken out of service and no longer receives sludge (A.T. Kearney, 1989). The two westernmost sludge drying beds received sludge from the new bilge water tanks and OWTP clarifier until late 1994, at which time sludge was conveyed to a new sludge dewatering unit. After dewatering, sludge is currently collected for offsite disposal by a subcontractor.

OWTP Percolation Pond (SWMU 8). SWMU 8 (Figure 4-1) formerly was the final treatment unit of the OWTP prior to discharge of effluent at a National Pollutant Discharge Elimination System (NPDES) permitted (No. FL0033308) discharge point into the St. Johns River. The NPDES permit expired in December 1992. The OWTP Percolation Pond was originally designed to allow treated effluent to percolate into underlying sediments and/or discharge to the St. Johns River. Effluent from an overflow pipe discharged to the St. Johns River. The OWTP Percolation Pond is approximately 1,575 square feet in size and at one time had an earthen berm on all sides that was approximately 10 feet wide and 5 feet above the land surface (A.T. Kearney, 1989).

In early 1988, the OWTP became overloaded and waste oil flowed into the OWTP Percolation Pond. The OWTP Percolation Pond and berms were excavated in order to remove the waste oil. At that time, a liner of 1 foot of gravel that covered 6 inches of compacted clay was added to the sides and bottom of the OWTP Percolation Pond. The berm was not reconstructed (A.T. Kearney, 1989).

In September 1992, a concrete plug was placed in a manhole that connected the discharge pipe from the Percolation Pond to the St. Johns River, and the waste water was conveyed to the station's waste water treatment plant. This continued until July 1994 while upgrades were being made to the OWTP (SWMU 9). Because the lift station to the station's waste water treatment plant did not have the capacity for the OWTP wastewater flow, the Percolation Pond was used temporarily from 1992 to 1994 for flow equalization. The Percolation Pond was taken out of service in July 1994 and no longer receives treated effluent. Currently, treated effluent is conveyed to the waste water treatment plant. In September 1994, a blank flange was placed on the discharge line to the St. Johns River.

OWTP (SWMU 9). SWMU 9 (Figure 4-1) was constructed in 1979 to treat bilge water and other oily waste generated at NAVSTA Mayport and has been in operation since its construction. The OWTP consisted of the following units, which were identified in the HSWA permit as separate SWMUs:

- three 210,000-gallon receiving tanks, SWMU 51 tanks 99, 100, and 101;
- the OWTP Sludge Drying Beds, SWMU 7;
- the OWTP Percolation Pond, SWMU 8; and
- the OWTP, SWMU 9.

As initially constructed, SWMU 9 consisted of a rapid mix-flocculation tank, a clarifier, a neutralization tank, and connecting piping. The construction and

operation of the OWTP is regulated by Florida Department of Environmental Regulation (FDER) (currently known as FDEP) through the issuance of construction and operation permits. At the time of the RFA VSI, a new dissolved-air flotation (DAF) unit and three holding tanks were being added to the OWTP under FDER construction permit IC16-155209 (A.T. Kearney, 1989). Currently, the DAF and holding tanks are operational parts of the OWTP treatment process.

Influent to the OWTP consists of ships' bilge water from which the oily fraction is separated by the OWTP treatment process. After separation of the oily fraction, the bilge water typically contains low concentrations of inorganics such as aluminum, chromium, copper, iron, manganese, nickel, lead, and zinc, and organics such as petroleum-derived compounds and 1,1,1-trichloroethane (Boguski and Taylor, 1987).

The following presents a description of the OWTP treatment system at the time of the RFA VSI (A.T. Kearney, Inc., 1989) as well as descriptions of systems upgrades. The oily fraction of the bilge water separated and moved to the top of the receiving tanks (Tanks 99 and 100, SWMU 51), and the separated water was pumped through an underground line from the bottom of the tanks to the OWTP. The influent first entered the rapid mix-flocculation tank, which has a rapid mix section and a flocculation (slow mix) section. The rapid mix section is approximately 5 feet wide and 5 feet long and has a capacity of 160 cubic feet. The flocculation section of the tank consists of two units, which, as a single entity, are 20 feet long and 8 feet wide and have a capacity of 833 cubic feet.

In the rapid mix-flocculation tank, bags of hydrated lime were added by hand to assist in the flocculation process. The system was designed to be semiautomated using a lime feeder, but the feeder was not used.

Effluent from the rapid mix-flocculator flowed through an aboveground line to the clarifier. The clarifier is a cylindrical tank that is 25 feet wide with a conical bottom and a rotating collection mechanism. The clarifier has a capacity of 5,370 cubic feet and is designed for an influent flow rate of 200 gallons per minute. In the clarifier, particles in the influent are allowed to settle to the bottom. The settled sludge is pumped through the clarifier underflow to the sludge drying beds (SWMU 7). Floating solids, oil, and grease are skimmed off and also pumped to the sludge drying beds. During April 1994, a sludge dewatering system or thickener was installed. Currently, all sludge is dewatered and then collected for offsite disposal by a subcontractor.

Effluent from the clarifier is pumped through an 8-inch diameter cast iron underground pipeline to the underground neutralization tank. The neutralization tank is constructed of concrete and has a capacity of 125 cubic feet. Sulfuric acid is added to the influent through an underground pipeline to adjust the pH, and a rapid mixer mixes the liquid prior to discharge. Initially, the system discharged the effluent to the OWTP Percolation Pond, but the Percolation Pond was taken out of service in July 1994, and the effluent is currently conveyed to the waste water treatment plant.

As previously described for SWMU 8, the only reported release of contaminants from the OWTP (SWMU 9) was caused by operator error in which oil was released to the OWTP Percolation Pond.

RCRA Hazardous Waste Storage Area (SWMU 10). SWMU 10 consists of a RCRA-regulated hazardous waste storage building and a less-than-90-day hazardous waste accumulation area (Figure 4-1) constructed in approximately 1984. The hazardous waste storage building is operated under a Florida Hazardous Waste Storage Facility permit, No. H016-118598, issued by FDER. The hazardous waste storage area is permitted to store a maximum of 480 55-gallon drums, holding no more than 26,400 gallons of hazardous waste.

The hazardous waste storage building has sheet-metal outer walls and is currently approximately 8,100 square feet in area. The building is divided into seven storage bays, and the floor consists of a concrete base coated with synthetic epoxy. Each storage bay is surrounded by a 12-inch concrete curb on three sides. The storage bays slope downward at a rate of ½ inch per foot from the outside edge of the bay toward grated isolated containment basins in the center of the building.

The hazardous waste storage building and the less-than-90-day storage area are encircled by a chainlink fence. Currently, the fenced area is approximately 96,250 square feet. Waste in the less-than-90-day storage area are stored on pallets. Most of the soil in the fenced-in area is covered with a layer of crushed lime rock. In the northwestern part of the less-than-90-day storage area, there is a grassy area not covered with the crushed lime rock. At the time of the RFA VSI, PCB-containing waste was stored at this location.

No releases are known to have occurred at the hazardous waste storage building or the less-than-90-day storage area. During the RFA VSI, several small stained areas were noted near the entrance to the fenced area. The RFA VSI report (A.T. Kearney, 1989) indicated that these stained areas were not large or deep enough to warrant concern. However, the RFA VSI report noted that a monitoring well may have been installed and abandoned at the northeastern side of the fenced area based on the presence of a metal bumper post and an area of concrete (A.T. Kearney, 1989). No available information has been found to determine whether or not a monitoring well existed at this location.

Fuel Spill Area (SWMU 11). SWMU 11 is located in the Fleet Industrial Supply Center (FISC) fuel farm, north and west of Tank 201 (Figure 4-1). The site was identified when soil samples collected from soil borings made for a construction project were found to have a fuel odor. The source of the fuel is unknown but is likely to have originated from either the fuel farm area or a former waste oil pit (A.T. Kearney, 1989). The waste oil pit was originally documented in a Hydrogeologic Assessment and Groundwater Monitoring Plan prepared in 1983 by Geraghty & Miller, Inc (Geraghty & Miller, Inc, 1983). The plan indicated that the waste oil pit was located to the southwest of Tank 201 and may have overflowed at some time into the St. Johns River.

4.1.1 Previous Investigations at OWTP Area SWMUs The following subsection summarizes the previous investigations completed for the SWMUs that comprise the OWTP Area (SWMUs 6, 7, 8, 9, 10, and 11).

Waste Oil Pit and Sludge Drying Bed (SWMU 6). The Naval Installation Restoration program (NIRP) IAS identified the Waste Oil Pit and Sludge Drying Bed as Site 8, and it was recommended that an ESI be conducted at the site. The ESI was conducted in May 1988 and included the collection of soil and groundwater samples. Constituents detected in groundwater samples consisted of bis(2-ethylhexyl)phtha-

late, naphthalene, benzene, ethylbenzene, endrin aldehyde, gamma-benzenehexachloride (γ-[BHC]), and lead. The concentration of endrin aldehyde (0.05 microgram per liter [μg/ℓ]) detected in the groundwater sample from monitoring well MPT-8-MW03S exceeded the U.S. Ambient Water Quality Criteria for chronic exposure in a marine environment. In addition, approximately 0.9 foot of free-phase floating hydrocarbon was found at monitoring well MPT-8-MW03. Only one compound, trichlorofluoromethane (Freon), was detected in a soil sample. The former Waste Oil Pit and Sludge Drying Bed was identified in the NAVSTA Mayport HSWA permit as requiring an RFI.

OWTP Sludge Drying Beds (SWMU 7). The Sludge Drying Beds were not identified as NIRP IAS sites and were not included in the ESI. The Sludge Drying Beds were identified as requiring an RFI in the NAVSTA Mayport HSWA permit.

In 1989, when the easternmost sludge drying bed was excavated, two soil samples were collected from beneath the excavation. Analytical results from these samples indicated a pH of 9.2 to 9.4 SUs, concentrations of oil and grease ranging from 3,093 to 3,323 mg/kg, and one sample containing xylenes at a concentration of 3.5 micrograms per kilogram (μg/kg). Analysis of extract from the samples by the (EPTOX) test for eight RCRA metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver) indicated that the RCRA criteria used to classify materials as hazardous waste were not exceeded. Total analytical values for six inorganic analytes (metals) detected in soil samples from the easternmost sludge drying bed were as follows:

cadmium	7.5 mg/kg
chromium	330 mg/kg
copper	830 mg/kg
nickel	290 mg/kg
lead	440 mg/kg
zinc	1,700 mg/kg

OWTP Percolation Pond (SWMU 8). The OWTP Percolation Pond was not identified as an NIRP IAS site and was not investigated during the ESI. The OWTP Percolation Pond was identified in the NAVSTA Mayport HSWA permit as requiring an RFI.

At the time of the RFA VSI (A.T. Kearney, Inc., 1989), no information concerning the characterization of the influent to the OWTP Percolation Pond was available; however, effluent from the pond is sampled and analyzed for compliance with the NPDES permit. The USEPA conducted a study of the effluent in July 1987 and determined that the quality of the effluent was in accordance with permit conditions. The effluent had a 5-day biochemical oxygen demand (BOD_5) of 28 milligrams per liter (mg/ℓ), total suspended solids (TDS) of 16 mg/ℓ, and oil and grease at a concentration of 9.9 mg/ℓ. Organic constituents detected in the effluent were acetone, benzene, toluene, ethylbenzene, methyl ethyl ketone, and 2,4-dimethylphenol.

OWTP (SWMU 9). The OWTP was identified as NIRP IAS Site 8 and was not included in the ESI. The OWTP also was identified as requiring an RFI in the HSWA permit.

Hazardous Waste Storage Area (SWMU 10). The HSWA permit identified the Hazardous Waste Storage Area and fenced area as requiring an RFI.

Fuel Spill Area (SWMU 11). The Fuel Spill Area was identified as NIRP IAS Site 9 and was included in the ESI. The Fuel Spill Area also was identified as requiring an RFI in the HSWA permit. During the ESI, three monitoring wells were installed, and soil and groundwater samples were collected from these locations. One soil sample was found to contain methylene chloride. The groundwater samples were found to contain concentrations of one semivolatile organic (naphthalene), two pesticides (aldrin and 4,4'-dichlorodiphenyldichloroethene [DDE]), and two inorganics (lead and mercury).

4.1.2 RFI Field Activities RFI field activities were conducted at the OWTP SWMUs in both 1993 and 1994. Tables 2-1 and 2-2 (Section 2.1) provide an overview of the analytical and data management programs for the Group II SWMUs. Sampling procedures, background sampling information, and other stationwide sampling information is provided in the NAVSTA Mayport GIR (ABB-ES, 1995a).

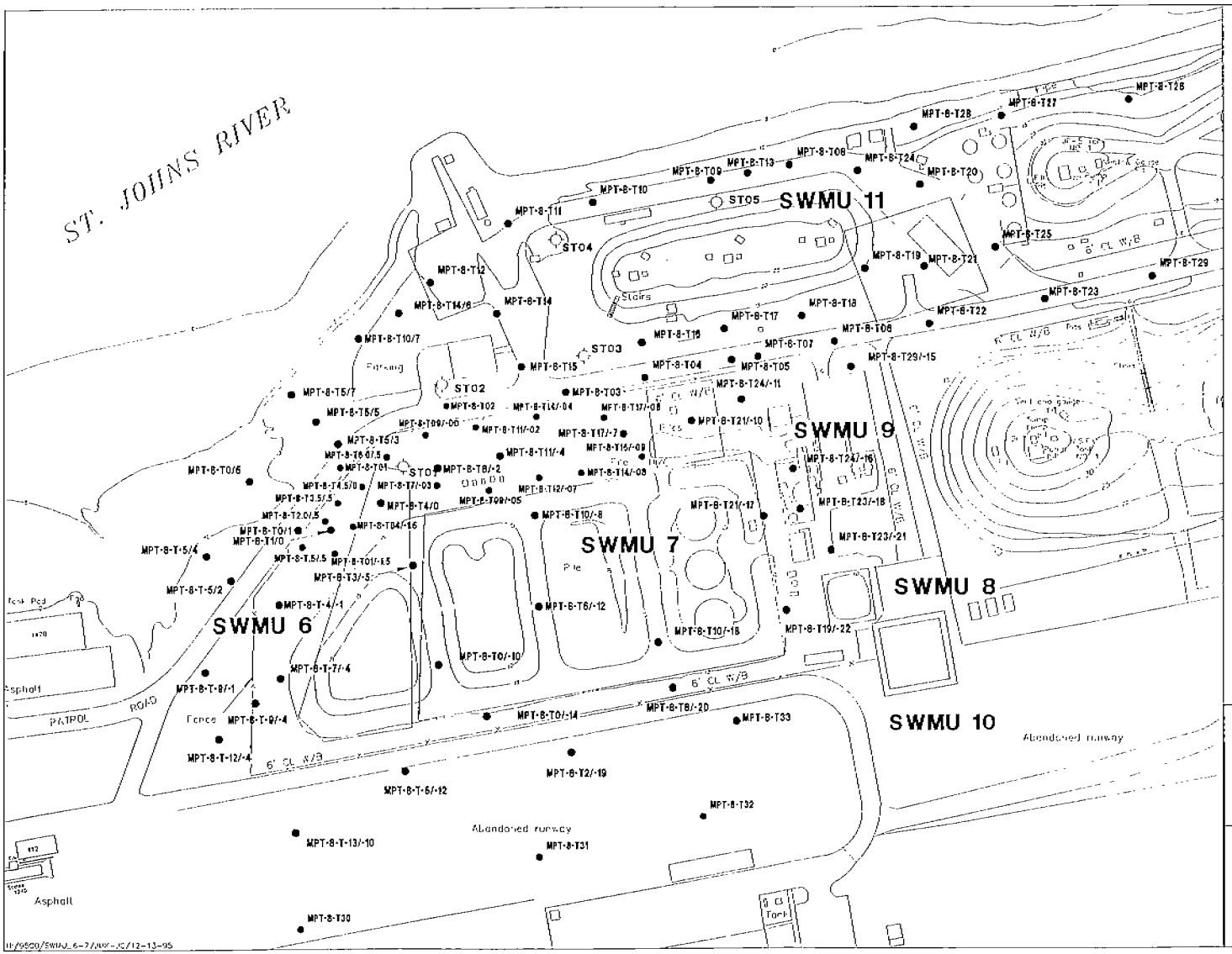
4.1.2.1 1993 RFI Activities Field activities conducted in 1993 included the collection of subsurface soil samples, surface water samples, sludge samples, and groundwater samples.

Subsurface Soil Sampling. Thirty-six subsurface soil samples (excluding duplicates) were collected in the vicinity of SWMUs 6, 7, 8, 9, and 10 using a TerraProbe℠ (example of sample designations MPT-8-T0-10; Figure 4-2). Sample collection depths at the OWTP typically ranged from 3 to 4 feet bls, 6 to 7 feet bls, and 9 to 10 feet bls. Upon retrieval, the subsurface soil sample was extruded from the sample collection sleeve into a precleaned 8-ounce glass jar using a hydraulic piston. Each soil sample was then described and placed in a cooler refrigerated with ice for transport to the field screening laboratory. The results of the field screening analysis were used to select samples for laboratory confirmation analysis. Fifteen of the subsurface soil samples were submitted to the offsite analytical laboratory for TPH analysis.

Split-spoons were used to collect 10 subsurface soil samples from the OWTP. Two subsurface soil samples were typically collected at a monitoring well boring: one from 1 to 2 feet bls and one at or immediately above the water table. Soil samples were collected in this manner at borings MPT-8-MW04S, MPT-8-MW06S, MPT-8-MW07S, and MPT-8-MW08S (Figure 4-3). A single sample was collected from both shallow boring MPT-8-MW05S and deep boring MPT-8-MW05DD. Subsurface soil samples collected with split-spoons were analyzed for volatile organic compounds, semivolatile organic compounds, pesticides, PCBs, inorganics, and cyanide using SW846 methodology.

Surface Water Sampling. Two surface water samples were collected from the OWTP SWMUs: one from SWMU 7 and one from SWMU 8 (Figure 4-3). Surface water samples were collected by immersing a decontaminated sample container directly into the surface water. If the surface water was not sufficiently deep to allow complete immersion of the container, a decontaminated beaker was used to skim and transfer surface water to the sample container. A duplicate sample was also collected from SWMU 8. Surface water samples were analyzed for VOCs, SVOCs, pesticides, PCBs, inorganics, and cyanide using SW846 methodology.

Four sludge samples were collected from the OWTP sludge drying beds (SWMU 7). MPT-8-SL01A was collected from the west side of the westernmost sludge bed. MPT-8-SL01 was collected from the east side of the west-central sludge bed west of the concrete sluice. MPT-8-SL02 was collected from the west side of the sludge



LEGEND

	Approximate SWMU Location
MPT-8-T0/-10	Terra Probes Soil Sampling Location 1993
MPT-8-T29	Terra Probes Soil Sampling Location 1994
RCRA	Resource Conservation And Recovery Act
U/C	Underground Cable
6' CL W/B	6' Chain-Link Fence
SWMU	Solid Waste Management Unit

0 60 120
SCALE: 1 INCH = 120 FEET

FIGURE 4-2
TERRAPROBE FIELD SCREENING LOCATIONS, 1993 AND 1994

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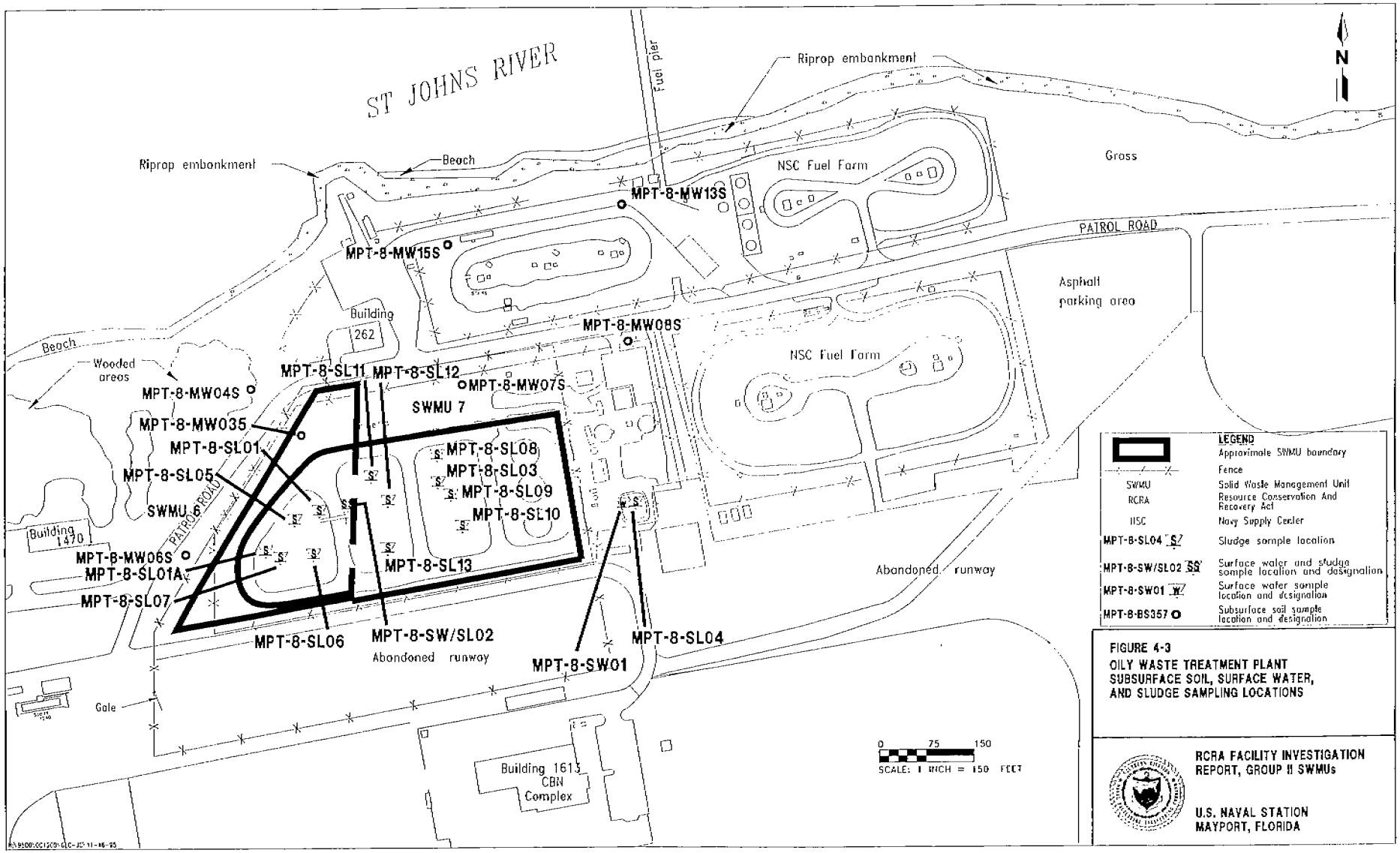

FIGURE 4-3
OILY WASTE TREATMENT PLANT
SUBSURFACE SOIL, SURFACE WATER,
AND SLUDGE SAMPLING LOCATIONS

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pit at the east edge of the concrete sluice gate. MPT-8-SL03 was collected from the west side of the out-of-service sludge bed. The samples were collected with a decontaminated, 2-inch-diameter stainless-steel push tube. Sludge samples for volatile organic analysis were removed from the sampling tube and placed directly into containers with Teflon™-lined lids. The remaining sludge in the sampling tube was transferred to a glass bowl, mixed, and placed into the appropriate sampling container. Sludge samples were analyzed for VOCs, SVOCs, pesticides, PCBs, inorganics, and cyanide.

Groundwater Sampling. Nine groundwater samples were collected from the following shallow monitoring wells at SWMUs 8 and 9: MPT-8-MW01, MPT-8-MW04S, MPT-8-MW05S, MPT-8-MW06S, MPT-8-MW07S, MPT-8-MW08S, MPT-9-MW01, MPT-9-MW02, and MPT-9-MW03 (Figure 4-4). Monitoring wells MPT-8-MW02S and MPT-8-MW03S were not sampled because of the presence of free-phase hydrocarbons. Duplicate samples were collected from monitoring wells MPT-8-MW05S and MPT-8-MW06S. One groundwater sample was collected from the deep monitoring well MPT-8-MW05D. The locations of monitoring wells MPT-8-MW05S, MPT-8-MW05I and MPT-8-MW05D are shown on Plate 1 in the NAVSTA Mayport GIR. The monitoring wells were purged and the groundwater samples were collected with decontaminated Teflon™ bailers. Groundwater samples were analyzed for VOCs, SVOCs, pesticides, PCBs, inorganics and cyanide, and water quality parameters using SW846 methodology.

Thirty-six groundwater samples (excluding duplicates) were collected in the vicinity of SWMUs 6, 7, 8, 9, and 10 using a TerraProbe℠ (example of sample designation MPT-8-T0-10; Figure 4-2). A threaded 1-inch-OD hollow steel rod assembly attached to a threaded 1-inch-OD stainless-steel perforated screen was driven to the proper sampling depth at each sampling location. A peristaltic pump was used to collect the groundwater sample, which was immediately containerized. Sample testing consisted of both onsite screening and offsite confirmatory laboratory analysis. Nine samples and one duplicate were submitted to an offsite laboratory for TPH analysis.

4.1.2.2 1994 RFI Activities Field activities conducted in 1994 consisted of collecting subsurface soil samples and sludge samples, conducting field screening of groundwater samples, installing monitoring wells, and collecting groundwater samples.

Subsurface Soil Sampling. Split-spoons were used to collect two subsurface soil samples from the OWTP during 1994 RFI activities. One sample was collected at soil boring MPT-8-MW13, from a depth of approximately 16 feet bls. The other sample was collected at soil boring MPT-8-MW15, from a depth of approximately 11 feet bls. A duplicate soil sample was also collected at MPT-8-MW15. These soil samples were analyzed for VOCs and polynuclear aromatic hydrocarbons (PAHs) by USEPA methods 8020 and 8100, respectively.

Sludge Sampling. Eighteen sludge samples were collected from the OWTP sludge drying beds (SWMU 7). The samples were collected with a decontaminated, 2-inch-diameter stainless-steel push tube. Sludge samples for volatile organic analysis were removed from the sampling tube and placed directly into containers with Teflon™-lined lids. The remaining sludge in the sampling tube was transferred to a glass bowl, mixed, and placed into the appropriate sampling container. Sludge samples were analyzed for VOCs, SVOCs, pesticides, PCBs, inorganics, and cyanide using SW846 methodology.

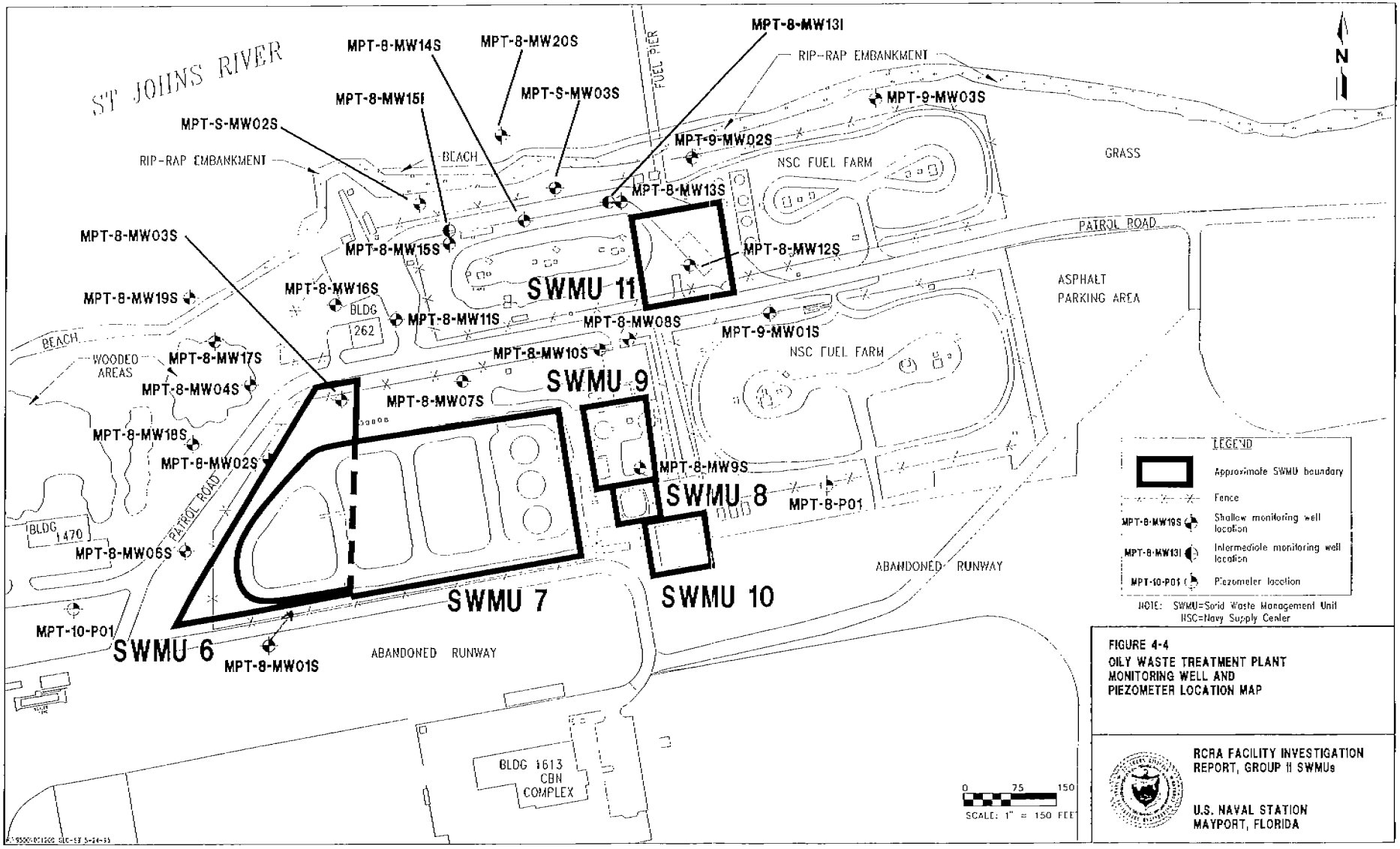

FIGURE 4-4
OILY WASTE TREATMENT PLANT
MONITORING WELL AND
PIEZOMETER LOCATION MAP

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REPORT, GROUP 11 SWMUs

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Field Screening. Twenty-nine field screening groundwater samples were collected during the 1994 sampling event (example of sample designation MPT-8-T29; Figure 4-2). The field screening samples were submitted to an offsite laboratory for analysis of total recoverable petroleum hydrocarbons (TRPH) by USEPA Method 418.1. The purpose of the field screening was to assess the horizontal extent of the hydrocarbon and select locations for monitoring wells which would be used to confirm the field screening analysis.

Monitoring Well Installation. Fourteen new monitoring wells were installed at SWMUs 6, 7, 8, 9, 10 and 11. The monitoring wells consist of 12 shallow monitoring wells (MPT-8-MW09S through MPT-8-MW20S) screened across the water table and 2 monitoring wells (MPT-8-MW13I and MPT-8-MW15I) screened in the intermediate zone of the surficial aquifer. The locations of the monitoring wells were based on the 1994 field screening results. The purpose of the shallow monitoring wells was to assess the horizontal extent of the petroleum-related chemicals detected in the previous sampling event in 1993. The purpose of the two monitoring wells screened in the intermediate zone of the surficial aquifer was to assess the vertical extent of the petroleum-related chemicals detected in the previous sampling event in 1993.

Two of the shallow monitoring wells (MPT-8-MW19S and MPT-8-MW20S) were successfully installed along the shoreline of the St. Johns River. Upon completion of the groundwater sampling event, these two monitoring wells were abandoned by removing the well casing and screen materials from the boreholes, which collapsed and were not grouted. However, because the wells were located along the bank of the St. Johns River, it is not likely that the ungrouted boreholes will provide a conduit to contaminants, if present.

Groundwater Sampling. Twenty groundwater samples were collected from existing and newly installed shallow and intermediate OWTP monitoring wells that did not contain free-phase hydrocarbons (Figure 4-4).

The monitoring wells were purged and sampled using low-flow sampling techniques, and groundwater samples were collected with a peristaltic pump equipped with Teflon™ tubing (in the order of inorganics, cyanide, SVOCs, pesticides, and PCBs) and a Teflon™ bailer (VOCs). The groundwater samples were collected by lowering the Teflon™ tubing to the midpoint of the monitoring well's screened interval. Groundwater was pumped from the well at a rate of less than a liter a minute and transferred immediately into the appropriate containers. However, after July 7, 1994 only the inorganic aliquots were collected using the low-flow sampling method. A Teflon™ bailer was used to collect the aliquots for VOCs, SVOCs, pesticides, and PCBs (see analytical summary tables in Subsection 4.2.4).

Groundwater samples were analyzed for VOCs, SVOCs, pesticides, PCBs, inorganics, cyanide, and water quality parameters using SW846 methodology.

4.2 FINDINGS. The following subsections present the nature and distribution of target analytes detected in surface water, sludge, subsurface soil, groundwater, and floating free-phase hydrocarbon samples collected from the OWTP. The data are described in the order as previously presented based on the following rationale. SWMUs 7 and 8 were sludge drying beds or ponds that are potential sources for contamination. These potential sources may have released contamination to the underlying or adjacent subsurface soils. Groundwater is assessed last

to determine what contaminants have migrated through the subsurface soils into groundwater from each of the SWMUs.

4.2.1 Surface Water Samples Surface water samples were collected from SWMU 7, the OWTP Sludge Drying Beds, and SWMU 8, the OWTP Percolation Pond (Figure 4-3). The following subsections describe the results of the analyses. Tables 4-1 and 4-2 present the concentrations of chemicals detected in each sample; Table 4-3 lists statistics for each chemical detected and compares the detected concentration of the target analytes with a surrogate benchmark concentration, FDEP Groundwater Guidance Concentration (FDEP, 1994). The FDEP Groundwater Guidance Concentration was used because of the potential for surface water in SWMUs 7 and 8 to infiltrate to the groundwater. There are no applicable background surface water samples for SWMUs 7 and 8 because in the past they were active units of the OWTP. The following presents a discussion of the surface water analytical results. This discussion is subdivided into organic target analytes and inorganic target analytes detected in the surface water samples.

4.2.1.1 **Organics** The organic target analytes detected in surface water samples consist of 7 VOCs and 10 SVOCs (Table 4-3). However, only benzene, ethylbenzene, toluene, xylenes (BTEX), 4-methylphenol, and naphthalene were detected at concentrations that exceed their respective surrogate benchmarks (Table 4-3).

Acetone was detected at concentrations ranging from 180 to 210 $\mu g/\ell$ in the samples and duplicate. 2-Butanone was detected at concentrations ranging from 10 to 15 $\mu g/\ell$ in the samples and duplicate. Acetone and 2-butanone are common field and laboratory contaminants; however, they were not detected in quality control samples associated with the surface water samples. These compounds may be related to SWMUs 7 and 8.

Carbon disulfide, a naturally occurring organic compound (Verschueren, 1983), was detected at concentrations ranging from 4 to 11 $\mu g/\ell$ in the samples and duplicate.

Four VOCs, benzene, ethylbenzene, toluene, and xylene, which are constituents of hydrocarbons, were detected in each of the surface water samples collected at SWMUs 7 and 8. Benzene was detected at concentrations ranging from 18 to 63 $\mu g/\ell$ in the samples and duplicate. Ethylbenzene was detected at concentrations ranging from 13 to 36 $\mu g/\ell$ in the samples and duplicate. Toluene was detected at concentrations ranging from 48 to 160 $\mu g/\ell$ in the samples and duplicate. Xylene was detected at concentrations ranging from 77 to 230 $\mu g/\ell$ in the samples and duplicate. All these compounds (except toluene in the duplicate pair from MPT-8-SW01) were detected in samples from SWMU 7 and 8 at concentrations that exceed their respective surrogate benchmarks (Table 4-3). With exception of bis(2-ethylhexyl)phthalate and dibenzofuran, the SVOCs were detected in the surface water samples from both SWMUs (Table 4-1). A duplicate sample for the SVOC analysis was not analyzed by the laboratory. Bis(2-ethylhexyl)phthalate was detected as a single occurrence at a concentration of 3 $\mu g/\ell$ in sample MPT-8-SW02. Although bis(2-ethylhexyl)phthalate was not detected in the quality control samples associated with these samples, it is a common laboratory and field contaminant and may have been introduced to the samples during collection or analysis.

The SVOCs dibenzofuran, dimethylphenol, 2,4-dimethylphenol, 2-methylphenol, and 4-methylphenol were detected in the surface water samples (Table 4-3). However, only the concentration of 4-methylphenol detected in the sample from SWMU 7

Table 4-1
Organic Analytes Detected in Surface Water Samples at Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	3492	0153	0153
Sample Matrix:	Surface Water	Surface Water	Surface Water
Sample Location No.:	MPT-8-SW01	MPT-8-SW01	MPT-8-SW02
Sample No.:	MPT8SW1	MPT8SW1Dup	MPT8SW2
Date Sampled:	19-JAN-93	18-FEB-93[1]	18-Feb-93
Volatile Analytes (μg/ℓ)			
Acetone	190 J	180 J	210 J
Carbon disulfide	11	10	4
2-Butanone	10	11	15
Benzene	21	18	63
Toluene	53	48	160
Ethylbenzene	14	13	36
Xylenes (total)	86	77	230 J
Semivolatile Analytes (μg/ℓ)			
2-Methylphenol	14	NA	84
2,4-Dimethylphenol	45	NA	160
Naphthalene	7 J	NA	140
2-Methylnaphthalene	11	NA	84
4-Methylphenol	9 J	NA	62
Acenaphthene	3 J	NA	4 J
Dibenzofuran	–	NA	2 J
Diethylphthalate	–	NA	2 J
Fluorene	4 J	NA	5 J
Phenanthrene	3 J	NA	6 J
bis(2-Ethylhexyl)phthalate	–	NA	3 J

[1] Resampled for VOAs on February 18, 1993.

Notes: RCRA = Resource Conservation and Recovery Act.
Dup = duplicate.
μg/ℓ = micrograms per liter.
J = estimated value.
NA = not analyzed.
– = analyte not detected.
VOA = volatile organic aromatic.

Table 4-2
Inorganic Analytes Detected in Surface Water Samples at Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	3492	3492
Sample Matrix:	Surface Water	Surface Water
Sample Location No.:	MPT-8-SW01	MPT-8-SW02
Sample No.:	MPT8SW1	MPT8SW2
Date Sampled:	19-JAN-93	19-JAN-93
Inorganic Analytes (μg/ℓ)		
Antimony	35.9 J	17.2 J
Barium	37.1 J	10.5 J
Chromium	6 J	–
Cobalt	–	5.9 J
Mercury	0.1 J	–
Nickel	29.8 J	11.2 J
Vanadium	3.7 J	4.2 J
Zinc	16.7 J	–

Notes: RCRA = Resource Conservation and Recovery Act.
μg/ℓ = micrograms per liter.
J = estimated value.
– = analyte not detected.

Table 4-3
Summary of Chemicals Detected in Oily Waste Treatment Plant (OWTP) Surface Water and a Comparison to Benchmark Concentrations

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Minimum Concentration[2]	Maximum Concentration[2]	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration	Florida Guidance Concentration[4]	Frequency Above Florida Guidance Concentration
Volatile Analytes (µg/ℓ)								
2-Butanone	2/2	10.5*	15	13	N/A	MPT8SW2	4,200	0/2
Acetone	2/2	185*	210	198	N/A	MPT8SW2	700	0/2
Benzene	2/2	19.5*	63	41	N/A	MPT8SW2	1	2/2
Carbon disulfide	2/2	4	10.5*	7	N/A	MPT8SW1	700	0/2
Ethylbenzene	2/2	13.5*	36	25	N/A	MPT8SW2	30	1/2
Toluene	2/2	50.5*	160	105	N/A	MPT8SW2	40	2/2
Xylenes (total)	2/2	81.5*	230	156	N/A	MPT8SW2	20	2/2
Semivolatile Analytes (µg/ℓ)								
2,4-Dimethylphenol	2/2	45	160	103	N/A	MPT8SW2	400	0/2
2-Methylnaphthalene	2/2	11	84	48	N/A	MPT8SW2	NSC	N/A
2-Methylphenol	2/2	14	84	49	N/A	MPT8SW2	350	0/2
4-Methylphenol	2/2	9	62	36	N/A	MPT8SW2	35	1/2
Acenaphthene	2/2	3	4	4	N/A	MPT8SW2	20	0/2
Dibenzofuran	1/2	2	2	2	10 - 10	MPT8SW2	NSC	N/A
Diethylphthalate	1/2	2	2	2	10 - 10	MPT8SW2	5,600	0/2
Fluorene	2/2	4	5	5	N/A	MPT8SW2	280	0/2
Naphthalene	2/2	7	140	74	N/A	MPT8SW2	6.8	2/2
Phenanthrene	2/2	3	6	5	N/A	MPT8SW2	10	0/2
bis(2-Ethylhexyl)phthalate	1/2	3	3	3	10 - 10	MPT8SW2	NSC	N/A
Inorganics (µg/ℓ)								
Antimony	2/2	17.2	35.9	26.6	N/A	MPT8SW1	6	2/2
Barium	2/2	10.5	37.1	23.8	N/A	MPT8SW1	2,000	0/2
Chromium	1/2	6	6	6	3.7 - 3.7	MPT8SW1	100	0/2
Cobalt	1/2	5.9	5.9	5.9	5.8 - 5.8	MPT8SW2	NSC	N/A

See notes at end of table.

Table 4-3 (Continued)
Summary of Chemicals Detected in Oily Waste Treatment Plant (OWTP) Surface Water and a Comparison to Benchmark Concentrations

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Minimum Concentration[2]	Maximum Concentration[2]	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration	Florida Guidance Concentration[4]	Frequency Above Florida Guidance Concentration
Mercury	1/2	0.1	0.1	0.1	0.1 - 0.1	MPT8SW1	2	0/2
Nickel	2/2	11.2	29.8	20.5	N/A	MPT8SW1	100	0/2
Vanadium	2/2	3.7	4.2	4	N/A	MPT8SW2	49	0/2
Zinc	1/2	16.7	16.7	16.7	2.2 - 2.2	MPT8SW1	5,000	0/2

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed.
[2] A value indicated by an asterisk is the average of the detected concentrations in a sample and its duplicate. For nondetected values, one-half the CRQL/CRDL is used as a surrogate.
[3] The mean of detected concentrations is the arithmetic mean of all samples in which the analyte was detected. It does not include those samples in which the analyte was not detected.
[4] Florida Groundwater Guidance Concentrations (June 1994). These guidance concentrations were used on the water in the ponds because of the potential for infiltration of groundwater.

Notes: RCRA = Resource Conservation and Recovery Act.
SWMU = solid waste management unit.
$\mu g/\ell$ = micrograms per liter.
N/A = not applicable.
NSC = no screening concentration.
CRQL/CRDL = contract-required quantitation limits/contract-required detection limit.

exceeds the surrogate benchmark concentrations (Table 4-3). These SVOCs are typically associated with residues of coal tar creosote and incomplete combustion of hydrocarbons. Dibenzofuran was detected as a single occurrence at a concentration of 2 $\mu g/\ell$ in MPT-8-SW02. 2,4-Dimethylphenol was detected at concentrations of 45 and 160 $\mu g/\ell$. 2-Methylphenol was detected at concentrations of 14 and 84 $\mu g/\ell$. 4-Methylphenol was detected at concentrations of 9 and 62 $\mu g/\ell$.

Five PAHs, acenaphthene, fluorene, 2-methylnaphthalene, naphthalene, and phenanthrene were detected in the surface water samples (Table 4-3). Acenaphthene was detected at concentrations of 3 and 4 $\mu g/\ell$. Fluorene was detected at concentrations of 4 and 5 $\mu g/\ell$. 2-Methylnaphthalene was detected at concentrations of 11 and 84 $\mu g/\ell$. Naphthalene was detected at concentrations of 7 and 140 $\mu g/\ell$. Phenanthrene was detected at concentrations of 3 and 6 $\mu g/\ell$. Only the concentrations of naphthalene detected in the samples from SWMU 7 and 8 exceed the surrogate benchmark concentrations (Table 4-3).

The detection of VOCs and SVOCs in surface water samples collected in 1993 from SWMU 7 and SWMU 8 suggest that hydrocarbon-related compounds have been released to the environment.

4.2.1.2 **Inorganics** Eight metals were detected in surface water samples; however, only antimony was detected at concentrations that exceed surrogate benchmark concentrations (Table 4-3). The metal results are total concentrations and reflect both filterable (suspended) and nonfilterable (dissolved) fractions.

Antimony was the only inorganic analyte that exceeded the FDEP groundwater guidance concentrations. Antimony was detected at concentrations of 17.2 and 35.9 $\mu g/\ell$ in samples from SWMUs 7 and 8, respectively.

The bottom of the SWMU 7, the OWTP Sludge Drying Beds, is above the groundwater table. SWMU 7 was in use during the 1993 sampling event; therefore, the concentration of chemicals detected in the surface water samples is likely representative of the sludge being released to the site at that specific time.

SWMU 8, the Percolation Pond, was taken out of service in July 1994, and the surface water samples were collected in January and February 1993. The surface water level in the Percolation Pond also fluctuates with the groundwater table during periods of extended rainfall when the elevation of the groundwater table rises above the bottom of the pond. Therefore, at the time the samples were collected, the chemicals detected in the SWMU 8 surface water samples potentially represent either concentrations in waste water and/or concentrations that could be in groundwater.

<u>4.2.2 Sludge Assessment</u> In 1993, four sludge samples and a duplicate were collected from three of the OWTP sludge drying beds (SWMU 7, sampling locations MPT-8-SL01 through MPT-8-SL03 and MPT-8-SL01A). In 1994, 18 sludge samples and two duplicates were collected from the sludge drying beds (sampling locations MPT-8-SL05 through MPT-8-SL13). In 1994, sludge samples were collected from two different depth intervals at each sampling location. Additionally, one sample and a duplicate were collected from the percolation pond (SWMU 8, sampling location MPT-8-SL04). Figure 4-3 shows the sampling locations, Tables 4-4 and 4-5 present the concentrations of chemicals detected in each sample, Table 4-6 lists statistics for each chemical that was detected, and Table 4-7 compares the detected concentration of the target analytes with surrogate benchmark values,

Table 4-4
Organic Analytes Detected in Sludge Samples at Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	3492	2396-3507	2396-3507	23883-34923	3492	8977	R897	M768	M768
Sample Matrix:	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge
Sample Location:	MPT-8-SL01	MPT-8-SL01A	MPT-8-SL01A	MPT-8-SL02	MPT-8-SL03	MPT-8-SL04	MPT-8-SL04	MPT-8-SL05	MPT-8-SL05
Sample No.:	MPT8SL1	8SL1A	8SL1ADup	MPT8SL2	MPT8SL3	08SL00401	08SL00401Dup	08SL00501	08SL00505
Date Sampled:	19-JAN-93	02-FEB-93	02-FEB-93	19-JAN-93	19-JAN-93	27-OCT-94	27-OCT-94	09-AUG-94	09-AUG-94
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	4 to 5
Volatile Analytes (µg/kg)									
Methylene chloride	--	--	--	--	--	--	--	21	30
Acetone	--	2 J	3 J	--	--	--	--	--	180 J
Carbon disulfide	7 J	--	--	--	--	--	--	--	19
2-Butanone	--	--	--	--	--	--	--	--	35
Benzene	--	--	--	--	--	--	--	--	--
2-Hexanone	--	--	--	--	--	--	--	--	--
Tetrachloroethene	--	--	--	--	--	--	--	--	--
Toluene	--	--	--	210 J	--	--	--	4 J	--
Ethylbenzene	--	--	--	430 J	--	--	--	--	810
Xylenes (total)	--	--	--	2,400 J	--	--	--	2 J	950 J
Trichlorofluoro-methane	--	--	--	--	--	--	--	--	2 J
Isobutyl alcohol	--	--	--	--	--	--	--	--	610
Semivolatile Analytes (µg/kg)									
Naphthalene	--	--	--	12,000 J	--	--	--	2,400 J	19,000
2-Methylnaphthalene	--	--	--	22,000 J	--	--	--	7,100	61,000
Acenaphthene	1,700 J	--	--	--	--	--	--	--	--
Dibenzofuran	--	--	--	--	--	--	--	--	--
Fluorene	--	--	--	--	--	--	--	1,300 J	7,200 J
N-Nitrosodiphenyl-amine (1)	50,000	--	--	7,300 J	--	--	--	--	--
Phenanthrene	--	--	--	13,000 J	--	--	--	1,400 J	12,000
Anthracene	--	100 J	91 J	--	79 J	--	--	--	--
Fluoranthene	--	--	--	5,800 J	--	220 J	--	--	--
Pyrene	3,400 J	--	170 J	37,000 J	--	320 J	140 J	660 J	1,300 J
Butylbenzylphthalate	--	--	85 J	--	--	--	--	--	--

See notes at end of table.

Table 4-4 (Continued)
Organic Analytes Detected in Sludge Samples at Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	3492	2396-3507	2396-3507	23883-34923	3492	8977	R897	M768	M768
Sample Matrix:	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge
Sample Location:	MPT-8-SL01	MPT-8-SL01A	MPT-8-SL01A	MPT-8-SL02	MPT-8-SL03	MPT-8-SL04	MPT-8-SL04D	MPT-8-SL05	MPT-8-SL05
Sample No.:	MPT8SL1	8SL1A	8SL1ADup	MPT8SL2	MPT8SL3	08SL00401	08SL00401D	08SL00501	08SL00505
Date Sampled:	19-JAN-93	02-FEB-93	02-FEB-93	19-JAN-93	19-JAN-93	27-OCT-94	27-OCT-94	09-AUG-94	09-AUG-94
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	4 to 5
Benzo(a)anthracene	--	--	--	6,600 J	--	100 J	--	--	--
Chrysene	--	220 J	170 J	--	91 J	110 J	--	--	--
bis(2-Ethylhexyl)-phthalate	3,800 J	--	1,200	51,000 J	--	170 J	230 J	--	670 J
Benzo(b)fluoranthene	--	--	76 J	--	--	140 J	--	--	--
Benzo(g,h,i)perylene	--	--	85 J	--	--	--	--	--	--
Pesticides and PCBs (µg/kg)									
4,4-DDE	--	7.1	7.1	--	--	--	--	--	--
4,4-DDD	--	--	--	--	--	6.2	5.3	--	--
4,4-DDT	--	--	--	--	--	2.2 J	2.1 J	--	--
Chlordane	--	--	--	--	--	--	--	--	--

See notes at end of table.

Table 4-4 (Continued)
Organic Analytes Detected in Sludge Samples at Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	M768	M768	M768	M768	M768	M768	M768	M768	M768	M768	M768
Sample Matrix:	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge
Sample Location:	MPT-8-SL06	MPT-8-SL06	MPT-8-SL07	MPT-8-SL07	MPT-8-SL07	MPT-8-SL08	MPT-8-SL08	MPT-8-SL09	MPT-8-SL09	MPT-8-SL010	MPT-8-SL10
Sample No.:	08SL00601	08SL00605	08SL00701	08SL00701Dup	08SL00705	08SL00801	08SL00806	08SL00901	08SL00906	08SL01001	08SL01001Dup
Date Sampled:	09-AUG-94	09-AUG-94	09-AUG-94	09-AUG-94	09-AUG-94	09-AUG-94	09-AUG-94	09-AUG-94	09-AUG-94	09-AUG-94	09-AUG-94
Sample Depth (ft bls):	0 to 1	4 to 5	0 to 1	0 to 1	4 to 5	0 to 1	5 to 6	0 to 1	5 to 6	0 to 1	0 to 1
Volatile Analytes (µg/kg)											
Methylene chloride	9 J	--	--	--	11 J	42	11 J	--	9 J	22	24
Acetone	120 J	--	150 J	--	190 J	--	140 J	--	160 J	--	--
Carbon disulfide	6 J	2 J	--	--	16 J	5 J	13 J	1 J	6 J	5 J	2 J
2-Butanone	30 J	2 J	--	--	87 J	--	50 J	--	45 J	4 J	3 J
Benzene	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	--	--	--	--	--	--	560 J	--	650 J	--	--
Tetrachloroethene	--	--	--	--	--	--	--	--	--	--	--
Toluene	--	--	13 J	11 J	--	--	31 J	--	59 J	--	--
Ethylbenzene	590 J	56 J	--	--	[1]1,300 J	--	840 J	2 J	[1]950	--	
Xylenes (total)	[1]2,600	19 J	4 J	4 J	890 J	19 J	[1]3,700	3 J	[1]4,300	8 J	5 J
Trichlorofluoro-methane	--	--	--	--	--	--	--	--	--	--	--
Isobutyl alcohol	320 J	170 J	--	--	2,700 J	--	1,200 J	--	--	--	--
Semivolatile Analytes (µg/kg)											
Naphthalene	6,100 J	6,800	--	--	15,000	--	16,000 J	--	8,400 J	--	--
2-Methylnaphthalene	25,000	28,000	--	--	8,400	--	[1]69,000	--	33,000	--	--
Acenaphthene	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	--	--	--	--	2,000 J	--	--	--	--	--	--
Fluorene	2,900 J	2,400 J	--	--	4,600	--	6,000 J	--	2,900 J	--	--
N-Nitrosodiphenyla-mine (1)	--	1,500 J	--	--	2,900 J	--	--	--	--	--	--

See notes at end of table.

Table 4-4 (Continued)
Organic Analytes Detected in Sludge Samples at Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	M768	M768	M768	M768	M768	M768	M768	M768	M768	M768	M768
Sample Matrix:	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge
Sample Location:	MPT-8-SL06	MPT-8-SL06	MPT-8-SL07	MPT-8-SL07	MPT-8-SL07	MPT-8-SL08	MPT-8-SL08	MPT-8-SL09	MPT-8-SL09	MPT-8-SL010	MPT-8-SL-10
Sample No.:	08SL00601	08SL00605	08SL00701	08SL00701Dup	08SL00705	08SL00801	08SL00806	08SL00901	08SL00906	08SL01001	08SL01001Dup
Date Sampled:	09-AUG-94	09-AUG-94	09-AUG-94	09-AUG-94	09-AUG-94	09-AUG-94	09-AUG-94	09-AUG-94	09-AUG-94	09-AUG-94	09-AUG-94
Sample Depth (ft bls):	0 to 1	4 to 5	0 to 1	0 to 1	4 to 5	0 to 1	5 to 6	0 to 1	5 to 6	0 to 1	0 to 1
Semivolatile Analytes (µg/kg) (Continued)											
Phenanthrene	3,400 J	3,900 J	--	--	7,300	--	11,000 J	--	4,800 J	--	--
Anthracene	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	--	--	--	--	--	--	--	--	--	--	--
Pyrene	--	390 J	--	--	950 J	--	1,100 J	--	--	--	--
Butylbenzylphthalate	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	--	--	--	--	--	--	--	--	--	--	--
Chrysene	--	--	--	--	270 J	--	--	--	--	--	--
bis(2-Ethylhexyl)-phthalate	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	--	--	--	--	--	--	--	--	--	--	--
Pesticides and PCBs (µg/kg)											
4,4-DDE	--	--	--	--	--	--	--	--	--	--	--
4,4-DDD	--	--	--	--	--	--	--	--	--	--	--
4,4-DDT	--	--	--	--	--	--	--	--	--	--	--
Chlordane	--	--	--	--	--	--	--	--	--	--	--

See notes at end of table.

Table 4-4 (Continued)
Organic Analytes Detected in Sludge Samples at Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	M768	M768	M768	M768	M768	M768	M768
Sample Matrix:	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge
Sample Location:	MPT-8-SL10	MPT-8-SL11	MPT-8-SL11	MPT-8-SL12	MPT-8-SL12	MPT-8-SL13	MPT-8-SL13
Sample No.:	08SL01006	08SL01101	08SL01102	08SL01201	08SL01202	08SL01301	08SL01302
Date Sampled:	09-AUG-94	08-AUG-94	08-AUG-94	08-AUG-94	08-AUG-94	08-AUG-94	08-AUG-94
Sample Depth (ft bls):	5 to 6	0 to 1	1 to 2	0 to 1	1 to 2	0 to 1	1 to 2
Volatile Analytes (µg/kg)							
Methylene chloride	37	--	--	--	--	--	51 J
Acetone	--	240 J	--	120 J	--	86 J	140 J
Carbon disulfide	15	5 J	10	5 J	8	4 J	32
2-Butanone	--	41 J	36 J	12 J	--	13 J	--
Benzene	--	--	7	--	--	--	--
2-Hexanone	--	--	--	--	--	--	--
Tetrachloroethene	--	--	2 J	--	--	--	3 J
Toluene	23 J	--	7 J	1 J	--	--	15 J
Ethylbenzene	110 J	--	69 J	--	43 J	26	260 J
Xylenes (total)	350 J	--	300 J	5 J	32 J	24	230 J
Trichlorofluoromethane	--	--	--	--	--	--	5 J
Isobutyl alcohol	130 J	--	--	--	--	--	--
Semivolatile Analytes (µg/kg)							
Naphthalene	8,600	--	4,400 J	--	--	--	--
2-Methylnaphthalene	[1]54,000 J	--	24,000	--	--	--	--
Acenaphthene	--	--	--	--	1,200 J	--	--
Dibenzofuran	--	--	--	--	--	--	--

See notes at end of table.

Table 4-4 (Continued)
Organic Analytes Detected in Sludge Samples at Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	M768	M768	M768	M768	M768	M768	M768
Sample Matrix:	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge
Sample Location:	MPT-8-SL10	MPT-8-SL11	MPT-8-SL11	MPT-8-SL12	MPT-8-SL12	MPT-8-SL13	MPT-8-SL13
Sample No.:	08SL01006	08SL01101	08SL01102	08SL01201	08SL01202	08SL01301	08SL01302
Date Sampled:	09-AUG-94	08-AUG-94	08-AUG-94	08-AUG-94	08-AUG-94	08-AUG-94	08-AUG-94
Sample Depth (ft bls):	5 to 6	0 to 1	1 to 2	0 to 1	1 to 2	0 to 1	1 to 2
Semivolatile Analytes (µg/kg) (Continued)							
Fluorene	8,500	--	3,700 J	--	2,800 J	2,000 J	--
N-Nitrosodiphenylamine (1)	4,400	--	3,600 J	--	2,100 J	1,700 J	2,200 J
Phenanthrene	16,000	2,600 J	7,200 J	--	4,800	4,600	6,500
Anthracene	--	--	--	--	--	--	--
Fluoranthene	--	--	--	--	--	--	--
Pyrene	1,500 J	3,100 J	1,700 J	210 J	530 J	580 J	610 J
Butylbenzylphthalate	--	--	--	--	--	--	--
Benzo(a)anthracene	--	--	--	--	--	--	--
Chrysene	470 J	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate	--	11,000 J	1,700 J	--	--	--	--
Benzo(b)fluoranthene	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	--	--	--	--	--	--	--
Pesticides and PCBs (µg/kg)							
4,4-DDE	--	--	--	--	--	--	--
4,4-DDD	--	--	--	--	--	--	--
4,4-DDT	--	--	--	--	--	--	--
Chlordane	--	--	--	--	--	--	--

[1] Value from reanalysis or dilution.

Notes: RCRA = Resource Conservation and Recovery Act.
ft bls = feet below land surface.
µg/kg = micrograms per kilogram.
-- = analyte not detected.
J = estimated value.
Dup = duplicate.
PCBs = polychlorinated biphenyls.
DDE = dichlorodiphenyldichloroethene.
DDD = dichlorodiphenyldichloroethane.
DDT = dichlorodiphenyltrichloroethane.

Table 4-5
Inorganic Analytes Detected in Sludge Samples at Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	3492	3507	3507	34923	3492	R897	R897	M768	M768	M768	M768
Sample Matrix:	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge
Sample Location:	MPT-8-SL01	MPT-8-SL01	MPT-8-SL01	MPT-8-SL02	MPT-8-SL03	MPT-8-SL04	MPT-8-SL04	MPT-8-SL05	MPT-8-SL05	MPT-8-SL06	MPT-8-SL06
Sample No.:	MPT8SL1	8SL1A	8SL1ADup	MPT8SL2	MPT8SL3	08SL00401	08SL00401Dup	08SL00501	08SL00505	08SL00601	08SL00605
Date Sampled:	19-JAN-93	02-FEB-93	02-FEB-93	19-JAN-93	19-JAN-93	27-OCT-94	27-OCT-94	09-AUG-94	09-AUG-94	09-AUG-94	09-AUG-94
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	4 to 5	0 to 1	4 to 5
Inorganic Analytes (mg/kg)											
Antimony	4.5 J	4 J	--	19.7 J	5.9 J	--	--	--	--	--	--
Arsenic	1.2 J	--	--	10.6	0.49 J	0.66 J	0.46 J	0.95 J	0.68 J	0.43 J	0.62 J
Barium	32.7 J	8 J	7.1 J	344 J	27.6 J	7.8 J	5.4 J	6.9 J	4.6 J	5.1 J	5.6 J
Beryllium	--	--	--	--	0.13 J	0.12 J	--	--	--	--	--
Cadmium	6.6 J	--	--	10.3 J	1.4 J	--	--	--	--	--	--
Chromium	75.1 J	1.1 J	1.5 J	127 J	26.5 J	5.4	4	2 J	3.1 J	2.5 J	1.5 J
Cobalt	--	--	--	--	--	--	--	--	--	--	--
Copper	510	6	5.7	859	72.4	15	6.4	--	--	5.7 J	--
Lead	91.3 J	3.1 J	2.9 J	171 J	43.4 J	26	20	0.91 J	1.5 J	2.3 J	1.1 J
Mercury	6 J	--	--	0.17 J	0.77 J	0.05 J	0.08	--	--	0.1 J	0.1 J
Nickel	285 J	2.2 J	4.3 J	198 J	38.7 J	2.9 J	--	1.7 J	2.5 J	7 J	--
Selenium	--	--	0.11 J	0.86 J	--	0.24 J	--	--	--	--	--
Silver	18.4	--	--	1.5 J	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	0.35 J	--	--
Tin	235	--	--	17.3	3.5	5.4 J	3.2 J	--	2.5 J	--	--
Vanadium	80.4 J	3.2 J	3.3 J	31.8 J	34.1 J	8.2 J	4.9 J	2 J	2.7 J	9.8 J	1.8 J
Zinc	421 J	14.7 J	20.8 J	1,700 J	203 J	27 J	26.2 J	--	6.9 J	24.4 J	8.5 J
Cyanide	--	0.21 J	--	--	--	--	--	0.12 J	0.08 J	--	0.23 J

See notes at end of table.

Table 4-5 (Continued)
Inorganic Analytes Detected in Sludge Samples at Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	M768	M768	M768	M768	M768	M768	M768	M768	M768	M768	M768
Sample Matrix:	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge
Sample Location:	MPT-8-SL07	MPT-8-SL07	MPT-8-SL07	MPT-8-SL08	MPT-8-SL08	MPT-8-SL09	MPT-8-SL09	MPT-8-SL10	MPT-8-SL10	MPT-8-SL10	MPT-8-SL11
Sample No.:	08SL00701	08SL00701Dup	08SL00705	08SL00801	08SL00806	08SL00901	08SL00906	08SL01001	08SL01001Dup	08SL01006	08SL01101
Date Sampled:	09-AUG-94	09-AUG-94	09-AUG-94	09-AUG-94	09-AUG-94	09-AUG-94	09-Aug-96	09-AUG-94	09-AUG-94	09-AUG-94	08-AUG-94
Sample Depth (ft bls):	0 to 1	4 to 5	0 to 1	5 to 6	0 to 1	0 to 1	5 to 6	0 to 1	0 to 1	5 to 6	0 to 1
Inorganic Analytes (mg/kg)											
Antimony	--	--	--	1.3 J	--	3.8 J	--	0.61 J	0.71 J	0.78 J	3.9 J
Arsenic	0.39 J	0.27 J	1.4 J	1 J	0.91 J	2.8 J	0.44 J	0.48 J	0.31 J	0.49 J	1.8 J
Barium	7 J	5.6 J	8.3 J	27.6 J	9.7 J	81.2	5.7 J	14.6 J	11.5 J	5.9 J	209
Beryllium	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	1.1 J	--	4.8	--	--	0.74 J	--	3.1
Chromium	3.2 J	3.9 J	6.2 J	34.3 J	3.4 J	95.6 J	5.9 J	19.9 J	13.5 J	3.9 J	78.1 J
Cobalt	--	--	--	1.2 J	--	2.5 J	--	1.1 J	0.83 J	--	2.9 J
Copper	6.5 J	7 J	10.8 J	66.9 J	6.3 J	319 J	9.4 J	44.8 J	29.8 J	5.5 J	377 J
Lead	4.1 J	2.8 J	4.8 J	37.5 J	5.5 J	281 J	5.3 J	13.3 J	39.4 J	5.5 J	92 J
Mercury	0.1 J	0.09 J	--	0.7 J	--	3.3 J	0.31 J	0.75 J	0.42 J	--	0.74 J
Nickel	4.6 J	3.8 J	5.3 J	59.9	6.4 J	119	6.6 J	32.5	23.5	6 J	103
Selenium	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	0.59 J	--	1.4 J	--	--	--	--	1.4 J
Thallium	--	--	--	--	--	--	--	--	--	--	--
Tin	2.1 J	2.7 J	2.5 J	4.1 J	--	11.3 J	2.3 J	3.8 J	3.5 J	2.7 J	12.5 J
Vanadium	2.4 J	2.9 J	--	42	4.3 J	104	5.9 J	26.5	20.7	4.5 J	16.8 J
Zinc	15.2 J	17.7 J	25.6 J	207 J	23.3 J	1,040 J	33.6 J	127 J	87.8 J	19.6 J	885 J
Cyanide	--	--	0.1 J	--	0.08 J	--	--	--	--	0.08 J	--

See notes at end of table.

Table 4-5 (Continued)
Inorganic Analytes Detected in Sludge Samples at Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	M768	M768	M768	M768	M768
Sample Matrix:	Sludge	Sludge	Sludge	Sludge	Sludge
Sample Location:	MPT-8-SL11	MPT-8-SL12	MPT-8-SL12	MPT-8-SL13	MPT-8-SL13
Sample No.:	08SL01102	08SL01201	08SL01202	08SL01301	08SL01302
Date Sampled:	08-AUG-94	08-AUG-94	08-AUG-94	08-AUG-94	08-AUG-94
Sample Depth (ft bls):	1 to 2	0 to 1	1 to 2	0 to 1	1 to 2
Inorganic Analytes (mg/kg)					
Antimony	--	--	--	--	--
Arsenic	0.59 J	0.46 J	0.22 J	0.3 J	0.24 J
Barium	7.4 J	9 J	7.3 J	12.4 J	11.2 J
Beryllium	--	--	--	--	--
Cadmium	--	--	--	--	--
Chromium	3 J	3.5 J	2.7 J	5.4 J	4.1 J
Cobalt	--	--	--	--	--
Copper	--	6.5 J	--	12.7 J	--
Lead	1.1 J	8.1 J	1.5 J	9.4 J	6.7 J
Mercury	0.18 J	--	0.1 J	--	--
Nickel	--	6 J	2.6 J	4.6 J	4.8 J
Selenium	--	--	--	--	--
Silver	--	0.51 J	--	--	--
Thallium	--	--	--	--	--
Tin	8 J	4.1 J	4.8 J	3.9 J	4.1 J
Vanadium	2.2 J	5.2 J	2.3 J	3.8 J	3.1 J
Zinc	--	19.2 J	12.1 J	31.7 J	21.5 J
Cyanide	--	--	--	--	0.06 J

Notes: RCRA = Resource Conservation and Recovery Act.
Dup = duplicate.
ft bls = feet below land surface.
mg/kg = milligrams per kilogram.
J = estimated value.
-- = analyte not detected.

Table 4-6
Summary of Chemicals Detected in Oily Waste Treatment Plant (OWTP) Area Sludge Samples

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Minimum Concentration[2]	Maximum Concentration[2]	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration
Volatile Analytes (µg/kg)						
2-Butanone	11/19	2	87	32	11 - 1,700	08SL00705
2-Hexanone	2/23	560	650	605	11 - 1,700	08SL00906
Acetone	11/23	2.5*	240	132	11 - 2,000	08SL01101
Benzene	1/23	7	7	7	5 - 840	08SL01102
Carbon disulfide	17/23	1	32	9	5 - 840	08SL01302
Ethylbenzene	13/23	2	1,300	423	5 - 17	08SL00705
Isobutyl alcohol	7/21	130	2,700	863	220 - 670	08SL00705
Methylene chloride	10/23	9	51	24	2.5 - 840	08SL01302
Tetrachloroethene	2/23	2	3	3	5 - 840	08SL01302
Toluene	9/23	1	210	40	5 - 29	MPT8SL2
Trichlorofluoromethane	2/23	2	5	4	5 - 840	08SL01302
Xylenes (total)	17/23	2	4,300	876	5 - 17	08SL00906
Semivolatile Analytes (µg/kg)						
2-Methylnaphthalene	10/23	8,400	69,000	33,280	710 - 91,000	08SL00806
Acenaphthene	2/21	1,200	1,700	1,450	710 - 91,000	MPT8SL1
Anthracene	2/21	79	95.5*	87	885 - 91,000	8SL1A
Benzo(a)anthracene	2/21	275*	6,600	3,438	710 - 91,000	MPT8SL2
Benzo(b)fluoranthene	2/21	215.5*	295*	255	770 - 91,000	08SL00401
Benzo(g,h,i)perylene	1/21	220*	220*	220	770 - 91,000	8SL1AD
Butylbenzylphthalate	1/21	220*	220*	220	770 - 91,000	8SL1AD
Chrysene	5/21	91	470	261	3,600 - 91,000	08SL01006
Dibenzofuran	1/21	2,000	2,000	2,000	710 - 91,000	08SL00705
Fluoranthene	2/21	335*	5,800	3,068	710 - 91,000	MPT8SL2
Fluorene	11/23	1,300	8,500	4,045	710 - 91,000	08SL01006
N-Nitrosodiphenylamine (1)	9/21	1,500	50,000	8,411	710 - 91,000	MPT8SL1

See notes at end of table.

Table 4-6 (Continued)
Summary of Chemicals Detected in
Oily Waste Treatment Plant (OWTP) Area Sludge Samples

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Minimum Concentration[2]	Maximum Concentration[2]	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration
Naphthalene	10/23	2,400	19,000	10,030	710 - 91,000	08SL00505
Phenanthrene	14/23	1,400	16,000	7,064	710 - 91,000	08SL01006
Pyrene	17/23	210	37,000	3,179	770 - 91,000	MPT8SL2
bis(2-Ethylhexyl)phthalate	7/21	200*	51,000	9,878	770 - 91,000	MPT8SL2
Pesticides/PCBs (µg/kg)						
4,4'-DDD	1/23	5.75*	5.75*	5.8	7.3 - 190	08SL00401
4,4'-DDE	1/23	7.1*	7.1*	7.1	0.9 - 98	8SL1A
4,4'-DDT	1/23	2.15*	2.15*	2.2	7.3 - 190	08SL00401
Chlordane	1/23	70*	70*	70	39 - 980	08SL00401D
Inorganics (mg/kg)						
Antimony	9/23	0.66*	19.7	4.8	1.07 - 5	MPT8SL2
Arsenic	22/23	0.22	10.6	1.22	0.15 - 0.15	MPT8SL2
Barium	23/23	4.6	344	37.2	N/A	MPT8SL2
Beryllium	2/23	0.08*	0.13	0.11	0.11 - 2.12	MPT8SL3
Cadmium	7/23	0.6325*	10.3	3.99	0.26 - 1.29	MPT8SL2
Chromium	23/23	1.3*	127	22.2	N/A	MPT8SL2
Cobalt	4/23	0.965*	2.9	1.89	0.835 - 12.85	08SL01101
Copper	17/23	5.5	859	136.6	5.36 - 6.43	MPT8SL2
Cyanide	8/23	0.06	0.23	0.11	0.17 - 4.25	08SL00605
Lead	23/23	0.91	281	35.9	N/A	08SL00901
Mercury	14/23	0.065*	6	0.94	0.03 - 0.05	MPT8SL1
Nickel	21/23	1.7	295	43.1	8.58 - 9.89	MPT8SL1
Selenium	3/23	0.0825*	0.86	0.4	0.12 - 2.12	MPT8SL2
Silver	6/23	0.51	19.4	4.13	0.45 - 2.57	MPT8SL1
Thallium	1/23	0.35	0.35	0.35	0.15 - 4.25	08SL00505
Tin	18/23	2.3	235	18.3	2.5 - 12.36	MPT8SL1

See notes at end of table.

Table 4-6 (Continued)
Summary of Chemicals Detected in
Oily Waste Treatment Plant (OWTP) Area Sludge Samples

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Minimum Concentration[2]	Maximum Concentration[2]	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration
Vanadium	22/23	1.8	104	17.8	12.53 - 12.53	08SL00901
Zinc	21/23	6.9	1,700	231	4.29 - 4.31	MPT8SL2

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed.
[2] A value indicated by an asterisk is the average of the detected concentrations in a sample and its duplicate. For nondetected values, one-half the CRQL/CRDL is used as a surrogate.
[3] The mean of detected concentrations is the arithmetic mean of all samples in which the analyte was detected. It does not include those samples in which the analyte was not detected or rejected.

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
µg/kg = micrograms per kilogram.
PCBs = polychlorinated biphenyls.
4,4'-DDD = dichlorodiphenyldichloroethane.
4,4'-DDE = dichlorodiphenyldichloroethene.
4,4'-DDT = dichlorodiphenyltrichloroethane.
mg/kg = milligrams per kilogram.
CRQL/CRDL = contract-required quantitation limit/contract-required detection limit

Table 4-7
Comparison of Analytes Detected in Oily Waste Treatment Plant (OWTP) Area Sludge Samples to Background Screening and Benchmark Concentrations

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Maximum Concentration[1]	Background Screening Concentration[2]	Frequency Above Background Screening Concentration	Florida Soil Cleanup Goal[3]	Frequency Above Florida Soil Cleanup Goal	Risk-Based Screening Concentration[4]	Frequency Above Risk-Based Screening Concentration
Volatile Analytes (µg/kg)							
2-Butanone	87	NSC	N/A	17,000,000	0/19	100,000,000	0/19
2-Hexanone	650	NSC	N/A	NSC	N/A	NSC	N/A
Acetone	240	NSC	N/A	890,000	0/23	20,000,000	0/23
Benzene	7	NSC	N/A	1,100	0/23	200,000	0/23
Carbon disulfide	32	NSC	N/A	18,000	0/23	20,000,000	0/23
Ethylbenzene	1,300	NSC	N/A	5,500,000	0/23	20,000,000	0/23
Isobutyl alcohol	2,700	NSC	N/A	NSC	N/A	61,000,000	0/21
Methylene chloride	51	NSC	N/A	13,000	0/23	760,000	0/23
Tetrachloroethene	3	NSC	N/A	18,000	0/23	110,000	0/23
Toluene	210	NSC	N/A	1,800,000	0/23	41,000,000	0/23
Trichlorofluoromethane	5	NSC	N/A	23,000	0/23	61,000,000	0/23
Xylenes (total)	4,300	NSC	N/A	44,000,000	0/23	16,000,000	0/23
Semivolatile Analytes (µg/kg)							
2-Methylnaphthalene	69,000	NSC	N/A	5,800,000	0/23	NSC	N/A
Acenaphthene	1,700	NSC	N/A	19,000,000	0/21	12,000,000	0/21
Anthracene	95.5*	NSC	N/A	200,000,000	0/21	61,000,000	0/21
Benzo(a)anthracene	6,600	NSC	N/A	5,200 4,900	1/21	7,800	0/21
Benzo(b)fluoranthene	295*	NSC	N/A	4,900	0/21	7,800	0/21
Benzo(g,h,i)perylene	220*	NSC	N/A	50,000	0/21	NSC	N/A
Butylbenzylphthalate	220*	NSC	N/A	NSC	N/A	41,000,000	0/21
Chrysene	470	NSC	N/A	490,000	0/21	780,000	0/21
Dibenzofuran	2,000	NSC	N/A	2,400,000	0/21	820,000	0/21
Fluoranthene	5,800	NSC	N/A	44,000,000	0/21	8,200,000	0/21
Fluorene	8,500	NSC	N/A	21,000,000	0/23	8,200,000	0/23

See notes at end of table.

Table 4-7 (Continued)
Comparison of Analytes Detected in Oily Waste Treatment Plant (OWTP) Area Sludge Samples to Background Screening and Benchmark Concentrations

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Maximum Concentration[1]	Background Screening Concentration[2]	Frequency Above Background Screening Concentration	Florida Soil Cleanup Goal[3]	Frequency Above Florida Soil Cleanup Goal	Risk-Based Screening Concentration[4]	Frequency Above Risk-Based Screening Concentration
N-Nitrosodiphenylamine (1)	50,000	NSC	N/A	69,000	0/21	1,200,000	0/21
Naphthalene	19,000	NSC	N/A	6,800,000	0/23	8,200,000	0/23
Phenanthrene	16,000	NSC	N/A	11,000,000	0/23	NSC	N/A
Pyrene	37,000	NSC	N/A	37,000,000	0/23	6,100,000	0/23
bis(2-Ethylhexyl)phthalate	51,000	NSC	N/A	100,000	0/21	410,000	0/21
Pesticides/PCBs (µg/kg)							
4,4'-DDD	5.75*	NSC	N/A	17,000	0/23	24,000	0/23
4,4'-DDE	7.1*	3.5	1/23	9,900	0/23	17,000	0/23
4,4'-DDT	2.15*	NSC	N/A	12,000	0/23	17,000	0/23
Chlordane	70*	NSC	N/A	2,800	0/23	4,400	0/23
Inorganics (mg/kg)							
Antimony	19.7	NSC	N/A	210	0/23	82	0/23
Arsenic	10.6	0.9	8/23	3 3.1	1/23	3.3	1/23
Barium	344	7.2	16/23	74,000	0/23	14,000	0/23
Beryllium	0.13	0.14	0/23	0.2	0/23	1.3	0/23
Cadmium	10.3	NSC	N/A	600	0/23	100	0/23
Chromium	127	3.4	15/23	220	0/23	1,000	0/23
Cobalt	2.9	1.04	4/23	110,000	0/23	12,000	0/23
Copper	859	3.6	17/23	72,000	0/23	7,600	0/23
Cyanide	0.23	0.66	0/23	40,000	0/23	4,100	0/23
Lead	281	2.8	17/23	1,000	0/23	400	0/23
Mercury	6	0.06	14/23	480	0/23	61	0/23
Nickel	295	NSC	N/A	11,000	0/23	4,100	0/23
Selenium	0.86	NSC	N/A	9,900	0/23	1,000	0/23
Silver	19.4	NSC	N/A	8,000	0/23	1,000	0/23

See notes at end of table.

Table 4-7 (Continued)
Comparison of Analytes Detected in Oily Waste Treatment Plant (OWTP)
Area Samples Sludge to Background Screening and Benchmark Concentrations

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Maximum Concentration[1]	Background Screening Concentration[2]	Frequency Above Background Screening Concentration	Florida Soil Cleanup Goal[3]	Frequency Above Florida Soil Cleanup Goal	Risk-Based Screening Concentration[4]	Frequency Above Risk-Based Screening Concentration
Thallium	0.35	NSC	N/A	NSC	N/A	16	0/23
Tin	235	5.4	5/23	660,000	0/23	100,000	0/23
Vanadium	104	3.2	15/23	4,800	0/23	1,400	0/23
Zinc	1,700	4.8	21/23	550,000	0/23	61,000	0/23

[1] A value indicated by an asterisk is the average of the detected concentrations in a sample and its duplicate. For nondetected values, one-half the CRQL/CRDL is used as a surrogate.
[2] The background screening concentration is twice the mean of detected concentrations for inorganic analytes.
[3] Florida Cleanup Goals (April 5, 1995).
[4] U.S.Environmental Protection Agency Region III risk-based screening concentrations (February 9, 1995). Concentrations for non-carcinogenic risks are adjusted to a hazard index of 0.1.

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
µg/kg = micrograms per kilogram.
NSC - no screening concentration.
N/A = not applicable.
CRQL/CRDL = contract-required quantitation limit/ contract-required detection limit.
PCBs = polychlorinated biphenyls.
4,4'-DDD = dichlorodiphenyldichloroethane.
4,4'-DDE = dichlorodiphenyldichloroethene.
4,4'-DDT = dichlorodiphenyltrichloroethane.
mg/kg = milligram per kilogram.

Table 4-8
Total Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX) and Polynuclear Aromatic Hydrocarbons (PAH) Concentrations Detected in Oily Waste Treatment Plant (OWTP) Area Sludge Samples

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

SWMU	Sample Location	Shallow Sample[1]		Deep Sample[1]	
		BTEX (µg/kg)	PAH[3] (µg/kg)	BTEX (µg/kg)	PAH[3] (µg/kg)
SWMU 6 and SWMU 7 Westernmost bed	MPT-8-SL01	ND	5,100	–	–
	MPT-8-SL01A	ND	320/592[2]	–	–
	MPT-8-SL02	3,040	96,400	–	–
	MPT-8-SL05	6	14,160	810	100,500
	MPT-8-SL06	3,190	37,400	75	41490
	MPT-8-SL07	17/15[2]	ND	2,190	36520
SWMU 7 First bed east of Westernmost bed	MPT-8-SL02	3,040	96,400	–	–
	MPT-8-SL11	ND	5,700	383	41,000
	MPT-8-SL12	6	210	75	9,330
	MPT-8-SL13	50	7,180	505	7,110
SWMU 7 Second bed east of Westernmost bed	MPT-8-SL03	ND	ND	–	–
	MPT-8-SL08	19	ND	4,571	103,100
	MPT-8-SL09	5	ND	5,319	51,820
	MPT-8-SL10	8/5[2]	ND	483	89,070

[1] Sample depths are presented in Table 4-4.
[2] Concentrations separated by "/" represent results from duplicate samples
[3] SW-846 Method 8100 compounds.

Notes: RCRA = Resource Conservation and Recovery Act.
SWMU = solid waste management unit.
µg/kg = micrograms per kilogram.
Florida Administrative Code 62-775 Clean Soil Criteria for BTEX is 100 µg/kg and 1,000 µg/kg for PAH.
ND = not detected.
– = not collected.

FDEP soil cleanup values (FDEP, 1995). The FDEP soil cleanup values (FDEP, 1995) for industrial sites were used because there are no equivalent values for sludges and these units of the OWTP were constructed in dredge material-derived soils. There are no applicable background sludge samples for SWMUs 7 and 8 because in the past they were active units of the OWTP. The following presents a discussion of the sludge analytical results. This discussion is subdivided into organic target analytes and inorganic target analytes detected in the sludge samples.

4.2.2.1 **Organics** Organics target analytes detected in the sludge samples consist of 12 VOCs, 16 SVOCs, and 4 pesticides (Table 4-6). However, only benzo(a)anthracene was detected in sludge sample MPT-8-SL02 collected from SWMU 7 at a concentration that exceeds a benchmark (Table 4-7). Benzo(a)anthracene was detected in one sample from SWMU 7 and one sample from SWMU 8. None of the other hydrocarbon-related VOCs (BTEX) or SVOCs (PAHs) detected in either the SWMU 7 or 8 sludge samples individually exceed their respective benchmark values.

Total values for individual BTEX sample concentrations are shown in Table 4-8. Comparison of these values to the clean soil criteria established for BTEX (100 μg/kg) and PAHs (1,000 μg/kg) under Florida Administrative Code (FAC) 62-775 suggests that the surface and subsurface soils within the basins do not meet these promulgated criteria.

Isobutyl alcohol and ketones (2-butanone, 2-hexanone, and acetone) also were detected in the sludge samples. Isobutyl alcohol and ketones may represent solvents or impurities or degradation byproducts of solvents, and may have been present in oily waste that was disposed of in SWMU 7. The ketones also are common laboratory and field contaminants; however, the distribution of these compounds is similar to the hydrocarbon-related organics, which suggests that the ketones and alcohol are likely site-related.

The chlorinated solvents methylene chloride and tetrachloroethene and the refrigerant or solvent trichlorofluoromethane were detected in some of the sludge samples collected from SWMU 7. Tetrachloroethene and trichlorofluoromethane were detected in two sludge samples at concentrations of 5 μg/kg or less. Methylene chloride was detected in 10 sludge samples at concentrations of 51 μg/kg or less. Methylene chloride is a common laboratory and field contaminant and was detected in the method blanks associated with three sludge samples; however, the concentrations in the samples were greater than 10 times the concentration detected in the associated method blanks. Based on the history of SWMUs 6 and 7 and the presence of other solvents in sludge samples, these compounds may be site-related. Carbon disulfide was detected in most of the sludge samples collected from SWMU 7 at concentrations of 32 μg/kg or less. This compound may be related to the site. Although carbon disulfide was detected in some quality control samples, it is also a by-product of anaerobic degradation (Verschueren, 1983). It is likely that the degradation of fuel-related compounds in the soil has created an anaerobic environment where carbon disulfide can be produced.

4.2.2.2 **Inorganics** Eighteen inorganic analytes were detected in sludge samples, and 16 of the analytes were detected at concentrations greater than background screening concentrations or were not detected in background samples. However, only arsenic was detected at concentrations greater than benchmark values (Table 4-7).

Arsenic was detected at a concentration of 10.6 mg/kg in the sludge sample collected at sampling location MPT-8-SL02 in SWMU 7, Sludge Drying Bed No. 3. This concentration exceeds the benchmark concentration and is several times higher than concentrations detected in other samples.

It is likely that inorganics were present in oily waste disposed of at SWMU 6 or SWMU 7. These inorganics may have become concentrated in the sludge during treatment at the OWTP Area. Therefore, inorganics detected in the sludge samples may be site-related.

Based on the analytical results of the sludge sample collected at SWMU 8, it does not require remediation because the sample contains petroleum-related chemicals at concentrations below the Florida clean soil criteria (62-775 FAC). However, review of the analytical results of the sludge samples collected at SWMU 7 suggests that remediation is required for surface and subsurface soils within the SWMU 7 basin because they contain petroleum-related chemicals in excess of the Florida clean soil criteria (62-775 FAC). Also, remediation of soil beneath SWMUs 6 and 7 is warranted because the hydrocarbons in the sludge and soil are the likely source of free-phase hydrocarbons measured in monitoring wells MPT-8-MW02S and MPT-8-MW03S. Therefore, a corrective measures study should be conducted to assess remedial options for SWMUs 6 and 7. Sludge samples were not collected at SWMU 6; however, this SWMU received waste similar to SWMU 7, and it is likely that soils at the SWMU also contains petroleum-related chemicals in excess of the Florida clean soil criteria.

Additionally, based on the sludge samples containing petroleum-related chemicals at concentrations that exceed the Florida clean soil criteria and the assumption that the remediation is conducted, human health and ecological risk assessments for these soils need not be conducted at this time. However, if the remediation is not conducted, the risk assessments will be considered a data gap and will have to be conducted. In the absence of conducting a human health risk assessment, remedial goal options for the surface and subsurface soils at SWMUs 6 and 7 are proposed to be the clean soil criteria under 62-775, FAC.

4.2.3 Subsurface Soil Assessment Subsurface soil sampling consisted of collecting samples for field screening analysis and laboratory analysis. Two subsurface soil field screening sampling events, one in 1993 and the other in 1994, were conducted over a broad area to assess the nature and extent of petroleum-type compounds which may have been released from the OWTP Area SWMUs (Figure 4-2). Subsurface soil field screening samples collected in 1993 were analyzed onsite using a Horiba OCMA 2000, which is a nondispersive infrared (NDIR) spectroscopy analyzer (similar to USEPA Method 418.1). In 1993, splits of the field screening samples were submitted to an analytical laboratory for confirmatory analysis using USEPA Method 418.1. Subsurface soil field screening samples collected in 1994 were shipped to an analytical laboratory for analysis by USEPA Method 418.1. Twelve subsurface soil samples also were collected during the drilling of soil borings for installation of monitoring wells. These samples were submitted to an analytical laboratory for analyses of VOCs, SVOCs, pesticides, PCBs, inorganics, and cyanide.

4.2.3.1 **Field Screening Results** The following presents the results of the field screening sampling events conducted in 1993 and 1994.

1993 Sampling Event. Fifty-three subsurface soil samples were collected from 38 sampling locations in the vicinity of SWMUs 6 and 9; sampling was limited to the area south of Patrol Road. Fifteen of the subsurface soil field screening samples were split and submitted for laboratory analysis.

The field screening analytical results indicate that TRPH was present in the subsurface soil samples, and these data were confirmed by laboratory analysis (Table 4-9). Evaluation of the analytical results suggests a correlation between field screening and laboratory results at concentrations near or below the lower detection limit (1 part per million [ppm]) of the field screening analytical instrument. This correlation provides confidence in delineating the horizontal and vertical extent of the hydrocarbons in subsurface soil at SWMUs 6 and 7. However, confirmation analytical results for field screening analytical sample MPT8(4 0) (laboratory analysis sample I.D. MPT-8-BS1) suggest that, at concentrations above the lower detection limit, the NDIR and laboratory results are not comparable. The explanation for this disparity is that, because the NDIR was calibrated near the lower detection limit, analytical results greater than this value were out of the calibrated range for the field screening instrument.

Field screening and laboratory analytical results suggest that TRPH is present in soil located beneath and hydraulically downgradient of SWMU 6 and SWMU 7 (Figure 4-5). TRPH concentrations vary with depth and distance from these SWMUs. The highest TRPH concentrations appear to be located northwest of SWMU 7 and correlate with the location of SWMU 6.

It should be noted that because of the effect of tides on the surficial aquifer in the vicinity of SWMUs 6 and 7, there is a bias to the TRPH concentrations. This bias results from the smearing effect the tidal fluctuations would have on the TRPH; therefore, the concentrations detected in field screening samples may vary depending on the sampling depth and the depth of the water table (as a result of the tidal stage at the time of sampling).

The total value for VOCs in the sludge samples, excluding BTEX (Table 4-4), were compared to TRPH values for samples MPT8(6/12) and MPT8(4/0). The total value for the VOCs for each sample was less than 1 percent of the value of the TRPH. The 1 percent criterion is used by FDEP to determine whether soil contains deminimus concentrations of chlorinated solvents. If less than 1 percent, FDEP allows soils to be treated using thermal desorption.

1994 Sampling Event. Eighty-three subsurface soil samples were collected from 46 sampling locations north and south of Patrol Road (Figure 4-2). The TRPH concentrations detected in samples collected south of the Patrol Road support the detection of TRPH in this area during the 1993 investigation (Table 4-9). Although the 1994 results are not numerically comparable to 1993 field screening results (because of the different analyses that were used), the distribution shown by these two data sets is consistent.

Field screening results suggest that petroleum contamination is migrating diagonally from SWMUs 6 and 7 (primarily SWMU 6) toward the river (Figure 4-5). It is likely that tidal effects on the surficial aquifer have prevented the petroleum contamination from reaching the river and are causing it to migrate northeast instead of directly north into the river.

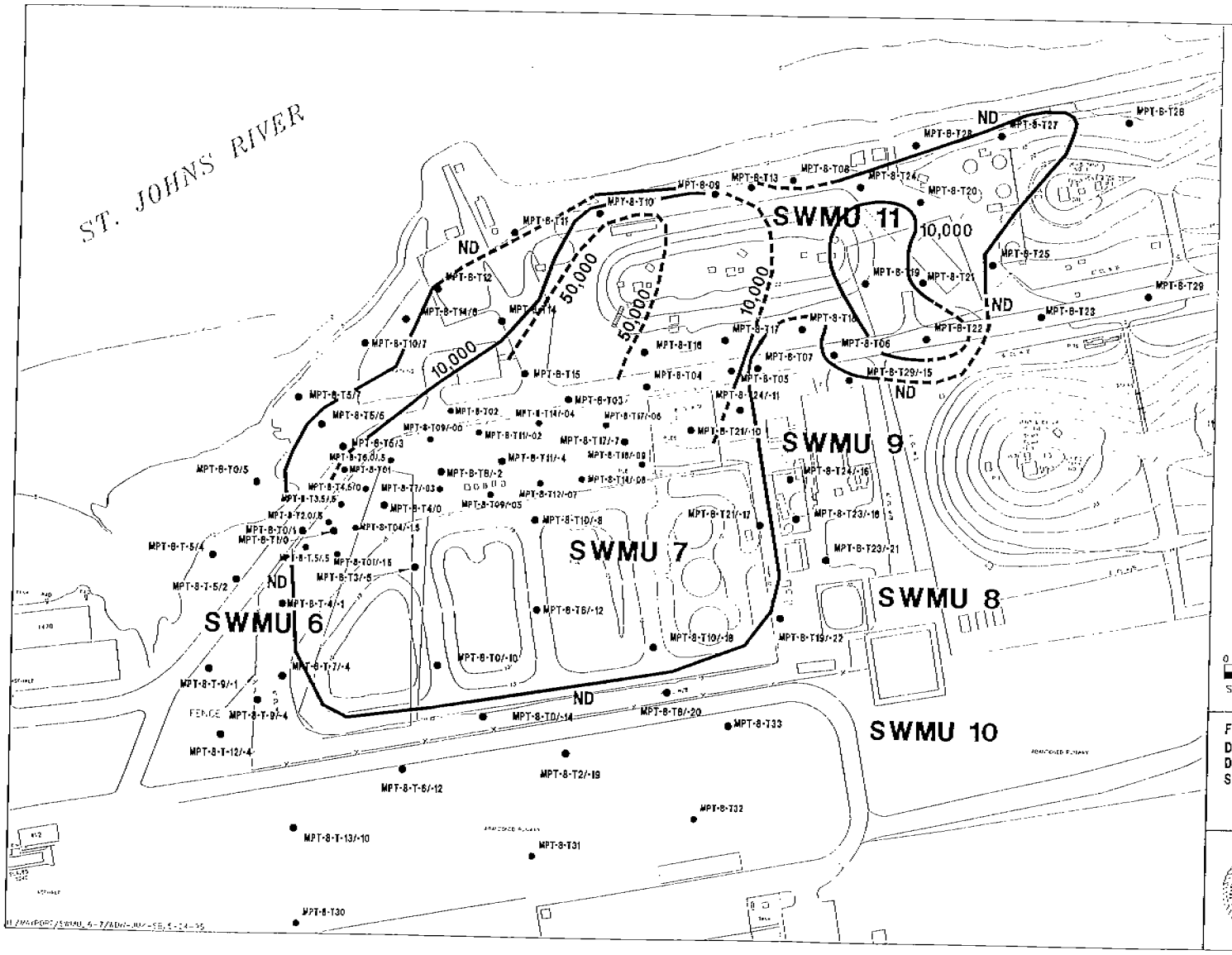
Table 4-9
Total Recoverable Petroleum Hydrocarbon Analysis of Soil Samples, Oily Waste Treatment Plant Area, 1993

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Soil Sample Location[1]	Laboratory I.D.[2]	Sample Depth (feet)	Sample Elevation (ft msl)	NDIR[3]	Laboratory Results[4]
MPT-8-T17/-7	MPT8BS4	6	5.0	–	14,200
MPT-8-T11/-4	MPT8BS3	7	4.1	–	15,100
MPT-8-T6/-12	MPT8BS12	8	4.9	–	22,300
MPT-8-T17/-7	MPT8BS5	9	2.0	–	170
MPT-8-T19/-22	MPT8BS9	9	3.7	ND	<2.0
MPT-8-T29/-15	MPT8BS10	9	4.9	ND	<2.0
MPT-8-T2/-19	MPT8BS14	9	3.9	–	<2.1
MPT-8-T2/-19D	MPT8BS14D	9	3.9	–	2.75
MPT-8-T4.5/0	MPT8BS1	9	1.7	600	22,000
MPT-8-T-5/2	MPT8BS13	9	2.1	ND	<2.0
MPT-8-T-6/-12	MPT8BS8	9	3.9	ND	<2.0
MPT-8-T8/-21	MPT8BS7	9	4.0	ND	3.6
MPT-8-T8/-2	MPT8BS2	9	2.1	–	21,100
MPT-8-T12/-4	MPT8BS6	10	2.7	ND	3.3
MPT-8-T6/-12	MPT8BS11	11	6.2	–	12,200

[1] Sample locations are presented on Figure 4-2.
[2] Sample Identification as submitted for laboratory analysis.
[3] Results of onsite NDIR analysis in parts per million (ppm).
[4] Total recoverable petroleum hydrocarbons (TRPH) results of laboratory analysis by U.S. Environmental Protection Agency Method 418.1 in ppm.

Notes: RCRA = Resource Conservation and Recovery Act.
SWMU = solid waste management unit.
ft msl = feet above mean sea level (National Geodetic Vertical Datum of 1929).
NDIR = nondispersive infrared.
– = onsite nondispersive infrared analysis not conducted.
ND = not detected.
< = less than.



LEGEND

Approximate SWMU Location

MPT-B-T32 Terra-Probe Soil Sample Location

Total Recoverable Petroleum Hydrocarbon Isopleth (Parts Per Million) Inferred where dashed

ND = Not detected

0 60 120

SCALE: 1" = 120'

FIGURE 4-5
DISTRIBUTION OF INTERPRETED HYDROCARBONS DETECTED IN FIELD SCREENING SAMPLES, 1993 AND 1994

RCRA FACILITY INVESTIGATION REPORT, GROUP II SWMUs

U.S. NAVAL STATION
MAYPORT, FLORIDA

In addition to the area of petroleum contamination that appears to be migrating from SWMUs 6 and 7, there is a smaller area in the vicinity of SWMU 11 (Figure 4-5). This area of petroleum contamination is separate from the larger area and is likely the result of a release at SWMU 11.

4.2.3.2 **Soil Boring Analytical Results** Subsurface soil samples were collected in 1993 during the drilling of soil borings for the installation of monitoring wells MPT-8-MW03S, MPT-8-MW04S, MPT-8-MW05S, MPT-8-MW05D, MPT-8-MW06S, MPT-8-MW07S, and MPT-8-MW08S to confirm the field screening results, (Figure 4-3). The deepest sampling interval for each boring was the sample that was just above the groundwater table at the time of drilling. Two samples and a duplicate sample were collected in 1994 from borings MPT-8-MW13 and MPT-8-MW15 (collocated with monitoring wells MPT-8-MW13I and MPT-8-MW15I, respectively) to confirm the 1994 field screening results. Tables 4-11 and 4-12 present the concentrations of chemicals detected in each sample, Table 4-13 lists statistics for each chemical that was detected, and Table 4-14 compares the detected concentrations to background screening and benchmark concentrations.

The following paragraphs describe the results of the analyses of the subsurface soil samples collected from soil borings.

Organic Target Analytes. Organic target analytes detected in subsurface soil samples consist of 8 VOCs, 11 SVOCs, and 2 pesticides (Table 4-13). None of these compounds were detected at concentrations that exceed benchmarks (Table 4-14).

Five VOCs (benzene, ethylbenzene, toluene, xylenes, and trichloroethene) were detected in samples from the area where the hydrocarbons were detected in the field screening samples. (No VOCs were detected in the subsurface soil sample MPT-8-BS1316 that was collected while installing monitoring well MPT-8-MW13S, which is near the source area for SWMU 11 (Figure 4-4, Table 4-14).

Benzene, toluene, ethylbenzene, and xylenes which are hydrocarbon-related organic compounds, were detected in some of the subsurface soil samples (Table 4-11). Benzene and toluene were detected in the subsurface soil sample MPT-8-MW03S at concentrations of 160 and 170 μg/kg, respectively. The highest concentrations of VOCs (with the exception of xylenes) were detected in the subsurface soil sample from boring MPT-8-MW03S. This boring is adjacent to where SWMU 6 was located. Ethylbenzene was detected in three samples (Table 4-11). The highest detected concentration of ethylbenzene, 1,500 μg/kg, was detected in the sample MPT-8-MW03S. Xylenes were detected in the sample collected at 7 to 8 feet bls in the MPT-8-MW04S boring.

Acetonitrile was detected as a single occurrence in the subsurface soil sample collected at 8 to 9 feet bls from boring MPT-8-MW08S. The source of this compound is unknown.

Acrolein was detected as a single occurrence in the subsurface soil sample collected at 1 to 2 feet bls during the installation of MPT-8-MW04S. This compound is used in herbicides, and it may represent residue from the application of herbicides.

Acetone, a VOC, was detected at a concentration of 160 μg/kg and /61 μg/kg in the samples collected at 5 to 7 feet bls in boring MPT-8-MW03S and at 1 to 2 feet bls in the MPT-8-MW04S boring respectively. Acetone is a common laboratory and field contaminant and was detected in the method blank associated with this sample;

Table 4-10
1994 Total Recoverable Petroleum Hydrocarbons (TRPH) Screening Results

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Sample Location	Soil Screening Results (mg/kg)					Groundwater (mg/ℓ)
	4 to 6 feet bls	6 to 8 feet bls	8 to 10 feet bls	10 to 12 feet bls	12 to 14 feet bls	
MPT-8-T01	–	–	70	–	8,122	–
MPT-8-T02	–	–	30,726	–	13,894	–
MPT-8-T03	–	175	–	39,081	–	–
MPT-8-T04	–	–	4,924	–	47,766	2.8
MPT-8-T05	–	–	ND	–	30,556	–
MPT-8-T06	–	–	–	ND	88	ND
MPT-8-T07	–	–	–	ND	6	ND
MPT-8-T08	–	–	ND	–	–	–
MPT-8-T09	–	–	27,803	15,755	–	0.9
MPT-8-T10	–	–	–	40,317	–	–
MPT-8-T11	–	–	–	–	–	ND
MPT-8-T12	–	–	6,783	ND	–	0.9
MPT-8-T13	–	–	–	663	–	–
MPT-8-T14	–	–	ND	–	–	ND
MPT-8-T15	–	3,723	–	74,394	–	–
MPT-8-T16	–	ND	–	49,646	–	5.8
MPT-8-T17	–	ND	–	21,706	–	–
MPT-8-T18	–	–	ND	ND	–	4.3
MPT-8-T19	–	–	1,163	18,459	–	4.2
MPT-8-T20	–	–	–	8,172	–	5.2
MPT-8-T21	–	–	–	4,422	–	2
MPT-8-T22	–	–	ND	12,903	–	0.3
MPT-8-T23	–	–	ND	ND	–	ND
MPT-8-T24	–	–	3,390	–	–	3.9
MPT-8-T25	–	–	ND	ND	–	ND
MPT-8-T26	–	ND	ND	–	–	ND
MPT-8-T27	–	ND	222	–	–	1.5
MPT-8-T28	–	–	ND	ND	–	ND
MPT-8-T29	–	–	ND	–	–	ND
MPT-8-T30	–	ND	–	–	–	ND
MPT-8-T31	–	–	–	–	–	ND
MPT-8-T32	–	–	–	–	–	ND
MPT-8-T33	672	–	–	–	–	ND
MPT-8-T1/-1.5	ND	7,833	–	–	–	–
MPT-8-T4/-1.5	ND	38,582	–	–	–	–
MPT-8-T7/-03	ND	12,856	–	–	–	–
MPT-8-T9/00	ND	12,715	–	–	–	–

See notes at end of table.

Table 4-10 (Continued)
1994 Total Recoverable Petroleum Hydrocarbons (TRPH) Screening Results

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Sample Location	Soil Screening Results (mg/kg)					Groundwater (mg/ℓ)
	4 to 6 feet bls	6 to 8 feet bls	8 to 10 feet bls	10 to 12 feet bls	12 to 14 feet bls	
MPT-8-T9/-05	10,484	12,195	–	–	–	–
MPT-8-T0.5/0.5	ND	9,238	35,051	–	–	–
MPT-8-T11/-02	ND	15,806	–	–	–	–
MPT-8-T12/-07	25,857	13,549	–	–	–	–
MPT-8-T14/-04	25	14,000	–	–	–	–
MPT-8-T14/-08	18,280	14,504	–	–	–	–
MPT-8-T16/-09	10,210	15,149	–	–	–	–
MPT-8-T17/-06	ND	13,454	–	–	–	–
MPT-8-T2.0/0.5	ND	20,513	–	–	–	–
MPT-8-T3.5/0.5	ND	32,106	–	–	–	–
MPT-8-T4.5/0.0	ND	39,779	–	–	–	–
MPT-8-T6.0/0.5	ND	33,253	–	–	–	–

Notes: RCRA = Resource Conservation and Recovery Act.
bls = below land surface.
ND = not detected.
– = no sample collected.
SWMU = solid waste management unit.
mg/kg = milligrams per kilogram.
mg/ℓ = milligrams per liter.

Table 4-11
Organic Analytes Detected in Subsurface Soil Samples at Solid Waste Management Units (SWMU) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	2382	2382-2882	3488	3488	34901
Sample Matrix:	Soil	Soil	Soil	Soil	Soil
Sample Location:	MPT-8-MW03S	MPT-8-MW04S	MPT-8-MW04S	MPT-8-MW05D	MPT-8-MW06S
Sample No.:	MPT8BS357	MPT8MS4S2	MPT8MS4S8	2BS85DD79	MPT8MS6S2
Sample Date:	15-JAN-93	14-JAN-93	14-JAN-93	13-JAN-93	15-JAN-93
Sample Depth (ft bls):	5 to 7	1 to 2	7 to 8	8 to 9	1 TO 2
Volatile Analytes (µg/kg)					
Trichloroethene	150 J	–	–	–	–
Acetone	160 J	61	–	–	–
Benzene	160 J	3 J	–	–	–
Toluene	170 J	3 J	–	–	–
Ethylbenzene	1,500	–	470 J	–	–
Xylenes (total)	–	–	1,600	–	–
Acetonitrile	–	–	–	–	–
Acrolein	–	18 J	–	–	–
Semivolatile Analytes (µg/kg)					
Benzoic acid	–	–	–	65 J	–
Butylbenzylphthalate	–	–	–	–	–
bis(2-Ethylhexyl)phthalate	–	–	–	–	57 J
Di-n-octylphthlate	–	–	–	–	–
Naphthalene	–	39,000 J	22,000 J	–	–
2-Methylnaphthalene	–	170,000	83,000 J	–	–
Acenaphthene	–	23,000 J	6,300 J	–	–
Fluorene	–	31,000 J	13,000 J	–	–
N-Nitrosodiphenylamine (1)	–	22,000 J	8,000 J	–	–
Phenanthrene	–	42,000 J	19,000 J	–	–
Pyrene	–	–	–	–	–
Pesticides/PCBs					
4,4'-DDE	–	12	–	–	–
4,4'-DDT	–	21	–	–	–

See notes at end of table.

Table 4-11 (Continued)
Organic Analytes Detected in Subsurface Soil Samples at Solid Waste Management Units (SWMU) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	2388	2388	3491	3491	M778
Sample Matrix:	Soil	Soil	Soil	Soil	Soil
Sample Location:	MPT-8-MW07S	MPT-8-MW07S	MPT-8-MW08S	MPT-8-MW08S	MPT-8-MW13S
Sample No.:	MPT8MS7S2	MPT8MS7S9	MPTMS8S2	MPT8MS8S9	08BS01316
Sample Date:	18-JAN-93	18-JAN-93	18-JAN-93	18-JAN-93	26-AUG-94
Sample Depth (ft bls):	1 to 2	8 to 9	1 to 2	8 to 9	15 to 16
Volatile Analytes (µg/kg)					
Trichloroethene	–	–	–	–	–
Acetone	–	–	–	–	–
Benzene	–	–	–	–	–
Toluene	–	–	–	–	–
Ethylbenzene	–	130 J	–	–	–
Xylenes (total)	-	–	–	–	–
Acetonitrile	–	–	–	4 J	–
Acrolein	–	–	–	4 J	–
Semivolatile Analytes (µg/kg)					
Benzoic acid	–	–	–	–	–
Butylbenzylphthalate	–	–	170 J	–	–
bis(2-Ethylhexyl)phthalate	–	–	880	–	–
Di-n-octylphthlate	–	–	4,000	–	–
Naphthalene	–	–	–	27,000 J	600[1]
1-Methylnaphthalene	–	NA	–	NA	1,300[1]
2-Methylnaphthalene	–	–	–	99,000	2,100[1]
Acenaphthene	–	–	–	11,000 J	–
Fluorene	–	–	–	17,000 J	–
N-Nitrosodiphenylamine (1)	–	–	–	10,000 J	–
Phenanthrene	–	–	–	23,000 J	–
Pyrene	–	–	–	3,300 J	–
Pesticides/PCBs					
4,4'-DDE	18	–	63	–	–
4,4'-DDT	1.8	–	62	–	–

[1] Analysis by U.S. Environmental Protection Agency methods 8100 and 8020.

Notes: RCRA = Resource Conservation and Recovery Act.
µg/kg = micrograms per kilogram.
mg/kg = milligram per kilogram.
ft bls = feet below land surface.
J = estimated value.
NA = not analyzed.
– = not sampled.
PCBs = polychlorinated biphenyls.

Table 4-12
Inorganic Analytes Detected in Subsurface Soil Samples at Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	3488	3488	3490	3491	3491
Sample Matrix:	Soil	Soil	Soil	Soil	Soil
Sample Location:	MPT-8MW04S	MPT-8-MW05S	MPT-8-MW06S	MPT-8-MW07S	MPT-8-MW08S
Sample No.:	MPT8MS4S2	2BS85S02	MPT8MS6S2	MPT8MS7S2	MPT8MS8S2
Date Sampled:	14-JAN-93	13-JAN-93	15-JAN-93	18-JAN-93	18-JAN-93
Sample Depth (ft bls):	1 to 2	1 to 2	1 to 2	1 to 2	1 to 2
Inorganic Analytes (mg/kg)					
Antimony	--	3.2 J	--	--	--
Arsenic	0.82 J	0.68 J	0.19 J	0.56 J	0.23 J
Barium	5.2 J	6 J	7.1 J	11 J	4.5 J
Beryllium	--	--	--	0.13 J	--
Chromium	1.5 J	--	--	4.7 J	2.2 J
Copper	1.8 J	0.72 J	3.5 J	8.5	1.5 J
Lead	0.88	0.25 J	0.26 J	11.4	9.5
Mercury	0.03 J	0.03 J	0.06 J	--	0.04 J
Nickel	--	--	--	2.5 J	--
Selenium	--	--	--	--	0.17 J
Thallium	0.19 J	--	--	--	--
Vanadium	3.2 J	1.9 J	1.8 J	7.8 J	2.4 J
Zinc	3.9 J	2.9 J	2.5 J	32.6 J	4.9 J

See notes at end of table.

Table 4-12 (Continued)
Inorganic Analytes Detected in Subsurface Soil Samples at Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	3490	3488	3488	3490	3491	3491
Sample Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Sample Location:	MPT-8-MW03S	MPT-8-MW04S	MPT-8-MW05D	MPT-8-MW06S	MPT-8-MS07S	MPT-8-MW08S
Sample No.:	MPT8BS3S7	MPT8MS4S8	MPT2BS85DD79	MPT8MS6S7	MPT8MS7S9	MPT8MS8S9
Date Sampled:	15-JAN-93	14-JAN-93	13-JAN-93	15-JAN-93	18-JAN-93	18-JAN-93
Sample Depth (ft bls):	6 to 7	7 to 8	8 to 9	6 to 7	8 to 9	8 to 9
Inorganic Analytes (mg/kg)						
Arsenic	0.32 J	--	1.1 J	0.91 J	0.29 J	0.36 J
Barium	3.1 J	43.9 J	3.6 J	3.4 J	3.7 J	4.8 J
Beryllium	--	0.23 J	--	--	--	--
Cadmium	--	1.8 J	--	--	--	--
Chromium	--	14.2 J	2 J	3.3 J	1.3 J	--
Cobalt	--	1.7 J	--	--	--	--
Copper	6.2	5.9	0.99 J	3.7 J	1.7 J	1.2 J
Lead	0.28 J	0.25 J	1.4	0.71 J	0.36 J	0.52 J
Mercury	0.1 J	0.04 J	0.06 J	0.06 J	--	0.05 J
Nickel	--	8.6 J	--	--	--	--
Thallium	--	0.16 J	0.22 J	--	--	--
Vanadium	1.2 J	27.4 J	1.5 J	2.8 J	1.7 J	2 J
Zinc	3.5 J	21.8 J	3.4 J	5.7 J	2.9 J	3 J

Notes: RCRA = Resource Conservation and Recovery Act.
ft bls = feet below land surface.
mg/kg = milligram per kilogram.
J = estimated value.
-- = not sampled.

Table 4-13
Summary of Chemicals Detected in OWTP Subsurface Soil

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Minimum Concentration[2]	Maximum Concentration[2]	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration
Volatile Analytes (µg/kg)						
Acetone	1/9	61	61	61	11 - 2,500	MPT8MS4S2
Acetonitrile	1/9	4	4	4	110 - 14,000	MPT8MS8S9
Acrolein	1/9	18	18	18	110 - 14,000	MPT8MS4S2
Benzene	2/9	3	160	82	5 - 690	MPT8BS3S7
Ethylbenzene	3/9	130	1,500	700	5 - 6	MPT8BS3S7
Toluene	2/9	3	170	87	5 - 690	MPT8BS3S7
Trichloroethene	1/9	150	150	150	5 - 690	MPT8BS3S7
Xylenes (total)	1/8	1,600	1,600	1,600	5 - 30	MPT8MS4S8
Semivolatile Analytes (µg/kg)						
1-Methylnaphthalene	1/2	1,300	1,300	1,300	58 - 58	08BS01316
2-Methylnaphthalene	4/11	2,100	170,000	88,525	58 - 760	MPT8BS3S7
Acenaphthene	3/11	6,300	23,000	13,433	58 - 760	MPT8BS3S7
Butylbenzylphthalate	1/9	170	170	170	350 - 76,000	MPT8MS8S2
Di-n-octylphthalate	1/9	4,000	4,000	4,000	350 - 76,000	MPT8MS8S2
Fluorene	3/11	13,000	31,000	20,333	58 - 760	MPT8BS3S7
N-Nitrosodiphenylamine (1)	3/9	8,000	22,000	13,333	350 - 760	MPT8BS3S7
Naphthalene	4/11	600	39,000	22,150	58 - 760	MPT8BS3S7
Phenanthrene	3/11	19,000	42,000	28,000	58 - 760	MPT8BS3S7
Pyrene	1/11	3,300	3,300	3,300	58 - 76,000	MPT8MS7S9
bis(2-Ethylhexyl)phthalate	2/9	57	880	469	350 - 76,000	MPT8MS8S2
Pesticides/PCBs (µg/kg)						
4,4'-DDE	3/9	12	63	31	0.73 - 7.6	MPT8MS8S2
4,4'-DDT	3/9	1.8	62	28.3	1.4 - 15	MPT8MS8S2
Inorganic Analytes (mg/kg)						
Arsenic	8/9	0.19	0.91	0.46	0.16 - 0.16	MPT8MS6S7

See notes at end of table.

Table 4-13 (Continued)
Summary of Chemicals Detected in OWTP Subsurface Soil

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Minimum Concentration[2]	Maximum Concentration[2]	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration
Barium	9/9	3.1	43.9	9.6	N/A	MPT8MS4S8
Beryllium	2/9	0.13	0.23	0.18	0.11 - 0.13	MPT8MS4S8
Cadmium	1/9	1.8	1.8	1.8	0.26 - 0.3	MPT8MS4S8
Chromium	6/9	1.3	14.2	4.5	0.79 - 0.85	MPT8MS4S8
Cobalt	1/9	1.7	1.7	1.7	1.2 - 1.5	MPT8MS4S8
Copper	9/9	1.2	8.5	3.8	N/A	MPT8MS7S2
Lead	9/9	0.25	11.4	2.68	N/A	MPT8MS7S2
Mercury	7/9	0.03	0.1	0.05	0.03 - 0.03	MPT8BS3S7
Nickel	2/9	2.5	8.6	5.6	1.6 - 2	MPT8MS4S8
Selenium	1/9	0.17	0.17	0.17	0.11 - 0.13	MPT8MS8S2
Thallium	2/9	0.16	0.19	0.18	0.15 - 0.18	MPT8MS4S2
Vanadium	9/9	1.2	27.4	5.6	N/A	MPT8MS4S8
Zinc	9/9	2.5	32.6	9	N/A	MPT8MS7S2

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed.
[2] A value indicated by an asterisk is the average of the detected concentrations in a sample and its duplicate. For nondetected values, one-half the CRQL/CRDL is used as a surrogate.
[3] The mean of detected concentrations is the arithmetic mean of all samples in which the analyte was detected. It does not include those samples in which the analyte was not detected.

Notes: OWTP = oily waste treatment plant.
SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
μg/kg = micrograms per kilogram.
PCBs = polychlorinated biphenyls.
4,4'-DDE = dichlorodiphenyldichloroethene.
4,4'-DDT = dichlorodiphenyltrichloroethane.
mg/kg = milligram per kilogram.
NA = not applicable.
CRQL/CRDL = contract-required quantitation limit/contract-required detection limit.

Table 4-14
Comparison of Analytes Detected in Oily Waste Treatment Plant (OWTP) Subsurface Soil to Background Screening and Benchmark Concentrations

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Maximum Concentration[1]	Background Screening Concentration[2]	Frequency Above Background Screening Concentration	Florida Soil Cleanup Goal[3]	Frequency Above Florida Soil Cleanup Goal	Risk-Based Screening Concentration[4]	Frequency Above Risk-Based Screening Concentration
Volatile Organic Compounds (µg/kg)							
Acetone	61	NSC	N/A	890,000	0/9	20,000,000	0/9
Acetonitrile	4	NSC	N/A	NSC	N/A	1,200,000	0/9
Acrolein	18	NSC	N/A	1,300	0/9	4,100,000	0/9
Benzene	160	NSC	N/A	1,100	0/9	200,000	0/9
Ethylbenzene	1,500	NSC	N/A	5,500,000	0/9	20,000,000	0/9
Toluene	170	NSC	N/A	1,800,000	0/9	41,000,000	0/9
Trichloroethene	150	NSC	N/A	4,800	0/9	520,000	0/9
Xylenes (total)	1,600	NSC	N/A	44,000,000	0/8	16,000,000	0/8
Semivolatile Analytes (µg/kg)							
1-Methylnaphthalene	1,300	NSC	N/A	1,500,000	0/2	NSC	N/A
2-Methylnaphthalene	170,000	NSC	N/A	5,800,000	0/11	NSC	N/A
Acenaphthene	23,000	NSC	N/A	19,000,000	0/11	12,000,000	0/11
Butylbenzylphthalate	170	NSC	N/A	300,000,000	0/9	41,000,000	0/9
Di-n-octylphthalate	4,000	NSC	N/A	32,000,000	0/9	4,100,000	0/9
Fluorene	31,000	NSC	N/A	21,000,000	0/11	8,200,000	0/11
N-Nitrosodiphenylamine (1)	22,000	NSC	N/A	69,000	0/9	1,200,000	0/9
Naphthalene	39,000	NSC	N/A	6,800,000	0/11	8,200,000	0/11
Phenanthrene	42,000	NSC	N/A	11,000,000	0/11	NSC	N/A
Pyrene	3,300	NSC	N/A	37,000,000	0/11	6,100,000	0/11
bis(2-Ethylhexyl)phthalate	880	NSC	N/A	100,000	0/9	410,000	0/9
Pesticides/PCBs (µg/kg)							
4,4'-DDE	63	3.5	3/9	9,900	0/9	17,000	0/9
4,4'-DDT	62	NSC	N/A	12,000	0/9	17,000	0/9

See notes at end of table.

Table 4-14 (Continued)
Comparison of Analytes Detected in Oily Waste Treatment Plant (OWTP) Subsurface Soil to Background Screening and Benchmark Concentrations

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Maximum Concentration[1]	Background Screening Concentration[2]	Frequency Above Background Screening Concentration	Florida Soil Cleanup Goal[3]	Frequency Above Florida Soil Cleanup Goal	Risk-Based Screening Concentration[4]	Frequency Above Risk-Based Screening Concentration
Inorganic Analytes (mg/kg)							
Arsenic	0.91	0.9	1/9	3	0/9	3.3	0/9
Barium	43.9	7.2	2/9	74,000	0/9	14,000	0/9
Beryllium	0.23	0.14	1/9	0.2	1/9	1.3	0/9
Cadmium	1.8	NSC	N/A	600	0/9	100	0/9
Chromium	14.2	3.4	2/9	220	0/9	1,000	0/9
Cobalt	1.7	1.04	1/9	110,000	0/9	12,000	0/9
Copper	8.5	3.6	4/9	72,000	0/9	7,600	0/9
Lead	11.4	2.8	2/9	1,000	0/9	400	0/9
Mercury	0.1	0.06	1/9	480	0/9	61	0/9
Nickel	8.6	NSC	N/A	11,000	0/9	4,100	0/9
Selenium	0.17	NSC	N/A	9,900	0/9	1,000	0/9
Thallium	0.19	NSC	N/A	NSC	N/A	16	0/9
Vanadium	27.4	3.2	2/9	4,800	0/9	1,400	0/9
Zinc	32.6	4.8	4/9	550,000	0/9	61,000	0/9

[1] A value indicated by an asterisk is the average of the detected concentrations in a sample and its duplicate. For nondetected values, one half the CRQL/CRDL is used as a surrogate.
[2] The background screening concentration is twice the mean of detected concentrations for inorganic analytes.
[3] Florida Cleanup Goals (April 5, 1995).
[4] U.S. Environmental Protection Agency Region III risk-based screening concentrations (February 9, 1995). Concentrations for noncarcinogenic risks are adjusted to a hazard index of 0.1.

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
µg/kg = micrograms per kilogram.
4,4'-DDT = dichlorodiphenyltrichloroethane.
PCBs = polychlorinated biphenyls.
N/A - not applicable.
4,4'-DDE = dichlorodiphenyldichloroethene.
mg/kg = milligrams per kilogram.
NSC - no screening concentration.
CRQL/CRDL = contract-required quantitation limit/contract-required detection limit.

however, the concentration in the sample is greater than 10 times the concentration detected in the method blank.

One chlorinated solvent, trichloroethene, was detected as a single occurrence in the subsurface soil sample MPT-8-MW03S. This compound may be site-related.

PAHs, which are SVOCs that are associated with hydrocarbons, were detected in subsurface soil samples collected from borings MPT-8-MW04S, MPT-8-MW08S, and MPT-8-MW13. These borings are located within the area where hydrocarbons were detected by the field screening program. The total concentrations of PAHs detected in each of the subsurface soil samples are:

- 305,000 μg/kg in the sample collected at 1 to 2 feet from MPT-8-MW04S;
- 143,300 μg/kg in the sample collected at 7 to 8 feet bls in the MPT-8-MW04S boring;
- 180,300 μg/kg in the sample collected at 8 to 9 feet bls in the MPT-8-MW08S boring; and
- 4,000 μg/kg in the sample from MPT-8-MW13.

N-nitrosodiphenylamine, an SVOC, was detected in three subsurface soil samples at concentrations ranging from 8,000 to 22,000 μg/kg. The highest detected concentration for this compound was in the subsurface soil sample from boring MPT-8-MW04S.

Three phthalate compounds (bis(2-ethylhexyl)phthalate, butylbenzylphthalate, and di-n-octylphthalate), which are also SVOCs, were detected in shallow subsurface soil samples collected at depths of 3 to 4 feet bls. Bis(2-ethylhexyl)phthalate was detected in two subsurface soil samples (from the MPT-8-MW06S and MPT-8-MW08S borings) at concentrations of 57 and 880 μg/kg, respectively. Butylbenzylphthalate and di-n-octylphthalate were both detected as single occurrences in sample MPT8MS8S2 collected at MPT-8-MW08S at concentrations of 170 and 4,000 μg/kg, respectively. Although they were not detected in associated quality control blanks, they are common laboratory and field contaminants and may have been introduced to the samples during collection or analysis.

The pesticides 4,4'-DDT and 4,4'-DDE were detected in the shallow subsurface soil samples (1 to 2 feet bls) collected from borings for monitoring wells MPT-8-MW04S, MPT-8-MW07S, and MPT-8-MW08S. The highest concentrations were detected in the subsurface soil sample from boring MPT-8-MW08S (62.0 μg/kg for 4,4'-DDT and 63.0 μg/kg for 4,4'-DDE). The pesticides were detected along Patrol Road and are likely the result of historical pesticide application rather than release from one of the SWMUs in the OWTP Area.

Based on the history of waste oil disposal at SWMU 6 and 7 and the distribution of hydrocarbon-related organic compounds, SWMUs 6 and 7 are the likely source of these chemicals. The field screening results in conjunction with the subsurface soil data also suggest that SWMU 11 is a potential source of hydrocarbon-related organic compounds.

<u>Inorganic Target Analytes</u>. Fourteen inorganic target analytes were detected in subsurface soil samples at concentrations that exceed background screening values

(Table 4-14). However, only beryllium was detected at a concentration that exceeds a benchmark (Table 4-14).

Beryllium was detected as a single occurrence at a concentration of 0.23 mg/kg in a subsurface soil sample collected from 7 to 8 feet bls at monitoring well MPT-8-MW04S. This concentration slightly exceeds the Florida soil cleanup goal of 0.2 mg/kg. The source of the beryllium is unknown and may be related to residual concentrations from the dredge material that was used to construct the land features at NAVSTA Mayport.

4.2.4 Groundwater Assessment The assessment of groundwater consisted of two separate field activities. The first activity consisted of collecting groundwater samples for field screening analysis which was used to assess the horizontal extent of contamination and locate monitoring wells. The second activity consisted of collecting groundwater samples from the monitoring wells and submitting the samples to an analytical laboratory for analysis of VOCs, SVOCs, pesticides, PCBs, inorganics, and cyanide to assess the nature and extent of contamination, if present.

Two groundwater field screening sampling events, one in 1993 and the other in 1994, were conducted over a broad area to assess the nature and extent of petroleum type compounds which may have been released from the OWTP Area SWMUs (Figures 4-2).

Groundwater field screening samples collected in 1993 were analyzed onsite using a Horiba OCMA 2000, which is an NDIR spectroscopy analyzer (similar to USEPA Method 418.1). In 1993, splits of the field screening samples were submitted to an analytical laboratory for confirmatory analysis using USEPA Method 418.1. Groundwater field screening samples collected in 1994 were shipped to an analytical laboratory for analysis by USEPA Method 418.1. Twenty-three groundwater samples collected from monitoring wells were submitted to an analytical laboratory for analyses of VOCs, SVOCs, pesticides, PCBs, inorganics and cyanide. Monitoring wells MPT-8-MW02S and MPT-8-MW03S were not sampled during the 1993 and 1994 sampling events because they contained floating free-phase hydrocarbons. Monitoring well MPT-8-MW07S was sampled in 1993 but not in 1994 because of the presence of floating free-phase hydrocarbons. Monitoring well MPT-8-MW15S was installed in 1994, but was not sampled because of the presence of floating free-phase hydrocarbons.

The following paragraphs describe the results of field screening and laboratory analyses.

4.2.4.1 **Field Screening Results** The following describes the results of the field screening sampling events conducted in 1993 and 1994.

1993 Sampling Event. Groundwater field screening results suggest that TRPH was present in groundwater samples and was confirmed by laboratory analysis. A comparison of the results from the in-field and laboratory analysis is provided in Table 4-15. These data suggest a correlation between field and laboratory analysis of groundwater field screening samples at concentrations below the detection limit of 1 ppm (e.g., samples in which TRPH was not detected or samples in which TRPH was detected at or below the detection limit). This correlation provides confidence in delineating the horizontal extent of the hydrocarbons in the water table zone of the surficial aquifer. The data also suggest that, at

concentrations above the NDIR method detection limits, there is variation in positive response, with the laboratory results generally higher than the field screening analytical results.

Isopleths of TRPH concentrations were constructed from the in-field analytical results and are shown in Figure 4-6. Based on the isopleths shown in this figure, the highest detected concentrations are located approximately 150 feet north of SWMU 7. This location also correlates with the former location of SWMU 6. The TRPH data also suggest that the extent of hydrocarbon plume in the water table zone of the surficial aquifer was delineated south and east of SWMUs 6 and 7.

It should be noted that a bias to the TRPH isopleths is the result of spatial variation in location and depth at which the groundwater samples were collected. The data suggest that the TRPH have migrated from SWMUs 6 and 7.

1994 Sampling Event. Twenty-three groundwater samples were collected. TRPH was detected in 11 samples at concentrations ranging from 0.3 to 5.2 mg/ℓ (Table 4-10). The distribution of TRPH in groundwater is consistent with that observed for subsurface soil (Figure 4-5).

It should be noted that, because of the effects of tides on the surficial aquifer in the vicinity of SWMUs 6 and 7, there is a bias to the TRPH concentrations. This bias results from the smearing effect the fluctuations caused by tides have on the TRPH; therefore, the concentrations detected in groundwater field screening samples may vary depending on the sampling depth and the depth of the water table (as a result of the tidal stage at the time of sampling).

4.2.4.2 Groundwater Samples from Monitoring Wells The following paragraphs describe the analytical results of groundwater samples collected from monitoring wells located in the vicinity of SWMUs 6, 7, 8, 9, 10, and 11 (Figure 4-4). The following paragraphs describe the analytical results for the groundwater samples. Tables 4-16 and 4-17 present the concentrations of chemicals detected in each groundwater sample, Table 4-18 lists statistics for each chemical that was detected, and Table 4-19 compares the detected concentration of the target analytes with benchmark concentrations, USEPA Region III RBCs, (USEPA, 1995), and FDEP Groundwater Guidance Concentration (FDEP, 1994). The following paragraphs discuss organic and inorganic target analytes detected in the groundwater samples.

Organic Analytes. Organic target analytes detected in groundwater samples consist of 8 VOCs, 14 SVOCs, and 2 pesticides (Table 4-19). 2-Butanone, benzene, carbon disulfide, chloroform, 2,4-dimethylphenol, 3- and 4-methylphenol, naphthalene, nitrobenzene, and phenanthrene were detected at concentrations that exceed benchmarks (Table 4-19). The following paragraphs describe the organic compounds that were detected in the groundwater samples.

The ketones 2-butanone and acetone were detected in some of the groundwater samples. 2-Butanone was detected as a single occurrence in the groundwater sample collected from monitoring well MPT-8-MW09S at 230 μg/ℓ (Figure 4-4). This sample also contained the highest detected concentration of acetone (330 μg/ℓ), suggesting that these solvents may have been released and are migrating in groundwater. Acetone and 2-butanone were detected in the 1993 surface water sample collected from SWMU 8; therefore, it is possible that this SWMU is the source of these compounds (Table 4-19).

Table 4-15
Total Recoverable Petroleum Hydrocarbons Analysis of Groundwater Samples, Oily Waste Treatment Plant Area, 1993

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Groundwater Sample Location[1]	Sample Identifier[2]	NDIR[3] Result (ppm)	Laboratory[4] Results (ppm)
(4,0)	8GW1	32.2	950
(-5,2)	8GW2	11.2	2.89
(5,3)	8GW7	13.1	197
(21,-10)	8GW4	3.6	359
(10,-8)	8GW5	18.3	784
(10,-8)	8GW5D	18.3	28.6
(0,-10)	8GW8	7.6	244
(14,6)	8GW6	0.6	0.07
(19,-22)	8GW9	0.7	0.26
(21,-17)	8GW3	13.1	360

[1] Sample locations as presented on Figure 4-2.
[2] Sample Identification as submitted for laboratory analysis.
[3] Results of onsite NDIR analysis in ppm.
[4] Total recoverable petroleum hydrocarbon (TRPH) results of laboratory analysis by U.S. Environmental Protection Agency Method 418.1 in ppm.

Notes: RCRA = Resource Conservation and Recovery Act.
SWMU = solid waste management unit.
NDIR = nondispersive infrared.
ppm = parts per million.

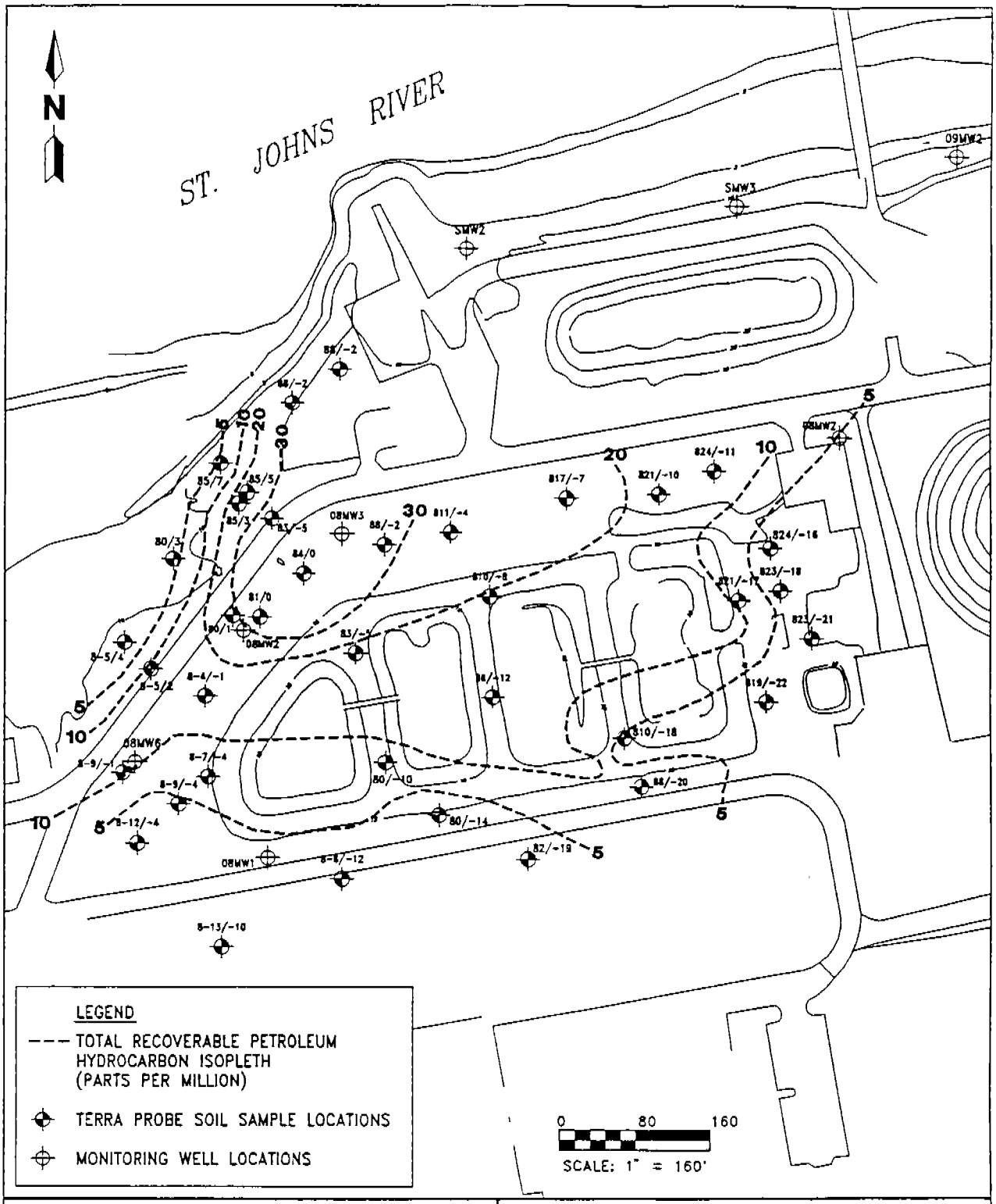


FIGURE 4-6
FIELD SCREENING RESULTS ANALYSIS OF GROUNDWATER SAMPLES FOR TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

H:\MAYPORT\MAYOIL\NP\10-27-94

RCRA FACILITY INVESTIGATION REPORT, GROUP II SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

Table 4-16
Volatile and Semivolatile Analytes Detected in Groundwater Samples at the Oily Waste Treatment Plant Area Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	2391	2391	R862	2388	3507	M749	2391	2391	R862	R861
Sample Matrix:	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Sample Location:	MPT-8-MW01S	MPT-8-MW04S	MPT-8-MW04S	MPT-8-MW08S	MPT-8-MW08S	MPT-8-MW06	MPT-8-MW07S	MPT-8-MW08S	MPT-8-MW09S	MPT-8-MW12S
Sample No.:	8MW1	8MW4	08MW004S	8MW6	8MW6Dup	08MW006SD	8MW7	8MW8	08MW009S	08MW012S
Date Sampled:	01-FEB-93	01-FEB-93	26-AUG-94	28-JAN-93	28-JAN-93	10-JUL-94	01-FEB-93	01-FEB-93	26-AUG-94	25-AUG-94
Volatile Analytes (µg/ℓ)										
Methylene chloride	5 J	--	--	5 J	--	--	--	4 J	--	--
Acetone	--	--	--	6 J	--	9 J	--	--	330 J	--
Carbon disulfide	--	--	--	--	--	--	2 J	--	4 J	--
Chloroform	--	--	--	--	--	--	--	--	--	--
2-Butanone	--	--	--	--	1 J	--	--	--	230 J	--
Benzene	--	--	--	--	--	--	2 J	--	--	--
1,1,2,2-Tetrachloroethane	--	--	--	--	1 J	--	--	--	--	--
Toluene	--	--	--	--	--	--	--	--	3 J	--
Ethylbenzene	--	--	--	--	--	--	21	--	--	--
Semivolatile Analytes (µg/ℓ)										
2-Methylphenol	--	--	--	--	NA	--	--	--	180	--
Nitrobenzene	--	--	--	--	NA	--	--	--	--	--
2,4-Dimethylphenol	--	--	--	--	NA	--	--	--	180	--
Benzoic acid	--	--	--	--	NA	--	--	--	--	8 J
Naphthalene	--	85	94	--	NA	--	130	--	--	--
2-Methylnaphthalene	--	56	140	--	NA	--	120	--	--	--
Dimethylphthalate	--	--	--	--	NA	--	--	--	--	--
Acenaphthene	--	--	9 J	--	NA	--	--	--	--	--
Dibenzofuran	--	--	5 J	--	NA	--	--	--	--	--
Diethylphthalate	--	--	4 J	--	NA	--	--	--	20 J	3 J
Fluorene	--	3 J	14 J	--	NA	--	5 J	--	--	--
Phenanthrene	--	--	12 J	--	NA	--	--	--	--	--
bis(2-Ethylhexyl)phthalate	5 J	--	--	--	NA	--	--	--	--	--
3- and 4-Methylphenol (2)	--	--	--	--	NA	--	--	--	480	--
4-Chloro-3-Methylphenol	--	--	--	--	--	--	--	--	--	--

See notes at end of table.

Table 4-16 (Continued)
Volatile and Semivolatile Analytes Detected in Groundwater Samples at the Oily Waste Treatment Plant Area Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	R861	R878	R861	2390	M750	2390
Sample Matrix:	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Sample Location:	MPT-8-MW013S	MPT-8-MW013I	MPT-8-MW014S	MT-9-MW02S	MPT-9-MW02S	MPT-9-MW03S
Sample No.:	08MW013S	08MW013I	08MW014S	9MW2	09MW002S	9MW3
Date Sampled:	25-AUG-94	22-SEP-94	25-AUG-94	29-JAN-93	11-JUL-94	29-JAN-93
Volatile Analytes (µg/ℓ)						
Methylene chloride	--	--	--	--	--	2 J
Acetone	--	16	--	5 J	--	5 J
Carbon disulfide	--	--	--	--	--	--
Chloroform	--	--	--	--	--	--
2-Butanone	--	--	--	--	--	--
Benzene	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	--	--	--	--	--	--
Toluene	--	--	--	--	--	--
Ethylbenzene	--	--	--	--	--	--
Semivolatile Analytes (µg/ℓ)						
2-Methylphenol	--	--	--	--	--	--
Nitrobenzene	--	--	3 J	--	--	--
2,4-Dimethylphenol	--	--	--	--	--	--
Benzoic acid	--	--	17 J	--	--	--
Naphthalene	--	--	170	110	140	--
2-Methylnaphthalene	--	--	110	44	53	--
Dimethylphthalate	--	--	17	--	--	--
Acenaphthene	--	--	5 J	--	--	--
Dibenzofuran	--	--	3 J	--	--	--
Diethylphthalate	2 J	--	--	--	--	--
Fluorene	--	--	7 J	--	--	--
Phenanthrene	--	--	5 J	--	--	--
bis(2-Ethylhexyl)phthalate	--	--	--	--	--	--
3- and 4-Methylphenol (2)	--	--	--	--	--	
4-chloro-3-Methylphenol	--	--	--	--	--	--

See notes at end of table.

Table 4-16 (Continued)
Volatile and Semivolatile Analytes Detected in Groundwater Samples at the Oily Waste Treatment Plant Area Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	R9036	R9036
Sample Matrix:	Groundwater	Groundwater
Sample Location:	MPT-8-MW20S	MPT-8-MW020S
Sample No.:	08MW0S0S	08MW0S0SD
Date Sampled:	11-AUG-94	11-AUG-94
Volatile Analytes (µg/ℓ)		
Methylene chloride	--	--
Acetone	--	--
Carbon disulfide	--	--
Chloroform	--	--
2-Butanone	--	--
Benzene	--	--
1,1,2,2-Tetrachloroethane	--	--
Toluene	--	--
Ethylbenzene	--	--
Semivolatile Analytes (µg/ℓ)		
2-Methylphenol	--	--
Nitrobenzene	--	--
2,4-Dimethylphenol	--	--
Benzoic acid	--	--
Naphthalene	--	--
2-Methylnaphthalene	--	--
Dimethylphthalate	4 J	4 J
Acenaphthene	--	--
Dibenzofuran	--	--
Diethylphthalate	--	--
Fluorene	--	--
Phenanthrene	--	--
bis(2-Ethylhexyl)phthalate	--	--
3- and 4-Methylphenol (2)	--	--
4-chloro-3-Methylphenol	--	--

See notes at end of table.

Table 4-16 (Continued)
Volatile and Semivolatile Analytes Detected in Groundwater Samples at the Oily Waste Treatment Plant (OWTP) Area Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Notes: MPT-8-MW02S and MPT-8-MW03S were not sampled in 1993 due to the presence of floating product in the monitoring well.
MPT-8-MW02S, MPT-8-MW03S, MPT-8-MW07S, MPT-8-MW11S, and MPT-8-MW15S were not sampled in 1994 due to the presence of floating product in the monitoring well.
MPT-8-MW05S, MPT-8-MW05I, and MPT-8-MW05D are listed in the NAVSTA Mayport RFI General Information Report, Vol. I, 1995.

RCRA = Resource Conservation and Recovery Act.
Dup = duplicate.
$\mu g/\ell$ = micrograms per liter.
J = estimated value.
-- = analyte not detected.
NA = not applicable.
RFI = RCRA Facility Investigation.

Table 4-17
Inorganic Analytes Detected in Groundwater Samples at Solid Waste Management Units (SWMUs) 6, 7, 8, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	2391	M750	2391	R862	2388	2394	2388	2388	M749
Sample Matrix:	Water	Water	Water	Water	Water	Water	Water	Water	Water
Sample Location:	MPT-8-MW01S	MPT-8-MW01S	MPT-8-MW04S	MPT-8-MW04S	MPT-8-MW05S	MPT-8-MW05S	MPT-8-MW06	MPT-8-MW06	MPT-8-MW06S
Sample No.:	8MW1	08MW001S	8MW4	08MW004S	8MW5S	8MW5DDup	8MW6	8MW6Dup	08MW006S
Date Sampled:	01-FEB-93	11-JUL-94	01-FEB-93	26-AUG-94	27-JAN-93	02-FEB-93	28-JAN-93	28-JAN-93	10-JUL-94
Inorganic Analytes (μg/ℓ)									
Arsenic	3.2 J	1.1 J	11.7	1.7 J	2.9 J	--	2.5 J	2.8 J	2.1 J
Barium	9.7 J	3.9 J	12.1 J	4.9 J	6.5 J	45.3 J	5.9 J	6.6 J	--
Beryllium	--	--	--	--	--	--	--	--	--
Cadmium	3 J	--	--	--	--	--	--	--	--
Calcium	NA	57,900	NA	146,000	89,500	158,000	62,200	62,300	56,700
Chromium	4.5 J	--	5.7 J	--	6.6 J	--	4.2 J	6.7 J	--
Cobalt	--	--	--	--	--	3.2 J	--	--	--
Copper	--	--	--	--	--	--	5.8 J	14.5 J	--
Iron	NA	710 J	NA	15,000	2,760 J	182	2,340 J	2,750 J	57.1 J
Lead	--	--	--	0.8 J	--	--	--	--	--
Magnesium	NA	6,180	NA	15,400	15,400	314,000	13,300	12,400	8,300
Manganese	NA	43.6 J	NA	280	39.9	101	36.1	36.8	21.5
Mercury	--	--	--	--	--	--	--	--	0.08 J
Nickel	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	3.7 J	--	--	--
Sodium	NA	4,980 J	NA	35,600	NA	NA	NA	NA	5,690
Thallium	--	1.5 J	--	--	--	--	--	--	--
Tin	13.2 J	--	--	--	--	--	34.9 J	--	--
Vanadium	6.3 J	--	8 J	2 J	7.2 J	2.8 J	5.7 J	8.3 J	--
Zinc	31	--	34.5	2.5 J	23.9 J	15.6 J	97.5 J	35.1 J	--
Cyanide	--	--	5.5	--	--	--	--	--	1.1 J

See notes at end of table.

Table 4-17 (Continued)
Inorganic Analytes Detected in Groundwater Samples at Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	M749	2391	2391	M749	R862	R871	R871	R861	R861
Sample Matrix:	Water	Water	Water	Water	Water	Water	Water	Water	Water
Sample Location:	MPT-8-MW06S	MPT-8-MW07S	MPT-8-MW08S	MPT-8-MW08S	MPT-8-MW09S	MPT-8-MW10S	MPT-8-MW10S	MPT-8-MW12S	MPT-8-MW13S
Sample No.:	08MW006SD	8MW7	8MW8	08MW008S	08MW009S	08MW010S	08MW010SDup	08MW012S	08MW013S
Date Sampled:	10-JUL-94	01-FEB-93	01-FEB-93	09-JUL-94	26-AUG-94	09-SEP-94	09-SEP-94	25-AUG-94	25-AUG-94
Inorganic Analytes (µg/ℓ)									
Arsenic	2.1 J	41.2	20.7	5.6 J	0.6 J	1.8 J	1.1 J	--	1.4 J
Barium	--	67.6 J	28.1 J	8.4 J	112 J	6.2 J	6.3 J	11 J	9.9 J
Beryllium	--	1.6 J	0.98 J	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--
Calcium	56,700	NA	NA	33,800	1,830,000	79,600	77,100	138,000	98,200
Chromium	--	40.9	36.8	--	--	--	--	--	--
Cobalt	--	11.7 J	7.1 J	--	--	--	--	--	--
Copper	--	15.4 J	3.4 J	--	--	--	--	--	--
Iron	69.2 J	NA	NA	88 J	4,820	--	--	3,890	38 J
Lead	--	45.9	10.4	--	--	--	--	2.5 J	1.9 J
Magnesium	8,050	NA	NA	28,100	401,000	17,100	16,500	8,300	5,480
Manganese	21	NA	NA	12 J	2,260	21.5	19.2	135	3.4 J
Mercury	0.08 J	0.29	--	--	--	--	--	--	--
Nickel	--	19.9 J	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	1.9 J	1.2 J	--	--
Silver	--	2.1 J	--	--	--	--	--	--	--
Sodium	5,530	NA	NA	675,000	1,810,000	24,100	23,100	12,300	8,070
Thallium	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--
Vanadium	--	60.3	48 J	--	8.3 J	3 J	2 J	2.1 J	4.9 J
Zinc	--	127	52.2	--	16.5 J	--	--	--	--
Cyanide	--	12.8	NA	--	--	--	--	--	--

See notes at end of table.

Table 4-17 (Continued)
Inorganic Analytes Detected in Groundwater Samples at Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	R878	R861	2390	M749	2390	M750	2390	M750	2390	M749
Sample Matrix:	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Sample Location:	MPT-8-MW13I	MPT-8-MW14S	MPT-9-MW01S	MPT-9-MW01S	MPT-9-MW02S	MPT-9-MW02S	MPT-9-MW03S	MPT-9-MW03S	MPT-S-MW02S	MPT-S-MW02S
Sample No.:	08MW013I	08MW014S	9MW1	09MW001S	9MW2	09MW002S	9MW3	09MW003S	S-2	0SMW002S
Date Sampled:	22-SEP-94	25-AUG-94	29-JAN-93	09-JUL-94	29-JAN-93	11-JUL-94	29-JAN-93	11-JUL-94	29-JAN-93	09-JUL-94
Inorganic Analytes (µg/ℓ)										
Arsenic	8.9 J	1.3 J	11.4	2.8 J	--	1.4 J	6.7 J	3.8 J	2.6 J	3.3 J
Barium	21.4 J	16.3 J	32.8 J	7.6 J	7.1 J	5.4 J	13.9 J	--	13.2 J	18.1 J
Beryllium	--	--	0.37 J	--	--	--	--	--	--	--
Cadmium	--	1.1 J	--	--	--	--	--	--	--	--
Calcium	47,700	201,000	145,000	103,000	168,000	170,000	130,000	118,000	162,000	185,000
Chromium	--	--	16.4	--	--	--	11	--	--	--
Cobalt	--	--	2.8 J	--	2.7 J	--	--	--	--	--
Copper	--	--	--	--	--	--	3.1 J	--	--	--
Iron	167	34,500	12,200 J	--	9,350 J	7,710 J	8,240 J	86.4 J	753 J	238
Lead	0.8 J	--	--	--	--	--	--	--	--	--
Magnesium	28,200	20,500	23,000	19,000	11,900	10,100	12,500	10,900	260,000	351,000
Manganese	83.5	734	386	4.7 J	285	236 J	142	7.5 J	25.3	20.8
Mercury	--	--	--	0.08 J	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	2.3 J	--	--	--	2.2 J	--
Sodium	357,000	18,700	NA	13,700	NA	37,200 J	NA	11,200 J	NA	3,030,000
Thallium	--	--	--	--	--	--	--	--	--	1.7 J
Tin	--	--	--	--	--	--	--	--	--	--
Vanadium	3.8 J	3.9 J	21.2 J	3.8 J	--	--	14.7 J	--	6.2 J	4.4 J
Zinc	--	--	86.4 J	--	15 J	--	31.6 J	--	25.6 J	--
Cyanide	--	--	--	0.82 J	--	--	--	--	--	1.3 J

See notes at end of table.

Table 4-17 (Continued)
Inorganic Analytes Detected in Groundwater Samples at Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	2390	M750	R860	M750	M750	M750
Sample Matrix:	Water	Water	Water	Water	Water	Water
Sample Location:	MPT-S-MW03S	MPT-S-MW03S	MPT-10-P01S	MPT-8-MW01S	MPT-9-MW03S	MPT-S-MW03S
Sample No.:	S-3	0SMW003S	10OP001	08MW001SF	09MW003SF	0SMW003S
Date Sampled:	28-JAN-93	11-JUL-94	24-AUG-94	11-JUL-94	11-JUL-94	11-JUL-94
Inorganic Analytes (µg/ℓ)						
Arsenic	12.5	2.9 J	1.4 J	0.95 J	2.9 J	3.2 J
Barium	7 J	3.8 J	4.7 J	--	--	3.5 J
Beryllium	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--
Calcium	99,100	142,000	77,900	58,800	119,000	140,000
Chromium	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--
Copper	--	--	--	--	--	--
Iron	11,200 J	96.2 J	46.7 J	450	24.6 J	--
Lead	--	--	--	--	--	--
Magnesium	7,440	9,500	11,400	5,730	11,100	9,250
Manganese	67.5	1.4 J	4.5 J	39.3 J	7 J	0.84 J
Mercury	--	--	--	--	--	--
Nickel	--	--	--	--	--	--
Selenium	--	--	--	--	--	--
Silver	2.8 J	--	--	--	--	--
Sodium	NA	11,000 J	8,910	4,940 J	11,200 J	10,900
Thallium	--	--	--	1.5 J	1.6 J	--
Tin	--	--	--	--	--	--
Vanadium	10.8 J	2.3 J	4.4 J	--	2.2 J	3.2 J
Zinc	26.2 J	--	3.6 J	--	--	--
Cyanide	--	--	3.6 J	--	--	--

See notes at end of table.

Table 4-17 (Continued)
Inorganic Analytes Detected in Groundwater Samples at Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	R8784	R8628	R8628	R8628	R8628	R8784
Sample Matrix:	Water	Water	Water	Water	Water	Water
Sample Location:	MPT-8-MW15I	MPT-8-MW16S	MPT-8-MW16S	MPT-8-MW17S	MPT-8-MW18S	MPT-8-MW19S
Sample No.:	08MW015I	08MW016S	08MW016SD	08MW017S	08MW018S	08MW019S
Date Sampled:	22-SEP-95	26-AUG-94	26-AUG-94	26-AUG-94	26-AUG-94	22-SEP-94
Inorganic Analytes (µg/ℓ)						
Arsenic	--	24.1	23.5	1.6 J	2.3 J	--
Barium	86.3 J	11 J	11 J	5.3 J	3.7 J	8 J
Beryllium	--	--	--	--	--	--
Cadmium	--	--	2.9 J	--	--	--
Calcium	70,400	145,000	143,000	130,000	41,500	166,000
Chromium	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--
Copper	--	--	--	--	--	--
Iron	--	14,300	13,900	2,810	221	--
Lead	0.9 J	--	--	--	--	9 J
Magnesium	90,200	10,100	9,790	7,010	17,800	390,000
Manganese	215	343	338	95.1	35.5	23.3
Mercury	--	--	--	--	--	--
Nickel	6.3 J	--	--	--	--	--
Selenium	--	--	--	--	--	--
Silver	--	--	--	--	--	--
Sodium	683,000	12,700	12,500	14,800	176,000	3,510,000
Thallium	--	--	--	--	--	--
Tin	--	--	--	--	--	--
Vanadium	3.6 J	2.3 J	2.5 J	2.3 J	3.2 J	3.4 J
Zinc	16.8 J	6.3 J	11.7 J	3.1 J	2.0 J	--
Cyanide	--	--	--	--	--	--

See notes at end of table.

Table 4-17 (Continued)
Inorganic Analytes Detected in Groundwater Samples at Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	R8784	R9037	R9037
Sample Matrix:	Water	Water	Water
Sample Location:	MPT-8-19S	MPT-8-MW20S	MPT-8-MW20S
Sample No.:	08MW019S	08MW020S	08MW020SD
Date Sampled:	22-SEP-94	11-AUG-	11-AUG-94
Inorganic Analytes (µg/ℓ)			
Arsenic	--	--	--
Barium	6.5 J	5.4 J	5.3 J
Beryllium	--	--	--
Cadmium	--	--	--
Calcium	155,000	186,000	187,000
Chromium	--	--	--
Cobalt	--	--	--
Copper	--	--	--
Iron	--	333	322
Lead	8 J	--	--
Magnesium	359,000	357,000	361,000
Manganese	23.8	24.2	23.5
Mercury	--	--	--
Nickel	--	--	--
Selenium	--	--	--
Silver	--	--	--
Sodium	344,000	2,970,000	2,990,000
Thallium	--	--	--
Tin	--	--	--
Vanadium	3 J	3.8 J	3.4 J
Zinc	--	--	--
Cyanide	--	--	--

See notes at end of table.

Table 4-17 (Continued)
Inorganic Analytes Detected in Groundwater Samples at Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	2390	M750	R860	M750	M750	M750
Sample Matrix:	Water	Water	Water	Water	Water	Water
Sample Location:	MPT-S-MW03S	MPT-S-MW03S	MPT-10-P01S	MPT-8-MW01S	MPT-9-MW03S	MPT-S-MW03S
Sample No.:	S-3	0SMW003S	10OP001	08MW001SF	09MW003SF	0SMW003S
Date Sampled:	28-JAN-93	11-JUL-94	24-AUG-94	11-JUL-94	11-JUL-94	11-JUL-94

Notes: RCRA = Resource Conservation and Recovery Act.
DUP = duplicate.
$\mu g/\ell$ = milligrams per liter.
-- = analyte not detected.
J = estimated value.
NA = not analyzed.

Table 4-18
Summary of Chemicals Detected in Oily Waste Treatment Plant Area Groundwater

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Minimum Concentration[2]	Maximum Concentration[2]	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration
Water Quality Parameters (mg/ℓ)						
Alkalinity as $CaCO_3$	18/18	150	3,390	550	N/A	08MW009S
Ammonia-N	13/18	0.3	7.6	2.5	0.3 - 0.3	08MW009S
Chloride	18/18	5.6	13,600	1,455	N/A	08MW019S
Color	18/18	10	140	53	N/A	08MW013I
Hardness as $CaCO_3$	18/18	180	7,180	969	N/A	08MW009S
Nitrate/Nitrite-N	13/18	0.14	3.69	0.59	0.05 - 0.1	08MW010S
Oil and Grease	3/18	19	1,480	517	5 - 10	8MW7
Phosphorous-P, Total	18/18	0.21	28	2.75	N/A	08MW009S
Sulfate	16/18	2.1	1,950	214.2	10 - 100	08MW019S
Sulfide	8/18	1.2	33	10.1	1 - 10	08MW015I
Total Dissolved Solids	18/18	341	14,500	2,649	N/A	08MW009S
Total Kjeldahl Nitrogen	17/18	0.3	15.2	4.6	0.3 - 0.3	08MW009S
Total Organic Carbon	18/18	3	3,990	246.1	N/A	08MW009S
Total Petroleum Hydrocarbons	9/19	0.045	132	18.56	0.05 - 0.06	08MW004S
pH	18/18	6.2	8	7.15	N/A	09MW001S
Volatile Analytes (μg/ℓ)						
2-Butanone	1/18	230	230	230	10 - 20	08MW009S
Acetone	5/23	7	330	79	10 - 20	08MW009S
Benzene	1/23	2	2	2	5 - 10	8MW7
Carbon disulfide	4/23	2	4	3	5 - 10	08MW009S
Chloroform	1/23	7	7	7	5 - 10	08MW015I
Ethylbenzene	1/23	21	21	21	5 - 10	8MW7
Methylene chloride	1/23	2	2	2	5 - 10	08MW015I
Toluene	1/23	3	3	3	5 - 10	08MW009S
Semivolatile Analytes (μg/ℓ)						
2,4-Dimethylphenol	1/23	180	180	180	10 - 20	08MW009S

See notes at end of table.

Table 4-18 (Continued)
Summary of Chemicals Detected in Oily Waste Treatment Plant Area Groundwater

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Minimum Concentration[2]	Maximum Concentration[2]	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration
2-Methylnaphthalene	5/23	42.5*	140	93	10 - 80	08MW004S
2-Methylphenol	1/23	180	180	180	10 - 20	08MW009S
3- and 4-Methylphenol	1/23	480	480	480	10 - 20	08MW009S
4-Chloro-3-methylphenol	1/23	4*	4*	4	10 - 80	08MW020SD
Acenaphthene	3/23	2*	9	5	10 - 80	08MW004S
Benzoic acid	2/19	8	17	13	50 - 400	08MW014S
Dibenzofuran	2/23	3	5	4	10 - 80	08MW004S
Diethylphthalate	4/23	2	20	7	10 - 20	08MW009S
Dimethylphthalate	3/23	4*	17	8	10 - 80	08MW014S
Diphenylamine	1/1	0	0	0	N/A	8MW7
Fluorene	4/23	4*	14	8	10 - 80	08MW004S
Naphthalene	5/23	78.5*	170	123	10 - 80	08MW014S
Nitrobenzene	1/23	3	3	3	10 - 80	08MW014S
Phenanthrene	3/23	4*	12	7	10 - 80	08MW004S
bis(2-Ethylhexyl)phthalate	1/23	4*	4*	4	10 - 80	08MW019S
Pesticides/PCBs (µg/ℓ)						
Endrin aldehyde	1/23	0.052	0.052	0.052	0.04 - 0.2	08MW004S
Endrin ketone	1/23	0.048	0.048	0.048	0.04 - 0.2	08MW004S
Inorganics Analytes (µg/ℓ)						
Arsenic	19/23	0.6	41.2	5.7	0.6 - 4.5	8MW7
Barium	21/23	3.7	112	20	200 - 200	08MW009S
Beryllium	1/23	1.6	1.6	1.6	0.3 - 5	8MW7
Cadmium	2/23	1.1	1.7*	1.4	1 - 5	08MW016SD
Calcium	22/22	33,800	1,830,000	191,657	N/A	08MW009S
Chromium	1/23	40.9	40.9	40.9	2.6 - 10	8MW7
Cobalt	1/23	11.7	11.7	11.7	3.1 - 50	8MW7

See notes at end of table.

Table 4-18 (Continued)
Summary of Chemicals Detected in Oily Waste Treatment Plant Area Groundwater

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Minimum Concentration[2]	Maximum Concentration[2]	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration
Copper	1/23	15.4	15.4	15.4	0.9 - 25	8MW7
Iron	18/22	38	34,500	4,717.3	9.1 - 100	08MW014S
Lead	7/23	0.8	45.9	8.8	0.6 - 6	8MW7
Magnesium	22/22	5,480	401,000	82,204	N/A	08MW009S
Manganese	22/22	1.4	2,260	209.2	N/A	08MW009S
Mercury	3/23	0.08*	0.29	0.15	0.1 - 0.5	8MW7
Nickel	2/23	6.3	19.9	13.1	5.9 - 40	8MW7
Selenium	1/23	1.55*	1.55*	1.5	0.6 - 30	08MW010S
Silver	1/23	2.1	2.1	2.1	2.1 - 10	8MW7
Sodium	22/22	4,980	3,475,000*	609,285	N/A	08MW019S
Thallium	2/23	1.5	1.7	1.6	0.6 - 10	0SMW002S
Vanadium	18/23	2	60.3	6.7	50 - 50	8MW7
Zinc	8/23	2	127	22.6	1 - 20	8MW7
Cyanide	5/23	0.82	12.8	4.31	2.7 - 10	8MW7

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed.
[2] A value indicated by an asterisk is the average of the detected concentrations in a sample and its duplicate. For nondetected values, one-half the CRQL/CRDL is used as a surrogate.
[3] The mean of detected concentrations is the arithmetic mean of all samples in which the analyte was detected. It does not include those samples in which the analyte was not detected.

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
mg/ℓ = milligrams per liter.
μg/ℓ = micrograms per liter.
N/A = not applicable.
$CACO_3$ = calcium carbonate.
PCBs = polychlorinated biphenyls.
CRQL/CRDL = contract-required quantitation limit/contract-required detection limit.

Table 4-19
Comparison of Analytes Detected in Oily Waste Treatment Plant Area Groundwater to Background Screening and Benchmark Concentrations

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Maximum Concentration[1]	Background Screening Concentration[2]	Frequency Above Background Screening Concentration	Florida Guidance Concentration[3]	Frequency Above Florida Guidance Concentration	Risk-Based Screening Concentration[4]	Frequency Above Risk-Based Screening Concentration
Volatile Analytes (µg/ℓ)							
2-Butanone	230	NSC	N/A	4,200	0/18	190	1/18
Acetone	330	16	3/23	700	0/23	370	0/23
Benzene	2	NSC	N/A	1	1/23	0.36	1/23
Carbon disulfide	4	1	4/23	700	0/23	2.1	2/23
Chloroform	7	2.5	1/23	6	1/23	0.15	1/23
Ethylbenzene	21	NSC	N/A	30	0/23	130	0/23
Methylene chloride	2	NSC	N/A	5	0/23	4.1	0/23
Toluene	3	NSC	N/A	40	0/23	75	0/23
Semivolatile Analytes (µg/ℓ)							
2,4-Dimethylphenol	180	NSC	N/A	400	0/23	73	1/23
2-Methylnaphthalene	140	NSC	N/A	NSC	N/A	NSC	N/A
2-Methylphenol	180	NSC	N/A	350	0/23	180	0/23
3- and 4-Methylphenol	480	29	1/23	35	1/23	18	1/23
4-Chloro-3-methylphenol	4*	NSC	N/A	3,000	0/23	NSC	N/A
Acenaphthene	9	NSC	N/A	20	0/23	220	0/23
Benzoic acid	17	NSC	N/A	28,000	0/19	15,000	0/19
Dibenzofuran	5	NSC	N/A	NSC	N/A	15	0/23
Diethylphthalate	20	NSC	N/A	5,600	0/23	2,900	0/23
Dimethylphthalate	17	NSC	N/A	70,000	0/23	37,000	0/23
Diphenylamine	0	NSC	N/A	175	0/1	91	0/1
Fluorene	14	NSC	N/A	280	0/23	150	0/23
Naphthalene	170	NSC	N/A	6.8	5/23	150	1/23
Nitrobenzene	3	NSC	N/A	9.5	0/23	0.34	1/23

See notes at end of table.

Table 4-19 (Continued)
Comparison of Analytes Detected in Oily Waste Treatment Plant Groundwater to Background Screening and Benchmark Concentrations

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Maximum Concentration[1]	Background Screening Concentration[2]	Frequency Above Background Screening Concentration	Florida Guidance Concentration[3]	Frequency Above Florida Guidance Concentration	Risk-Based Screening Concentration[4]	Frequency Above Risk-Based Screening Concentration
Phenanthrene	12	NSC	N/A	10	1/23	NSC	N/A
bis(2-Ethylhexyl)phthalate	4*	6.2	1/23	NSC	N/A	4.8	1/23
Pesticides/PCBs (µg/ℓ)							
Endrin aldehyde	0.052	NSC	N/A	0.1	0/23	NSC	N/A
Endrin ketone	0.048	NSC	N/A	NSC	N/A	NSC	N/A
Inorganics (µg/ℓ)							
Arsenic	41.2	9.8	2/23	50	0/23	0.038	19/23
Barium	112	39	3/23	2,000	0/23	260	0/23
Beryllium	1.6	NSC	N/A	4	0/23	0.016	1/23
Cadmium	1.7*	NSC	N/A	5	0/23	1.8	1/23
Calcium	1,830,000	207,466	1/22	NSC	N/A	1,055,398	1/22
Chromium	40.9	10.4	1/23	100	0/23	18	1/23
Cobalt	11.7	NSC	N/A	NSC	N/A	220	0/23
Copper	15.4	2.8	1/23	1,000	0/23	140	0/23
Iron	34,500	1,728	7/22	300	9/22	13,267	3/22
Lead	45.9	3.6	2/23	15	1/23	15	1/23
Magnesium	401,000	153,984	4/22	NSC	N/A	118,807	4/22
Manganese	2,260	210	6/22	50	9/22	18	16/22
Mercury	0.29	0.16	1/23	2	0/23	1.1	0/23
Nickel	19.9	NSC	N/A	100	0/23	73	0/23
Selenium	1.55*	11.8	0/23	50	0/23	18	0/23
Silver	2.1	NSC	N/A	100	0/23	18	0/23
Sodium	3,475,000*	1,519,016	4/22	160,000	8/22	396,022	6/22
Thallium	1.7	NSC	N/A	2	0/23	0.29	2/23

See notes at end of table.

Table 4-19 (Continued)
Comparison of Analytes Detected in Oily Waste Treatment Plant Area Groundwater to Background Screening and Benchmark Concentrations

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Maximum Concentration[1]	Background Screening Concentration[2]	Frequency Above Background Screening Concentration	Florida Guidance Concentration[3]	Frequency Above Florida Guidance Concentration	Risk-Based Screening Concentration[4]	Frequency Above Risk-Based Screening Concentration
Vanadium	60.3	9.2	1/23	49	1/23	26	1/23
Zinc	127	41.6	1/23	5,000	0/23	1,100	0/23
Cyanide	12.8	1.9	2/23	200	0/23	73	0/23

[1] A value indicated by an asterisk is the average of the detected concentrations in a sample and its duplicate. For nondetected values, one-half the CRQL/CRDL is used as a surrogate.
[2] The background screening concentration is twice the mean of detected concentrations for inorganic analytes.
[3] Florida Guidance Concentrations, June 1994.
[4] U.S. Environmental Protection Agency Region III risk-based screening concentrations (February 9, 1995). Concentrations for noncarcinogenic risks are adjusted to a hazard index of 0.1.

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
$\mu g/\ell$ = micrograms per liter.
PCBs = polychlorinated biphenyls.
N/A = not applicable.
NSC = no screening concentration.
CRQL/CRDL = contract-required quantitation limits/contract-required detection limits.

Benzene was detected at 2 $\mu g/\ell$, which exceeds the benchmark concentration (1 μ/ℓ), in the groundwater sample collected from monitoring well MPT-8-MW07S. This groundwater sample also contained ethylbenzene at 21 $\mu g/\ell$, which does not exceed benchmark concentrations (Table 4-19). This monitoring well is located hydraulically downgradient of SWMUs 6 and 7; these detections suggest that hydrocarbon-related organic compounds are migrating in groundwater and the source is likely these SWMUs.

Carbon disulfide was detected in four groundwater samples at concentrations of 4 $\mu g/\ell$ or less. This compound is a product of the anaerobic decay of organic matter (Verschueren, 1983) and may be associated with the degradation of hydrocarbon-related compounds.

Chloroform was detected as a single occurrence at a concentration of 7 $\mu g/\ell$ in the groundwater sample from monitoring well MPT-8-MW15I. The source of this compound is unknown.

The SVOCs 2,4-dimethylphenol and 3- and 4-methylphenol were only detected in the groundwater sample collected from monitoring well MPT-8-MW09S at concentrations of 180 and 480 $\mu g/\ell$, respectively. 2,4-Dimethylphenol is associated with pesticides, and 3- and 4-methylphenol are associated with herbicides and wood treatment (e.g., creosol for wood preservation). These SVOCs are likely related to the historical application of pesticides and herbicides or to SWMU 8 or SWMU 10. These compounds were detected in the surface water sample collected from SWMU 8 in 1993 (Table 4-3).

PAHs were detected in groundwater samples collected from monitoring wells MPT-8-MW04S, MPT-8-MW07S, MPT-8-MW14S, MPT-8-MW16S, and MPT-9-MW02. Concentrations of naphthalene detected in these samples exceeded benchmark concentrations (Table 4-19). Concentrations of phenanthrene detected in the groundwater sample collected from monitoring well MPT-8-MW04S (12 $\mu g/\ell$) also exceeded the benchmark concentration. Monitoring wells MPT-8-MW04S, MPT-8-MW07S, MPT-8-MW14S, and MPT-8-MW16S are located hydraulically downgradient of SWMUs 6 and 7 and are within the area where the TPH were detected in the groundwater field screening samples. The detection of PAHs in groundwater samples collected from monitoring wells MPT-8-MW04S, MPT-8-MW07S, MPT-8-MW14S, and MPT-8-MW16S, suggest that hydrocarbon-related compounds are migrating in groundwater and the source is likely SWMUs 6 and 7. PAHs were also detected in the groundwater sample collected from monitoring well MPT-9-MW02S, which is located hydraulically downgradient of SWMU 11; this suggests that hydrocarbon-related compounds are migrating in groundwater and the source is likely SWMU 11.

Nitrobenzene was only detected as a single occurrence in the groundwater sample collected from monitoring well MPT-8-MW14S at 3 $\mu g/\ell$. The source of this compound is unknown.

4.2.4.3 **Inorganics** Twenty-one inorganic target analytes were detected in groundwater samples; 20 of the analytes were detected at concentrations greater than background screening concentrations or were not detected in background samples (Table 4-19). Twelve of the analytes were detected at concentrations that exceed benchmark concentrations (Table 4-19).

Arsenic was detected in 19 samples at concentrations that exceed benchmark concentrations (Table 4-19). The source of the arsenic in groundwater is not

known. However, it is possible that the degradation of fuel-related compounds has affected groundwater chemistry (e.g, lowered dissolved oxygen concentrations) and caused naturally occurring arsenic in soil to dissolve into groundwater. The highest concentration (41.2 $\mu g/\ell$) was detected in the groundwater sample collected in 1993 from monitoring well MPT-8-MW07S. A groundwater sample was not collected from this monitoring well in 1994 because of the presence of floating free-phase hydrocarbons. Groundwater samples were collected in 1993 using a bailer to purge and collect the sample; the low-flow sampling technique was not used during this sampling event. Therefore, it is likely that the concentrations detected in this sample are biased high because of suspended solids (sediment). The bias results from the preservation of the sample with nitric acid at a pH of less than 2 SUs and the resulting leaching of inorganic constituents from the suspended solids.

Cadmium was detected in the duplicate groundwater sample collected from monitoring well MPT-8-MW16S at a concentration of 2.9 $\mu g/\ell$, which exceeds benchmark concentrations. However, cadmium was not detected in the associated environmental sample from monitoring well MPT-8-MW16S. The nondetection in the environmental sample suggests that cadmium may have been a false positive detection in the duplicate sample. Cadmium also was detected in the groundwater sample collected from monitoring well MPT-8-MW14S, but only at concentrations below the benchmark (Table 4-19).

Calcium was detected in the groundwater sample collected from monitoring well MPT-8-MW09S at a concentration of 1,830,000 $\mu g/\ell$, which exceeds the benchmark (Table 4-19). The likely source of the calcium detected in the sample from this monitoring well is water that was discharged to SWMU 8 after it was treated with lime in the OWTP.

Iron was detected in nine samples at concentrations that exceed benchmark concentrations (Table 4-19). The highest concentrations were detected in the samples from monitoring wells MPT-8-MW04S (34,500 $\mu g/\ell$), MPT-8-MW14S (15,000 $\mu g/\ell$), and MPT-8-MW16S (13,900 and 14,300 $\mu g/\ell$ in duplicate samples). These wells are on the edge of the area where hydrocarbons were detected by field screening. However, it is possible that the degradation of fuel-related compounds has affected groundwater chemistry (e.g,, lowered dissolved oxygen concentrations) and caused naturally occurring iron in soil to dissolve into groundwater. This is supported by the detection of higher concentrations of sulfide relative to sulfate, which is indicative of a more reduced environment where iron would be expected to be retained at higher concentrations.

Magnesium was detected in samples from monitoring wells MPT-S-MW02S, MPT-8-MW19S, MPT-8-MW20S, and MPT-8-MW09S at concentrations that exceed benchmark concentrations (Table 4-19). All these wells except MPT-8-MW09S are along the shore of the St. Johns River. Therefore, the magnesium concentrations detected in the samples from the monitoring wells other than MPT8-MW09S can be attributed to saline water from the river (this is supported by chloride concentrations detected in samples from MPT-8-MW19S and MPT-8-MW20S). MPT-8-MW09S is directly hydraulically downgradient of SWMU 8 and is more than 500 feet from the shoreline. The likely source of the magnesium detected in the sample from this monitoring well is water that was discharged to SWMU 8 after it was treated with lime in the OWTP Area.

Manganese was detected in 16 samples at concentrations that exceed benchmark concentrations (Table 4-19). The distribution of manganese is similar to that

of iron and may be attributed to changes in groundwater chemistry caused by the degradation of fuel-related compounds. This also is supported by the detection of higher concentrations of sulfide relative to sulfate, which is indicative of a more reduced environment where manganese (which is geochemically similar to iron) would be expected to be retained at higher concentrations. The highest manganese concentration (2,260 $\mu g/\ell$) was detected in the sample from MPT-8-MW09S, which is hydraulically downgradient of SWMU 8. This may be a residual effect from the release in 1988 of waste oil to the percolation pond.

Sodium was detected in eight groundwater samples at concentrations that exceed the benchmark. Seven of these monitoring wells are located within 200 feet of the St. Johns River and may be affected by saline water from the river. In general, the concentrations of sodium are highest in groundwater samples collected from monitoring wells located near the St. Johns River shoreline and decrease with distance from the shoreline. This suggests the diffusion of estuarine and marine waters into the surficial aquifer during tidal fluctuations. However, sodium was detected at a concentration of 1,810,000 $\mu g/\ell$ in the groundwater sample collected from MPT-8-MW09S, which is located adjacent to SWMU 8. Possible sources of the sodium detected in this monitoring well are water that has been treated with chemicals (e.g., soda ash) in the OWTP or estuarine or marine waters which may have flowed into SWMU 8 through the discharge line prior to placing the concrete plug and blank flange on the line.

Thallium was detected in groundwater samples collected from monitoring wells MPT-S-MW02S and MPT-8-MW01S at concentrations of 1.5 and 1.7 $\mu g/\ell$, which exceed the benchmark concentration (Table 4-19). The source of thallium detected in these samples is unknown.

Beryllium, chromium, lead, and vanadium were detected at concentrations exceeding the respective benchmarks in the groundwater sample collected in 1993 from monitoring well MPT-8-MW07S. A groundwater sample was not collected from this monitoring well in 1994 because of the presence of floating free-phase hydrocarbons. Groundwater samples were collected in 1993 using a bailer to purge and collect the samples; the low-flow sampling technique was not used during this sampling event. Therefore, it is likely that the concentrations detected in this sample are biased high because of suspended solids (sediment). The bias results from the preservation of the sample with nitric acid at a pH of less than 2 SUs and the resulting leaching of inorganic constituents from the suspended solids.

4.2.5 Free-Phase Hydrocarbon Assessment Samples of floating free-phase hydrocarbons have been collected during three sampling events (1992, 1993, and 1994). One floating free-phase hydrocarbon sample was collected from monitoring well MPT-8-MW03S in May 1992, two samples were collected from monitoring wells MPT-8-MW02S and MPT-8-MW03S in January 1993, and three samples were collected from monitoring wells MPT-8-MW02S, MPT-8-MW03S, and MPT-8-MW07S in 1994.

A hydrocarbon fuel analysis was conducted on the sample collected in 1992. The hydrocarbon fuel analysis is a gas chromatograph method that provides a chromatogram of the signature of the petroleum product for comparison with other types of petroleum products. The second set of samples was also analyzed by the hydrocarbon fuel analysis method, and one floating free-phase hydrocarbon sample, collected from monitoring well MPT-8-MW02S, was also analyzed for specific gravity, viscosity, inorganics, and PCBs.

The results of the 1992 analysis suggest that the sample appeared to match that of mineral spirits; however, it was noted that there was a difference in retention time and the peaks of the chromatogram. Based on the chromatogram, the sample appeared to have undergone some weathering. The chromatogram did not indicate the presence of large regularly spaced straight-chain alkane peaks which are found in kerosene, JP-4, and diesel fuels.

The results of the 1993 analysis suggest that the floating free-phase hydrocarbon sample collected from monitoring well MPT-8-MW02S correlated to diesel fuel, and the sample collected from monitoring well MPT-8-MW03S did not correlate with any referenced fuel (Figure 4-7). The result of the specific gravity analysis was 0.8756 at 60 degrees Fahrenheit (°F), and the viscosity was 668 centistokes at 40 degrees centigrade (°C). The specific gravity and viscosity of the sample are similar to values for No. 5B fuel oil or No. 4D diesel oil.

The 1994 samples were analyzed for total halogens, PCBs, RCRA metals, SVOCs, specific gravity, heat of combustion, viscosity, flammability, and simulated distillation range (because of sample size, only the simulated distillation range could be evaluated for the sample from MPT-8-MW03S). Halogens, PCBs, and RCRA metals were not detected in these samples. Semivolatile hydrocarbons in the C9 through C27 range were detected. The specific gravity measurements were similar to the 1993 measurement.

<u>4.2.6 Summary</u> VOCs and SVOCs (primarily BTEX and PAHs) detected in soil and groundwater samples and free-phase hydrocarbons observed in some monitoring wells indicate that petroleum-related compounds were released from SWMUs 6 and 7. Because waste oil was discharged directly to SWMU 6, it is likely that this SWMU is the primary source of the petroleum-related compounds.

Petroleum-related compounds were also detected in soil and groundwater samples collected near SWMU 11, indicating that this SWMU may also be a source of petroleum-related compounds.

Methylphenols and ketones were detected in the 1994 groundwater sample collected from MPT-8-MW09S, which is hydraulically downgradient of SWMU 8. These compounds were also detected in the 1993 surface water sample collected from SWMU 8, indicating that these compounds may have been released from this SWMU. The methylphenols may represent degradation products of petroleum-related compounds. The sample from monitoring well MPT-8-MW09S also contained concentrations of calcium, magnesium, sodium, and manganese that are high relative to concentrations detected in samples from other monitoring wells. These inorganic concentrations may represent chemicals that were used to treat the water that was discharged to SWMU 8. However, prior to the blocking off of the discharge pipe from SWMU 8 to the St. Johns River, the extreme high tides are reported by NAVSTA Mayport personnel to have resulted in the intrusion of sea water through the discharge pipe into SWMU 8. It is also likely that these inorganics are related to this occasional occurrence.

The data collected during the 1993 and 1994 sampling events do not suggest that there has been a release from SWMU 10.

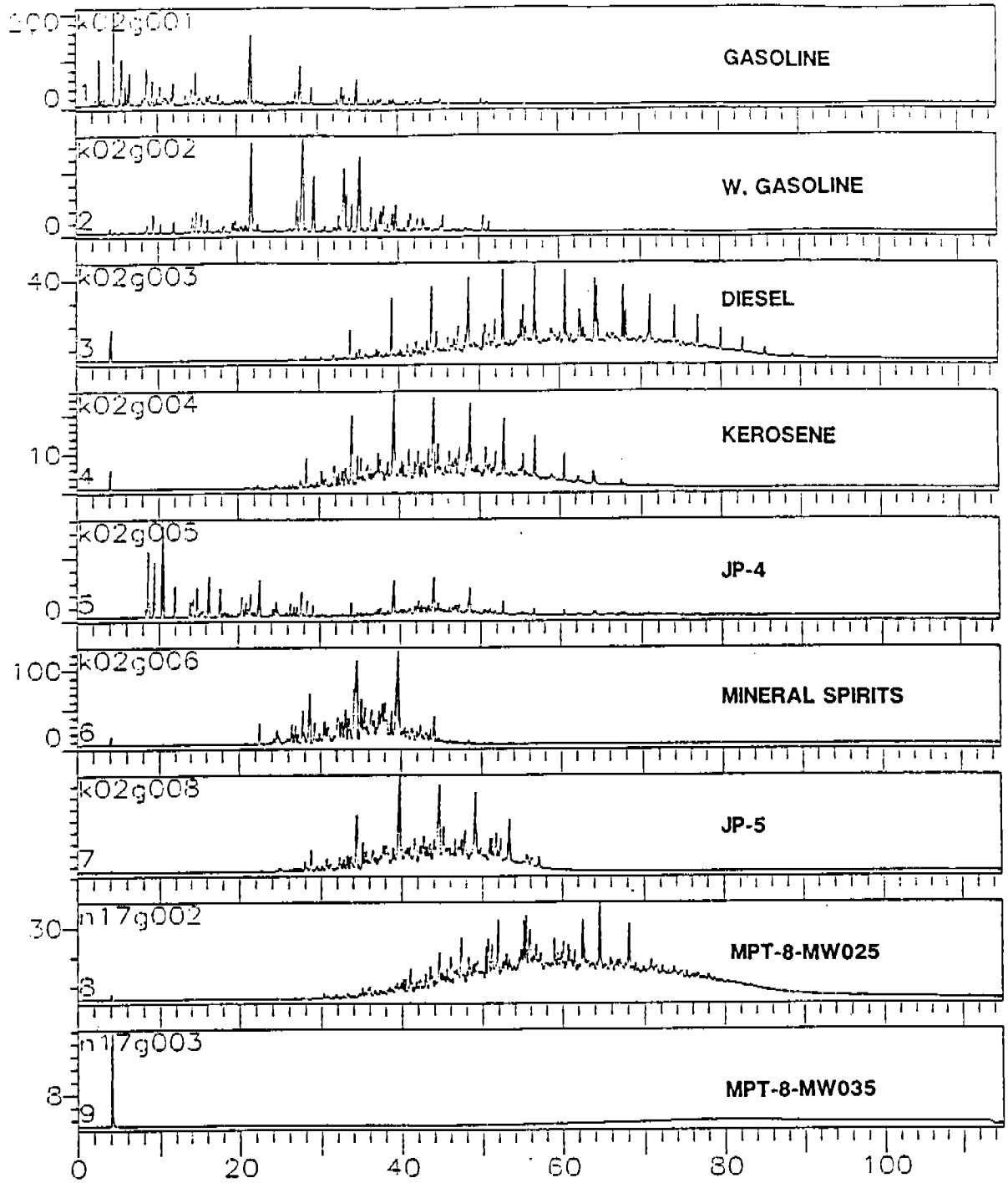


FIGURE 4-7

EXAMPLE GAS CHROMATOGRAM COMPARING SAMPLES TO STANDARD PETROLEUM PRODUCTS

RCRA FACILITY INVESTIGATION REPORT, GROUP II SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

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4.3 HUMAN HEALTH RISK ASSESSMENT (HHRA) FOR SWMUs 6, 7, 8, 9, 10, AND 11. SWMUs 6, 7, 8, 9, 10, and 11 are located in an area collectively called the OWTP Area. The location, physical description, and history associated with the OWTP Area are described in Section 4.1.

Risk to human health through groundwater exposure is the only pathway evaluated in the HHRA. Surface soil was not evaluated because there were no reported releases outside the sludge lagoons. Surface and subsurface soil was not evaluated because any potential soil contamination for this area will be evaluated in a corrective measures study (CMS) (See Sections 4.2.2 and 4.2.3). Interim measures have been implemented to recover free-phase product in accordance with Florida petroleum cleanup regulations (62-770, FAC). A monitoring program is planned to be implemented to assess the effectiveness of the recovery system and determine if modifications are necessary and to assess whether or not additional remedial measures will be required to mitigate petroleum-related constituents dissolved in groundwater. Additionally, the monitoring program will be used to assess whether a human health risk assessment should be conducted during or at the conclusion of the interim measures.

Groundwater samples were collected from the surficial aquifer using bailers and the low-flow sampling method during the RFI (Subsection 4.1.2). After evaluation and management of the environmental data collected at the OWTP Area (Chapter 2.0), human health chemicals of potential concern (HHCPCs) in groundwater were selected and the potential human health risks associated with groundwater at the waste site were characterized. Because the low-flow sampling method produces less turbid samples that are more representative of the surficial aquifer than those obtained with a bailer, the preferred data set was from the 1994 sampling event. However, it should be noted that chemicals detected in groundwater samples collected during the 1993 sampling event that were not detected in groundwater samples collected in 1994 were included in the final data set.

The methodology for the human health risk assessment is described in Section 2.5 of Volume I of the RFI GIR.

4.3.1 Selection of Chemicals of Potential Concern HHCPCs are defined as chemicals for which data of sufficient quality are available for use in the risk assessment, that are potentially site-related, and that are present at concentrations above standards or guidelines; above risk-based screening concentrations (where available); or for inorganic analytes above background screening concentrations (where available). The methodology used to select HHCPCs is described in Subsection 2.5.2 of the RFI GIR.

As previously discussed in Subsection 4.1.2, unfiltered samples from the surficial aquifer were submitted for chemical analysis during the groundwater sampling program. Only samples from the most recent sampling round were evaluated in the HHRA. Sample locations for the surficial aquifer that were evaluated in the HHRA are indicated on Figure 4-4.

Table 4-20 presents the analytes detected in unfiltered groundwater at the OWTP Area and the HHCPCs selected for groundwater associated with the OWTP Area. The HHCPCs include two volatiles (2-butanone and carbon disulfide), five semivolatiles (2-Methylnaphthalene, acenaphthene, fluorene, naphthalene, and phenanthrene), total petroleum hydrocarbons, and nine inorganics (arsenic, calcium, iron, lead, magnesium, manganese, sodium, thallium, and vanadium).

4.3.2 Exposure Assessment Currently, no humans reside at the OWTP Area, and groundwater is not used for any potable or nonpotable purposes. However, if the OWTP Area were developed for residential use in the future, residents could be exposed to contaminants in the groundwater. Therefore, groundwater is evaluated in the HHRA. Potential receptors and exposure scenarios are identified below and summarized in Table 4-21 and Figure 4-8. Receptor-specific exposure parameters for each exposure scenario are presented in Appendix D-1 of the RFI GIR. The risk calculation spreadsheets in Appendix E-2 to this report also contain the exposure parameters for each exposure scenario.

Currently, the surficial aquifer is not used as a potable or nonpotable water source at the OWTP Area. Domestic use of the surficial aquifer (adult ingestion and inhalation of volatiles while showering) would be considered appropriate as part of a hypothetical residential exposure scenario at the OWTP Area if the land use were changed to residential in the future.

Exposure point concentrations (EPCs) for groundwater were determined according to procedures outlined in Subsection 2.5.6 of the RFI GIR. The EPCs for analytes selected as HHCPCs are presented in Table 4-22. The contaminant exposure intakes for the receptor evaluated (adult resident) are presented in the risk calculation spreadsheet in Appendix E-2 to this report.

4.3.3 Toxicity Assessment The purpose of the toxicity assessment is to identify the adverse effects that are associated with exposure to each HHCPC and to identify the relationship between the level of exposure and the severity or likelihood of adverse effects. The toxicity assessment methodology is described in Subsection 2.5.8 of the RFI GIR. Appendix D-4 to the RFI GIR contains brief toxicity summaries for the HHCPCs. Appendix E-1 to this report contains dose-response information for the HHCPCs. This information is used to estimate the excess lifetime cancer risk (ELCR) for carcinogens and the hazard index (HI) for all HHCPCs in the risk characterization (Subsection 4.3.4). Dose-response values current as of June 1995 for Integrated Risk Information System (IRIS) and November 1994 for Health Effects Assessment Summary Table (HEAST) have been used in this HHRA. Uncertainties associated with chemical-specific toxicity values are discussed in Subsection 4.3.5.

4.3.4 Risk Characterization Both carcinogenic and noncarcinogenic risks were estimated for each HHCPC and each complete exposure pathway selected for evaluation in the exposure assessment, as described in Subsection 2.5.9 of the RFI GIR. Risk estimates for potential exposures to groundwater are discussed below. Table 4-23 summarizes the risk estimates. The risk characterization results are shown in spreadsheet E-2-1 through E-2-3 in Appendix E-2 to this report. Figure 4-9 summarizes the cancer risks associated with the OWTP Area. There is no exposure to water from the surficial aquifer under current land use. For future land use, the cancer risk associated with ingestion of groundwater as drinking water is $2x10^{-4}$ for the adult resident. The risk is attributed to arsenic. No carcinogenic VOCs were selected as HHCPCs, so cancer risk to the adult resident associated with inhalation of VOCs during showering was not evaluated. Arsenic and lead are the only two carcinogens found at the OWTP Area; all other HHCPCs are not believed to be carcinogenic.

Figure 4-10 presents an HI summary for the OWTP Area. The HI associated with adult resident ingestion of groundwater is 10. Manganese (hazard quotient [HQ] of 7) and iron (HQ of 3) contribute the majority of the noncancer risk. All other

Table 4-20
Selection of Human Health Chemicals of Potential Concern
Unfiltered Groundwater Associated with Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations[2]	Mean of Detected Concentrations[3]	Background Screening Concentration[4]	Risk-based Screening Concentration[5]	Federal MCLs[6]	Florida Guidance Concentration[7]	Selected as HHCPC (Yes/No)
Volatile Analytes (µg/ℓ)									
2-Butanone	1/18	10 - 20	230 - 230	230	NA	190	NS	4,200	Yes
Acetone	5/23	10 - 20	7* - 330	79.2	NA	370	NS	700	No[8]
Benzene	1/23	5 - 10	2 - 2	2	NA	0.36	5	1	No[9]
Carbon disulfide	4/23	5 - 10	2 - 4	2.8	NA	2.1	NS	700	Yes
Chloroform	1/23	5 - 10	7 - 7	7	NA	0.15	100	6	No[9]
Ethylbenzene	1/23	5 - 10	21 - 21	21	NA	130	700	30	No[8]
Methylene chloride	1/23	5 - 10	2 - 2	2	NA	4.1	5	5	No[8]
Toluene	1/23	5 - 10	3 - 3	3	NA	75	1000	40	No[8]
Semivolatile Analytes (µg/ℓ)									
2,4-Dimethylphenol	1/23	10 - 80	180 - 180	180	NA	73	NS	400	No[9]
2-Methylnaphthalene	5/23	10 - 80	42.5* - 140	93.1	NA	150	NS	6.8	Yes
2-Methylphenol	1/23	10 - 80	180 - 180	180	NA	180	NS	350	No[8]
3- and 4-Methylphenol	1/23	10 - 80	480 - 480	480	NA	18	NS	35	No[9]
4-Chloro-3-methylphenol	1/23	10 - 80	4* - 4*	4	NA	NSC	NS	3,000	No[8]
Acenaphthene	3/23	10 - 80	2* - 9	5.3	NA	220	NS	20	Yes[10]
Benzoic acid	2/19	50 - 400	8 - 17	12.5	NA	15,000	NS	28,000	No[8]
Dibenzofuran	2/23	10 - 80	3 - 5	4	NA	15	NS	NS	No[8]
Diethylphthalate	4/23	10 - 80	2 - 20	7.3	NA	2,900	NS	5,600	No[8]
Dimethylphthalate	3/23	10 - 80	4* - 17	8.3	NA	37,000	NS	70,000	No[8]
Fluorene	4/23	10 - 80	4* - 14	7.5	NA	150	NS	280	Yes[10]
Naphthalene	5/23	10 - 80	78.5* - 170	123	NA	150	NS	6.8	Yes
Nitrobenzene	1/23	10 - 80	3 - 3	3	NA	0.34	NS	9.5	No[9]
Phenanthrene	3/23	10 - 80	4* - 12	7	NA	NSC	NS	10	Yes
bis(2-Ethylhexyl)-phthalate	1/23	10 - 80	4* - 4*	4	NA	4.8	6	6	No[8]
Total Petroleum Hydrocarbons (mg/ℓ)	9/19	0.05 - 2.12	0.045* - 132	18.6	NA	NA	NS	NS	Yes

See notes at end of table.

Table 4-20 (Continued)
Selection of Human Health Chemicals of Potential Concern
Unfiltered Groundwater Associated with Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations[2]	Mean of Detected Concentrations[3]	Background Screening Concentration[4]	Risk-based Screening Concentration[5]	Federal MCLs[6]	Florida Guidance Concentration[7]	Selected as HHCPC (Yes/No)
Pesticides/PCBs (µg/ℓ)									
Endrin aldehyde	1/23	0.04 - 0.2	0.052 - 0.052	0.05	NA	NSC	NS	0.1	No[8]
Endrin ketone	1/23	0.04 - 0.2	0.048 - 0.048	0.05	NA	NSC	NS	NS	No[9]
Inorganic Analytes (µg/ℓ)									
Arsenic	19/23	0.6 - 10	0.6 - 41.2	5.7	9.8	0.038	50	50	Yes
Barium	21/23	0.4 - 200	3.7 - 112	20	39	260	2,000	2,000	No[8]
Beryllium	1/23	0.3 - 5	1.6 - 1.6	1.6	ND	0.016	4	4	No[9]
Cadmium	2/23	1 - 5	1.1 - 1.7*	1.4	ND	1.8	5	5	No[8]
Calcium	22/22	41.7 - 5,000	33,800 - 1,830,000	191,657	207,466	1,055,398	NS	NS	Yes
Chromium	1/23	2.6 - 10	40.9 - 40.9	40.9	10.4	18	100	100	No[9]
Cobalt	1/23	3.1 - 50	11.7 - 11.7	11.7	ND	220	NS	NS	No[8]
Copper	1/23	0.9 - 25	15.4 - 15.4	15.4	2.8	140	1300	1,000	No[8]
Cyanide	5/23	2.7 - 10	0.82 - 12.8	4.3	1.9	73	200	200	No[9]
Iron	18/22	9.1 - 100	38 - 34,500	4,717	1,728	13,267	NS	300	Yes
Lead	7/23	0.6 - 6	0.8 - 45.9	8.8	2.6	15	15	15	Yes
Magnesium	22/22	31.4 - 5,000	5,480 - 401,000	82,204	153,984	118,807	NS	NS	Yes
Manganese	22/22	0.6 - 15	1.4 - 2,260	209	210	18	NS	50	Yes
Mercury	3/23	0.1 - 0.5	0.08* - 0.29	0.15	0.16	1.1	2	2	No[8]
Nickel	2/23	5.9 - 40	6.3 - 19.9	13.1	ND	73	100	100	No[8]
Selenium	1/23	0.6 - 30	1.55* - 1.55*	1.5	11.8	18	50	50	No[8,11]
Silver	1/23	2.1 - 10	2.1 - 2.1	2.1	ND	18	NS	100	No[8]
Sodium	22/22	14.4 - 5,000	4,980 - 3,475,000	809,285	1,519,016	396,022	NS	160,000	Yes
Thallium	2/23	0.6 - 10	1.5 - 1.7	1.6	ND	0.29	2	2	Yes
Vanadium	18/23	1.5 - 50	2 - 60.3	6.7	9.2	26	NS	49	Yes
Zinc	8/23	1 - 20	2 - 127	22.6	41.6	1,100	NS	5,000	No[8]

See notes at end of table.

Table 4-20 (Continued)
Selection of Human Health Chemicals of Potential Concern
Unfiltered Groundwater Associated with Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Notes from previous page.

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed. The following samples were analyzed: 10OP001, 8MW7, 08MW001S, 08MW004S, 08MW006S, 08MW008S, 08MW009S, 08MW010S, 08MW012S, 08MW013I, 08MW013S, 08MW014S, 08MW015I, 08MW016S, 08MW017S, 08MW018S, 08MW019S, 08MW020S, 09MW001S, 09MW002S, 09MW003S, 0SMW002S, and 0SMW003S with duplicates 08MW010SD, 08MW016SD, 08MW019SD, 08MW020SD, and 08MW006SD (Figure 4-4).
[2] A value indicated by an asterisk is the average of the detected concentrations in a sample and its duplicate. For nondetected values, one-half the contract-required quantitation limit/contract-required detection limit is used as a surrogate.
[3] The mean of detected concentrations is the arithmetic mean of all samples in which the analyte was detected. It does not include those samples in which the analyte was not detected.
[4] The background screening concentration is twice the mean of detected concentrations for inorganic analytes. The mean analyte concentrations in background samples are identified in Table D-1-3 of Appendix D to the RCRA Facility Investigation (RFI) General Information Report.
[5] The risk-based screening concentrations are identified in Table D-1-5 of Appendix D to the RFI General Information Report.
[6] The Federal MCLs (November 1994) are identified in Table D-1-5 of Appendix D to the RFI General Information Report.
[7] The Florida Guidance Concentrations (June 1994) are identified in Table D-1-5 of Appendix D to the RFI General Information Report.
[8] The maximum detected concentration did not exceed the risk-based screening concentration, the Federal MCL, or the Florida Guidance Concentration; therefore, this analyte will not be evaluated in the human health risk assessment (HHRA).
[9] The frequency of detection is less than or equal to 5 percent and professional judgement was used; therefore, the analyte will not be evaluated in the HHRA.
[10] The chemical is a member of a class that contains other HHCPCs; therefore, this analyte is retained as an HHCPC.
[11] The maximum detected concentration did not exceed the background screening concentration; therefore, this analyte will not be evaluated in the HHRA.

Notes: RCRA = Resource Conservation and Recovery Act.
MCL = maximum contaminant level.
HHCPC = human health chemical of potential concern.
$\mu g/\ell$ = micrograms per liter.
NA = not applicable.
NS = no standard or guidance available.
NSC = no screening concentration.
ND = analyte not detected in background samples.
mg/ℓ = milligrams per liter.
PCB = polychlorinated biphenyl.

Table 4-21
Summary of Potential Exposure Pathways
Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Medium of Exposure	Route of Exposure	Potentially Exposed Population	Selected for Evaluation?	Reason for Selection or Exclusion
Current Land Use				
Groundwater: Surficial Aquifer	Ingestion of groundwater as drinking water and inhalation of volatiles while showering	Resident (adult)	No	There are no current exposures to groundwater.
Future Land Use				
Groundwater: Surficial Aquifer	Ingestion of groundwater as drinking water and inhalation of volatiles while showering	Resident (adult)	Yes	If the site were developed for residential use, residents could be exposed to contaminants in the surficial aquifer.

Note: RCRA = Resource Conservation and Recovery Act.

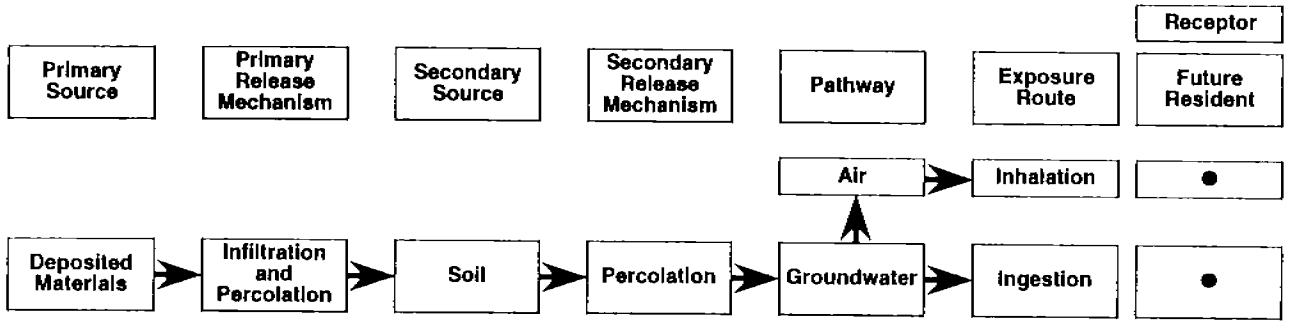

FIGURE 4-8

COMPLETE EXPOSURE PATHWAYS FOR HUMAN RECEPTORS, OWTP AREA (SWMUs 6, 7, 8, 9, 10, AND 11)

RCRA FACILITY INVESTIGATION REPORT, GROUP II SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

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Table 4-22
Exposure Point Concentrations for Human Health Chemicals of Potential Concern Unfiltered Groundwater Associated with Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Frequency of Detection[1]	Maximum Detected Concentration	95 Percent UCL[2]	Exposure Point Concentration[3]
Volatile Analytes (μg/ℓ)				
2-Butanone	1/18	230	17	17
Carbon disulfide	4/23	4	2.8	2.8
Semivolatile Analytes (μg/ℓ)				
2-Methylnaphthalene	5/23	140	46.5	46.5
Acenaphthene	3/23	9	7.9	7.9
Fluorene	3/23	14	8.2	8.2
Naphthalene	5/23	170	67.4	67.4
Phenanthrene	3/23	12	8	8
Inorganic Analytes (μg/ℓ)				
Arsenic	19/23	41.2	9	9
Calcium	22/22	1,830,000	240,386	240,386
Iron	18/22	34,500	268,337	34,500
Lead	7/23	45.9	5.3	5.3
Magnesium	22/22	401,000	189,094	189,094
Manganese	22/22	2,260	1,249	1,249
Sodium	22/22	3,475,000	9,820,671	3,475,000
Thallium	2/23	1.7	5.2	1.7
Vanadium	18/23	60.3	17.6	17.6
Total Petroleum Hydrocarbons (mg/ℓ)	9/19	132	113	113

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the number of samples analyzed.
[2] The 95 percent UCL was calculated on the arithmetic mean of all samples using one-half the contract-required quantitation limit contract-required detection limit for nondetected concentrations.
[3] The exposure point concentration equals the 95 percent UCL unless the maximum detected concentration is less than the 95 percent UCL. If there are three or less total samples, the maximum detected concentration is the exposure point concentration.

Notes: RCRA = Resource Conservation and Recovery Act.
SWMU = solid waste management unit.
UCL = upper confidence limit.
μg/ℓ = micrograms per liter.
mg/ℓ = milligrams per liter.

Table 4-23
Human Health Risk Summary for Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Land Use	Exposure Route	Hazard Index	Excess Lifetime Cancer Risk
Future Land Use			
Surficial Aquifer:			
Adult resident	Ingestion of groundwater as drinking water	10	$2x10^{-4}$
	Inhalation of volatiles while showering	0.01	NC
Total adult resident:		**10**	**$2x10^{-4}$**

Notes: RCRA = Resource Conservation and Recovery Act.
NC = not calculated because no carcinogenic volatiles were selected as human health chemicals of potential concern.

Cancer Risk Summary, Future Land Use

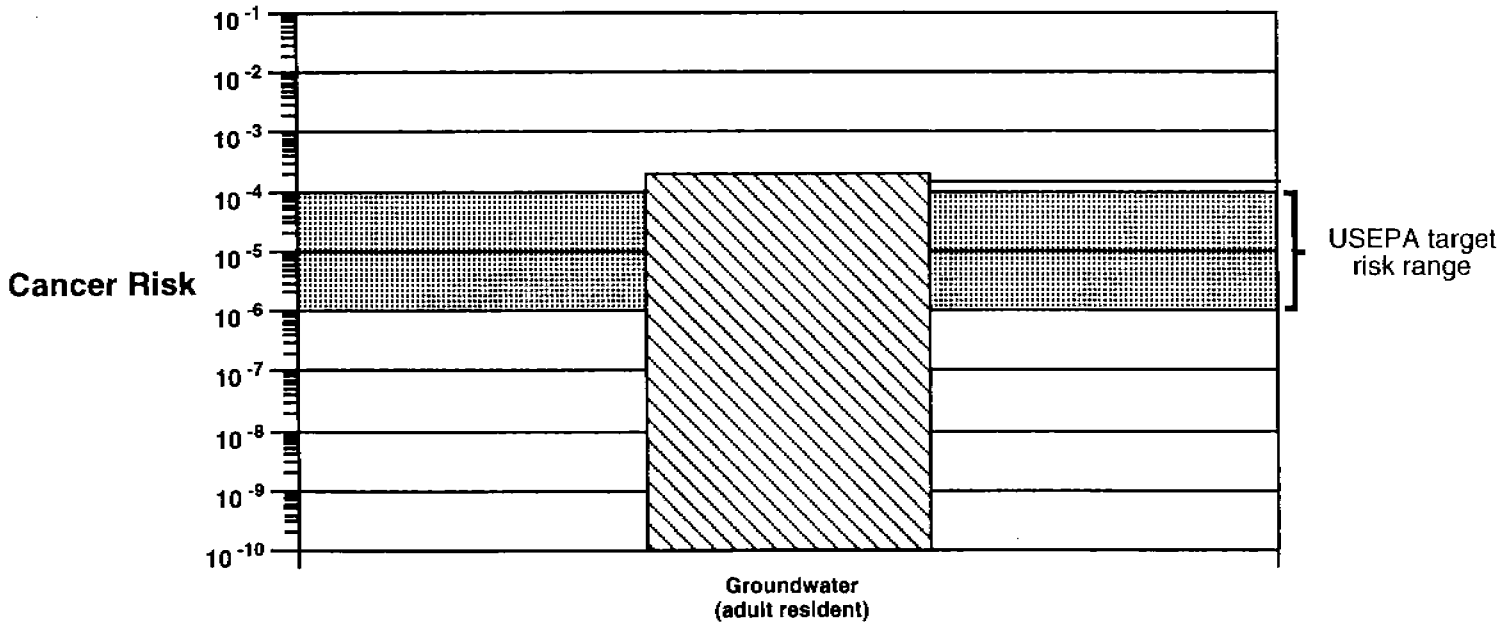

FIGURE 4-9

CANCER RISK SUMMARY,
FUTURE LAND USE,
SWMUs 6, 7, 8, 9, 10, AND 11

RCRA FACILITY INVESTIGATION REPORT, GROUP II SWMUs

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Hazard Index Summary, Future Land Use

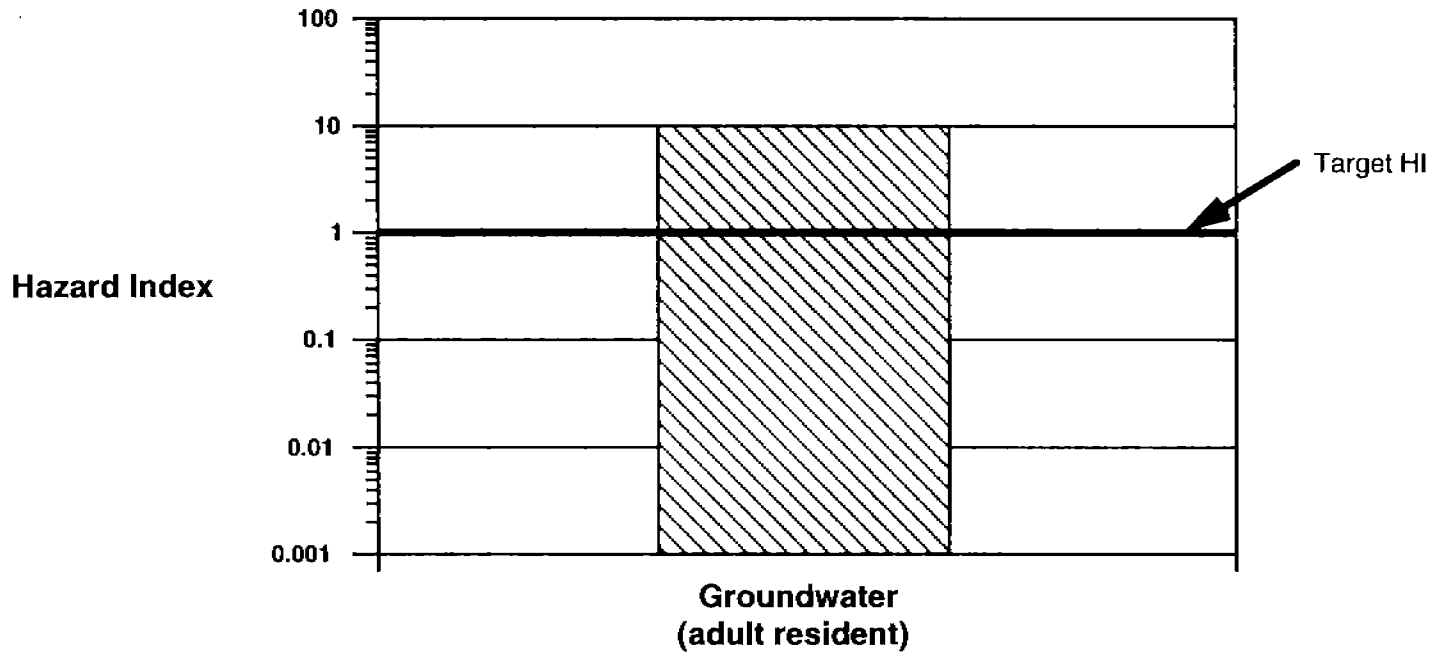


FIGURE 4-10

HAZARD INDEX SUMMARY,
FUTURE LAND USE,
SWMUs 6, 7, 8, 9, 10, AND 11

RCRA FACILITY INVESTIGATION
REPORT, GROUP II SWMUs

U.S. NAVAL STATION
MAYPORT, FLORIDA

8533-08 950524WEM

HHCPCs contributed HQs of less than 1. Two VOCs (2-butanone and carbon disulfide) were selected as HHCPCs. The combined noncancer risk associated with adult resident inhalation of VOCs during showering is 0.01.

Remedial goal options (RGOs) for the ELCR and HI associated with the future resident are presented in Subsection 4.3.6. Inclusion of arsenic in this table is not intended to be a statement that remediation of arsenic is necessary. Arsenic was detected in 19 out of 23 sample locations. The highest arsenic concentration detected was 41.2 $\mu g/\ell$, which is below both the Federal and Florida drinking water standards of 50 $\mu g/\ell$.

4.3.5 Uncertainty Analysis General uncertainties associated with the collection, analysis, and evaluation of data; exposure assessment; toxicity assessment; and the risk estimation process are discussed in Subsection 2.5.10 of the RFI GIR. Site-specific uncertainties that are important for the interpretation of the calculated risk estimates for groundwater at the OWTP Area are discussed below.

- Residential land use is the assumed future land use scenario according to USEPA Region IV guidance (USEPA, 1991). It is likely, however, that the area near the OWTP Area will remain industrial because of its proximity to the Mayport turning basin.

- The groundwater contains sodium, calcium, iron, magnesium, manganese, and other inorganic analytes at concentrations similar to those typically found in brackish or marine water. Based on the location of the site, which is immediately adjacent to a tidally influenced river, it is likely that the inorganics detected are the result of the diffusion of marine or brackish water into the surficial aquifer during tidal fluctuations (see Subsection 4.2.4.3, Inorganics).

- The arsenic cancer slope factor (CSF) is a source of uncertainty in the HHRA for the surficial aquifer because concentrations of arsenic that tend to be present in the area surrounding NAVSTA Mayport are high enough to consistently cause arsenic to be a significant contributor to cancer risks. The oral CSF for inorganic arsenic is based on dose-response data for skin cancer incidence obtained by Tseng and others (1968). Individuals in this study were exposed to high levels of inorganic arsenic in drinking water (170 $\mu g/ml$). Arsenic exposure was approximated based on estimates of water intake. Other exposure pathways contributing to total exposure, such as ingestion of fish, livestock, and plants, were not assessed, potentially resulting in an underestimate of arsenic exposure. The oral slope factor was calculated using a model that assumes the dose-response curve is linear at low doses. Recent evidence suggests that low doses of arsenic may be largely detoxified by methylation, producing a nonlinear dose-response curve (Goyer, 1991). In the Tseng et al. study, the saturation of the normal detoxification pathways, coupled with an underestimate of exposure, may have resulted in an overestimate of cancer risk. Therefore, cancer risk for this SWMU may be overestimated. Based on the uncertainties associated with the arsenic CSF, risk management guidance (USEPA, 1988f) suggests that cancer risk may be up to tenfold lower than predicted.

- The manganese drinking water reference dose (RfD) of 5.00E-03 mg/kg-day is based on a single epidemiological study conducted in Greece (Kondakis

et al., 1989). Limitations of study design coupled with the lack of supporting studies may have resulted in a significant overestimate of the risks associated with drinking water ingestion of manganese. The critical study assessed neurological function in an adequate number of individuals residing in three geographically distinct areas of Greece, each area with significantly different levels of manganese endemic to the local water supply. The study did not investigate and quantitate other potential dietary sources of manganese in the study groups. The levels of manganese in locally grown produce and livestock can be presumed to reflect the local concentration of manganese in the water supply (i.e., the high manganese area would also have local food with higher levels of manganese than the areas with lower levels of manganese in water). This study flaw may have resulted in the establishment of an artificially low oral drinking water RfD. Additionally, the study assessed neurological function only in individuals greater than 50 years of age. The neurological degeneration documented to be produced by high chronic manganese consumption was nonspecific in nature and could have resulted from a number of other neurological diseases, such as Parkinsonism and Alzheimer's disease, which increase in prevalence with age. Because this study did not control for the presence of other neurological diseases or for patients with a family history of neurological disease there is an uncertainty to the cause-and-effect relationship of manganese to the toxic endpoint. Therefore, the HQ associated with manganese may be overestimated.

- Use of the USEPA Environmental Criteria Assessment Office (ECAO) provisional oral RfD for iron detected in groundwater to estimate noncancer risk may result in an overestimate of risk. The oral RfD for iron based on average daily intake data for humans from the National Health and Nutrition Examination Survey (NHANES) II database represents an intake protective of iron deficiency anemia. Therefore, the data do not represent toxicity data.

- The presence of tentatively identified compounds (TICs) has not been established with a degree of certainty great enough to warrant their inclusion in the HHRA for groundwater at the OWTP Area. The relative number of TICs is low in comparison to the number of detected contaminants. Furthermore, few toxicity data are available to evaluate the potential health effects of these analytes even if they were considered for quantitative evaluation. Because TICs were not evaluated there is a potential for underestimation of the health risks associated with future land uses.

- Because a definable contaminant plume of dissolved chemicals was not present at the OWTP area, the exposure point concentrations were calculated from groundwater samples collected from monitoring wells located hydraulically downgradient from the SWMUS. Therefore, the exposure point concentrations may overestimate the risk because not all analytes were detected at either the 95 percent upper confidence limit (UCL) or maximum detected concentration in a single well.

4.3.6 RGOs As required by USEPA Region IV guidance, RGOs are presented in a table of potential media cleanup levels. Potential media cleanup levels have been identified for HHCPCs that exceed Federal or State standards or Florida guidance

concentrations, or that have associated cancer risks greater than $1x10^{-6}$ or HQs greater than 0.1. Potential media cleanup levels include concentrations at various risk levels and Federal and State standards and guidance values. These potential media cleanup levels are not actual cleanup levels. These values are provided here for informational purposes to assist risk-management decision making concerning the need for a CMS and within the CMS itself.

Table 4-24 contains a summary of RGOs for the OWTP Area. Potential media cleanup levels were developed for arsenic, the only carcinogenic HHCPC with available toxicity information. The ELCR from residential exposure to arsenic in the surficial aquifer groundwater is $2x10^{-4}$. Potential media cleanup levels were also developed for those HHCPCs having a total HQ greater than 0.1. Inorganics contribute the majority of noncarcinogenic risk.

Use of these guidance concentrations in the development of RGOs should be considered in relation to established background concentrations and detection limits.

4.4 ECOLOGICAL RISK ASSESSMENT FOR SWMUs 6, 7, 8, 9, 10, AND 11. The following subsections describe the results of the ecological risk assessment (ERA) for the OWTP Area. The SWMUs in the OWTP Area are either part of the OWTP itself or are located adjacent to the OWTP. The SWMUs will be grouped together for the purpose of completing an ERA for the OWTP Area.

The ERA was completed according to the methodology described in Section 2.4 of the NAVSTA Mayport GIR (ABB-ES, 1995a) and includes selection of ecological chemicals of potential concern (ECPCs) (Subsection 4.4.1), exposure assessment (Subsection 4.4.2), ecological effects assessment (Subsection 4.4.3), risk characterization (Subsection 4.4.4), and uncertainty analyses (Subsection 4.4.5). Exposure pathways for ecological receptors at SWMUs 6, 7, 8, 9, 10, and 11 (hereafter referred to as the OWTP Area) are limited to groundwater. It is unlikely that terrestrial receptors would be exposed to surface soil contamination, because the area provides limited habitat for terrestrial wildlife, and the contamination is not at the surface. SWMU 7 contains standing water from rainfall events plus sludge from the bilge water treatment process; as a result, the SWMU 7 containment ponds do not provide suitable habitat for aquatic receptors. An ERA considering potential exposures to contamination in surface water and sediment of the SWMU 7 containment ponds will not be completed because concentrations of petroleum-related chemicals exceed values for clean soil under FAC 62-775. Therefore, a corrective measures study should be conducted to assess remedial options for this SWMU. Additionally, the Navy plans to use excess clean soil from the remediation of SWMU 7 to fill SWMU 8. This will remove the potential for SWMU 8 to be a pathway for exposure by ecological receptors to surface water and sediment within this pond.

4.4.1 Selection of Ecological Chemicals of Potential Concern Analytes were determined to be an ECPC according to the process described in Subsection 2.4.1 of the NAVSTA Mayport GIR (ABB-ES, 1995a). Aquatic receptors in the St. Johns River may be exposed to groundwater contamination as it discharges to the surface water. For this reason, analytes detected in groundwater from the OWTP Area are screened as ECPCs.

Table 4-24
Summary of Remedial Goal Options for Human Health at Solid Waste Management Units (SWMUs) 6, 7, 8, 9, 10, and 11

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Range of Detected Concentrations	Excess Lifetime Cancer Risk Risk Range			Hazard Quotient Risk Range			Federal MCL[1]	Florida Guidance Concentration[2]
		10^{-4}	10^{-5}	10^{-6}	10	1	0.1		
Surficial Aquifer (μg/ℓ)									
Adult resident, groundwater									
Naphthalene	78.5 - 170	NA	NA	NA	14,600	1,460	146	NA	6.8
Phenanthrene	4 - 12	NA	NA	NA	NA	NA	NA	NA	10
Arsenic	0.6 - 41.2	5.6	0.56	0.06	109	10.9	1.1	50	50
Iron	38 - 34,500	NA	NA	NA	107,800	10,780	1,078	NA	300
Lead	0.8 - 45.9	NA	NA	NA	NA	NA	NA	15	15
Manganese	1.4 - 2,260	NA	NA	NA	1,840	184	18.4	NA	50
Sodium	4,980 - 3,475,000	NA	NA	NA	NA	NA	NA	NA	160,000
Thallium	1.5 - 1.7	NA	NA	NA	29	2.9	0.29	0.02	2
TPH	45 - 132,000	NA	NA	NA	NA	NA	NA	NA	5,000

[1] The Federal MCLs (November 1994) are identified in Table D-1-5 of Appendix D-1 to the RCRA Facility Investigation (RFI) General Information Report.
[2] The Florida guidance concentrations (June 1994) are identified in Table D-1-5 of Appendix D-1 to the RFI General Information Report.

Notes: RCRA = Resource Conservation and Recovery Act.
MCL = maximum contaminant level.
μg/ℓ = microgram per liter.
NA = not applicable.
TPH = total petroleum hydrocarbon.

The monitoring well system installed at the OWTP Area to examine potential contamination to the groundwater is described in Subsection 4.2.5. The locations of the 24 monitoring wells (MPT-10-P01, MPT-8-MW01S, MPT-8-MW04S, MPT-8-MW6S, MPT-8-MW7S, MPT-8-MW8S, MPT-8-MW9S, MPT-8-MW10S, MPT-8-MW12S, MPT-8-MW13I, MPT-8-MW13S, MPT-8-MW14S, MPT-8-MW15I, MPT-8-MW15S, MPT-8-MW16S, MPT-8-MW17S, MPT-8-MW18S, MPT-8-MW19S, MPT-8-MW20S, MPT-9-MW01S, MPT-9-MW02S, MPT-9-MW03S, MPT-S-MW02S, and MPT-S-MW03S) are shown on Figure 4-4.

The unfiltered groundwater data for the OWTP Area are summarized in Table 4-25. Use of unfiltered groundwater data to estimate contaminant exposures for aquatic life is highly conservative. The measurement of contaminants in unfiltered samples includes both the fraction of contaminants sorbed onto particles and the dissolved forms. Only the dissolved fraction of contaminants in the groundwater is likely to be transported in groundwater and discharged to the St. Johns River. Generally, only the fraction of the contaminant in the dissolved phase is biologically available and potentially toxic to aquatic organisms (USEPA, 1993a).

Table 4-25 provides a summary of the analytical results, including the frequency of detection, range of detected concentrations, range of reporting limits, mean of detected concentrations, and the screening background concentrations for each of the analytes. In addition, maximum and average exposure point concentrations are provided for analytes selected as ECPCs.

Twenty-one of 46 analytes detected in groundwater from the OWTP Area were selected as ECPCs. The 21 analytes include 3 volatiles (2-butanone, acetone, and carbon disulfide), 9 semivolatiles, and 9 inorganics. Calcium, magnesium, and sodium were not included in the screening process because they are naturally occurring nutrients.

4.4.2 **Exposure Assessment** The exposure assessment identifies exposure pathways and estimates the magnitude of exposures for aquatic receptors to ECPCs in groundwater. Potential exposure pathways for aquatic receptors to contamination from the OWTP Area are identified in the contaminant pathway model (Figure 4-11).

Aquatic receptors in the St. Johns River may be exposed to contamination in groundwater from the OWTP Area as it discharges to the surface water of the St. Johns River. Exposure concentrations of groundwater ECPCs for aquatic receptors in the St. Johns River are estimated based on a worst-case exposure scenario. It is assumed that the average and maximum exposure point concentrations of ECPCs in groundwater (Table 4-25) are the concentrations to which the receptors would be exposed in the St. Johns River. This worst-case exposure scenario assumes no reduction in contaminant concentrations as a result of transport from the OWTP Area to the St. Johns River and no dilution once the contaminant is discharged.

The data collected at SWMUs 6, 7, 8, 9, 10 and 11 suggest that neither dissolved nor free-phase hydrocarbons appear to be discharging to the St. Johns River (see subsection 4.2.4, Groundwater Assessment). Therefore, less conservative exposures are also evaluated based on assumptions of 10, 100, and 1,000 times dilution of the groundwater (and respective maximum detected groundwater ECPC concentrations) as it is discharged into the St. Johns River. The dilution of existing groundwater conditions is used to model a reasonable scenario where groundwater through advection, dispersion, mixing, and retardation would discharge to a

Table 4-25
Selection of Ecological Chemicals of Potential Concern in Unfiltered Groundwater Samples Associated with the Oily Waste Treatment Plant (OWTP) Area

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Analyte	Frequency of Detection[1]	Range of Detected Concentrations	Mean of Detected Concentrations[2]	Screening Reference Concentration[3]	Florida Surface Water Quality Standards[4]	Analyte ECPC? (Yes/No)	95 percent UCL[5]	Arithmetic Mean[6]	Exposure Point Concentrations	
									Maximum[7]	Average[8]
Volatile Analytes (µg/ℓ)										
2-Butanone	1/18	230 - 230	230	ND	NA	Yes	NC	NC	230	230
Acetone	5/23	7* - 330	79.2	16	NA	Yes	NC	NC	330	79.2
Benzene	1/23	2 - 2	2	ND	71.28	No[9]				
Carbon disulfide	4/23	2 - 4	2.8	1	NA	Yes	2.8	2.7	2.8	2.7
Chloroform	1/23	7 - 7	7	2.5	470.8	No[9,10]				
Ethylbenzene	1/23	21 - 21	21	ND	NA	No[9]				
Methylene chloride	1/23	2 - 2	2	ND	1,580	No[9,11]				
Toluene	1/23	3 - 3	3	ND	NA	No[9]				
Semivolatile Analytes (µg/ℓ)										
2,4-Dimethylphenol	1/23	180 - 180	180	ND	NA	No[9]				
2-Methylnaphthalene	5/23	42.5* - 140	93.1	ND	NA	Yes	46.5	25.7	46.5	25.7
2-Methylphenol	1/23	180 - 180	180	ND	NA	No[9]				
3- and 4-Methylphenol	1/23	480 - 480	480	29	NA	No[9]				
4-Chloro-3-methylphenol	1/23	4* - 4*	4	ND	NA	No[9]				
Acenaphthene	3/23	2* - 9	5.3	ND	2.7	Yes	7.9	6.8	7.9	6.8
Benzoic acid	2/19	8 - 17	12.5	ND	NA	Yes	42.1	34.2	17	17
Dibenzofuran	2/23	3 - 5	4	ND	NA	Yes	7.5	6.7	5	5
Diethylphthalate	4/23	2 - 20	7.3	ND	NA	Yes	6.5	5.6	6.5	5.6
Dimethylphthalate	3/23	4* - 17	8.3	ND	NA	Yes	8.6	7.4	8.6	7.4
Fluorene	4/23	4* - 14	7.5	ND	14	Yes	8.2	7.2	8.2	7.2
Naphthalene	5/23	78.5* - 170	123	ND	NA	Yes	67.4	32.1	67.4	32.1
Nitrobenzene	1/23	3 - 3	3	ND	NA	No[9]				
Phenanthrene	3/23	4* - 12	7	ND	NA	Yes	8	7	8	7
bis(2-Ethylhexyl)phthalate	1/23	4* - 4*	4	6.2	NA	No[9,10]				

See notes at end of table.

Table 4-25 (Continued)
Selection of Ecological Chemicals of Potential Concern in Unfiltered Groundwater Samples Associated with the Oily Waste Treatment Plant (OWTP) Area

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Analyte	Frequency of Detection[1]	Range of Detected Concentrations	Mean of Detected Concentrations[2]	Screening Reference Concentration[3]	Florida Surface Water Quality Standards[4]	Analyte ECPC? (Yes/No)	95 Percent UCL[5]	Arithmetic Mean[6]	Exposure Point Concentrations	
									Maximum[7]	Average[8]
Pesticides/PCBs (µg/ℓ)										
Endrin aldehyde	1/23	0.052 - 0.052	0.05	ND	NA	No[9]				
Endrin ketone	1/23	0.048 - 0.048	0.05	ND	NA	No[9]				
Inorganic Analytes (µg/ℓ)										
Arsenic	19/23	0.6 - 41.2	5.7	9.8	50	No[11]				
Barium	21/23	3.7 - 112	20	39	NA	Yes	50.9	27	50.9	27
Beryllium	1/23	1.6 - 1.6	1.6	ND	0.13	No[9]				
Cadmium	2/23	1.1 - 1.7*	1.4	ND	9.3	No[11]				
Calcium	22/22	33,800 - 1,830,000	191,657	207,466	NA	No[12]				
Chromium	1/23	40.9 - 40.9	40.9	10.4	50	No[9,11]				
Cobalt	1/23	11.7 - 11.7	11.7	ND	NA	No[9]				
Copper	1/23	15.4 - 15.4	15.4	2.8	2.9	No[9,10,11]				
Cyanide	5/23	0.82 - 12.8	4.3	1.9	1.0	Yes	3.7	2.8	3.7	2.8
Iron	18/22	38 - 34,500	4,717	1,728	300	Yes	268,337	3,863	34,500	3,863
Lead	7/23	0.8 - 45.9	8.8	2.6	5.6	Yes	5.3	3.5	5.3	3.5
Magnesium	22/22	5,480 - 401,000	82,204	153.984	NA	No[12]				
Manganese	22/22	1.4 - 2,260	209	210	NA	Yes	1,249	209	1,249	209
Mercury	3/23	0.08* - 0.29	0.15	0.16	0.025	Yes	0.23	0.16	0.23	0.16
Nickel	2/23	6.3 - 19.9	13.1	ND	8.3	Yes	16.3	9.8	16.3	9.8
Selenium	1/23	1.55* - 1.55*	1.5	11.8	71	No[9,10,11]				
Silver	1/23	2.1 - 2.1	2.1	ND	0.05	No[9]				
Sodium	22/22	4,980 - 3,475,000*	609,285	1,519,016	NA	No[12]				
Thallium	2/23	1.5 - 1.7	1.6	ND	48	No[11]				

See notes at end of table.

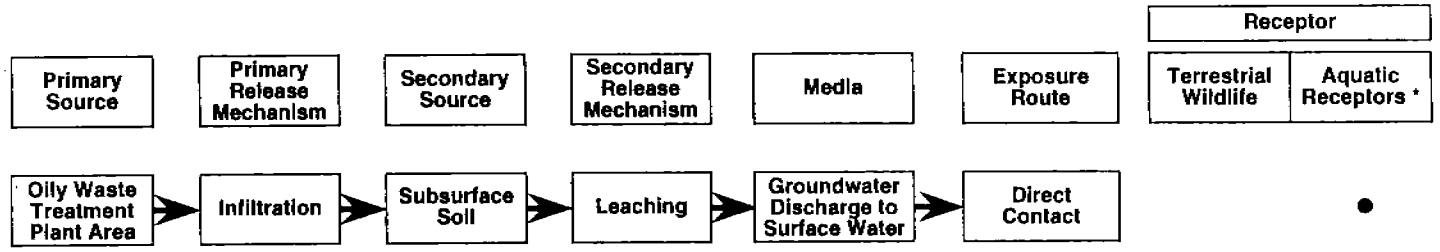
Table 4-25 (Continued)
Selection of Ecological Chemicals of Potential Concern in Unfiltered Groundwater Samples Associated With the Oily Waste Treatment Plant (OWTP) Area

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Analyte	Frequency of Detection[1]	Range of Detected Concentrations	Mean of Detected Concentrations[2]	Screening Reference Concentration[3]	Florida Surface Water Quality Standards[4]	Analyte ECPC? (Yes/No)	95 Percent UCL[5]	Arithmetic Mean[6]	Exposure Point Concentrations	
									Maximum[7]	Average[8]
Vanadium	18/23	2 - 60.3	6.7	9.2	NA	Yes	17.6	10.7	17.6	10.7
Zinc	8/23	2 - 127	22.6	41.6	86	Yes	40	11.5	40	11.5

[1] Frequency of detection is the number of samples in which the analyte is detected divided by the total number of samples analyzed (10OP001, 08MW001S, 08MW010S, 08MW012S, 08MW013I, 08MW013S, 08MW014S, 08MW015I, 08MW016S, 08MW017S, 08MW018S, 08MW019S, 08MW020S, 08MW004S, 08MW006S, 8MW7, 08MW008S, 08MW009S, 09MW001S, 09MW002S, 09MW003S, 0SMW002S, and 0SMW003S).
[2] The average of detected concentrations is the arithmetic mean of all samples in which the analyte was detected; it does not include those samples in which the analyte was not detected.
[3] Background sample locations include 01MW001, 08MW005S, 0BMW001S, 8MW5S, MPT-1-MW1-1, MPT-S-1-S, S-1, 08MW005I, 0BMW001I, 08MW005D, and OBMW001D, with a duplicate at 0SMW001RD. The average concentrations of analytes detected in the background locations are listed in the RCRA Facility Investigation General Information Report (ABB Environmental Services, Inc., 1995). Two times the background concentration is calculated for inorganics.
[4] Florida Department of Environmental Protection, 62-302, Florida Administrative Code (1995 Version); surface water quality standards for Class III marine waters.
[5] The 95 percent UCL is calculated on the log-transformed average of all concentrations using the formula provided in the U.S. Environmental Protection Agency (USEPA) Region IV Supplemental Guidance (USEPA, 1991).
[6] The arithmetic mean of all concentrations assigns a value of one-half of the contract-required quantitation limit for organics and method detection limit for inorganics to all nondetects.
[7] The maximum exposure concentration is equal to the 95 percent UCL or the maximum detected concentration, whichever is less.
[8] The average exposure concentration is equal to the arithmetic mean or the maximum detected concentration, whichever is less.
[9] Analyte is detected in less than 5 percent of samples collected.
[10] Maximum detected concentration is less than one time the average background concentration for organics or less than two times the average background concentration for inorganics.
[11] Maximum detected concentration is less than the Florida surface water quality standard and, therefore, the analyte will not be evaluated in the ecological risk assessment.
[12] Analyte is an essential nutrient and is not present at toxic levels.

Notes: RCRA = Resource Conservation and Recovery Act.
$\mu g/\ell$ = micrograms per liter.
ECPC = ecological chemical of potential concern.
UCL = upper confidence limit.
ND = not detected in the background samples.
NA = not available.
NC = not calculated.
PCB = polychlorinated biphenyl.



* Aquatic receptors include invertebrates, plants, algae, amphibians, fish, and reptiles.

FIGURE 4-11

CONTAMINANT PATHWAY MODEL FOR ECOLOGICAL RECEPTORS, SWMUs 6, 7, 8, 9, 10, AND 11

RCRA FACILITY INVESTIGATION REPORT, GROUP II SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

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surface water body. This is used to assess whether an adverse impact to the environment is probable.

4.4.3 Ecological Effects Assessment The ecological effects assessment describes the potential adverse effects associated with ECPCs in groundwater to aquatic receptors. Ecological effects are estimated based on aquatic toxicity benchmarks. Aquatic toxicity information for the ECPCs is obtained from searches of the USEPA AQUIRE database (Appendix F-1). Table 4-26 provides a summary of the toxicity testing information available from the AQUIRE search and a range of concentrations associated with lethal and sublethal effects to fish, invertebrates, mollusks, and algae. For each ECPC, the effect concentrations from AQUIRE are compared with the exposure concentrations to evaluate potential risks in Subsection 4.4.4.

4.4.4 Risk Characterization Risks are evaluated for aquatic life associated with exposures to ECPCs in groundwater from the OWTP Area as it discharges to the St. Johns River. The predicted maximum and average concentrations for groundwater ECPCs in the St. Johns River are compared to the State of Florida surface water quality standards for Class III marine water (Chapter 62-302, FAC), the Ambient Water Quality Criteria (AWQC) (USEPA, 1986b), and the lowest reported adverse effect concentration in AQUIRE in Table 4-27. In order to interpret exceedances of toxicity benchmarks, two columns are included in Table 4-27 that report the concentration of the analyte in monitoring wells adjacent to the St. Johns River (MPT-8-MW19S and MPT-8-MW20S) and concentrations detected in surface water samples from the St. Johns River adjacent to the OWTP Area of the NAVSTA Mayport GIR [ABB-ES, 1995a]). In addition, concentrations of analytes detected in background surface water samples (MPT-B-SW1 through MPT-B-SW7; Tables 3-15 and 3-16 of the NAVSTA Mayport GIR [ABB-ES, 1995a]) are listed.

Exposure point concentrations of phenanthrene, iron, cyanide, nickel, and mercury exceed the lowest toxicity benchmark concentrations. The exposure point concentration of acenaphthene exceed the Florida surface water quality standard of 2.7 $\mu g/\ell$, however, this standard is not directly applicable to aquatic receptors because it is based on human health concerns and not toxicity to aquatic life. Concentrations of acenaphthene are less than the Federal AWQC values for protection of aquatic life for marine water (acute, 970 $\mu g/\ell$ and chronic 710 $\mu g/\ell$).

The maximum exposure point concentration for phenanthrene of 8 $\mu g/\ell$ is higher than the proposed Federal AWQC of 4.6 $\mu g/\ell$. Future discharges of phenanthrene in groundwater to surface water are expected to be diluted by at least two times and should not represent a risk for aquatic receptors.

Future discharges of iron to the surface water of the St. Johns River are not expected to result in unacceptable risks for aquatic receptors. The most sensitive of species, a dinoflagellate, would be protected if dilution of not less than 500 times were to occur. Most species (fish and invertebrates) would be protected at exposure concentrations three to four times lower than the groundwater exposure point concentrations.

The maximum exposure point concentration of cyanide at 3.7 $\mu g/\ell$ is within the range of concentrations detected in the St. Johns River surface water samples (1.1 to 3.9 $\mu g/\ell$). The respective maximum and average exposure point concentrations of nickel of 16.3 $\mu g/\ell$ and 9.8 $\mu g/\ell$ are within the concentration reported from background surface water samples of 13 $\mu g/\ell$ (ABB-ES, 1995a). Future discharge

Table 4-26
Results of AQUIRE Search for Toxicity of Groundwater Ecological Chemicals of Potential Concern at the Oily Waste Treatment Plant Area to Aquatic Receptors
(Number of Studies / Range of Concentrations)

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Analyte	Fish		Invertebrates		Mollusks		Algae and Aquatic Plants
	Lethal	Sublethal	Lethal	Sublethal	Lethal	Sublethal	Sublethal
Volatile Analytes ($\mu g/\ell$)							
2-Butanone	--	--	--	--	--	--	--
Acetone	1 / 1.1×10^7	--	2 / 2.1×10^6 - 1.67×10^7	--	1 / 2.5×10^5	1 / 1.0×10^4	--
Carbon disulfide	--	--	--	--	--	--	--
Semivolatile Analytes ($\mu g/\ell$)							
2-Methylnaphthalene	11 / 2.0×10^3 - 6.0×10^3	5 / 300 - 1.0×10^4	10 / 600 - 5.0×10^3	--	--	--	--
Acenaphthene	--	1 / 2.2×10^3	--	--	--	1 / 380	--
Benzoic acid	--	--	--	--	--	1 / 4.07×10^9	--
Dibenzofuran	1 / 1.8×10^3	--	--	--	--	--	--
Diethylphthalate	1 / 3.0×10^4	--	--	--	--	--	3 / 3.0×10^3 - 3.3×10^4
Dimethylphthalate	2 / 5.8×10^4 - 1.15×10^5	--	1 / 6.2×10^4	--	--	--	4 / 5.4×10^4 - 1.85×10^5
Fluorene	--	--	1 / 1.0×10^3	--	--	--	--
Naphthalene	19 / 2.0 - 3.0×10^4	11 / 120 - 6.5×10^3	38 / 850 - 2.0×10^4	6 / 88 - 3.19×10^3	1 / 1.1×10^4	3 / 5.0×10^3 - 1.94×10^5	4 / 695 - 2.21×10^3
Phenanthrene	--	--	9 / 75 - 600	3 / 200 - 520	--	--	--
Inorganic Analytes ($\mu g/\ell$)[2]							
Barium	--	--	1 / 1.0×10^4	1 / 1.0×10^4	--	--	--
Cyanide	--	--	--	--	--	--	--
Iron	2 / 6.88×10^4 - 9.94×10^4	--	1 / 1.0×10^3	1 / 1.0×10^3	--	--	27 / 100 - 1.0×10^5

See notes at end of table.

Table 4-26 (Continued)
Results of AQUIRE Search for Toxicity of Groundwater Ecological Chemicals of Potential Concern at the Oily Waste Treatment Plant Area to Aquatic Receptors
(Number of Studies / Range of Concentrations)

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Analyte	Fish		Invertebrates		Mollusks		Algae and Aquatic Plants
	Lethal	Sublethal	Lethal	Sublethal	Lethal	Sublethal	Sublethal
Manganese	--	--	--	--	--	3 / 2.0×10^4	--
Vanadium	--	--	--	--	--	--	23 / 5.0×10^2 - 5.0×10^4

[1] Toxicity information was retrieved from AQUIRE and is included as Appendix F-1.
[2] Toxicity information for lead, mercury, nickel, and zinc was not searched in AQUIRE because sufficient aquatic toxicity information was retrieved from Ambient Water Quality Criteria (U.S. Environmental Protection Agency, 1986b).

Notes: RCRA = Resource Conservation and Recovery Act.
SWMU = solid waste management unit.
$\mu g/\ell$ = micrograms per liter.
-- = information not available.

Table 4-27
Comparison of Oily Waste Treatment Plant Area Groundwater Ecological Chemical of Potential Concern Exposure Concentrations (in St. Johns River) with Toxicity Benchmarks

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Analyte	St. Johns River Exposure Concentration: Maximum / Average Exposure Point Concentrations for Groundwater[1]	Concentrations Detected in MPT-8-19S and MPT-8-20S	Florida Surface Water Quality Standard[2]	Federal AWQC[3]	AQUIRE[4] (Lowest reported adverse effect concentration)	Concentrations Detected in Surface Waters of St. Johns River[5]	Results of Comparison
Volatile Analytes (µg/ℓ)							
2-Butanone	230 / 230	ND	NA	NA	NA	2	Benchmark not available
Acetone	330 / 79.2	17	NA	NA	10,000	5	Benchmark not exceeded
Carbon disulfide	2.8 / 2.7	ND	NA	NA	NA	ND	Benchmark not available
Semivolatile Analytes (µg/ℓ)							
2-Methylnaphthalene	46.5 / 25.7	ND	NA	NA	300	ND	Benchmark not exceeded
Acenaphthene	7.9 / 6.8	ND	2.7	[6]710	380	ND	Applicable Benchmark not exceeded[8]
Benzoic acid	17 / 17	ND	NA	NA	4.07×10^{9}	ND	Benchmark not exceeded
Dibenzofuran	5 / 5	ND	NA	NA	1,800	ND	Benchmark not exceeded
Diethylphthalate	6.5 / 5.6	ND	NA	NA	3,000	ND	Benchmark not exceeded
Dimethylphthalate	8.6 / 7.4	ND	NA	NA	54,000	ND	Benchmark not exceeded
Fluorene	8.2 / 7.2	ND	14	NA	1,000	ND	Benchmark not exceeded

See notes at end of table.

Table 4-27 (Continued)
Comparison of Oily Waste Treatment Plant Area Groundwater Ecological Chemical of Potential Concern Exposure Concentrations (in St. Johns River) with Toxicity Benchmarks

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Analyte	St. Johns River Exposure Concentration: Maximum / Average Exposure Point Concentrations for Groundwater[1]	Concentrations Detected in MPT-8-19S and MPT-8-20S	Florida Surface Water Quality Standard[2]	Federal AWQC[3]	AQUIRE[4] (Lowest reported adverse effect concentration)	Concentrations Detected in Surface Waters of St. Johns River[5]	Results of Comparison
Naphthalene	67.4 / 32.1	ND	NA	NA	2 / Mummichog mortality	ND	Exceedance of 33.7 times the lowest benchmark
Phenanthrene	8 / 7	ND	NA	[7]4.6	75	ND	Exceedance of 1.7 times the lowest benchmark
Inorganic Analytes (µg/ℓ)							
Barium	50.9 / 27	5.35 - 7.25	NA	NA	10,000	6.6 - 8.7	Benchmark not exceeded
Cyanide	3.7 / 2.8	ND	1.0	NA	NA	1.1 - 3.9	Exceedance of 3.7 times the lowest benchmark
Iron	34,500 / 3,863	327.5	300	NA	100 / Dinoflagellate population growth	ND	Exceedance of 345 times the lowest benchmark
Lead	5.3 / 3.5	8.5	5.6	8.5	NS	ND	Exceedance of 1.02 times the lowest benchmark
Manganese	1,249 / 209	23.55 - 23.85	NA	NA	20,000	ND	Benchmark not exceeded
Mercury	0.23 / 0.16	ND	0.025	0.0025	NS	ND	Exceedance of 92 times the lowest benchmark

See notes at end of table.

Table 4-27 (Continued)
Comparison of Oily Waste Treatment Plant Area Groundwater Ecological Potential of Potential Concern Exposure Concentrations (in St. Johns River) with Toxicity Benchmarks

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Analyte	St. Johns River Exposure Concentration: Maximum / Average Exposure Point Concentrations for Groundwater[1]	Concentrations Detected in MPT-8-19S and MPT-8-20S	Florida Surface Water Quality Standard[2]	Federal AWQC[3]	AQUIRE[4] (Lowest reported adverse effect concentration)	Concentrations Detected in Surface Waters of St. Johns River[5]	Results of Comparison
Mercury	0.23 / 0.16	ND	0.025	0.0025	NS	ND	Exceedance of 92 times the lowest benchmark
Nickel	16.3 / 9.8	ND	8.3	8.3	NS	ND	Exceedance of 2.5 times the lowest benchmark
Vanadium	17.6 / 10.7	3.2 - 3.6	NA	NA	500	1.8	Benchmark not exceeded
Zinc	40 / 11.5	ND	86	86	NS	1.4 - 5.3	Benchmark not exceeded

[1] From Table 4-25.
[2] U.S. Environmental Protection Agency (USEPA) Ambient Water Quality Chronic Criteria (USEPA, 1986b).
[3] Florida Department of Environmental Protection, 62-302, Florida Administrative Code (1995 Version); surface water quality standards for Class III marine waters.
[4] From Table 4-26.
[5] Range of detected concentrations from the RCRA Facility Investigation General Information Report (ABB-ES, 1995a).
[6] Insufficient data to develop criteria. Value presented is the lowest observed effects level.
[7] Proposed standard or criteria.
[8] State of Florida Surface Water Quality standard is based on human health concerns and not toxicity to aquatic life.

Notes: RCRA = Resource Conservation and Recovery Act.
SWMU = solid waste management unit.
NA = not available.
ND = not detected.
$\mu g/\ell$ = micrograms per liter.
AWQC = ambient water quality criteria.
AQUIRE = Aquatic Information Retrieval

of these metals in groundwater to surface water would not result in increasing the current concentrations and will not represent a risk for aquatic receptors. The highest concentration of lead detected in the monitoring wells adjacent to the St. Johns River is slightly below the Federal AWQC and the Florida surface water standard. The maximum and average exposure point concentrations in groundwater at 5.3 $\mu g/\ell$ and 3.5 $\mu g/\ell$ (using all monitoring wells) do not exceed the benchmarks. Lead was detected in background surface water samples at concentrations ranging from 0.91 $\mu g/\ell$ to 1.5 $\mu g/\ell$ (ABB-ES, 1995a). Lead in groundwater is not expected to present a risk for aquatic receptors in the St. Johns River for the following reasons:

- The highest concentration of lead detected in groundwater in the monitoring wells located adjacent to the St. Johns River is equal to the toxicity benchmarks. It is expected that some dilution will occur as the groundwater is discharged to surface water, and actual exposure concentrations in the river will be lower than the benchmarks.

- The fraction of lead biologically available and potentially toxic to aquatic receptors is likely to be considerably less than the concentrations measured. The unfiltered analyses of the groundwater represents both dissolved and nondissolved phases of the metal. Only the dissolved phase of the metal is considered to be biologically available and potentially toxic to aquatic receptors (USEPA, 1993c).

The respective maximum and average exposure point concentrations of mercury in groundwater of 0.23 $\mu g/\ell$ and 0.16 $\mu g/\ell$ exceed the toxicity benchmarks. However, the concentrations are close to the background screening concentration for mercury of 0.16 $\mu g/\ell$, suggesting that mercury in groundwater may not be related to the OWTP Area. Mercury was not detected in the monitoring wells adjacent to the St. Johns River. If concentrations of mercury in groundwater are discharged to the St. Johns River in the future, they could represent a risk for aquatic receptors as a result of bioconcentration and bioaccumulation in fish and invertebrate tissue. However, future risks associated with the transport of mercury into the St. Johns River may not be attributable to the OWTP Area.

4.4.5 Uncertainty Analyses A number of uncertainties and assumptions are inherent in the ecological risk assessment process. The NAVSTA Mayport GIR (ABB-ES, 1995a) summarizes general ERA uncertainties. Specific uncertainties associated with the evaluation of risks from potential groundwater contamination at the OWTP Area include the following:

- The presumption of no risks for aquatic life resulting from potential exposures to phenanthrene, cyanide, iron, and nickel in groundwater assumes, in part, that the dilution of groundwater, as it is discharged into the St. Johns River, is at least five times. If dilution is less, risks may be underestimated.

- The unfiltered analyses of the groundwater included both dissolved and nondissolved phases of the metal. Only the dissolved phase of the metal is considered to be biologically available and potentially toxic to aquatic receptors (USEPA, 1993c). The metals concentrations used are an overestimate of exposure and risks.

- Aquatic toxicity benchmarks are not available for 2-butanone and carbon disulfide, resulting in a possible underestimate of risks.

5.0 SWMU 12 - NEUTRALIZATION BASIN

SWMU 12, the Neutralization Basin, is located in the northern part of NAVSTA Mayport, approximately 40 feet north of Boiler Building 1241 and 75 feet from the St. Johns River (Figure 5-1). This chapter provides a description and history of SWMU 12, a description of the ecological setting at SWMU 12, RFI field activities, results and interpretation of the 1993 and 1994 environmental sample analyses, and the human health and ecological assessment.

5.1 SWMU 12 DESCRIPTION. The Neutralization Basin was formerly used to store treated effluent from the anion and cation exchange process used in the boiler plant. Prior to the existing neutralization basin, two other basins were used to treat effluent from the boiler plant. The first neutralization basin was a temporary unlined basin used only during the construction of a permanent basin. This basin was reportedly located northeast of the boiler plant and began operation in January or February 1971. The exact location of the first basin is not known, and no visible signs of the basin currently exist. Construction of the second neutralization basin was completed in 1971. The second basin had an asphalt base covered with a synthetic liner. This basin was reported to have been in good condition until it was damaged by a storm in 1985. As a result, the basin materials were removed and the existing neutralization basin was constructed on the site of the second basin in 1986.

The existing neutralization basin is approximately 59 feet wide, 78 feet long, and divided into two cells, each having a depth of 6 feet. The capacity of the basin is approximately 112,300 gallons with a 1.5-foot freeboard. The thickness of the concrete base is approximately 6 inches with side slopes approximately 4 inches thick. Construction design documents specified 12 inches of compacted soil (95 percent of a modified proctor [American Society for Testing and Materials (ASTM) D1557]) beneath the concrete base material. A Hypalon™ liner was placed over the concrete base and side slopes and a 6-foot chainlink fence was installed around the perimeter of the basin site.

Ecological Setting Coastal Berm communities are present along the St. Johns River 75 feet north of SWMU 12. A description of the Coastal Berm community and a list of aquatic species expected to exist in the St. Johns River are presented in the NAVSTA Mayport GIR (ABB-ES, 1995a).

Former Operations The neutralization basin was originally constructed to receive and neutralize backwash from recharging ion-exchange columns in the boiler plant. The neutralized wastewater was then discharged to the NAVSTA Mayport sanitary sewer system. The ion-exchange regeneration system was subsequently redesigned to accomplish neutralization prior to discharge into the basin. According to facility personnel, from July 1990 to January 1992 the basin was used for flow equalization and received and temporarily stored treated, nonhazardous effluent from the newly adopted anion and cation exchange process used in the boiler plant. Nonhazardous effluent from the neutralization basin was then discharged to the NAVSTA Mayport sanitary sewer system. In January 1992, this process was discontinued, and the neutralization basin was removed from operation. At present, there are no plans for future operation of the neutralization basin.

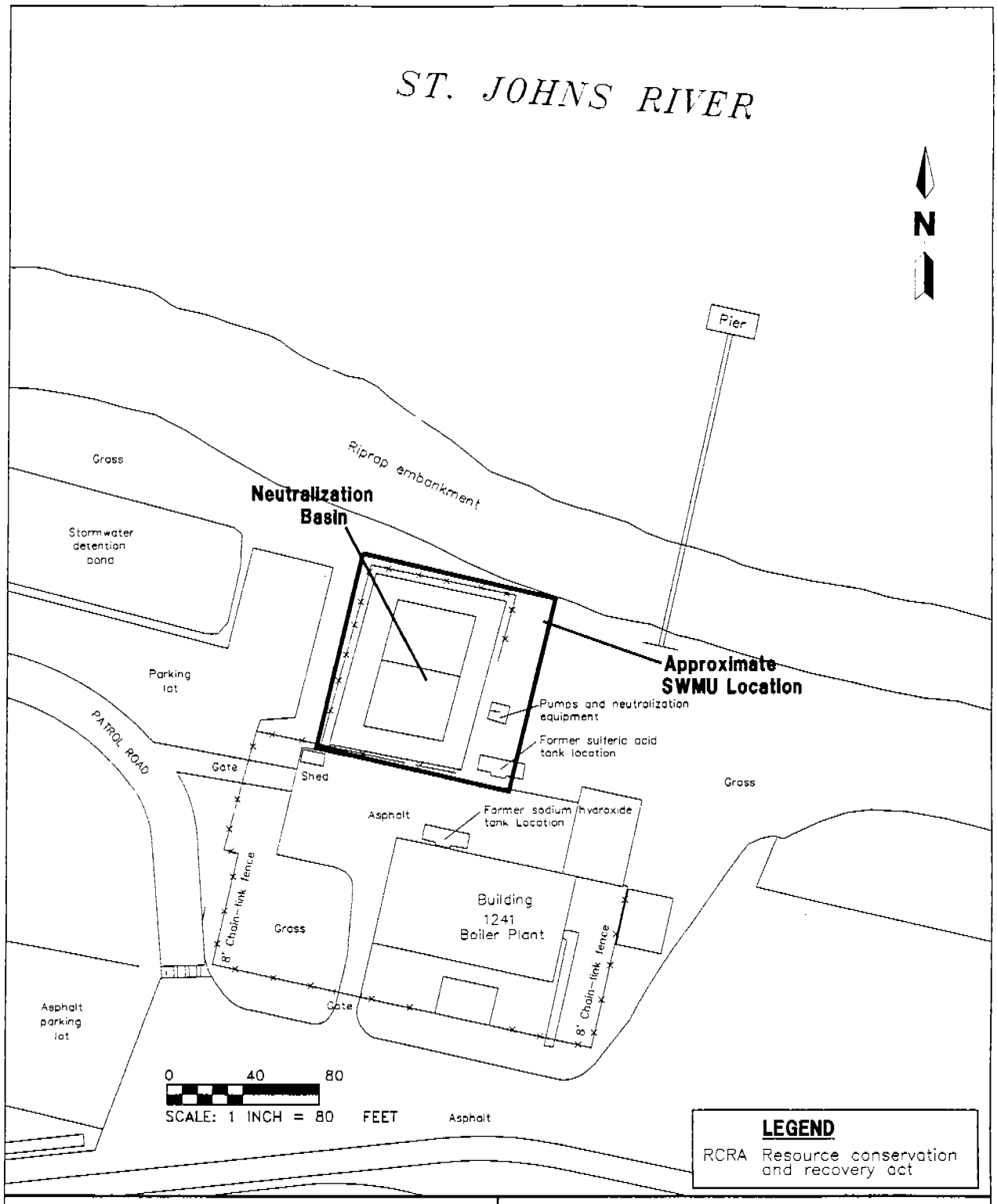

FIGURE 5-1
SOLID WASTE MANAGEMENT UNIT (SWMU) 12 LOCATION MAP

H:\9500\MAYFIGS\JC\11-16-95

RCRA FACILITY INVESTIGATION REPORT, GROUP II SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

During a recent interview, a facility maintenance contractor employee indicated that in 1992 a release of sodium hydroxide occurred near SWMU 12. The release occurred when the neutralization basin's sodium hydroxide tank was being removed from service. The tank had a faulty pump which resulted in the tank not being completely emptied prior to its removal. Consequently, the tank's contents (approximately 300 gallons of sodium hydroxide) were released on the ground, about 20 feet east of the southeastern corner of the neutralization basin and 40 feet north of the boiler plant (Building 1241). The area surrounding the release was later identified as having stressed vegetation. Consequently, a 6- to 9-inch-thick layer of soil was placed over the release area and the soil was seeded. Also, it should be noted that overtopping of the SWMU 12 basins has not been reported to have occurred.

5.1.1 Previous Investigations at SWMU 12 The existing neutralization basin was determined to be an RCRA hazardous waste management unit during a site inspection in 1987 by the FDEP, formerly FDER. This determination was made because effluent from the neutralization process potentially had a pH of less than 2 or greater than 12.5. As a result of this site visit, NAVSTA Mayport entered into a Consent Order (No. 87-1128) with the FDER and was required to submit a closure plan for the neutralization basin. The neutralization basin was also identified as a SWMU requiring an RFI in the NAVSTA Mayport HSWA permit.

5.1.1.1 **Closure Activities** In accordance with the Consent Order negotiated between NAVSTA Mayport and FDER, a closure plan pursuant to 40 CFR 264, Subpart G, and a groundwater monitoring plan that complied with the requirements of 40 CFR 264, Subpart F, were prepared. The FDER Consent Order included a waiver of groundwater monitoring requirements of 40 CFR 264, Subpart F, pursuant to 40 CFR 265.90 (e) if NAVSTA Mayport could demonstrate that no migration of hazardous waste or hazardous waste constituents from the neutralization basin had occurred. It further stated that, in order to demonstrate that no contaminant migration had occurred, the installation of at least one hydraulically downgradient and one hydraulically upgradient monitoring well was required. The Consent Order also required quarterly groundwater sampling and analyses. The initial quarterly samples were to be analyzed for parameters set forth in 40 CFR 265.92 (b) and the Florida Secondary Drinking Water Standards (SDWS), Chapter 17-550, FAC. The remaining three quarterly groundwater samples required analysis for pH, 40 CFR 265 Appendix III Metals, and any first quarter parameters that exceeded the Florida Drinking Water Standards (FDWS).

Implementation of the Groundwater Monitoring and Closure Plans (E.C. Jordan, 1988b; 1988c; 1989) was initiated in early 1989. The results of the sampling and analysis program for soil and groundwater were evaluated and submitted to the FDER in September 1990, and the final closure certificate was sent to the FDER on November 26, 1990. The FDER accepted the closure certificate and terminated the Consent Order No. 87-1128 by letter on March 8, 1991. Soil and groundwater sampling and analysis findings obtained during closure activities are summarized below.

Soil Sampling and Analysis. In May 1989, two soil borings were drilled at an angle beneath the neutralization basin to collect split-spoon soil samples in accordance with Addendum A to the Closure Plan (E.C. Jordan, 1989). The samples were analyzed for selected EPTOX metals.

The results of the EPTOX analysis of the four soil samples indicated that the samples did not contain detectable concentrations of Appendix III inorganics (arsenic, barium, cadmium, chromium, mercury, lead, selenium, and silver). The pH of the soil samples ranged from 8.18 to 9.16 standard units. Based on these analytical results, the soil beneath the neutralization basin would not be considered a "hazardous waste" if excavated and disposed of.

Quarterly Groundwater Sampling and Analysis. Two monitoring wells, MPT-11-MW01S and MPT-11-MW02S, were installed on January 24, 1989 (Figure 5-2). Groundwater samples were collected during four quarterly sampling events: April 25, 1989; July 6, 1989; October 10, 1989; and January 4, 1990. The samples for the first quarterly sampling event were analyzed for Appendix III groundwater quality parameters, organics, radionuclides, and metals in accordance with the Consent Order and Groundwater Monitoring Plan (40 CFR 265.92[b][2] and [3]). The analytical parameters were selected based on anecdotal information that organic compounds were previously used in the neutralization basin area and there was a history of low pH wastewater treatment and release from the basin. The results of the first quarterly samples are presented in Table 5-1. Based on analytical results from the first quarterly sampling event, samples collected during the three remaining sampling events were analyzed only for selected Appendix III metals in accordance with the Groundwater Monitoring Plan (E.C. Jordan, 1988b).

Chlorides and sulfate exceeded both the Federal and State maximum contaminant levels (MCLs) (established by Federal Primary Drinking Water Standards [PDWS] 40 CFR 141, and FDWS, Chapter 17-550, FAC) during the first quarterly sampling event (April 25, 1989). It should be noted, however, that chlorides and sulfides are inorganics that are commonly found in saline waters. Chloride, sodium, and sulfate were the dominant ions detected. These three ions were detected at higher concentrations in monitoring well MPT-11-MW02S, located near the St. Johns River, than in MPT-11-MW01S (Figure 5-2). Groundwater samples collected from MPT-11-MW02S did not meet the conditions for predominantly marine water as defined in Chapter 17-302.200, FAC (chloride ≥1,500 mg/ℓ).

TDS, as measured by a gravimetric method (USEPA Method 160.1), ranged from 991 mg/ℓ in a sample collected from MPT-11-MW01S to 3,264 mg/ℓ in a sample from MPT-11-MW02S and 2,343 in its duplicate sample. Groundwater is moderately saline in MPT-11-MW02S because water quality is influenced by the St. Johns River. The Appendix III organics (endrin, lindane, methoxychlor, toxaphene, 2,4-D; 2,4,5-TP) and radionuclides (radium and gross alpha) were not detected in the groundwater samples collected from either well or the duplicate sample.

Results for Appendix III metals from all four quarterly sampling events are presented in Table 5-2. The groundwater samples for inorganic constituents were collected without filtration and were preserved immediately after collection with nitric acid. The inorganic results reported are thus total concentrations and reflect both filterable (suspended) and nonfilterable (dissolved) fractions. None of the Appendix III metals detected in the groundwater samples exceeded the FPDWS or FDWS criteria.

The USEPA promulgated new regulations after the effective date of the FDER Consent Order in September 1987, requiring a Clean Closure Equivalency Demonstration (CCED) to show that units closed pursuant to 40 CFR 265 also meet the requirements of 40 CFR 264. This regulation requires the permittee to submit an equivalency

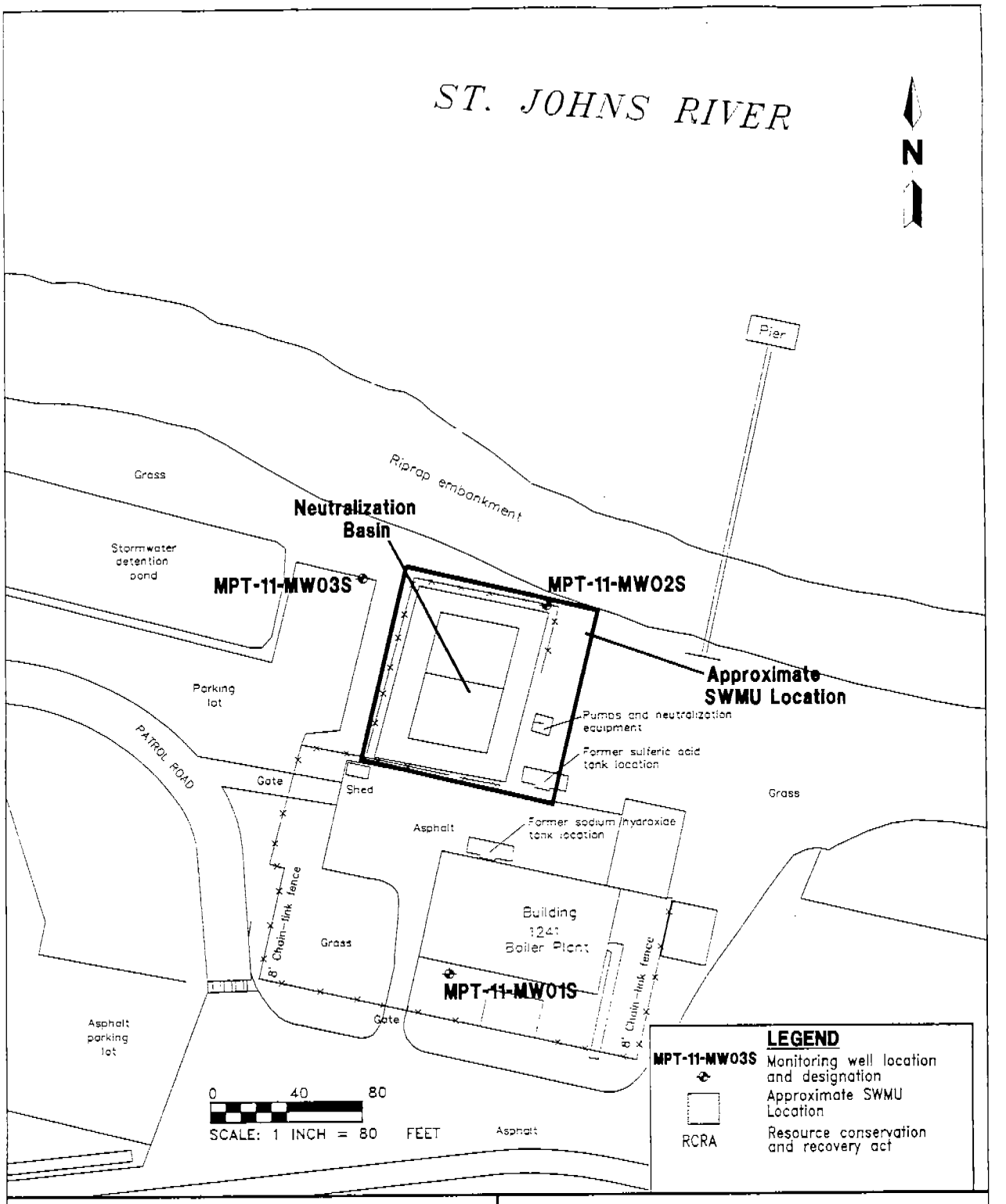

FIGURE 5-2
GROUNDWATER SAMPLE LOCATIONS
SOLID WASTE MANAGEMENT UNIT
(SWMU 12)

RCRA FACILITY INVESTIGATION
GROUP II SWMUs

U.S. NAVAL STATION
MAYPORT, FLORIDA

Table 5-1
Summary of Analytical Results,
First Quarter Groundwater Sampling, Solid Waste Management Units (SWMUs) SWMU 12,
April 25, 1989

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Parameter	Units	MCLs[1]	Florida Drinking Water Standard[2]	Laboratory Detection Limit[3]	Concentration in Samples		
					MPT-11-MW01S	MPT-11-MW02S	MPT-11-MW02S (dup)
40 CFR 265 Appendix III Metals							
Arsenic	mg/ℓ	0.05	0.05	0.001	0.007	0.016	0.011
Barium	mg/ℓ	2	2	0.03	bdl	bdl	bdl
Cadmium	mg/ℓ	0.005	0.005	0.0005	0.001	0.002	0.001
Chromium	mg/ℓ	0.1	0.1	0.01	bdl	bdl	0.010
Lead	mg/ℓ	0.005	0.015	0.01	bdl	0.005	bdl
Mercury	mg/ℓ	0.002	0.002	0.0001	bdl	bdl	bdl
Selenium	mg/ℓ	0.05	0.05	0.01	bdl	bdl	bdl
Silver	mg/ℓ	[3]0.10	100	0.0001	bdl	bdl	bdl
40 CFR 265 Appendix III Non-Metals							
Endrin	mg/ℓ	0.002	0.002	0.00007	bdl	bdl	bdl
Fluoride	mg/ℓ	4	44	0.01	0.43	1.5	1.5
Lindane	mg/ℓ	0.0002	0.0002	0.0002	bdl	bdl	bdl
Nitrate-N	mg/ℓ	10	10	0.1	0.3	bdl	bdl
Methoxychlor	mg/ℓ	0.04	0.04	0.005	bdl	bdl	bdl
Toxaphene	mg/ℓ	0.003	0.003	0.001	bdl	bdl	bdl
2,4-D	mg/ℓ	0.07	0.07	0.02	bdl	bdl	bdl
2,4,5-TP	mg/ℓ	0.05	0.05	0.002	bdl	bdl	bdl
Radium (226)	Pc/ℓ	20	–	0.0 ± 1.2	0.8 ± 0.1	0.9 ± 0.1	0.3 ± 0.1
Gross alpha	Pc/ℓ	15	15	1.2 ± 1.3	11.4 ± 8.6	0.0 ± 35.8	9.3 ± 14.7
Coliform bacteria	CTN/100 mℓ	–	1	1	bdl	bdl	bdl
Turbidity	NTU	–	–	0.1	6.2	16	14
40 CFR 265.92(b)(2) Parameters							
Chloride	mg/ℓ	250	250	1.0	170	1,084	1,734
Iron	mg/ℓ	0.3	0.3	0.02	6	4.7	7.3
Manganese	mg/ℓ	0.05	0.05	0.01	0.14	0.24	0.32
Total Phenols	mg/ℓ	–	0.01	0.001	bdl	bdl	bdl
Sodium	mg/ℓ	–	160	0.20	144	740	750
Sulfate	mg/ℓ	400/500	250	1.0	412	202	242

See notes at end of table.

Table 5-1 (Continued)
Summary of Analytical Results,
First Quarter Groundwater Sampling, Solid Waste Management Unit (SWMU) 12,
April 25, 1989

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Parameter	Units	MCLs[1]	Florida Drinking Water Standard[2]	Laboratory Detection Limit[3]	Concentration in Samples		
					MPT-11-MW01	MPT-11-MW02S	MPT-11-MW02S (dup)
40 CFR 265.92(b)(3) Parameters							
pH	Standard units	6.5-8.5	6.5-8.5	0.01	7.24	7.31	7.37
Specific conductance	μmhos/cm	–	–	0.1	1,491	5,630	4,255
Total organic carbon	mg/ℓ	–	–	.1	4	5	4
Total organic halogen	mg/ℓ	–	–	.001	70	70	70
Secondary Drinking Water Standards							
Color	Color	15	15	25.0	30	30	30
Copper	mg/ℓ	1.0	1	0.02	bdl	bdl	bdl
Corrosivity	LSI	–	–	.01	0.44	0.40	0.64
Foaming agents	mg/ℓ	0.5	0.5	–	0.027	0.060	0.052
Odor	Threshold odor number	3	3	1.0	1.0	1	1
Total dissolved solids	mg/ℓ	500	500	1	991	3,264	2,343
Zinc	mg/ℓ	[3]5	5	0.01	0.08	0.04	0.07

[1] MCLs, Safe Drinking Water Act 40 CFR Part 141 (May 1993).
[2] FDWS, Monitoring and Reporting, Title 17, Chapter 17-550, FAC (January 1, 1993).
[3] 40 CFR Part 143; National Secondary Drinking Water Standards (May 1993).
[4] The secondary standard for fluoride is 2 mg/ℓ.

Notes: RCRA = Resource Conservation and Recovery Act.
MCLs = maximum contaminant levels.
dup = duplicate.
mg/ℓ = milligrams per liter.
bdl = below detection limits.
2,4-D = 2,4-dichloroephenoxyacid.
2,4,5-TP = 2,4,5-Trichlorophenoxy)-acetic acid.
Pc/ℓ = picocuries per liter.
– = contaminant or parameter not regulated by U.S. Environmental Protection Agency or Florida Drinking Water Standards (FDWS) (Chapter 17-550,400, Florida Administrative Code [FAC]).
CTN = (total) coliform count.
NTU = nephelometric turbidity units.
μmhos/cm = micromhos per centimeter.
LSI = Langlier Saturation Index.
CFR = Code of Federal Regulations.
± = plus or minus.
mℓ = milliliter.

Table 5-2
Results of Chemical Analysis for Appendix III Metals Detected in Solid Waste Management Unit (SWMU) 12 Groundwater, Fourth Quarter Sampling Events

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Well	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
Florida Drinking Water Standards[1]	0.05	2.0	0.005	0.1	0.015	0.002	0.05	0.1
MCLs[2]	0.05	2.0	0.005	0.1	0.005	0.002	0.05	[3]0.10
Detection Limit	0.001	0.1	0.005	0.01	0.001	0.0001	0.003	0.0001
April 25, 1989								
MPT-11-MW01S	0.007	bdl	0.001	bdl	bdl	bdl	bdl	bdl
MPT-11-MW02S	0.016	bdl	0.002	bdl	0.005	bdl	bdl	bdl
MPT-11-MW02SD	0.011	bdl	0.001	0.010	bdl	bdl	bdl	bdl
July 6, 1989								
MPT-11-MW01S	0.008	bdl	0.0011	bdl	0.006	bdl	bdl	0.001
MPT-11-MW01SD	0.008	bdl	0.004	bdl	0.002	bdl	bdl	bdl
MPT-11-MW02S	0.006	bdl	0.002	bdl	bdl	0.0001	bdl	bdl
October 10, 1989								
MPT-11-MW01S	bdl	bdl	0.010	bdl	0.002	bdl	bdl	bdl
MPT-11-MW02S	0.004	bdl	bdl	bdl	bdl	0.0001	bdl	bdl
MPT-11-MW02SD	0.004	bdl	bdl	bdl	bdl	bdl	bdl	bdl
January 4, 1990								
MPT-11-MW01S	0.005	bdl	0.0007	bdl	0.003	bdl	bdl	bdl
MPT-11-MW01SD	0.007	bdl	0.0005	bdl	0.002	bdl	bdl	bdl
MPT-11-MW02S	0.012	bdl	0.0003	bdl	bdl	bdl	bdl	bdl

[1] Florida Drinking Water Standards, Title 17 Chapter 17-550, Florida Administrative Code (January 1, 1993).
[2] MCLs, Safe Drinking Water Act, 40 CFR Part 141 (May 1993).
[3] 40 CFR Part 143; National Secondary Drinking Water Standards, (May 1993).

Notes: RCRA = Resource Conservation and Recovery Act.
All concentrations in milligrams per liter (mg/ℓ).
Suffix "D" appended on identification identifies a duplicate sample.
MCL = maximum contaminant level.
bdl = below detection limit listed.
CFR = Code of Federal Regulations.
Method = U.S. Environmental Protection Agency 600/4-79-020, Revised March 1993.

demonstration of closure-by-removal under 40 CFR 270.1, (C). In order to comply with the new regulations, an additional monitoring well was installed at the neutralization basin during the RFI activities and a CCED petition was prepared and submitted to USEPA and FDEP (ABB-ES, 1994).

5.1.2 RFI Field Activities RFI field activities were conducted at SWMU 12 in 1993 and 1994. Field activities included the collection of groundwater samples from the three shallow monitoring wells (MPT-11-MW01S, MPT-11-MW02S, and MPT-11MW03S). Tables 2-1 and 2-2 (Section 2.1) provide details of the analytical and data management programs for the Group II SWMUs. Sampling procedures, background sampling information, and other installationwide sampling information is provided in the NAVSTA Mayport GIR (ABB-ES, 1995a).

5.1.2.1 1993 RFI Field Activities Three groundwater samples were collected from SWMU 12 in 1993 from shallow monitoring wells MPT-11-MW01S, MPT-11-MW02S, and MPT-11-MW03S (Figure 5-2). One duplicate sample was also collected (from MPT-11-MW03S). A bailer was used to purge the monitoring wells and collect the groundwater samples. The groundwater samples and associated duplicate sample were analyzed for VOCs, SVOCs, pesticides, PCBs, inorganics, cyanide, and water quality parameters.

5.1.2.2 1994 RFI Field Activities Three groundwater samples were collected from SWMU 12 in 1994 from shallow monitoring wells MPT-11-MW01S, MPT-11-MW02S, and MPT-11-MW03S (Figure 5-2). No duplicate samples were collected during the 1994 sampling event. Low-flow sampling with a peristaltic pump was used to purge the monitoring wells and collect the aliquots to be analyzed for inorganics, SVOCs, pesticides, and PCBs; bailers were used to collect the aliquot for VOCs. The three samples for inorganics analysis were split, and, prior to preservation with nitric acid, one aliquot was filtered (45 micron); the other aliquot was not filtered. Sampling procedures are described in more detail in the NAVSTA Mayport RFI workplan (ABB-ES, 1991b) and the NAVSTA Mayport GIR (ABB-ES, 1995). The samples (except for the filtered samples) were analyzed for VOCs, SVOCs, pesticides, inorganics, cyanide, and water quality parameters. The filtered samples were analyzed only for inorganics.

5.2 FINDINGS. Groundwater samples were collected from the three monitoring wells in two sampling events, one in 1993 and the other in 1994. Tables 5-3 through 5-5 present the concentrations of organic analytes, inorganic analytes, and water quality parameters detected in each sample, Table 5-6 lists statistics for each target analyte that was detected, and Table 5-7 compares detected concentrations with background screening and benchmark values.

5.2.1 Organics Organics detected in groundwater samples consist of four VOCs and two SVOCs (see Table 5-6). However, phenol was the only organic detected at a concentration that exceeds benchmark values (see Table 5-7).

Chlorinated solvents detected in groundwater samples collected from monitoring well MPT-11-MW03S during the 1994 sampling event were 1,1-dichloroethane, 1,2-dichloroethene, and methylene chloride. 1,1-Dichloroethane was also detected in 1993 at the same concentration (1 $\mu g/\ell$). The concentrations of 1,1-dichloroethane and 1,2-dichloroethene detected in the groundwater sample did not exceed benchmark values.

Table 5-3
Organic Analytes Detected in Groundwater Samples at Solid Waste Management Unit (SWMU) 12

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Analytical Batch No.:	2388	M745	3507	3507	M745
Sample Matrix:	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Sample Location:	MPT-11-MW02	MPT-11-MW02S	MPT-11-MW03	MPT-11-MW03	MPT-11-MW03S
Sample No.	MPT-11-2	11MW002S	11MW3	11MW3Dup	11MW003S
Date Sampled:	27-JAN-93	06-JUL-94	27-JAN-93	27-JAN-93	06-JUL-94
Volatile Analytes (µg/ℓ)					
Methylene chloride	--	--	--	--	1 J
Acetone	11	--	--	--	--
1,1-Dichloroethane	--	--	1 J	1 J	1 J
1,2-Dichloroethene (total)	--	--	--	--	2 J
1,2-Dichlorobenzene	--	2 J	--	--	--
Semivolatile Analytes (µg/ℓ)					
Phenol	22	43	--	--	--
4-Nitrophenol	--	11 J	--	--	13 J

Notes: RCRA = Resource Conservation and Recovery Act.
µg/ℓ = micrograms per liter.
-- = analyte not detected.
J = estimated value.

Table 5-4
Inorganic Analytes Detected in Groundwater Samples at Solid Waste Management Unit (SWMU) 12

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Analytical Batch No.:	2388	M747	M747	2388	M745	M745	2388	2388	M745	M745
Sample Matrix:	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Sample Location:	MPT-11-MW01	MPT-11-MW01S	MPT-11-MW01SF	MPT-11-MW02	MPT-11-MW02S	MPT-11-MW02SF	MPT-11-MW03	MPT-11-MW03	MPT-11-MW03S	MPT-MW03SF
Sample No.:	MPT-11-1	11MW001S	11MW001SF	MPT-11-2	11MW002S	11MW002SF	11MW3	11MW3Dup	11MW003S	11MW003SF
Date Sampled:	27-JAN-93	07-JUL-94	07-JUL-94	27-JAN-93	06-JUL-94	06-JUL-94	27-JAN-93	27-JAN-93	06-JUL-94	06-JUL-94
Inorganic Analytes (μg/ℓ)										
Antimony	--	--	5.4	--	--	6.3	--	--	--	--
Arsenic	14.1	3.2 J	4.2 J	34.3	42.5	40.8	2.7 J	3.2 J	1.7 J	1.3 J
Barium	37.2 J	3.9 J	4.9 J	4.3 J	--	--	8.8 J	9.5 J	5.6 J	5.6 J
Beryllium	1.4 J	--	--	--	--	--	--	--	--	--
Calcium	115,000	90,300	96,400	15,200	1,770 J	1,370 J	191,000	189,000	173,000	178,000
Chromium	27	--	--	6.3 J	5.1 J	4.5 J	4.6 J	5.2 J	--	--
Cobalt	5.1 J	--	--	--	--	--	--	--	--	--
Copper	14.5 J	7.4 J	--	6.3 J	19.7 J	15 J	9 J	12.9 J	--	--
Iron	14,200	--	--	888	180	62.9 J	2,510	3,070	915	390
Lead	10.5	--	2.1 J	--	5.7 J	9.8	--	--	1 J	1.9 J
Magnesium	8,720	7,300	8,150	9,440	98.3 J	40.5 J	44,300	43,500	30,700	31,600
Manganese	324	7.5 J	10 J	62.6	--	--	86.8	88.7	87.2	89.9
Mercury	--	--	--	--	0.12 J	0.11 J	--	--	--	--
Nickel	--	--	--	10.8 J	20.4 J	17.1 J	--	--	--	--
Sodium	NA	15,300 J	17,500 J	NA	831,000	797,000	NA	NA	223,000	232,000
Vanadium	28.7 J	5 J	3.4 J	79.2	110	98.2	8.1 J	8.3 J	--	--
Zinc	105	--	--	98.8	14.1 J	12.9 J	33.2	19.3 J	--	--
Cyanide	--	0.69 J	--	--	--	--	--	--	0.94 J	--

Notes: RCRA = Resource Conservation and Recovery Act.
μg/ℓ = micrograms per liter.
-- = analyte not detected.
J = estimated value.
The suffix "F" in the sample location and sample number indicates a groundwater sample that was filtered through a 45-micron screen prior to preservation. Samples without the suffix "F" were not filtered.

Table 5-5
Groundwater Quality Parameters in Groundwater Samples at Solid Waste Management Unit (SWMU) 12

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:		M747	M745	M745
Sample Matrix:		Water	Water	Water
Sample Location:		MPT-11-MW01S	MPT-11-MW02S	MPT-11-MW03S
Sample No.:		11MW001S	11MW002S	11MW003S
Date Sampled:	Units	07-JUL-94	06-JUL-94	06-JUL-94
Alkalinity as $CaCO_3$	mg/ℓ	248	1,440	347
Ammonia-N	mg/ℓ	0.7	2.2	0.7
Chloride	mg/ℓ	34	1,030	1,190
Hardness as $CaCO_3$	mg/ℓ	353	27	281
Nitrate/Nitrite-N	mg/ℓ	0.34	0.28	0.12
Oil and grease	mg/ℓ	--	10	--
Phosphorous-P, total	mg/ℓ	0.32	1.16	0.19
Sulfate	mg/ℓ	29.3	105	95.9
Sulfide	mg/ℓ	--	2	--
Total dissolved solids	mg/ℓ	374	2,550	1,370
Total Kjeldahl nitrogen	mg/ℓ	0.7	4.7	1.5
Total organic carbon	mg/ℓ	3.2	23.3	17.2
Color	Alpha	15	800	25
pH	Standard	7.5	11.4	7.2

Note: RCRA = Resource Conservation and Recovery Act.
mg/ℓ = milligrams per liter.
$CaCO_3$ = calcium carbonate.
APHA = American Public Health Association.

Table 5-6
Summary of Chemicals Detected in Solid Waste Management Unit (SWMU) SWMU 12 Groundwater

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Minimum Concentration[2]	Maximum Concentration[2]	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration
Volatile Analytes (µg/ℓ)						
1,1-Dichloroethane	1/3	1	1	1	5 - 5	11MW003S
1,2-Dichlorobenzene	2/3	1	2	2	5 - 5	11MW002S
1,2-Dichloroethene (total)	1/3	2	2	2	5 - 5	11MW003S
Methylene chloride	1/3	1	1	1	5 - 5	11MW003S
Semivolatile Analytes (µg/ℓ)						
4-Nitrophenol	2/3	11	13	12	50 - 50	11MW003S
Phenol	1/3	43	43	43	10 - 10	11MW002S
Inorganics Analytes (µg/ℓ)						
Arsenic	3/3	1.7	42.5	15.8	N/A	11MW002S
Barium	2/3	3.9	5.6	4.8	200 - 200	11MW003S
Calcium	3/3	1,770	173,000	88,357	N/A	11MW003S
Chromium	1/3	5.1	5.1	5.1	10 - 10	11MW002S
Copper	2/3	7.4	19.7	13.6	25 - 25	11MW002S
Cyanide	2/3	0.69	0.94	0.82	10 - 10	11MW003S
Iron	2/3	180	915	548	100 - 100	11MW003S
Lead	2/3	1	5.7	3.4	3 - 3	11MW002S
Magnesium	3/3	98.3	30,700	12,699.4	N/A	11MW003S
Manganese	2/3	7.5	87.2	47.4	15 - 15	11MW003S
Mercury	1/3	0.12	0.12	0.12	0.2 - 0.2	11MW002S
Nickel	1/3	20.4	20.4	20.4	40 - 40	11MW002S
Sodium	3/3	15,300	831,000	356,433	N/A	11MW002S
Vanadium	2/3	5	110	58	50 - 50	11MW002S

See notes at end of table.

Table 5-6 (Continued)
Summary of Chemicals Detected in Solid Waste Management Unit (SWMU) 12 Groundwater

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Minimum Concentration[2]	Maximum Concentration[2]	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration
Zinc	1/3	14.1	14.1	14.1	20 - 20	11MW002S

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed.
[2] A value indicated by an asterisk is the average of the detected concentrations in a sample and its duplicate. For nondetected values, one-half the contract-required quantitation limits/contract-required detection limit is used as a surrogate.
[3] The mean of detected concentrations is the arithmetic mean of all samples in which the analyte was detected. It does not include those samples in which the analyte was not detected.

Notes: RCRA = Resource Conservation and Recovery Act.
$\mu g/\ell$ = micrograms per liter.
N/A = not analyzed.

Table 5-7
Comparison of Analytes Detected in Solid Waste Management Unit (SWMU) 12 Groundwater to Background Screening and Benchmark Concentrations

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Maximum Concentration[1]	Background Screening Concentration[2]	Frequency Above Background Screening Concentration	Florida Guidance Concentration[3]	Frequency Above Florida Guidance Concentration	Risk-Based Screening Concentration[4]	Frequency Above Risk-Based Screening Concentration
Volatile Analytes µg/ℓ							
1,1-Dichloroethane	1	NSC	N/A	700	0/3	81	0/3
1,2-Dichlorobenzene	2	NSC	N/A	600	0/3	27	0/3
1,2-Dichloroethene (total)	2	NSC	N/A	70	0/3	5.5	0/3
Methylene chloride	1	NSC	N/A	5	0/3	4.1	0/3
Semivolatile Analytes µg/ℓ							
4-Nitrophenol	13	NSC	N/A	15	0/3	230	0/3
Phenol	43	NSC	N/A	10	1/3	2,200	0/3
Inorganics µg/ℓ							
Arsenic	42.5	9.3	1/3	50	0/3	0.038	3/3
Barium	5.6	39	0/3	2,000	0/3	260	0/3
Calcium	173,000	207,466	0/3	NSC	N/A	1,055,398	0/3
Chromium	5.1	10.4	0/3	100	0/3	18	0/3
Copper	19.7	2.8	2/3	1,000	0/3	140	0/3
Cyanide	0.94	1.9	0/3	200	0/3	73	0/3
Iron	915	1,728	0/3	300	1/3	13,267	0/3
Lead	5.7	3.6	1/3	15	0/3	15	0/3
Magnesium	30,700	153,984	0/3	NSC	N/A	118,807	0/3
Manganese	87.2	210	0/3	50	1/3	18	1/3
Mercury	0.12	0.16	0/3	2	0/3	1.1	0/3
Nickel	20.4	NSC	N/A	100	0/3	73	0/3
Sodium	831,000	1,519,016	0/3	160,000	2/3	396,022	1/3
Vanadium	110	9.2	1/3	49	1/3	26	1/3

See notes at end of table.

Table 5-7 (Continued)
Comparison of Analytes Detected in Solid Waste Management Unit (SWMU) 12
Groundwater to Background Screening and Benchmark Concentrations

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Maximum Concentration[1]	Background Screening Concentration[2]	Frequency Above Background Screening Concentration	Florida Guidance Concentration[3]	Frequency Above Florida Guidance Concentration	Risk-Based Screening Concentration[4]	Frequency Above Risk-Based Screening Concentration
Zinc	14.1	41.6	0/3	5,000	0/3	1,100	0/3

[1] A value indicated by an asterisk is the average of the detected concentrations in a sample and its duplicate. For nondetected values, one-half the contract-required quantitation limits/contract-required detection limit (CRQL/CRDL) is used as a surrogate.
[2] The background screening concentration is twice the mean of detected concentrations for inorganic analytes.
[3] Florida Guidance Concentrations, June 1994.
[4] U.S. Environmental Protection Agency Region III risk-based screening concentrations (February 9, 1995). Concentrations for noncarcinogenic risks are adjusted to a hazard index of 0.1.

Notes: RCRA = Resource Conservation and Recovery Act.
μg/kℓ = micrograms per liter.
NSC - no screening concentration.
N/A - not applicable.

Methylene chloride was detected in the groundwater sample from monitoring well MPT-11-MW03S. Methylene chloride is a common laboratory and field contaminant; however, it was not detected in the quality control samples associated with the sample analytical batch. The concentration detected did not exceed benchmark values.

1,2-Dichlorobenzene was detected in groundwater samples collected from monitoring well MPT-11-MW02S and MPT-11-MW03S in 1994 at concentrations of 2 $\mu g/\ell$ or less. The concentrations detected did not exceed benchmark values.

Phenol was detected in groundwater samples collected in 1993 and 1994 from monitoring well MPT-11-MW02S. The concentration detected in 1994 (43 $\mu g/\ell$) exceeded benchmark values (see Table 5-7).

4-Nitrophenol was detected in groundwater samples collected in 1994 from monitoring wells MPT-11-MW02S and MPT-11-MW03S at concentrations below benchmark values.

The organic compounds detected in the groundwater samples are not consistent with the use of the neutralization basin (i.e., pH adjustment), and it is unlikely that they are related to SWMU 12. The source of these chemicals is unknown. Additionally, with the exception of phenol, the organic chemicals detected in the SWMU 12 groundwater samples did not exceed Florida groundwater guidance concentrations.

5.2.2 Inorganics Sixteen inorganic target analytes were detected in groundwater samples; five of the analytes (arsenic, copper, lead, nickel, and vanadium) were detected at concentrations greater than background screening values or were detected in SWMU 12 groundwater samples but not in background samples. Arsenic, iron, manganese, sodium, and vanadium were detected in the groundwater samples at concentrations greater than benchmark values.

Concentrations of iron and manganese that exceed benchmark concentrations but are less than background screening concentrations were detected in the groundwater sample from MPT-11-MW03S (see Table 5-7). The dissolved oxygen measured in this well (2 $\mu g/\ell$) suggests that the iron and manganese may be naturally occurring in the soil and mobilized by a change in groundwater chemistry. The cause of the low dissolved oxygen measured in the groundwater sample from monitoring well MPT-11-MW3S is unknown.

Concentrations of sodium, magnesium, and calcium detected in the groundwater sample collected from monitoring well MPT-11-MW03S suggest that groundwater in the vicinity of this well is probably affected by saline water from the St. Johns River; however, this does not account for the dissolved oxygen concentration.

Arsenic was detected in groundwater samples collected from all three SWMU 12 monitoring wells at concentrations that exceed benchmark values. However, the concentration detected in the groundwater sample from monitoring well MPT-11-MW01S, which is located hydraulically upgradient from SWMU 12, was greater than the concentration detected in the groundwater sample collected from monitoring well MPT-11-MW03S (see Table 5-4). This suggests that the concentration of arsenic detected in the groundwater sample collected from monitoring well MPT-11-MW03S is not related to the SWMU. Additionally, concentrations of arsenic

detected in groundwater samples from monitoring wells MPT-11-MW01S and MPT-11-MW03S were less than background screening concentrations (see Table 5-7).

The concentration of arsenic detected in the groundwater sample collected from monitoring well MPT-11-MW02S is an order of magnitude higher than concentrations detected in groundwater samples collected from the other two monitoring wells (see Table 5-4). The sample from this monitoring well also contained the highest detected concentrations of other inorganic target analytes, including copper, lead, nickel, sodium, and vanadium. Filtered results suggest that these inorganics are dissolved in groundwater. This well is located at the northeast corner of the neutralization basin and directly hydraulically downgradient from the area where sodium hydroxide tank was formerly located. The exact location of the sodium hydroxide release is not known.

The following describes the rationale for characterizing the groundwater in the vicinity of monitoring well MPT-11-MW02S as being impacted by the sodium hydroxide release.

- Values for pH measured in groundwater samples collected in 1993 and 1994 from monitoring well MPT-11-MW02S were 10 (field measured) and 11.4 SUs (Table 5-5). These values exceed the Florida guidance concentration of 8.5 SU. The pH measurements taken before the 1992 release were approximately 7 SU. The results for pH measured in 1993 and 1994 suggest that the groundwater in the vicinity of this well may have been affected by the sodium hydroxide release.

- The concentration of sodium (831,000 $\mu g/\ell$) detected in the groundwater sample from monitoring well MPT-11-MW02S is several times higher than the concentration detected in the groundwater sample collected from monitoring well MPT-11-MW03S (223,000 $\mu g/\ell$), which is about the same distance from the river. Concentrations of sodium are expected to occur in the groundwater as both wells would be affected by saline river water. The disparity in the detected concentrations suggests that the groundwater in the vicinity of this well was affected by the sodium hydroxide release.

- Concentrations of calcium and magnesium detected in the groundwater sample from monitoring well MPT-11-MW02S are at least two orders of magnitude lower than concentrations detected in the sample from MPT-11-MW03S.

These findings are the basis for suggesting that the sodium hydroxide spill has affected the groundwater chemistry near MPT-11-MW02S. It is likely that the release has caused some inorganics, which likely are naturally present in the soil, to migrate with precipitation events and become dissolved constituents in groundwater in the vicinity of monitoring well MPT-11-MW02S.

The difference between analytical results of groundwater samples collected from monitoring well MPT-11-MW02S and the samples collected from the other two monitoring wells at SWMU 12 was not as apparent in the 1993 data as in the 1994 data. Differences between the 1993 and 1994 analytical results may be attributed to the different purging and sampling techniques used during these two sampling events. The 1993 groundwater samples were collected using a bailer, and 1994 samples were collected using low-flow sampling.

The 1993 data suggest that the highest measured concentrations of most inorganics were detected in the sample collected from the hydraulically upgradient monitoring well MPT-11-MW01S. This is contradicted by the 1994 data which suggest that the highest concentrations were detected in the sample from monitoring well MPT-11-MW02S.

The concentrations of inorganic target analytes detected in 1993 groundwater samples for SWMU 12 may be biased high because of suspended solids (sediment) in the samples. When the groundwater sample is preserved with nitric acid at a pH of 2 or less, some of the inorganics in the sediment may become dissolved in the sample. Because a bailer was used in 1993 for groundwater purging and sampling, the groundwater samples potentially contained sediments which, after preserving, introduced inorganics to the sample and biased the analytical results. As a result, there is poor correlation between the 1993 and 1994 analytical results. Groundwater samples produced from low-flow purging and sampling result in a sample with fewer suspended solids and are more representative of the aquifer; therefore, the analytical results for 1994 should be considered more accurate than the 1993 analytical results.

5.2.3 Summary Based on the SWMU 12 groundwater analytical results, the operation of the Neutralization Basin has not adversely affected groundwater quality at SWMU 12. However, the sodium hydroxide released when the sodium hydroxide storage tank was removed has adversely affected groundwater quality in the vicinity of monitoring well MPT-11-MW02S.

Organic chemicals detected in the groundwater samples collected from SWMU 12 are not consistent with the use of the neutralization basin. With exception of phenol, the organic chemicals were detected at concentrations less than Florida groundwater guidance concentrations. Iron, manganese, sodium, and vanadium were detected at concentrations that exceed Florida groundwater guidance concentrations. These inorganic chemicals are likely attributal to the diffusion of marine or estuarine water into the surficial aquifer and/or the sodium hydroxide release.

5.3 HUMAN HEALTH RISK ASSESSMENT FOR SWMU 12. The location, physical description, and history associated with SWMU 12 are described in Section 5.1. Three groundwater samples were collected from the surficial aquifer using bailers in 1993 and low-flow sampling in 1994 (Subsection 5.1.2). Because the low flow sampling method produces less turbid samples that are more representative of the surficial aquifer than those obtained with a bailer, the preferred data set was from the 1994 sampling event. However, it should be noted that chemicals detected in groundwater samples collected during the 1993 sampling event that were not detected in groundwater samples collected in 1994 were included in the final data set.

At the time the groundwater samples were collected, no overtopping of the basins or release to surface soil had been reported at SWMU 12. Therefore, neither surface nor subsurface soil samples were collected. However, a recent employee interview indicated that approximately 300 gallons of sodium hydroxide were released at SWMU 12 in 1992 (Section 5.1). This release is to be assessed separately from SWMU 12. After evaluation and management of the environmental data collected at SWMU 12 (Chapter 2.0), human health chemicals of potential concern (HHCPCs) in groundwater were selected, and the potential human health risks associated with groundwater at the waste site were characterized.

The methodology for the human health risk assessment is described in Section 2.5 of Volume I of the RFI GIR.

5.3.1 Selection of Chemicals of Potential Concern HHCPCs are defined as chemicals for which data of sufficient quality are available for use in the risk assessment, that are potentially site-related, and that have maximum detected concentrations that are above standards or guidelines; above risk-based screening concentrations (where available); or, for inorganic analytes, above background screening concentrations (where available). The methodology used to select HHCPCs is described in Subsection 2.5.2 of the RFI GIR.

As previously discussed in Subsection 5.1.2, unfiltered samples from the surficial aquifer were submitted for chemical analysis during the groundwater sampling program. Only samples from the most recent sampling round were evaluated in the HHRA. Sample locations for the surficial aquifer that were evaluated in the HHRA (MPT-11-MW01S, MPT-11-MW02S, and MPT-11-MW03S) are indicated on Figure 5-2.

Table 5-8 presents the analytes detected in unfiltered groundwater at SWMU 12 and the HHCPCs selected for groundwater at SWMU 12. One SVOC (phenol) and two inorganic analytes (arsenic and vanadium) were retained as HHCPCs.

5.3.2 Exposure Assessment Currently, no humans reside at the site, and groundwater is not used for any potable or nonpotable purposes. However, if the site were developed for residential use in the future, residents could be exposed to contaminants in the groundwater. Therefore, groundwater was evaluated in the HHRA. Potential receptors and exposure scenarios are identified below and summarized in Table 5-9 and Figure 5-3. Receptor-specific exposure parameters for each exposure scenario are presented in Appendix D-3 of the RFI GIR. The risk calculation spreadsheets in Appendix E-3 to this report also contain the exposure parameters for each exposure scenario.

Domestic use of the surficial aquifer (adult ingestion and inhalation of volatiles while showering) would be considered appropriate as part of a hypothetical residential exposure scenario at SWMU 12 if the land use were changed to residential in the future.

EPCs for groundwater were determined according to procedures outlined in Subsection 2.5.6 of the RFI GIR. The EPCs for analytes selected as HHCPCs are presented in Table 5-10. The contaminant exposure intakes for the receptor evaluated (adult resident) are presented in the risk calculation spreadsheet in Appendix E-3 to this report.

5.3.3 Toxicity Assessment The purpose of the toxicity assessment is to identify the adverse effects associated with exposure to each HHCPC and to identify the relationship between the level of exposure and the severity or likelihood of adverse effects. The toxicity assessment methodology is described in Subsection 2.5.8 of the RFI GIR. Appendix D-4 to the RFI GIR contains brief toxicity summaries for the HHCPCs. Appendix E-1 to this report contains dose-response information for the HHCPCs.

This information was used to estimate the ELCR for carcinogens and the HI for all HHCPCs in the risk characterization (Subsection 5.3.4). Dose-response values current as of June 1995 for IRIS and November 1994 for HEAST have been used in this HHRA. Uncertainties associated with chemical-specific toxicity values are discussed in Subsection 5.3.5.

Table 5-8
Selection of Human Health Chemicals of Potential Concern in Unfiltered Groundwater Samples Associated with Solid Waste Management Unit (SWMU) 12

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	Mean of Detected Concentrations[2]	Background Screening Concentration[3]	Risk-Based Screening Concentration[4]	Federal MCL[5]	Florida Guidance Concentration[6]	Selected as HHCPC? (Yes/No)
Volatile Analytes (µg/ℓ)									
1,1-Dichloroethane	1/3	5 - 5	1 - 1	1	NA	81	NS	700	No[7]
1,2-Dichlorobenzene	2/3	5 - 5	1 - 2	1.5	NA	27	600	600	No[7]
1,2-Dichloroethene (total)	1/3	5 - 5	2 - 2	2	NA	5.5	70	70	No[7]
Methylene chloride	1/3	5 - 5	1 - 1	1	NA	4.1	5	5	No[7]
Semivolatile Analytes (µg/ℓ)									
4-Nitrophenol	2/3	50 - 50	11 - 13	12	NA	230	NS	15	No[7]
Phenol	1/3	10 - 10	43 - 43	43	NA	2,200	NS	10	Yes
Inorganic Analytes (µg/ℓ)									
Arsenic	3/3	10 - 10	1.7 - 42.5	15.8	9.8	0.038	50	50	Yes
Barium	2/3	200 - 200	3.9 - 5.6	4.8	39.0	260	2,000	2,000	No[7,8]
Calcium	3/3	5,000 - 5,000	1,770 - 173,000	88,357	207,466	1,055,398	NS	NS	No[7,8]
Chromium	1/3	10 - 10	5.1 - 5.1	5.1	10.4	18	100	100	No[7,8]
Copper	2/3	25 - 25	7.4 - 19.7	13.6	2.8	140	1,300	1,000	No[7]
Iron	2/3	100 - 100	180 - 915	548	1,728	13,267	NS	300	No[8]
Lead	2/3	3 - 3	1 - 5.7	3.4	2.6	15	15	15	No[7]
Magnesium	3/3	5,000 - 5,000	98.3 - 30,700	12,699	153,984	118,807	NS	NS	No[7,8]
Manganese	2/3	15 - 15	7.5 - 87.2	47.4	210	18	NS	50	No[8]
Mercury	1/3	0.2 - 0.2	0.12 - 0.12	0.12	0.16	1.1	2	2	No[7,8]
Nickel	1/3	40 - 40	20.4 - 20.4	20.4	ND	73	100	100	No[7]
Sodium	3/3	5,000 - 5,000	15,300 - 831,000	356,433	1,519,016	396,022	NS	160,000	No[8]
Vanadium	2/3	50 - 50	5 - 110	57.5	9.2	26	NS	49	Yes

See notes at end of table.

Table 5-8 (Continued)
Selection of Human Health Chemicals of Potential Concern in Unfiltered Groundwater Samples Associated with Solid Waste Management Unit (SWMU) 12

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	Mean of Detected Concentrations[2]	Background Screening Concentration[3]	Risk-Based Screening Concentration[4]	Federal MCL[5]	Florida Guidance Concentration[6]	Selected as HHCPC? (Yes/No)
Zinc	1/3	20 - 20	14.1 - 14.1	14.1	41.6	1,100	NS	5,000	No[7,8]
Cyanide	2/3	10 - 10	0.69 - 0.94	0.82	1.9	73	200	200	No[7,8]

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed. The following samples were analyzed: 11MW001S, 11MW002S, 11MW003S (Figure 5-2).
[2] The mean of detected concentrations is the arithmetic mean of all samples in which the analyte was detected. It does not include those samples in which the analyte was not detected.
[3] The background screening concentration is twice the mean of detected concentrations for inorganic analytes. The mean analyte concentrations in background samples are identified in Table D-1-3 of Appendix D to the RCRA Facility Investigation (RFI) General Information Report.
[4] The risk-based screening concentrations are identified in Table D-1-5 of Appendix D to the RFI General Information Report.
[5] The Federal MCLs (November 1994) are identified in Table D-1-5 of Appendix D to the RFI General Information Report.
[6] The Florida Guidance Concentrations (June 1994) are identified in Table D-1-5 of Appendix D to the RFI General Information Report.
[7] The maximum detected concentration did not exceed the risk-based screening concentration, the Federal MCL, or the Florida Guidance Concentration; therefore, this analyte will not be evaluated in the Human Health Risk Assessment (HHRA).
[8] The maximum detected concentration did not exceed the background screening concentration; therefore, this analyte will not be evaluated in the HHRA.

Notes: RCRA = Resource Conservation and Recovery Act.
MCL = maximum contaminant level.
HHCPC = human health chemical of potential concern.
$\mu g/\ell$ = micrograms per liter.
NA = not applicable.
NS = no standard or guideline available.
ND = not detected in any background samples.

Table 5-9
Summary of Potential Exposure Pathways
at Solid Waste Management Unit (SWMU) 12

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Medium of Exposure	Route of Exposure	Potentially Exposed Population	Selected for Evaluation?	Reason for Selection or Exclusion
Current Land Use				
Groundwater: Surficial Aquifer	Ingestion of groundwater as drinking water and inhalation of volatiles while showering.	Resident (adult)	No	There are no current exposures to groundwater.
Future Land Use				
Groundwater: Surficial Aquifer	Ingestion of groundwater as drinking water and inhalation of volatiles while showering.	Resident (adult)	Yes	If the site were developed for residential use, residents could be exposed to contaminants in the surficial aquifer.

Note: RCRA = Resource Conservation and Recovery Act.

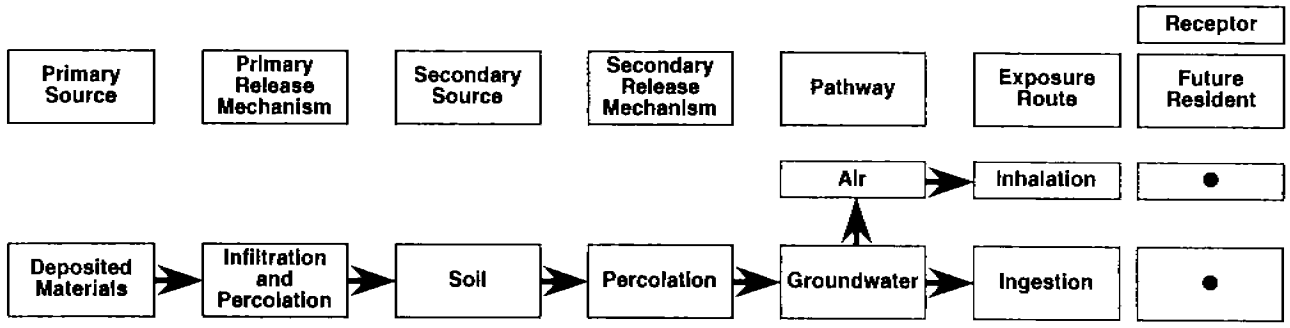

FIGURE 5-3

COMPLETE EXPOSURE PATHWAYS FOR HUMAN RECEPTORS, SWMU 12

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U.S. NAVAL STATION MAYPORT, FLORIDA

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Table 5-10
Exposure Point Concentrations for Human Health Chemicals of Potential Concern Unfiltered Groundwater Samples Associated with Solid Waste Management Unit (SWMU) 12

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Frequency of Detection[1]	Maximum Detected Concentration	95 Percent UCL[2]	Exposure Point Concentration[3]
Semivolatile Analytes (μg/ℓ)				
Phenol	1/3	43	NC	43
Inorganic Analytes (μg/ℓ)				
Arsenic	3/3	42.5	NC	42.5
Vanadium	2/3	110	NC	110

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the number of samples analyzed.
[2] The 95 percent UCL was calculated on the arithmetic mean of all samples using one-half the contract-required quantitation limit and contract-required detection limit for nondetected concentrations.
[3] The exposure point concentration equals the 95 percent UCL unless the maximum detected concentration is less than the 95 percent UCL. If there are three or less total samples, the maximum detected concentration is the exposure point concentration.

Notes: RCRA = Resource Conservation and Recovery Act.
UCL = upper confidence limit.
μg/ℓ = microgram per liter.
NC = not calculated.

5.3.4 Risk Characterization Both carcinogenic and noncarcinogenic risks were estimated for each HHCPC and each complete exposure pathway selected for evaluation in the exposure assessment, as described in Subsection 2.5.9 of the RFI GIR. Risk estimates for potential exposures to groundwater are discussed below. Table 5-11 summarizes the risk estimates. The risk characterization results are shown in spreadsheet E-3-1 in Appendix E-3 to this report.

Figure 5-4 summarizes the cancer risks associated with SWMU 12. There is no exposure to water from the surficial aquifer under current land use. For future land use, the cancer risk associated with ingestion of groundwater as drinking water is $7x10^{-4}$ for the adult resident. No VOCs were selected as HHCPCs, so cancer risk to the adult resident associated with inhalation of VOCs during showering was not evaluated. The only contaminant contributing cancer risk to the ELCR for the adult resident is arsenic. All three reported arsenic detections are below the Federal and Florida drinking water standards, which are both 50 $\mu g/\ell$. Figure 5-5 presents an HI summary for SWMU 12. The HI associated with adult resident ingestion of groundwater is 4. Arsenic (HQ = 3.9) is the major contributor to this HI, with vanadium contributing an HQ of 0.43. No VOCs were selected as HHCPCs, so noncancer risk associated with adult resident inhalation of VOCs during showering was not evaluated.

RGOs for the ELCR and HI associated with the future resident are presented in Subsection 5.3.6. Inclusion of arsenic in this table is not intended to be a statement that remediation of arsenic is necessary. Arsenic concentrations are less than Federal and State drinking water standards. A single sample result (42.5 $\mu g/\ell$) is higher than the background screening concentration, whereas the other two samples have concentrations at least ten fold lower (1.7 $\mu g/\ell$ and 3.2 $\mu g/\ell$). This single sample drives all carcinogenic and noncarcinogenic risks at SWMU 12. If this sample result is not representative of site conditions, there would be no carcinogenic CPCs, and the total HI for groundwater would be less than 1.

5.3.5 Uncertainty Analysis General uncertainties associated with the collection, analysis, and evaluation of data; exposure assessment; toxicity assessment; and the risk estimation process are discussed in Subsection 2.5.10 of the RFI GIR. Site-specific uncertainties that are important for the interpretation of the calculated risk estimates for groundwater at SWMU 12 are discussed below.

- Residential land use was the assumed future land use scenario according to USEPA Region IV guidance (USEPA, 1991). It is likely, however, that the area near SWMU 12 will remain industrial because of its proximity to the Mayport turning basin.

- Some uncertainty is associated with the representativeness of the data collected to complete the risk evaluation at SWMU 12. Because no subsurface soil samples were evaluated in the HHRA, it is uncertain whether the contaminants identified in groundwater at SWMU 12 resulted from activities at the neutralization basin. Generally, because the low-flow method was used, turbidity in the unfiltered groundwater samples was minimal. Filtered groundwater samples were collected from monitoring wells MPT-11-MW01S, MPT-11-MW02S, and MPT-11-MW03S because some turbidity was associated with the unfiltered samples collected from these wells.

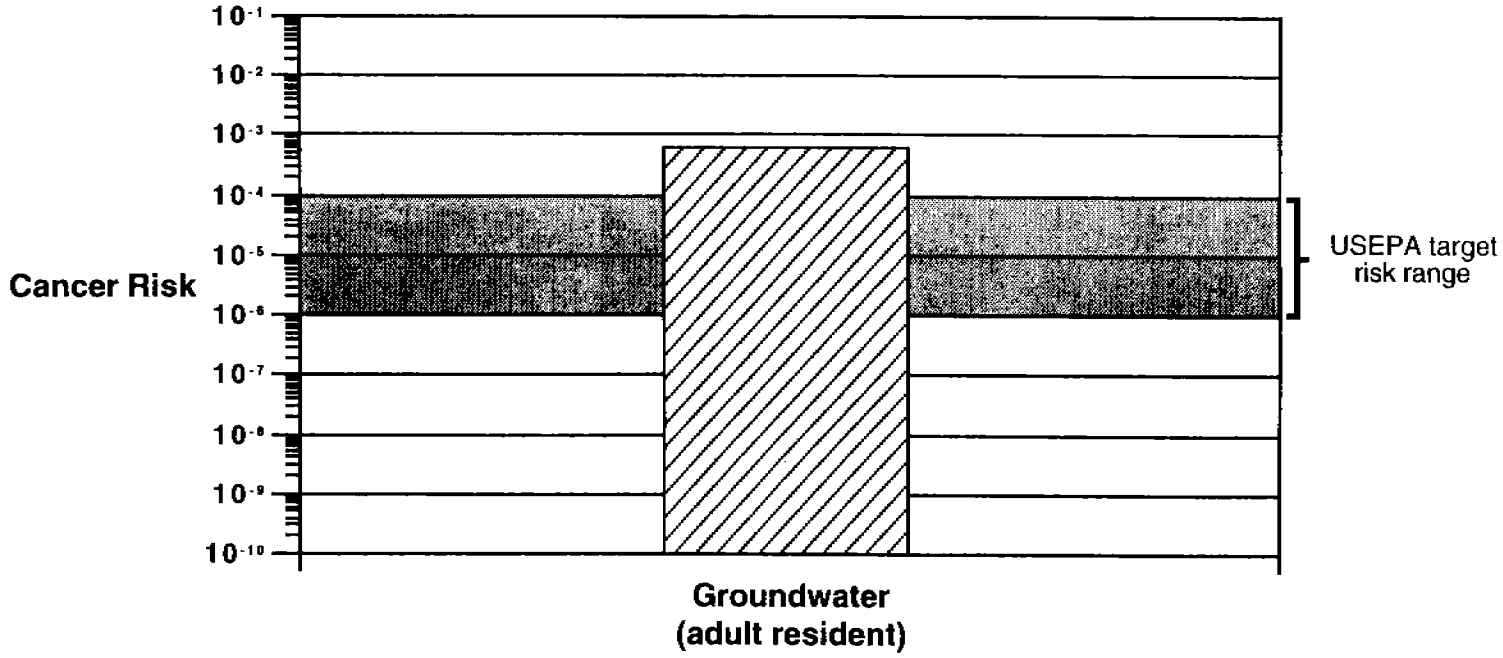
Table 5-11
Human Health Risk Summary for Solid Waste Management Unit (SWMUs) 12

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Land Use	Exposure Route	Hazard Index	Excess Lifetime Cancer Risk
Future Land Use			
Surficial Aquifer:			
Adult resident	Ingestion of groundwater as drinking water	4	$7x10^{-4}$
	Inhalation of volatiles while showering	NC	NC
Total adult resident:		**4**	**$7x10^{-4}$**

Notes: RCRA = Resource Conservation Recovery Act.
NC = not calculated because no volatiles were selected as human health chemicals of potential concern.

Cancer Risk Summary, Future Land Use



NOTES:
SWMU = Solid Waste Management Unit
USEPA = U.S. Environmental Protection Agency

FIGURE 5-4
CANCER RISK SUMMARY,
FUTURE LAND USE,
SWMU 12

RCRA FACILITY INVESTIGATION REPORT, GROUP II SWMUs

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MAYPORT, FLORIDA

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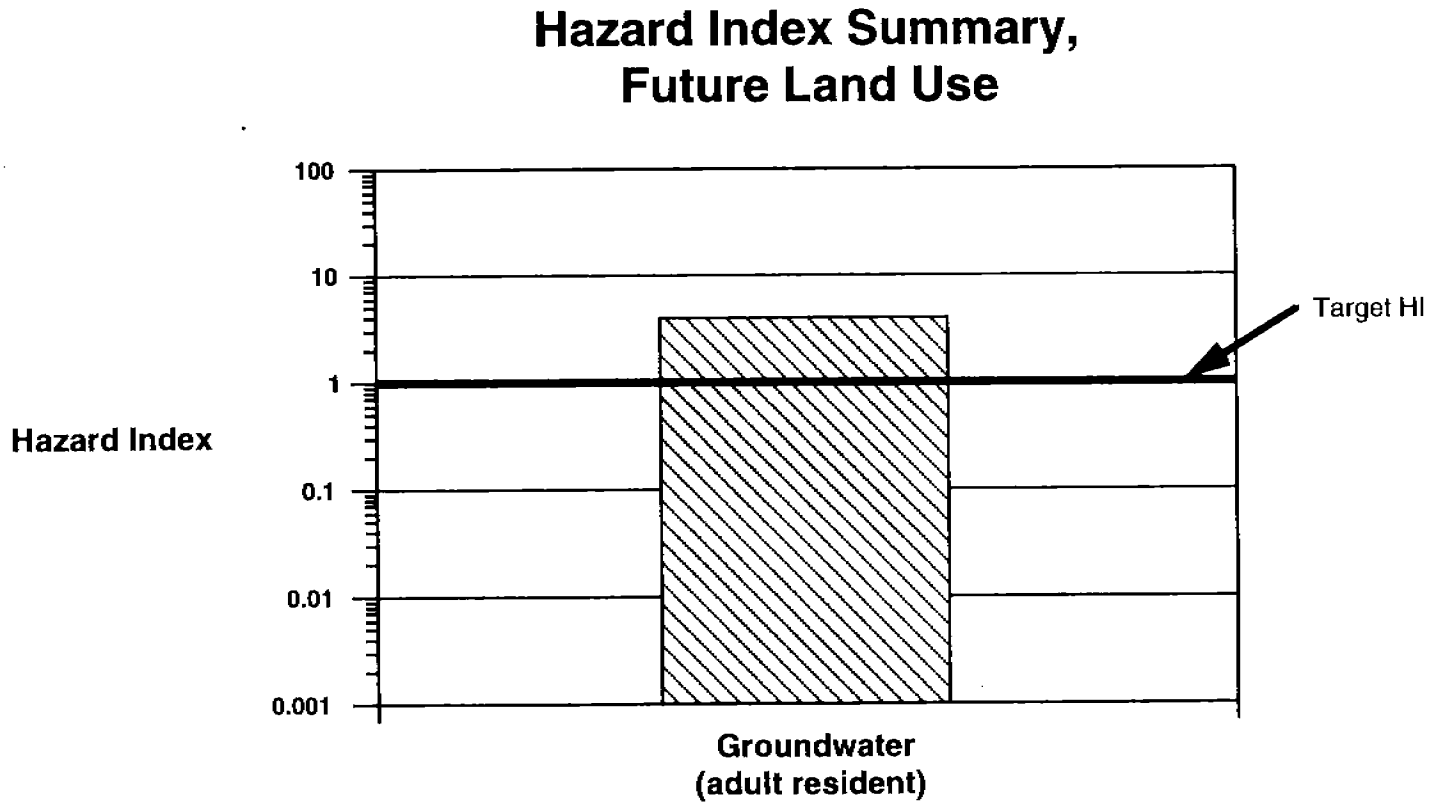

FIGURE 5-5

HAZARD INDEX SUMMARY,
FUTURE LAND USE,
SWMU 12

RCRA FACILITY INVESTIGATION
REPORT, GROUP II SWMUs

U.S. NAVAL STATION
MAYPORT, FLORIDA

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The analytical data from the filtered samples were not used in the HHRA. However, the two inorganic HHCPCs, arsenic and vanadium, were detected at slightly higher levels in the unfiltered samples than in the filtered samples.

- A single sample is responsible for selection of arsenic as an HHCPC and subsequently for all carcinogenic risk associated with future residential groundwater ingestion at SWMU 12. This sample may not be representative of site conditions, because the remaining samples contained arsenic at concentrations consistent with background levels. Also, all detected concentrations of arsenic were below Federal and State drinking water standards.

- The arsenic CSF is a source of uncertainty in the HHRA for the surficial aquifer because concentrations of arsenic that tend to be present in the area surrounding NAVSTA Mayport are high enough to consistently cause arsenic to be a significant contributor to cancer risks. The oral CSF for inorganic arsenic is based on dose-response data for skin cancer incidence obtained by Tseng, et al. (1968). Individuals in this study were exposed to high levels of inorganic arsenic in drinking water (170 μg/ml). Arsenic exposure was approximated based on estimates of water intake. Other exposure pathways contributing to total exposure such as ingestion of fish, livestock, and plants were not assessed, potentially resulting in an underestimate of arsenic exposure. The oral cancer slope factor was calculated using a model that assumes the dose-response curve is linear at low doses.

  Recent evidence suggests that low doses of arsenic may be largely detoxified by methylation, producing a nonlinear dose-response curve (Goyer, 1991). In the Tseng, et al. study, the saturation of the normal detoxification pathways coupled with an underestimate of exposure, may have resulted in an overestimate of cancer risk for this site. Based on the uncertainties associated with the arsenic CSF, risk management guidance (USEPA, 1988f) suggests that cancer risk may be up to tenfold lower than predicted.

- The presence of TICs has not been established with a degree of certainty great enough to warrant their inclusion in the HHRA for groundwater at SWMU 12. The relative number of TICs is low in comparison to the number of detected contaminants. Furthermore, few toxicity data are available to evaluate the potential health effects of these analytes even if they were considered for quantitative evaluation. Because TICs were not evaluated, there is a potential for underestimation of the health risks associated with future land use.

- Because SWMU 12 is located on a thin peninsula between the St. Johns River and the Mayport Turning Basin where the surficial aquifer is in direct hydraulic connection with the marine and estuarine waters of the St. Johns River, it is not likely, in a hypothetical future use residential scenario, that the groundwater beneath this site would be used as a potable water source.

5.3.6 Remedial Goal Options As required by USEPA Region IV guidance, RGOs are presented in a table of potential media cleanup levels. Potential media cleanup levels have been identified for HHCPCs that exceed Federal or State standards or

Florida guidance concentrations, or that have associated cancer risks greater than $1x10^{-6}$ or HQs greater than 0.1. Potential media cleanup levels include concentrations at various risk levels and Federal and State standards and guidance values. These potential media cleanup levels are not actual cleanup levels. These values are provided here for informational purposes to assist risk-management decision making concerning the need for a CMS and for use within the CMS itself.

Potential media cleanup levels were developed for arsenic, the only HHCPC that contributes a cancer risk of greater than 10^{-6} to the ELCR of $7x10^{-4}$ for the unfiltered surficial aquifer groundwater. Potential media cleanup levels were also developed for those HHCPCs (arsenic and vanadium) that contribute an HQ greater than 0.1 to the HI of 4 for the surficial aquifer. Table 5-12 contains a summary of RGOs for SWMU 12.

RGOs for iron, phenol, manganese, and sodium are also presented in Table 5-12 because the maximum detected concentrations of these analytes in groundwater samples associated with SWMU 12 exceeded their respective Federal or State MCLs, or Florida Guidance Concentrations. Use of these guidance concentrations in the development of RGOs should be considered in relation to established background concentrations and detection limits.

5.4 ECOLOGICAL RISK ASSESSMENT FOR SWMU 12. The following subsections describe the results of the ERA for SWMU 12, the Neutralization Basin. The ERA was completed according to the methodology described in Section 2.4 of the RFI (ABB-ES, 1995a) and includes selection of ECPCs (Subsection 5.4.1), exposure assessment (Subsection 5.4.2), ecological effects assessment (Subsection 5.4.3), risk characterization (Subsection 5.4.4), and uncertainty analyses (Subsection 5.4.5). Exposure pathways for ecological receptors at SWMU 12 are limited to groundwater. It is expected that terrestrial receptors would not be present at SWMU 12 because the area is paved with concrete. The St. Johns River is located approximately 75 feet from the SWMU.

5.4.1 Selection of Ecological Chemicals of Potential Concern Analytes were determined to be an ECPC according to the process described in Subsection 2.4.1 of the RFI GIR (ABB-ES, 1995a). Aquatic receptors in the St. Johns River may be exposed to groundwater contamination as it discharges to the surface. For this reason, analytes detected in groundwater at SWMU 12 are screened as ECPCs.

The monitoring well system installed at SWMU 12 to examine potential contamination to the groundwater is described in Subsection 5.2.1. The locations of the three monitoring wells (MPT-11-MW01S, MPT-11-MW02S, and MPT-11-MW03S) are shown on Figure 5-2. The results of analyses of unfiltered samples from the monitoring wells at SWMU 12 are summarized in Table 5-13. Use of unfiltered groundwater data to estimate contaminant exposures for aquatic life is highly conservative. The measurement of contaminants in unfiltered samples includes both the fraction of contaminants sorbed onto particles and the dissolved forms. Only the dissolved fraction of contaminants in the groundwater is likely to be transported in groundwater and discharged to the St. Johns River. Generally, only the fraction of the contaminant in the dissolved phase is biologically available and potentially toxic to aquatic organisms (USEPA, 1993c).

Table 5-12
Summary of Remedial Goal Options for Human Health at Solid Waste Management Unit (SWMU) 12

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Range of Detected Concentrations	Excess Lifetime Cancer Risk Risk Range			Hazard Quotient Risk Range			Federal MCL[1]	Florida Primary Standard[2]
		10^{-4}	10^{-5}	10^{-6}	0.1	1	10		
Surficial Aquifer (μg/ℓ)									
Adult resident, groundwater ingestion									
Arsenic	1.7 - 42.5	5.7	0.57	0.06	1.1	10.9	109	50	50
Iron[3]	180 - 915	NA	NA	NA	NA	NA	NA	NS	[4]300
Manganese[3]	7.5 - 87.2	NA	NA	NA	NA	NA	NA	NS	[4]50
Phenol	43 - 43	NA	NA	NA	2,150	21,500	215,000	NS	[5]10
Sodium[3]	15,300 - 831,000	NA	NA	NA	NA	NA	NA	NS	160,000
Vanadium	5 - 110	NA	NA	NA	25.6	256	2,560	NS	[5]49

[1] The Federal MCL (November 1994) are identified in Table D-1-5 of Appendix D to the RCRA Facility Investigation (RFI) General Information Report.
[2] The Florida Primary Standards (June 1994) are identified in Table D-1-5 of Appendix D to the RFI General Information Report.
[3] This analyte was not selected as a human health chemical of potential concern for groundwater because the maximum detected concentration did not exceed the background screening concentration. However, the maximum detected concentration exceeded the analyte's risk-based screening concentration, Federal MCL, or Florida guidance concentration. Therefore, remedial goal options are presented for this analyte.
[4] This value is a Florida secondary standard.
[5] This value is a Florida guidance concentration. The Florida guidance concentrations (June 1994) are identified in Table D-1-5 of Appendix D to the RFI General Information Report.

Notes: RCRA = Resource Conservation and Recovery Act.
SWMU = solid waste management unit.
MCL = maximum contaminant level.
μg/ℓ = micrograms per liter.
NA = not applicable.
NS = no standard available.

Table 5-13
Selection of Ecological Chemicals of Potential Concern in Groundwater Samples Associated with Solid Waste Management Unit (SWMU) 12

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Range of Detected Concentrations	Mean of Detected Concentrations[2]	Screening Reference Concentration[3]	Florida Surface Water Quality Standards[4]	Analyte ECPC? (Yes/No)
Volatile Analytes (µg/ℓ)						
1,1-Dichloroethane	1/3	1	1	ND	NA	Yes
1,2-Dichlorobenzene	2/3	1 - 2	1.5	ND	NA	Yes
1,2-Dichloroethene (total)	1/3	2	2	ND	NA	Yes
Methylene chloride	1/3	1	1	ND	1,580	No[6]
Semivolatile Analytes (µg/ℓ)						
4-Nitrophenol	2/3	11 - 13	12	ND	NA	Yes
Phenol	1/3	43	43	ND	4,600	No[6]
Inorganic Analytes (µg/ℓ)						
Arsenic	3/3	1.7 - 42.5	15.8	9.8	50	No[6]
Barium	2/3	3.9 - 5.6	4.8	39	NA	No[5]
Calcium	3/3	1,770 - 173,000	88,357	207,466	NA	No[5,7]
Chromium	1/3	5.1	5.1	10.4	50	No[5,6]
Copper	2/3	7.4 - 19.7	13.6	2.8	2.9	Yes
Iron	2/3	180 - 915	548	1,728	300	No[5]
Lead	2/3	1 - 5.7	3.4	2.6	5.6	Yes
Magnesium	3/3	98.3 - 30,700	12,699	153,984	NA	No[5,7]
Manganese	2/3	7.5 - 87.2	47.4	210	NA	No[5]
Mercury	1/3	0.12	0.12	0.16	0.025	No[6]
Nickel	1/3	20.4	20.4	ND	8.3	Yes
Sodium	3/3	15,300 - 831,000	356,433	1,519,016	NA	No[5,7]
Vanadium	2/3	5 - 110	57.5	9.2	NA	Yes
Zinc	1/3	14.1	14.1	41.6	86	No[5,6]

See notes at end of table.

Table 5-13 (Continued)
Selection of Ecological Chemicals of Potential Concern in Groundwater Samples Associated with Solid Waste Management Unit (SWMU) 12

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Range of Detected Concentrations	Mean of Detected Concentrations[2]	Screening Reference Concentration[3]	Florida Surface Water Quality Standards[4]	Analyte ECPC? (Yes/No)
Cyanide	2/3	0.69 - 0.94	0.82	1.9	1.0	No[5,6]

[1] Frequency of detection is the number of samples in which the analyte is detected divided by the total number of samples analyzed (MPT-11-MW01S, MPT-11-MW02S, and MPT-11-MW03S; Figure 5-2).
[2] The average of detected concentrations is the arithmetic mean of all samples in which the analyte was detected; it does not include those samples in which the analyte was not detected.
[3] Background sample locations include MPT-1-MW01S, MPT-S-MW01S, MPT-8-MW05S, MPT-8-MW05I, MPT-8-MW05D, MPT-B-MW01S, MPT-B-MW01I, and MPT-B-MW01D, with a duplicate at MPT-S-MW01S. The average concentrations of analytes detected in the background locations are listed in the RCRA Facility Investigation General Information Report (ABB Environmental Services, Inc., 1995a). Two times the background concentration is calculated for inorganics.
[4] Florida Department of Environmental Protection, 62-302 Florida Administrative Code (1995 Version); surface water quality standards for Class III marine waters.
[5] Maximum detected concentration is less than one time the average background concentration for organics or less than two times the average background concentration for inorganics.
[6] Maximum detected concentration is less than the Florida surface water quality standard and, therefore, the analyte will not be evaluated in the Ecological Risk Assessment.
[7] Analyte is an essential nutrient and is not present at toxic levels.

Notes: RCRA = Resource Conservation and Recovery Act.
ECPC = ecological chemical of potential concern.
$\mu g/\ell$ = micrograms per liter.
ND = not detected in the background samples.
NA = not available.
NC = not calculated.

Table 5-13 provides a summary of the analytical results, including the frequency of detection, range of detected concentrations, mean of detected concentrations, and the screening reference concentrations, for each of the analytes. Calcium, magnesium, and sodium were not included in the screening process because they are naturally occurring nutrients. Eight of 21 analytes detected in groundwater samples collected from SWMU 12 monitoring wells were selected as ECPCs. The eight analytes include three volatiles (1,1-dichloroethane, 1,2-dichlorobenzene, and 1,2-dichloroethene), one semivolatile (4-nitrophenol), and four inorganics (copper, lead, nickel, and vanadium).

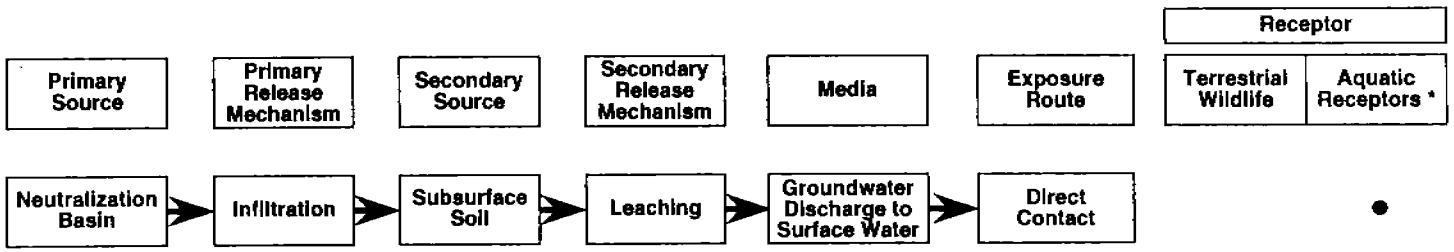
5.4.2 Exposure Assessment The exposure assessment identifies exposure pathways and estimates the magnitude of contaminant exposures for aquatic receptors for ECPCs in groundwater. Exposure pathways for aquatic receptors at SWMU 12 are identified in the contaminant pathway model (Figure 5-6).

Aquatic receptors in the St. Johns River may be exposed to contamination in groundwater from SWMU 12 if it discharges to the surface water of the river. Exposure concentrations of groundwater ECPCs for aquatic receptors in the St. Johns River are estimated based on a worst-case exposure scenario. It is assumed that the average and maximum exposure point concentrations of ECPCs in groundwater (Table 5-13) are the concentrations to which the receptors would be exposed in the St. Johns River. The average and maximum exposure concentrations are equal to the respective average and maximum detected concentrations. This worst-case scenario assumes no reduction in contaminant concentrations as a result of transport from SWMU 12 to the St. Johns River and no dilution once the contaminant is discharged.

Less conservative exposures are also evaluated based on assumptions of 10, 100, and 1,000 times dilution of the groundwater (and respective maximum detected groundwater ECPC concentrations) as it is discharged into the St. Johns River. The dilution of existing groundwater conditions is used to model a reasonable scenario where groundwater through advection, dispersion, mixing, and retardation would discharge to a surface water body. This is used to assess whether an adverse impact to the environment is probable.

5.4.3 Ecological Effects Assessment The ecological effects assessment describes the potential adverse effects associated with ECPCs in groundwater to aquatic receptors. Ecological effects are based on comparison of predicted ECPC exposure concentrations with aquatic toxicity benchmarks. Aquatic toxicity information for the ECPCs is obtained from searches of the USEPA AQUIRE database (Appendix F-1). Table 5-14 provides a summary of the toxicity testing information available from the AQUIRE search and a range of concentrations associated with lethal and sublethal effects to fish, invertebrates, mollusks, and algae. For each ECPC, the effect concentrations from AQUIRE are compared with the exposure concentrations to evaluate potential risks in Subsection 5.4.4.

5.4.4 Risk Characterization Risks are evaluated for aquatic life associated with exposures to ECPCs in groundwater from SWMU 12 as it discharges to the St. Johns River. It is expected that groundwater from SWMU 12 is currently discharging to the St. Johns River. The predicted maximum and average concentrations for groundwater ECPCs in the St. Johns River are compared to the State of Florida surface water quality standards for Class III marine water (Chapter 62-302, FAC), the AWQC (USEPA, 1986b), and the lowest reported adverse effect concentration in AQUIRE listed in Table 5-15. For comparison purposes, the concentrations of



* Aquatic receptors include invertebrates, plants, algae, amphibians, fish, and reptiles.

FIGURE 5-6

CONTAMINANT PATHWAY MODEL FOR ECOLOGICAL RECEPTORS, SWMU 12

RCRA FACILITY INVESTIGATION REPORT, GROUP II SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

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Table 5-14
Results of AQUIRE Search for Toxicity of Groundwater Ecological Chemicals of Potential Concern (ECPCs) at Solid Waste Management Unit (SWMU) 12 to Aquatic Receptors

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte[1]	Fish		Invertebrates		Mollusks		Algae and Aquatic Plants
	Lethal	Sublethal	Lethal	Sublethal	Lethal	Sublethal	Sublethal
Volatile Analytes (μg/ℓ)							
1,1-Dichloroethane	--	--	--	--	--	--	--
1,2-Dichlorobenzene	2 / 9.7 - 7,300	--	4 / 9,400 - 14,300	--	--	--	--
1,2-Dichloroethene	--	--	--	--	--	--	--
Semivolatile Analytes (μg/ℓ)							
4-Nitrophenol	1 / 27	--	1 / 26,400	1 / 10,000	1 / 29,400	--	--
Inorganic Analytes (μg/ℓ)[2]							
Vanadium	--	--	--	--	--	--	23 / 500 - 50,000

[1] Toxicity information was retrieved from AQUIRE and is included as Appendix F-1.
[2] Toxicity information for copper, lead, and nickel was not searched in AQUIRE because sufficient aquatic toxicity information was retrieved from Ambient Water Quality Criteria (USEPA, 1986b).

Notes: RCRA = Resource Conservation and Recovery Act.
Values are expressed in number of studies per range of concentrations.
μg/ℓ = micrograms per liter.
AQUIRE = Aquatic Information Retrieval.
-- = information not available.

Table 5-15
Comparison of Solid Waste Management Unit (SWMU) 12 Groundwater Ecological Chemical of Potential Concern (ECPC) Exposure Concentrations (in St. Johns River) with Toxicity Benchmarks

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	St. Johns River Exposure Concentration: Maximum/Average Exposure Point Concentrations for Groundwater[1]	Florida Surface Water Quality Standard[2]	Federal AWQC[3]	AQUIRE[4] (Lowest reported adverse effect concentration)	Concentrations Detected in Surface Waters of St. Johns River[5]	Concentrations Detected in Background Surface Water Samples[6]	Results of Comparison
Volatile Analytes (µg/ℓ)							
1,1-Dichloroethane	1 / 1	NA	NA	NA	ND	ND	Benchmark not available
1,2-Dichlorobenzene	2 / 1.5	NA	129[7]	9.7	ND	ND	Benchmark not exceeded
1,2-Dichloroethene	2 / 2	NA	NA	NA	ND	ND	Benchmark not available
Semivolatile Analytes (µg/ℓ)							
4-Nitrophenol	13 / 12	NA	NA	27	ND	ND	Benchmark not exceeded
Inorganic Analytes (µg/ℓ)							
Copper	19.7 / 13.6	2.9	2.9	NS	4.1 - 5	2.4 - 37.2	Exceedance of 6.8 times the lowest benchmark
Lead	5.7 / 3.4	5.6	8.5	NS	ND	0.91 - 1.5	Exceedance of 1.02 times the lowest benchmark
Nickel	20.4 / 20.4	8.3	8.3	NS	ND	13	Exceedance of 2.5 times the lowest benchmark

See notes at end of table.

Table 5-15 (Continued)
Comparison of Solid Waste Management Unit (SWMU) 12 Groundwater Ecological Chemicals of Potential Concern (ECPC) Exposure Concentrations (in St. Johns River) with Toxicity Benchmarks

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Analyte	St. Johns River Exposure Concentration: Maximum/Average Exposure Point Concentrations for Groundwater[1]	Florida Surface Water Quality Standard[2]	Federal AWQC[3]	AQUIRE[4] (Lowest reported adverse effect concentration)	Concentrations Detected in Surface Waters of St. Johns River[5]	Concentrations Detected in Background Surface Water Samples[6]	Results of Comparison
Vanadium	110 / 57.5	NA	NA	500	1.8	3.4 - 5.2	Benchmark not exceeded

[1] From Table 5-13.
[2] Florida Department of Environmental Protection, 62-302, Florida Administrative Code (1995 Version); surface water quality standards for Class III marine waters.
[3] U.S. Environmental Protection Agency (USEPA) Ambient Water Quality Chronic Criteria (USEPA, 1986b).
[4] From Table 5-14.
[5] Range of detected concentrations from the RCRA Facility Investigation (RFI) General Information Report (ABB Environmental Services, Inc. [ABB-ES], 1995a).
[6] Background sample locations include MPT-B-SW01, MPT-B-SW02, MPT-B-SW03, MPT-B-SW04, MPT-B-SW05, MPT-B-SW06, and MPT-B-SW07. The concentrations of organic and inorganic analytes detected in background surface water samples are listed in Tables 3-15 and 3-16, respectively, of the RFI General Information Report (ABB-ES, 1995a).
[7] Standard indicated is for chlorinated benzenes as a group.

Notes: RCRA = Resource Conservation and Recovery Act.
AWQC = ambient water quality criteria.
$\mu g/\ell$ = micrograms per liter
NA = not available.
ND = not detected.
AQUIRE = Aquatic Information Retrieval
NS = not sampled.

analytes in the surface water of the St. Johns River north and northeast of SWMU 12 (MPT-B-SW13, MPT-B-SW14, and MPT-B-SW15) and the background surface water locations (MPT-B-SW1 through MPT-B-SW7) (RFI GIR [ABB-ES, 1995a]) are also presented in Table 5-15. Benchmarks are not available to assess the potential aquatic toxicity of 1,1-dichloroethane and 1,1-dichloroethene in the marine environment.

Only the exposure point concentrations of copper, lead, and nickel in groundwater exceeded toxicity benchmark values. Copper is detected in surface water samples from the St. Johns River at concentrations higher than the benchmarks. Current discharge of copper, lead, and nickel in groundwater to the St. Johns River is not expected to present a risk for aquatic receptors for the following reasons:

- It is expected that some dilution will occur as the groundwater is discharged to surface water, and actual exposure concentrations in the river will be lower than the benchmarks.

- The fraction of metals biologically available and potentially toxic to aquatic receptors is likely to be considerably less than the concentrations measured. The unfiltered analyses of the groundwater included both dissolved and nondissolved phases of the metal. Only the dissolved phase of the metal is considered to be biologically available and potentially toxic to aquatic receptors (USEPA, 1993c).

5.4.5 Uncertainty Analyses A number of uncertainties and assumptions are inherent in the ecological risk assessment process. The NAVSTA Mayport GIR (ABB-ES, 1995a) summarizes general ERA uncertainties. Specific uncertainties associated with the evaluation of risks from potential groundwater contamination at SWMU 12 include the following:

- The presumption of no risks for aquatic life resulting from potential exposures to copper, lead, and nickel in groundwater assumes, in part, that the dilution of groundwater as it is discharged into the St. Johns River is at least 10 times. If dilution is less, risks may be underestimated.

- The analyses of the groundwater included both dissolved and nondissolved phases of the metal. Only the dissolved phase of the metal is considered to be biologically available and potentially toxic to aquatic receptors (USEPA, 1993c). The metals concentrations used are an overestimate of exposure and risks.

- Aquatic toxicity benchmarks are not available for 1,1-dichloroethane and 1,2-dichloroethene, resulting in a possible underestimate of risks.

6.0 SWMU 15 - OLD PESTICIDE HANDLING AREA

SWMU 15, the Old Pesticide Handling Area, is located in the northwestern part of NAVSTA Mayport, approximately 1,900 feet south of the St. Johns River and 350 feet east of the station's western boundary and the town of Mayport. This chapter provides a description and history of SWMU 15, a description of the ecological setting, results and interpretation of environmental sample analyses, and human health and ecological risk assessments.

6.1 SWMU 15 DESCRIPTION. The Old Pesticide Handling Area was located adjacent to Building 48A, approximately 350 feet east of the western boundary of the installation and approximately 700 feet west of Runway 23/5 (Figure 6-1). During 1963 and 1964, pesticides and pesticide application equipment were stored in a shed attached to the southwest corner of Building 48A. Pesticides were mixed at the site and, after use, the application equipment may have been washed near the building. As a result, runoff from the washing and rinsing activities may have infiltrated the ground surface. Also, small quantities of pesticides may have been disposed of in the vicinity of Building 48A (A.T. Kearney, 1989).

Ecological Setting. Terrestrial habitats at SWMU 15 include Mesic Flatwoods, Disturbed Mesic Flatwoods, and Overgrown Fields. Descriptions of these habitat types including characteristic plant and wildlife species are included in Section 3.4 of the RFI GIR (ABB-ES, 1995a).

Mesic Flatwoods are located approximately 650 feet north of SWMU 15. A green anole (*Anolis carolinensis carolinensis*) and a greathorned owl (*Bubo virginianus*) were observed during a field survey in the Mesic Flatwood community adjacent to SWMU 15. Although a nest was not found, it is possible that the owls nest onsite.

The Disturbed Mesic Flatwood community located within the Group II SWMUs is approximately 1,000 feet northeast of SWMU 15 and 300 feet south of SWMU 6. Bird species observed in the Disturbed Mesic Flatwood community were the cardinal (*Cardinalis cardinalis*), gray catbird (*Dumetella carolinensis*), rufous-sided towhee (*Pipilo erythrophthalmus*), and mourning dove (*Zenaida macroura*). A feral cat was also observed.

Overgrown fields are located approximately 330 feet northeast of SWMU 15. Bird species observed in the overgrown field community included the starling (*Sturnus magna*), meadowlark (*Sturnus vulgaris*), field sparrow (*Spizella pusilla*), loggerhead shrike (*Lanius ludovicianus*), mockingbird, killdeer, and ground dove (*Columbia passerina*).

6.1.1 Previous Investigations at SWMU 15 The Old Pesticide Handling Area was identified as NIRP IAS Site 15 but was not included in the ESI. Therefore, no previous environmental data were collected at this location. The Old Pesticide Handling Area was identified as an SWMU requiring an RFI in the HSWA permit.

6.1.2 RFI Field Activities RFI field activities were conducted at SWMU 15 in 1993 and 1994. Field activities included the installation of groundwater monitoring wells; the collection of surface soil, subsurface soil, and groundwater samples; and collection of soil for ecological toxicity testing using the earthworm (*Eisenia foetida*). Tables 2-1 and 2-2 (Section 2.1) provide an

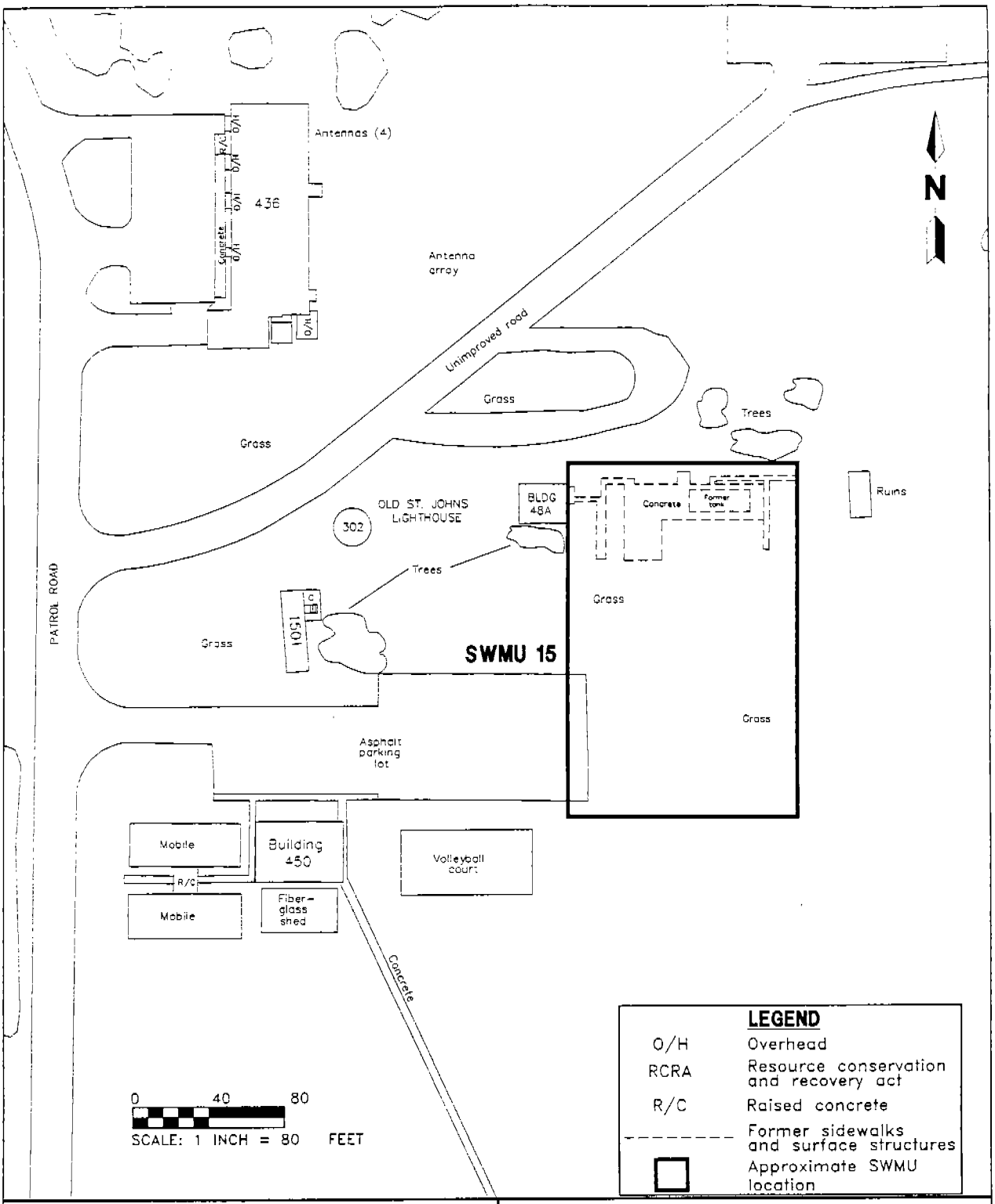

FIGURE 6-1
SOLID WASTE MANAGEMENT UNIT (SWMU) 15 LOCATION MAP

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overview of the analytical data for the Group II SWMUs. Sampling procedures, background sampling information, and other installationwide sampling information is provided in the NAVSTA Mayport GIR (ABB-ES, 1995a).

6.1.2.1 1993 RFI Field Activities

Surface and Subsurface Soil Sampling. Eight surface and subsurface soil sample pairs (excluding duplicates) were collected from shallow hand-auger borings (MPT-15-SS01 through MPT-15-SS08; Figure 6-2). The surface soil samples were collected at depths of 0 to 1 foot bls; the subsurface samples were collected at depths of 1 to 2 feet bls. One duplicate surface soil sample and one duplicate subsurface soil sample were also collected.

Two subsurface soil samples were also collected from the soil boring drilled for the installation of monitoring well MPT-15-MW01S (Figure 6-2). The samples were collected from 3 to 4 feet bls and 7 to 8 feet bls.

Monitoring Well Installation. One groundwater monitoring well was installed at a location that was assumed to be hydraulically downgradient from the former pesticide handling area. The purpose of the well was to provide a location where a groundwater sample could be collected and used to assess the potential for pesticides to have migrated to the shallow groundwater beneath SWMU 15.

Groundwater Sampling. One groundwater sample was collected from SWMU 15 in 1993 from the shallow monitoring well MPT-15-MW01S (Figure 6-2). A bailer was used to purge the monitoring well and collect the groundwater sample. The soil and groundwater samples were analyzed for VOCs, SVOCs, pesticides and PCBs, inorganics, and cyanide. In addition, the groundwater sample was analyzed for water quality parameters (total dissolved solids, chloride, alkalinity, hardness, sulfate, sulfide, total kjeldahl nitrogen, ammonia, nitrate and/or nitrite, phosphorus, total organic carbon, oil and grease, color, and pH).

6.1.2.2 1994 RFI Field Activities

Surface Soil Sampling. Soil samples were collected at shallow depths with a hand auger at SWMU 15 (MPT-15-SS09 through MPT-15-SS29; Figure 6-3). Twenty-three surface soil samples (land surface to a depth of 1 foot bls) and three duplicate samples were collected from shallow hand-auger borings.

The purpose of the surface soil samples was to assess the horizontal extent of pesticides detected in the 1993 samples and select locations for surface soil samples to be used for ecological toxicity (survival) testing with the earthworm (*Eisenia foetida*). Seven toxicity testing sampling locations were selected; six of the locations correspond to sampling locations MPT-15-SS12, MPT-15-SS15, MPT-15-SS16, MPT-15-SS17, MPT-15-SS20, and MPT-15-SS23 (Figure 6-3). The seventh sampling location corresponds to background location MPT-B-SS1 (Plate 1: NAVSTA Mayport GIR). A sample was collected from the background location to provide a reference sample for comparison to mortality percentages in the site-specific samples. The surface soil samples were analyzed for SVOCs (USEPA method 8270), chlorinated pesticides and PCBs (USEPA method 8080), organophosphate pesticides (USEPA method 8140), and chlorinated herbicides (USEPA method 8150). Earthworms surviving the toxicity testing were analyzed for SVOCs (USEPA method 8270) and pesticides and PCBs (USEPA method 8080).

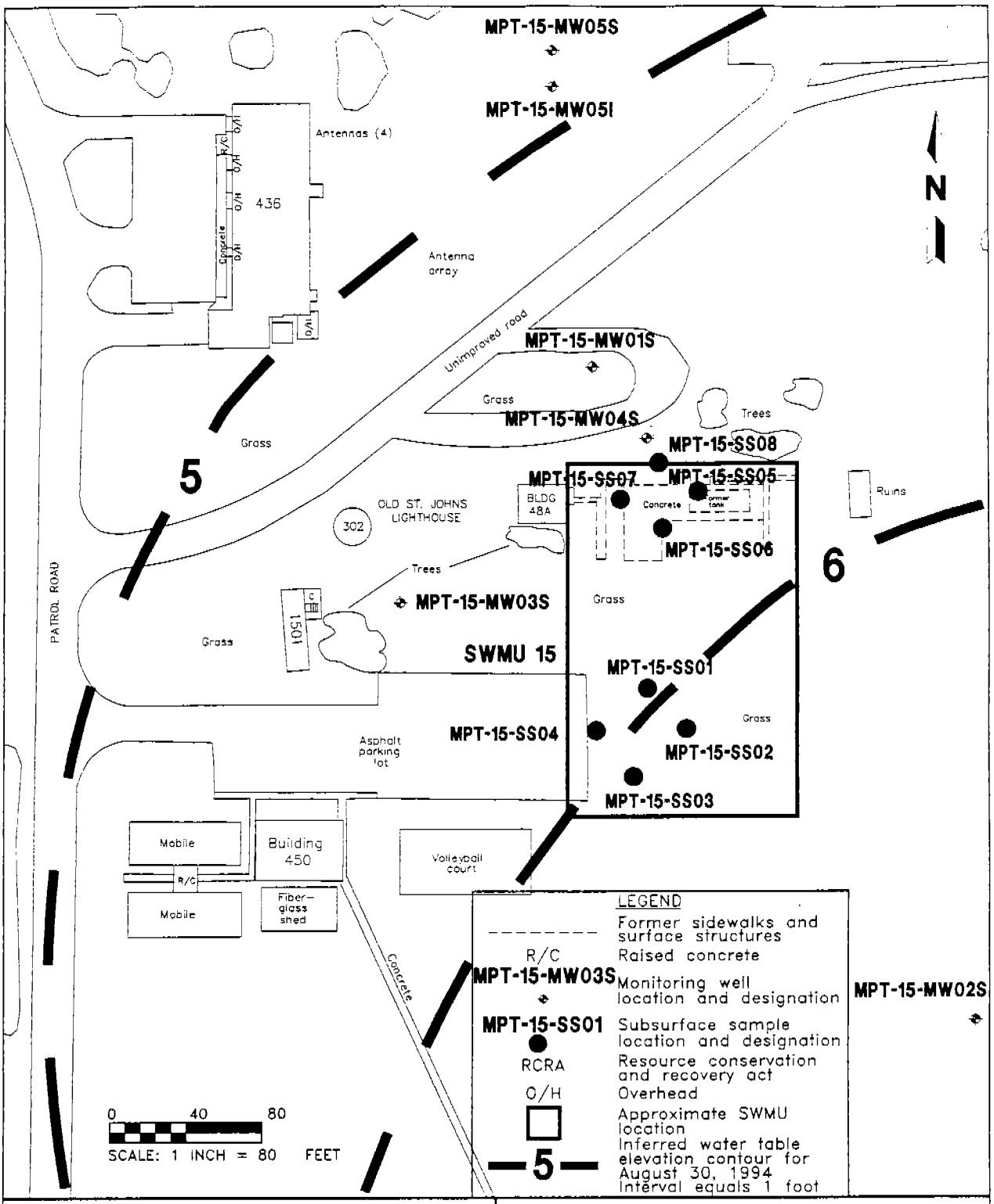

FIGURE 6-2
SUBSURFACE SOIL AND GROUNDWATER SAMPLE LOCATIONS, AND POTENTIOMETRIC SURFACE MAP, SOLID WASTE MANAGEMENT UNIT (SWMU) 15

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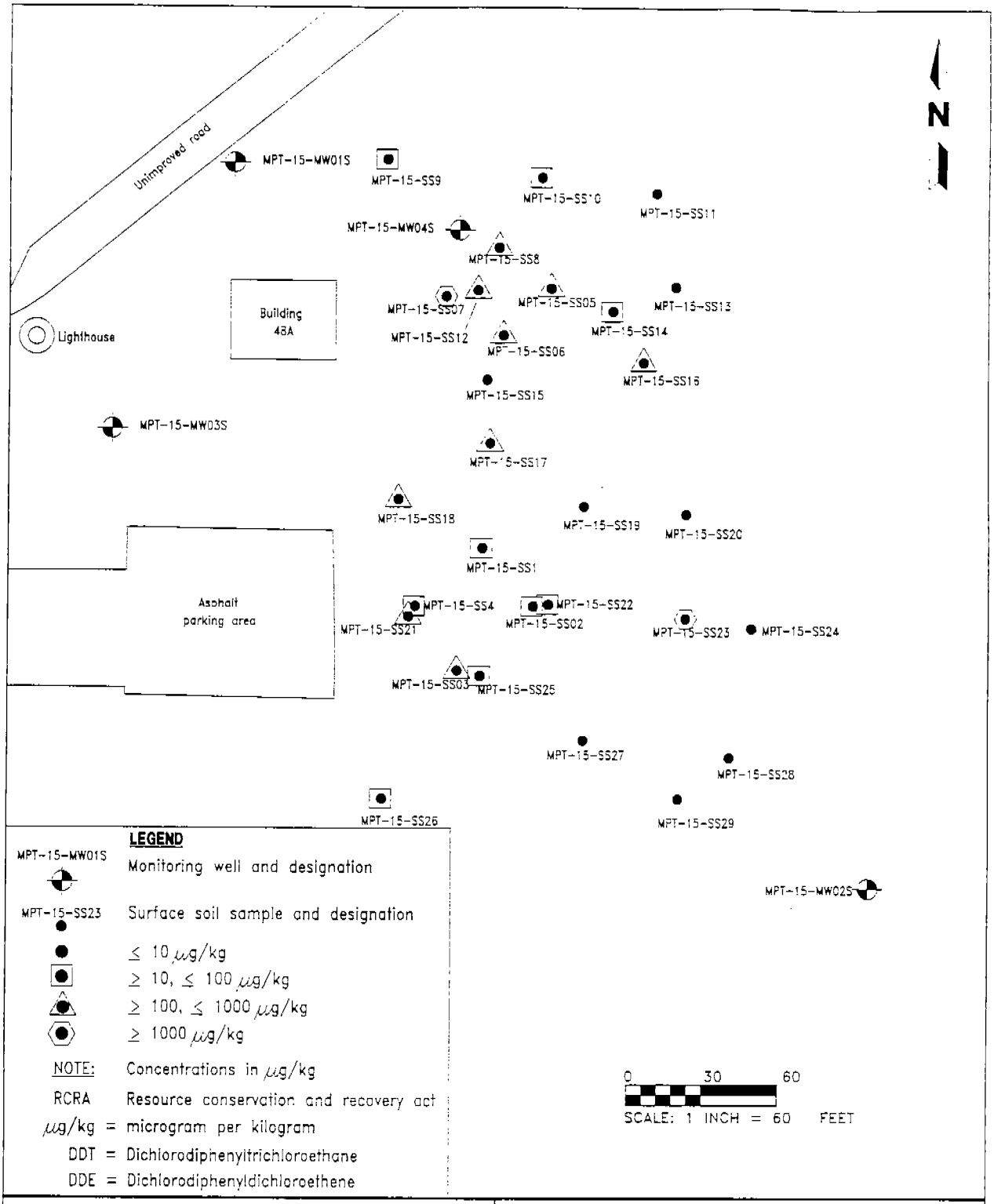

FIGURE 6-3

TOTAL 4,4-DDT AND 4,4-DDE CONCENTRATIONS DETECTED IN SURFACE SOIL SAMPLES AT SOLID WASTE MANAGEMENT UNIT (SWMU) 15

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Monitoring Well Installation. Because pesticides were detected in the monitoring well installed in 1993, five additional monitoring wells were installed at locations assumed to be hydraulically downgradient from SWMU 15. The monitoring wells consisted of four monitoring wells screened across the water table (MPT-15-MW02S through MPT-15-MW05S) and one monitoring well screened in the intermediate zone of the surficial aquifer, MPT-15-MW05I (Figure 6-2).

Groundwater Sampling. Six groundwater samples were collected from SWMU 15 in 1994. Five of the samples were collected from shallow monitoring wells MPT-15-MW01S, MPT-15-MW02S, MPT-15-MW03S, MPT-15-MW04S, and MPT-15-MW05S (Figure 6-2). One sample was collected from intermediate monitoring well MPT-15-MW05I (Figure 6-2). One duplicate groundwater sample was collected from shallow monitoring well MPT-15-MW05S. The monitoring wells were purged using low-flow sampling methods (ABB-ES, 1995a). Inorganic aliquots were collected using the low-flow sampling method. A Teflon™ bailer was used to collect aliquots for VOCs, SVOCs, pesticides, and PCB analyses (see analytical summary tables in Subsection 6.2.3).

6.2 FINDINGS. The nature and distribution of analytes detected in SWMU 15 surface soil, subsurface soil, and groundwater are described in the following subsections.

6.2.1 Surface Soil Assessment Eight surface soil samples and a duplicate were collected in 1993 (MPT-15-SS01 through MPT-15-SS08, Figure 6-2) and, in 1994, 22 surface soil samples and 3 duplicates were collected (MPT-15-SS09 through MPT-15-SS30, Figure 6-3). Tables 6-1 and 6-2 present the concentrations of organic and inorganic analytes detected in each sample, Table 6-3 lists statistics for each chemical detected, and Table 6-4 shows how detected concentrations compare to background screening and benchmark concentrations. Sample MPT-15-SS30 was collected approximately 600 feet north of SWMU 15. This sample was collected as a reference sample for the ecological toxicity testing. Analytical results from this sample will be used to assess whether the chemicals detected in the other ecological testing samples are potentially responsible for the observed mortality, if any. Therefore, concentrations of chemicals detected in this sample are not included in Tables 6-3 and 6-4.

6.2.1.1 Organics Organic compounds detected in the soil samples consist of one VOC, two SVOCs, and five pesticides (see Table 6-3). The pesticides 4,4'-DDE, 4,4'-DDT, and chlordane were detected at concentrations that exceed benchmarks (see Table 6-4). Organophosphate pesticides and chlorinated herbicides were not detected in the surface soil samples.

Acetone was detected in three samples at concentrations of 30 μg/kg or less. Acetone is a common laboratory and field contaminant; however, it was not detected in the quality control samples associated with these samples. Although it was not detected in associated blanks, acetone may have been introduced to the samples during sample collection or analysis.

The SVOCs, which were the two phthalate compounds (bis-2-ethylhexylphthalate and butylbenzylphthalate), were detected at concentrations of 640 J μg/kg or less in surface soil samples collected from the northwestern part of the site. Phthalates are common laboratory and field contaminants; however, they were not detected in the associated quality control samples. The source of these compounds is unknown.

Table 6-1
Organic Analytes Detected in Surface Soil Samples at Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
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Analytical Batch No.:	2395	2395	2395	2395	2395	2395	2395
Sample Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Sample Location:	MPT-15-SS01	MPT-15-SS02	MPT-15-SS03	MPT-15-SS04	MPT-15-SS05	MPT-15-SS06	MPT-15-SS07
Sample No.:	15SS11	15SS21	15SS31	15SS41	15SS51	15SS61	15SS71
Date Sampled:	02-FEB-93	02-FEB-93	02-FEB-93	02-FEB-93	02-FEB-93	02-FEB-93	02-FEB-93
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Volatile Analytes (µg/kg)							
Acetone	--	--	--	2 J	30 J	9 J	--
Semivolatile Analytes (µg/kg)							
Butylbenzylphthalate	--	--	--	--	--	640 J	--
bis(2-Ethylhexyl)phthalate	--	--	--	--	--	--	--
Pesticides and PCBs (µg/kg)							
Heptachlor	--	--	--	--	16 J	--	--
Heptachlor epoxide	--	--	--	--	85 J	--	--
4,4-DDE	24	28	160	49	100 J	72 J	2,800
4,4-DDT	9.2	22	34	18	100 J	84 J	1,500
Chlordane	--	--	--	--	5,600	1,100	--

See notes at end of table.

Table 6-1 (Continued)
Organic Analytes Detected in Surface Soil Samples at Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
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Mayport, Florida

Analytical Batch No.:	2395	2395	M790	M790	M786	M786	M786	M786
Sample Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Sample Location:	MPT-15-SS08	MPT-15-SS08	MPT-15-SS09	MPT-15-SS09	MPT-15-SS-10	MPT-15-SS11	MPT-15-SS12	MPT-15-SS13
Sample No.:	15SS81	15SS81Dup	15SS00901	15SS00901Dup	15SS01001	15SS01101	15SS01201	15SS01301
Date Sampled:	02-FEB-93	02-FEB-93	20-SEP-94	20-SEP-94	13-SEP-94	13-SEP-94	13-SEP-94	13-SEP-94
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Volatile Analytes (µg/kg)								
Acetone	–	–	NA	NA	NA	NA	NA	NA
Semivolatile Analytes (µg/kg)								
Butylbenzylphthalate	180 J	250 J	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	–	–	NA	NA	NA	NA	NA	NA
Pesticides and PCBs (µg/kg)								
Heptachlor	–	–	–	–	–	–	–	–
Heptachlor epoxide	–	–	–	–	–	–	–	–
4,4-DDE	260 J	230 J	63 J	60 J	54	3.1	220	3.4
4,4-DDT	110 J	140 J	7.1 J	7.4 J	18	1.8	56 J	4.4 J
Chlordane	1,000	710	–	–	–	–	380	20

See notes at end of table.

Table 6-1 (Continued)
Organic Analytes Detected in Surface Soil Samples at Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	M786	M786	M786	M786	M786	M790	M790
Sample Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Sample Location:	MPT-15-SS14	MPT-15-SS15	MPT-15-SS16	MPT-15-SS17	MPT-15SS18	MPT-15-SS19	MPT-15-SS19
Sample No.:	15SS01401	15SS01501	15SS01601	15SS01701	15SS01801	15SS01901	15SS01901Dup
Date Sampled:	13-SEP-94	13-SEP-94	13-SEP-94	13-SEP-94	13-SEP-94	20-SEP-94	20-SEP-94
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Volatile Analytes (µg/kg)							
Acetone	NA	NA	NA	NA	NA	NA	NA
Semivolatile Analytes (µg/kg)							
Butylbenzylphthalate	NA	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NA	NA	NA	NA	NA	NA	NA
Pesticides and PCBs (µg/kg)							
Heptachlor	--	--	--	--	--	--	--
Heptachlor epoxide	--	--	--	--	--	--	--
4,4-DDE	9.3	1.1	560	93	180	2.1 J	1.7 J
4,4-DDT	34	2.5	340	89	54	1.5 J	1.7 J
Chlordane	75	31	9,000	--	--	--	--

See notes at end of table.

Table 6-1 (Continued)
Organic Analytes Detected in Surface Soil Samples at Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	M786	M786	M786	M786	M786	R878	R878	R874	R874	R874
Sample Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Sample Location:	MPT-15-SS21	MPT-15-SS22	MPT-15-SS23	MPT-15-SS25	MPT-15-SS26	MPT-15-SS27	MPT-15-SS27	MPT-15-SS28	MPT-15-SS29	MPT-15-SS30
Sample No.:	15SS02101	15SS02201	15SS02301	15SS02501	15SS02601	15SS02701	15SS02701Dup	15SS02801	15SS02901	15SS03001
Date Sampled:	13-SEP-94	13-SEP-94	13-SEP-94	13-SEP-94	13-SEP-94	22-SEP-94	22-SEP-94	13-SEP-94	13-SEP-94	13-SEP-94
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Volatile Analytes (µg/kg)										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Analytes (µg/kg)										
Butylbenzylphthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)-phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pesticides and PCBs (µg/kg)										
Heptachlor	–	–	–	–	–	–	–	–	–	–
Heptachlor epoxide	–	–	–	–	–	–	–	–	–	–
4,4-DDE	270	14	–	49	7.9	1.2	0.67 J	2.8	6.5	3.8
4,4-DDT	60	6.5	790,000	17	7.4	–	–	–	2.1	2.2
Chlordane	–	–	–	–	–	–	–	–	–	–

Notes: Samples MPT-15-SS20 and MPT-15-SS24 had no detectable organic analyte.

RCRA = Resource Conservation and Recovery Act.
ft bls = feet below land surface.
µg/kg = micrograms per kilogram.
J = estimated value.
– = analyte not detected.
PCBs = polychlorinated biphenyls.
DDE = dichlorodiphenyldichloroethene.
DDT = dichlorodiphenyltrichloroethane.
NA = not analyzed.

Table 6-2
Inorganic Analytes Detected in Surface Soil Samples at Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	0128	0128	0128	0128	0128	0128	0128	0128	0128
Sample Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Sample Location:	MPT-15-SS01	MPT-15-SS02	MPT-15-SS03	MPT-15-SS04	MPT-15-SS05	MPT-15-SS06	MPT-15-SS07	MPT-15-SS08	MPT-15-SS08
Sample No.:	15SS11	15SS21	15SS31	15SS41	15SS51	15SS61	15SS71	15SS81	15SS81Dup
Date Sampled:	02-FEB-93	02-FEB-93	02-FEB-93	02-FEB-93	02-FEB-93	02-FEB-93	02-FEB-93	02-FEB-93	02-FEB-93
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Inorganic Analytes (mg/kg)									
Antimony	2.8 J	--	--	--	--	--	--	--	--
Arsenic	1.3 J	1.2 J	1.2 J	1.4 J	2.9 J	5	3 J	2.9 J	2.9 J
Barium	7.1 J	5.1 J	4.3 J	5.5 J	7.5 J	4.6 J	30.6 J	27.7 J	21.8 J
Beryllium	0.16 J	0.12 J	0.14 J	0.17 J	0.09 J	0.1 J	0.07 J	0.09 J	0.09 J
Cadmium	--	0.62	--	0.59	--	--	0.5 J	0.8	0.84
Chromium	4.3	5.4	3.2	4	2.5	6.7	14.6	9.1	10.9
Cobalt	0.48 J	0.51 J	0.7 J	0.36 J	0.26 J	0.38 J	0.59 J	0.66 J	0.65 J
Copper	8.2	4.5	2.3 J	2.3 J	2 J	1.1 J	11.4	9.3	10.8
Lead	17.1	26.3	15.5	2.4	8.9	4.9	107 J	267 J	326 J
Mercury	--	--	--	--	--	--	0.07 J	0.53	0.62
Nickel	--	1.6 J	--	1.9 J	--	--	1.4 J	--	--
Selenium	0.81 J	0.64 J	0.5 J	0.48 J	0.37 J	0.74 J	0.78 J	0.27 J	0.59 J
Tin	--	--	4.2 J	--	--	--	--	3.7 J	3.8 J
Vanadium	2.1 J	3.2 J	3.2 J	3.6 J	1.6 J	1.8 J	3.7 J	3 J	3.3 J
Zinc	22.8 J	53.6 J	72.6 J	28.5 J	39.6 J	9.1 J	165 J	169 J	174 J

Notes: RCRA = Resource Conservation and Recovery Act.
ft bls = feet below land surface.
mg/kg = milligrams per kilogram.
J = estimated value.
-- = analyte not detected.

Table 6-3
Summary of Chemicals Detected in Surface Soil for Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Minimum Concentration[2]	Maximum Concentration[2]	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration
Volatile Analytes (µg/kg)						
Acetone	3/8	2	30	14	10 - 11	15SS51
Semivolatile Analytes (µg/kg)						
Butylbenzylphthalate	2/8	215*	640	428	690 - 18,000	15SS61
bis(2-Ethylhexyl)phthalate	1/8	200	200	200	680 - 720	15SS71
Pesticides/PCBs (µg/kg)						
4,4'-DDE	28/29	0.935*	2,800	179.38	14,000 - 14,000	15SS71
4,4'-DDT	27/29	1.6*	790,000	29,355.5	1.4 - 1.4	15SS02301
Chlordane	8/29	20	9,000	2,133	7 - 14,000	15SS01601
Heptachlor	1/29	16	16	16	0.7 - 14,000	15SS51
Heptachlor epoxide	1/29	85	85	85	0.7 - 14,000	15SS51
Inorganic Analytes (mg/kg)						
Antimony	1/8	2.8	2.8	2.8	2.5 - 2.7	15SS11
Arsenic	8/8	1.2	5	2.4	N/A	15SS61
Barium	8/8	4.3	30.6	11.2	N/A	15SS71
Beryllium	8/8	0.07	0.17	0.12	N/A	15SS41
Cadmium	4/8	0.5	0.82*	0.63	0.41 - 0.43	15SS81D
Chromium	8/8	2.5	14.6	6.3	N/A	15SS71
Cobalt	8/8	0.26	0.7	0.49	N/A	15SS31
Copper	8/8	1.1	11.4	5.2	N/A	15SS71
Lead	8/8	2.4	296.5*	59.8	N/A	15SS81D
Mercury	2/8	0.07	0.575*	0.32	0.04 - 0.13	15SS81D
Nickel	3/8	1.4	1.9	1.6	1.3 - 1.4	15SS41
Selenium	8/8	0.37	0.81	0.59	N/A	15SS11
Tin	2/8	3.75*	4.2	4	3.6 - 3.8	15SS31
Vanadium	8/8	1.6	3.7	2.8	N/A	15SS71

See notes at end of table.

Table 6-3 (Continued)
Summary of Chemicals Detected in Surface Soil for Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Minimum Concentration[2]	Maximum Concentration[2]	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration
Zinc	8/8	9.1	171.5*	70.3	N/A	15SS81D

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed.
[2] A value indicated by an asterisk is the average of the detected concentrations in a sample and its duplicate. For nondetected values, 1/2 the contract-required quantitation limit (CRQL/CRDL) and contract-required detection limit (CRQL/CRDL) is used as a surrogate.
[2] The mean of detected concentrations is the arithmetic mean of all samples in which the analyte was detected. It does not include those samples in which the analyte was not detected.

Notes: RCRA = Resource Conservation and Recovery Act.
µg/kg = micrograms per kilogram.
4,4'-DDT = dichlorodiphenyltrichloroethane.
NA = not applicable.
PCBs = polychlorinated biphenyls.
4,4'-DDE = dichlorodiphenyldichloroethene.
mg/kg = milligrams per kilogram.

Table 6-4
Comparison of Analytes Detected in Solid Waste Management Unit (SWMU) 15 Surface Soil to Background Screening and Benchmark Concentrations

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Maximum Concentration[1]	Background Screening Concentration[2]	Frequency Above Background Screening Concentration	Florida Cleanup Goal[3]	Frequency Above Florida Cleanup Goal	Risk-Based Screening Concentration[4]	Frequency Above Risk-Based Screening Concentration
Volatile Analytes (µg/kg)							
Acetone	30	NSC	N/A	130,000	0/8	780,000	0/8
Semivolatile Analytes (µg/kg)							
Butylbenzylphthalate	640	NSC	25/29	15,000,000	0/8	1,600,000	0/8
bis(2-Ethylhexyl)phthalate	200	NSC	N/A	45,000	0/8	46,000	0/8
Pesticides/PCBs (µg/kg)							
4,4'-DDE	2,800	3.5	25/29	2,900	0/29	1,900	1/29
4,4'-DDT	790,000	NSC	N/A	3,100	1/29	1,900	1/29
Chlordane	9,000	NSC	N/A	800	4/29	490	4/29
Heptachlor	16	NSC	N/A	200	0/29	140	0/29
Heptachlor epoxide	85	NSC	N/A	100	0/29	70	1/29
Inorganic Analytes (mg/kg)							
Antimony	2.8	NSC	N/A	26	0/8	3.1	0/8
Arsenic	5	NSC	N/A	0.7	8/8	0.37	8/8
Barium	30.6	5.6	4/8	5,000	0/8	550	0/8
Beryllium	0.17	0.16	1/8	0.1	4/8	0.15	2/8
Cadmium	0.82*	2	0/8	37	0/8	3.9	0/8
Chromium	14.6	2.6	7/8	150	0/8	39	0/8
Cobalt	0.7	NSC	N/A	4,700	0/8	470	0/8
Copper	11.4	2.2	6/8	2,900	0/8	290	0/8
Lead	296.5*	NSC	N/A	500	0/8	400	0/8
Mercury	0.575*	NSC	N/A	23	0/8	2.3	0/8
Nickel	1.9	NSC	N/A	1,500	0/8	160	0/8
Selenium	0.81	1.36	0/8	390	0/8	39	0/8
Tin	4.2	NSC	N/A	44,000	0/8	4,700	0/8

See notes at end of table.

Table 6-4 (Continued)
Comparison of Analytes Detected in Solid Waste Management Unit (SWMU) 15 Surface Soil to Background Screening and Benchmark Concentrations

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Maximum Concentration[1]	Background Screening Concentration[2]	Frequency Above Background Screening Concentration	Florida Cleanup Goal[3]	Frequency Above Florida Cleanup Goal	Risk-Based Screening Concentration[4]	Frequency Above Risk-Based Screening Concentration
Vanadium	3.7	4	0/8	480	0/8	55	0/8
Zinc	171.5*	2.6	8/8	23,000	0/8	2,300	0/8

[1] A value indicated by an asterisk is the average of the detected concentrations in a sample and its duplicate. For nondetected values, one-half the contract-required quantitation limit and contract-required detection limit is used as a surrogate.
[2] The background screening concentration is twice the mean of detected concentrations for inorganic analytes.
[3] The Florida Cleanup Goals April 5, 1995.
[4] U.S. Environmental Protection Agency Region III risk-based screening concentrations (February 9, 1995). Concentrations for noncarcinogenic risks are adjusted to a hazard index of 0.1.

Notes: RCRA = Resource Conservation and Recovery Act.
μg/kg = micrograms per kilogram.
4,4'-DDT = dichlorodiphenyltrichloroethane.
PCBs = polychlorinated biphenyls.
N/A = not applicable.
4,4'-DDE = dichlorodiphenyldichloroethene.
mg/kg = milligrams per kilogram.
NSC = no screening concentration.

4,4'-DDE and 4,4'-DDT were detected in nearly every sample. However, each was detected in only one sample at a concentration that exceeds background or benchmark concentrations (MPT-15-SS07 for 4,4'-DDE and MPT-15-SS23 for 4,4'-DDT) (see Table 6-4).

The maximum concentrations detected were 2,800 μg/kg for 4,4'-DDE and 790,000 μg/kg for 4,4'-DDE, which suggest that pesticides have been released at the site. This is consistent with the site history. These concentrations are also much greater than the concentrations detected in the reference sample MPT-15-SS30 (3.8 μg/kg for 4,4'-DDE and 2.2 μg/kg 4,4'-DDT). Figure 6-3 shows the distribution of the combined values for detected concentrations of 4,4'-DDE and 4,4'-DDT. The highest concentrations were detected in the northwest and southeast part of SWMU 15. Because the release is likely a result of the cleaning of pesticide application equipment, there is a possibility that concentrations of 4,4'-DDT and 4,4'-DDE may be detected in areas beyond what is illustrated in Figure 6-3. The release is believed to represent numerous "hot spots" that cannot be defined by contouring of the analytical results.

Chlordane was detected in fewer samples than 4,4'-DDE and 4,4'-DDT; however, four samples contained chlordane at concentrations that exceed the benchmark concentrations (see Table 6-4). The concentrations of chlordane detected in the surface soil samples also suggest that this pesticide was released at SWMU 15. However, chlordane was only detected in the northern part of the SWMU (Figure 6-4). The highest concentration (9,000 μg/kg) was detected in sample MPT-15-SS16 located in the eastern part of the SWMU. Because the release is likely a result of the cleaning of pesticide application equipment, there is a possibility that concentrations of chlordane may be detected in areas northeast of the area illustrated in Figure 6-4. Therefore, the release is believed to represent numerous "hot spots" that cannot be defined by contouring of the analytical results.

Two other pesticides, heptachlor and heptachlor epoxide, were also detected in the surface soil samples. Heptachlor epoxide was detected at a concentration (85 μg/kg) slightly higher than the USEPA Region III RBC (72 μg/kg). However, these compounds were detected in only one sample (MPT-15-SS05). It is likely that these pesticides also are related to past pesticide handling and storage at this SWMU.

6.2.1.2 Inorganics Fifteen inorganic analytes were detected in surface soil samples; 12 were detected at concentrations that exceed background screening concentrations or were detected in SWMU 15 samples but not in background samples (see Table 6-4). However, only arsenic and beryllium were detected at concentrations exceeding benchmarks (see Table 6-4).

Arsenic was detected in eight surface soil samples at concentrations exceeding benchmarks. These samples are located in the northwest part of the SWMU. There is no pattern to the distribution of arsenic at SWMU 15.

Beryllium was detected in all the surface soil samples. Four samples contained beryllium at concentrations slightly exceeding benchmarks. There is no pattern to the distribution of beryllium at the SWMU.

Because the land features at NAVSTA Mayport are influenced by the deposition of dredge material from the Mayport Turning Basin, it cannot be determined whether the concentrations of arsenic and beryllium are related to a release at SWMU 15, or are residual concentrations from the dredge material. However, it should be noted that arsenic was used singularly and in combination with other chemicals as a pesticide and a herbicide.

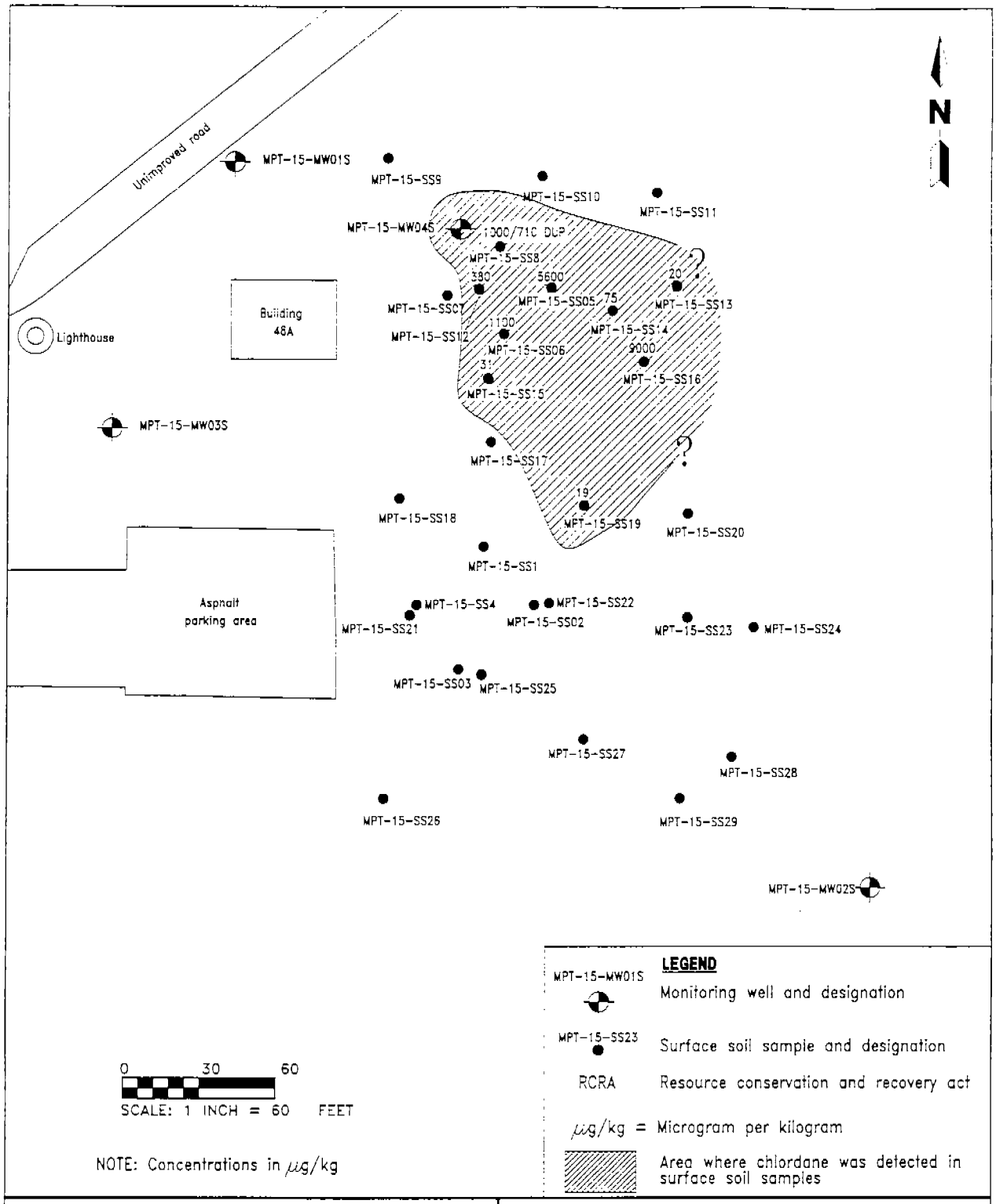

FIGURE 6-4

CHLORDANE CONCENTRATIONS DETECTED IN SURFACE SOIL SAMPLES AT SOLID WASTE MANAGEMENT UNIT (SWMU) 15

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RCRA FACILITY INVESTIGATION REPORT, GROUP II SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

6.2.2 Subsurface Soil Assessment In 1993, eight subsurface soil samples and a collocated duplicate were collected (sampling locations MPT-15-SS01 through MPT-15-SS08), and two samples were collected during the installation of monitoring well MPT-15-MW01S (Figure 6-2). Tables 6-5 and 6-6 present the concentrations of chemicals detected in each sample, Table 6-7 lists statistics for each chemical detected, and Table 6-8 shows how detected concentrations compare to background screening and benchmark concentrations.

6.2.2.1 **Organics** One VOC, one SVOC, and three pesticides were detected in subsurface soil samples (see Table 6-7). None of these compounds were detected at concentrations exceeding benchmarks (see Table 6-8).

Acetone was detected in seven subsurface soil samples across the SWMU; however, there is no known source for acetone at SWMU 15. Acetone is very volatile and soluble. If it had been released, it is expected that it would be present in groundwater, but it was not detected in the SWMU 15 groundwater samples (see Section 6.2.3). Acetone is a common laboratory and field contaminant; however, it was not detected in the quality control samples associated with these samples. Although it was not detected in associated blanks, acetone may have been introduced to the samples during sample collection or analysis.

Butylbenzylphthalate was detected in MPT-15-SS05 at 380 μg/kg, which is below benchmark concentrations. The source of butylbenzylphthalate in this sample is unknown; however, it is a common laboratory and field contaminant, and may have been introduced during sampling or analysis.

4,4'-DDE and 4,4'-DDT were detected in two samples at concentrations less than 3 μg/kg. The low frequencies of detection and relatively low concentrations as compared to the widespread distribution in surface soil samples suggest that there is minimal downward migration of these pesticides (see Tables 6-3 and 6-4). However, a subsurface soil sample was not collected at sampling location MPT-15-SS23 where the highest concentration of 4,4'-DDT was detected (790,000 μg/kg). The presence of these pesticides in the subsurface soil samples is consistent with the site history.

Chlordane was only detected in one subsurface soil sample (the sample from MPT-15-SS05). The surface soil sample from this location had the second highest concentration of chlordane detected (5,600 μg/kg). A subsurface soil sample was not collected from MPT-15-SS16 where the highest concentration of chlordane was detected (9,000 μg/kg). The detection of chlordane in subsurface soil samples where the highest concentrations were detected in surface soil suggests that there is some downward migration. The presence of chlordane is consistent with the site history.

6.2.2.2 **Inorganics** Fourteen inorganic analytes were detected in subsurface soil samples; five analytes were detected at concentrations exceeding background screening concentrations or were detected in SWMU 15 samples but not in background samples. Only arsenic was detected at concentrations that exceed benchmark concentrations (see Table 6-8).

Arsenic was detected in all the subsurface soil samples; however, only sample MPT-15-SS06 contained arsenic at a concentration that exceeds benchmark concentrations. The surface soil sample from this location also had the highest detected concentration of arsenic (5 mg/kg).

Table 6-5
Organic Analytes Detected in Subsurface Soil Samples at Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	3508	3508	3508	2395	2395	3508	2376	2376
Sample Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Sample Location:	MPT-15-SS01	MPT-15-SS02	MPT-15-SS03	MPT-15-SS04	MPT-15-SS05	MPT-15-SS06	MPT-15-MW01S	MPT-15-MW01S
Sample No.:	15SS12	15SS22	15SS32	15SS42	15SS52	15SS62	MP15MS1S2	MP15MS1S6
Date Sampled:	02-FEB-93	02-FEB-93	02-FEB-93	02-FEB-93	02-FEB-93	02-FEB-93	15-JAN-93	15-JAN-93
Sample Depth (ft bls):	1 to 2	1 to 2	1 to 2	1 to 2	1 to 2	1 to 2	1 to 2	5 to 6
Volatile Analytes (µg/kg)								
Acetone	4 J	2 J	2 J	3 J	5 J	46 J	--	150
Semivolatile Analytes (µg/kg)								
Butylbenzylphthalate	--	--	--	--	380	--	--	--
Pesticides and PCBs (µg/kg)								
4,4-DDE	--	--	--	2.1	1.9 J	--	--	--
4,4-DDT	--	--	--	2.4	--	--	--	--
Chlordane	--	--	--	--	180	--	--	--

Notes: RCRA = Resource Conservation and Recovery Act.
ft bls = feet below land surface.
µg/kg = micrograms per kilogram.
J = estimated value.
-- = analyte not detected.
PCBs = polychlorinated biphenyls.
DDE = dichlorodiphenyldichloroethene.
DDT = dichlorodiphenyltrichloroethane.

Table 6-6
Inorganic Analytes Detected in Subsurface Samples at Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Analytical Batch No.:	0128	0128	0128	0128	0128	0128	0128
Sample Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Sample Location:	MPT-15-SS01	MPT-15-SS02	MPT-15SS03	MPT15SS04	MPT-15-SS05	MPT-15-SS06	MPT-15-SS07
Sample No.:	15SS12	15SS22	15SS32	15SS42	15SS52	15SS62	15SS72
Date Sampled:	02-FEB-93	02-FEB-93	02-FEB-93	02-FEB-93	02-FEB-93	02-FEB-93	02-FEB-93
Sample Depth (ft bls):	1 to 2	1 to 2	1 to 2	1 to 2	1 to 2	1 to 2	1 to 2
Inorganic Analytes (mg/kg)							
Antimony	–	–	–	–	–	–	–
Arsenic	1.2 J	1.1 J	1.5 J	1.5 J	2.5 J	5.1	2.1 J
Barium	2.9 J	2.1 J	2.9 J	3.9 J	4.5 J	2.8 J	4.8 J
Beryllium	0.12 J	0.12 J	0.11 J	0.14 J	0.05 J	0.07 J	0.07 J
Chromium	2	1.8	2	2.5	0.86 J	2.9	1.9
Cobalt	0.24 J	0.31 J	0.49 J	0.35 J	0.41 J	–	–
Copper	0.28 J	0.33 J	0.46 J	0.5 J	0.44 J	0.54 J	1.6 J
Lead	0.9	1.5	1	2.6	0.5	0.3 J	0.86
Mercury	–	–	–	–	–	–	–
Selenium	0.52 J	0.54 J	–	0.37 J	0.44 J	0.62 J	0.64 J
Thallium	–	–	–	–	–	–	–
Tin	–	–	4.2 J	–	–	–	–
Vanadium	1.6 J	2 J	1.5 J	2.2 J	0.86 J	0.97 J	1.6 J
Zinc	1.3 J	1.5 J	3.6 J	3.1 J	3.5 J	2.6 J	7.8 J

See notes at end of table.

Table 6-6 (Continued)
Inorganic Analytes Detected in Subsurface Samples at Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Analytical Batch No.:	0128	0128	3490	3490
Sample Matrix:	Soil	Soil	Soil	Soil
Sample Location:	MPT-15-SS08	MPT-15-SS08	MPT-15-MW01S	MPT-15-MW01S
Sample No.:	15SS82	15SS82Dup	MP15MS1S6	MP15MS1S2
Date Sampled:	02-FEB-93	02-FEB-93	15-JAN-93	15-JAN-93
Sample Depth (ft bls)	1 to 2	1 to 2	5 to 6	1 to 2
Inorganic Analytes (mg/kg)				
Antimony	–	–	3 J	–
Arsenic	1.5 J	1.5 J	0.53 J	0.9 J
Barium	5 J	4.7 J	5.1 J	2.3 J
Beryllium	0.09 J	0.07 J	–	–
Chromium	1.3	0.93 J	1.5 J	–
Cobalt	0.37 J	–	–	–
Copper	1.1 J	1.3 J	2.4 J	1.7 J
Lead	0.5	0.41	0.56 J	0.63
Mercury	–	–	0.03 J	–
Selenium	0.46 J	0.46 J	–	–
Thallium	–	–	0.22 J	–
Tin	–	–	–	–
Vanadium	1.2 J	1.1 J	1.8 J	0.96 J
Zinc	5 J	2.4 J	2.9 J	3.6 J

Notes: RCRA = Resource Conservation and Recovery Act.
Dup = duplicate.
ft bls = feet below land surface.
mg/kg = milligrams per kilogram.
– = analyte not detected.
J = estimated value.

Table 6-7
Summary of Chemicals Detected in Solid Waste Management Unit (SWMU) 15 Subsurface Soil

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Minimum Concentration[2]	Maximum Concentration[2]	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration
Volatile Analytes (µg/kg)						
Acetone	7/10	2	150	30	10 - 13	MP15MS1S6
Semivolatile Analytes (µg/kg)						
Butylbenzylphthalate	1/10	380	380	380	340 - 400	15SS52
Pesticides/PCBs (µg/kg)						
4,4'-DDE	2/10	1.9	2.1	2	0.69 - 0.8	15SS42
4,4'-DDT	1/10	2.4	2.4	2.4	1.4 - 2.7	15SS42
Chlordane	1/10	180	180	180	6.9 - 8	15SS52
Inorganic Analytes (mg/kg)						
Antimony	1/10	3	3	3	2.5 - 2.6	MP15MS1S6
Arsenic	10/10	0.53	5.1	1.79	N/A	15SS62
Barium	10/10	2.1	5.1	3.6	N/A	MP15MS1S6
Beryllium	8/10	0.05	0.14	0.1	0.1 - 0.12	15SS42
Chromium	9/10	0.86	2.9	1.84	0.78 - 0.78	15SS62
Cobalt	6/10	0.24	0.49	0.34	0.23 - 1.4	15SS32
Copper	10/10	0.28	2.4	0.95	N/A	MP15MS1S6
Lead	10/10	0.3	2.6	0.93	N/A	15SS42
Mercury	1/9	0.03	0.03	0.03	0.04 - 0.09	MP15MS1S6
Selenium	7/10	0.37	0.64	0.51	0.1 - 0.22	15SS72
Thallium	1/10	0.22	0.22	0.22	0.15 - 0.27	MP15MS1S6
Tin	1/10	4.2	4.2	4.2	2.4 - 3.7	15SS32
Vanadium	10/10	0.86	2.2	1.46	N/A	15SS42

See notes at end of table.

Table 6-7 (Continued)
Summary of Chemicals Detected in Solid Waste Management Unit (SWMU) 15 Subsurface Soil

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Minimum Concentration[2]	Maximum Concentration[2]	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration
Zinc	10/10	1.3	7.8	3.4	N/A	15SS72

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed.
[2] A value indicated by an asterisk is the average of the detected concentrations in a sample and its duplicate. For nondetected values, one-half the contract-required quantitation limit and contract-required detection limit is used as a surrogate.
[3] The mean of detected concentrations is the arithmetic mean of all samples in which the analyte was detected. It does not include those samples in which the analyte was not detected.

Notes: RCRA = Resource Conservation and Recovery Act.
μg/kg = micrograms per kilogram.
4,4'-DDT = dichlorodiphenyltrichloroethane.
PCBs = polychlorinated biphenyls.
4,4'-DDE = dichlorodiphenyldichloroethene.
mg/kg = milligrams per kilogram.
NA = not applicable.

Table 6-8
Comparison of Analytes Detected in Solid Waste Management Unit (SWMU) 15 Subsurface Soil to Background Screening and Benchmark Concentrations

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Maximum Concentration[1]	Background Screening Concentration[2]	Frequency Above Background Screening Concentration	Florida Soil Cleanup Goal[3]	Frequency Above Florida Soil Cleanup Goal	Risk-Based Screening Concentration[4]	Frequency Above Risk-Based Screening Concentration
Volatile Analytes (µg/kg)							
Acetone	150	NSC	N/A	890,000	0/10	20,000,000	0/10
Semivolatile Analytes(µg/kg)							
Butylbenzylphthalate	380	NSC	N/A	300,000,000	0/10	41,000,000	0/10
Pesticides/PCBs (µg/kg)							
4,4'-DDE	2.1	NSC	N/A	9,900	0/10	17,000	0/10
4,4'-DDT	2.4	NSC	N/A	12,000	0/10	17,000	0/10
Chlordane	180	NSC	N/A	2,800	0/10	4,400	0/10
Inorganic Analytes (mg/kg)							
Antimony	3	NSC	N/A	210	0/10	82	0/10
Arsenic	5.1	0.9	8/10	3	1/10	3.3	1/10
Barium	5.1	7.2	0/10	74,000	0/10	14,000	0/10
Beryllium	0.14	0.14	0/10	0.2	0/10	1.3	0/10
Chromium	2.9	3.4	0/10	220	0/10	1,000	0/10
Cobalt	0.49	1.04	0/10	110,000	0/10	12,000	0/10
Copper	2.4	3.6	0/10	72,000	0/10	7,600	0/10
Lead	2.6	2.8	0/10	1,000	0/10	400	0/10
Mercury	0.03	0.06	0/9	480	0/9	61	0/9
Selenium	0.64	NSC	N/A	9,900	0/10	1,000	0/10
Thallium	0.22	NSC	N/A	NSC	N/A	16	0/10
Tin	4.2	5.4	0/10	660,000	0/10	100,000	0/10
Vanadium	2.2	3.2	0/10	4,800	0/10	1,400	0/10

See notes at end of table.

Table 6-8 (Continued)
Comparison of Analytes Detected in Solid Waste Management Unit (SWMU) 15 Subsurface Soil to Background Screening and Benchmark Concentrations

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Maximum Concentration[1]	Background Screening Concentration[2]	Frequency Above Background Screening Concentration	Florida Soil Cleanup Goal[3]	Frequency Above Florida Soil Cleanup Goal	Risk-Based Screening Concentration[4]	Frequency Above Risk-Based Screening Concentration
Zinc	7.8	4.8	2/10	550,000	0/10	61,000	0/10

[1] A value indicated by an asterisk is the average of the detected concentrations in a sample and its duplicate. For nondetected values, one-half the contract-required quantitation limit and contract-required detection limit is used as a surrogate.
[2] The background screening concentration is twice the mean of detected concentrations for inorganic analytes.
[3] Florida Cleanup Goals (April 5, 1995).
[4] U.S. Environmental Protection Agency Region III risk-based screening concentrations (February 9, 1995). Concentrations for noncarcinogenic risks are adjusted to a hazard index of 0.1.

Notes: RCRA = Resource Conservation and Recovery Act.
µg/kg = micrograms per kilogram.
4,4'-DDT = dichlorodiphenyltrichloroethane.
PCBs = polychlorinated biphenyls.
4,4'-DDE = dichlorodiphenyldichloroethene.
N/A = not applicable.
mg/kg = milligrams per kilogram.
NSC - no screening concentration.

Because the land features at NAVSTA Mayport are influenced by the deposition of dredge material from the Mayport Turning Basin, it cannot be determined whether the concentrations of arsenic are related to a release at SWMU 15 or are residual concentrations from the dredge material. However, it should be noted that arsenic was used singularly and in combination with other chemicals as a pesticide, and a herbicide.

6.2.3 Groundwater Assessment Groundwater samples were collected from six monitoring wells (Figure 6-2). Tables 6-9 and 6-10 present the concentrations of chemicals detected in each sample, Table 6-11 lists statistics for each chemical that was detected, and Table 6-12 shows how detected concentrations compare to background screening and benchmark concentrations.

6.2.3.1 **Organics** Organic target analytes detected in the groundwater samples consist of one VOC, one SVOC, and three pesticides (see Table 6-11). However, only alpha-BHC, beta-BHC, and bis(2-ethylhexyl)phthalate were detected at concentrations which exceed benchmarks (see Table 6-12).

Carbon disulfide was detected at concentrations of 2 $\mu g/\ell$ or less in samples collected from monitoring wells MPT-15-MW01S and MPT-15-MW4S, located hydraulically downgradient from SWMU 15. The detected concentrations do not exceed benchmark concentrations (see Table 6-12). Carbon disulfide is a common laboratory and field contaminant; however, it was not detected in the QC samples (trip blank, equipment rinse, and method blanks) associated with this sample. It also should be noted that carbon disulfide is a by-product of anaerobic degradation (Verschueren, 1983). Although it was not detected in the associated blanks, it is possible this compound may have been introduced to the samples during sample collection or analysis.

Bis(2-ethylhexyl)phthalate was detected in one groundwater sample collected from monitoring well MPT-15-MW03S at a concentration of 14 $\mu g/\ell$. This monitoring well is located hydraulically downgradient from SWMU 15. Bis(2-ethylhexyl)phthalate is a common laboratory and field contaminant; however, it was not detected in the QC samples (equipment rinse and method blanks) associated with this sample. Although it was not detected in the associated blanks, bis(2-ethylhexyl)phthalate may have been introduced to the samples during sample collection or analysis.

The alpha-, beta-, and delta-BHCs were detected in groundwater samples collected from two monitoring wells, MPT-15-MW01S and MPT-15-MW04S. Monitoring well MPT-15-MW01S is located immediately hydraulically downgradient from SWMU 15, and MPT-15-MW04S is located further hydraulically downgradient along the same flow path. The highest concentrations were detected in the groundwater sample collected from monitoring well MPT-15-MW01S. Although alpha-, beta-, and delta-BHC were not detected in SWMU 15 surface or subsurface soil samples, it is possible these pesticides are related to the past storage and handling of pesticides at SWMU 15.

6.2.3.2 **Inorganics** Fourteen inorganic analytes were detected in groundwater samples collected at SWMU 15; five inorganic analytes (arsenic, cyanide, lead, manganese, and zinc) were detected at concentrations exceeding background screening concentrations (see Table 6-12). Only arsenic and manganese were detected at concentrations exceeding their respective benchmarks. Iron and sodium were detected at concentrations exceeding the benchmarks, but do not exceed background screening concentrations.

Table 6-9
Organic Analytes Detected in Groundwater Samples at Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Analytical Batch No.:	2388	R860	R840
Sample Matrix:	Groundwater	Groundwater	Groundwater
Sample Location:	MPT-15-MW01	MPT-15-MW01S	MPT-15-MW04S
Sample No.:	15MW /	15MW001S	15MW004S
Date Sampled:	27-JAN-93	24-AUG-94	26-JUL-94
Volatile Analytes (µg/ℓ)			
Carbon disulfide	–	2 J	1 J
Pesticides and PCBs (µg/ℓ)			
alpha-BHC	0.035	0.058	0.23
beta-BHC	0.68	0.84	3.6
delta-BHC	0.027	0.029	–

Notes: RCRA = Resource Conservation and Recovery Act.
µg/ℓ = micrograms per liter.
J = estimated value.
– = analyte not detected.
PCBs = polychlorinated biphenyls.
BHC = benzene hexachloride.

Table 6-10
Inorganic Analytes Detected in Groundwater Samples at Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Analytical Batch No.:	2388	R860	R839	R839	R840	R860	R860	R842
Sample Matrix:	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Sample Location:	MPT-15-MW01	MPT-15-MW01S	MPT-15-MW02S	MPT-15-MW03S	MPT-15-MW04S	MPT-15-MW05S	MPT-15-MW05S	MPT-15-MW05I
Sample No.:	15MW1	15MW001S	15MW002S	15MW003S	15MW004S	15MW005S	15MW005SDup	15MW005I
Date Sampled:	27-JAN-93	24-AUG-94	25-JUL-94	25-JUL-94	26-JUL-94	24-AUG-94	24-AUG-94	28-JUL-94
Inorganic Analytes (μg/ℓ)								
Arsenic	9 J	10.4	0.7 J	1.6 J	62 J	--	--	2.9 J
Barium	28.4 J	14.6 J	--	--	--	7.5 J	7.5 J	4.7 J
Beryllium	0.44 J	--	--	--	--	--	--	--
Calcium	84,300	99,700	80,200	74,000	76,900 J	79,300	78,600	82,900
Chromium	17.1	--	--	--	2.7 J	--	--	--
Cobalt	3.3 J	--	--	--	--	--	--	--
Copper	8.8 J	--	--	--	--	--	--	--
Iron	8,630 J	162	325	102	156	117	108	496
Lead	38.1	7.5	--	--	0.6 J	0.6 J	--	--
Magnesium	8,790	9,950	--	--	--	3,000 J	2,960 J	6,730
Manganese	65.3	77.9	89.4	70	45.8 J	4.7 J	4.5 J	241
Mercury	--	--	0.16 J	0.12 J	--	--	--	--
Selenium	--	--	--	--	--	1.3 J	--	0.78 J
Sodium		77,800	--	--	783,000	5,040	4,990 J	7,880
Vanadium	14.5 J	3 J	2.3 J	3 J	7.7 J	2.6 J	1.9 J	2.8 J
Zinc	79.1 J	61.2	--	--	--	4.1 J	3.7 J	--
Cyanide	--	--	--	--	--	--	3 J	3.3 J

Notes: RCRA = Resource Conservation and Recovery Act.
μg/ℓ = micrograms per liter.
J = estimated value.
-- = analyte not detected.
Dup = duplicate.
S = shallow monitoring well.
I = intermediate monitoring well.

Table 6-11
Summary of Chemicals Detected in Groundwater Samples at Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Minimum Concentration[2]	Maximum Concentration[2]	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration
Water Quality Parameters (µg/ℓ)						
Alkalinity as $CaCO_3$	7/7	170	587	294	N/A	15MW004S
Ammonia-N	6/7	0.4	7.1	1.9	0.3 - 0.3	15MW004S
Chloride	7/7	6.5	1,180	204.9	N/A	15MW004S
Color	7/7	5	350	78	N/A	15MW004S
Hardness as $CaCO_3$	7/7	202	720	330	N/A	15MW004S
Nitrate/Nitrite-N	4/7	0.1	1.1	0.5	0.1 - 0.1	15MW001S
Oil and grease	1/7	18.1	18.1	18.1	5 - 5	15MW003S
Phosphorous-P, total	7/7	0.45	5.07	1.64	N/A	15MW004S
Sulfate	7/7	11.5	62.9	28.8	N/A	15OP001
Sulfide	3/7	1.6	137	62.9	1 - 1	15MW001S
Total dissolved solids	7/7	268	2,650	710	N/A	15MW004S
Total Kjeldahl nitrogen	7/7	0.6	16	3.5	N/A	15MW004S
Total organic carbon	7/7	3.5	18.2	8.1	N/A	15MW004S
pH	7/7	7.03	7.49	7.27	N/A	15MW002S
Volatile Analytes (µg/ℓ)						
Carbon disulfide	2/7	1	2	2	5 - 5	15MW001S
Semivolatile Analytes (µg/ℓ)						
bis(2-Ethylhexyl)phthalate	1/7	14	14	14	10 - 10	15MW003S
Pesticides/PCBs µg/ℓ						
alpha-BHC	2/7	0.058	0.23	0.144	0.02 - 0.02	15MW004S
beta-BHC	2/7	0.84	3.6	2.22	0.04 - 0.04	15MW004S
delta-BHC	1/7	0.029	0.029	0.029	0.02 - 0.1	15MW001S
Inorganic Analytes (µg/ℓ)						
Arsenic	6/7	0.7	62	13.1	0.6 - 0.6	15MW004S
Barium	4/7	3.1	14.6	7.5	0.4 - 0.4	15MW001S
Calcium	7/7	74,000	129,000	88,807	N/A	15OP001

See notes at end of table.

Table 6-11 (Continued)
Summary of Chemicals Detected in Groundwater Samples at Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Minimum Concentration[2]	Maximum Concentration[2]	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration
Chromium	1/7	2.7	2.7	2.7	2.6 - 2.6	15MW004S
Iron	7/7	102	496	212	N/A	15MW005I
Lead	3/7	0.45*	7.5	2.8	0.6 - 0.6	15MW001S
Magnesium	4/7	2,980*	9,950	6,115	31.4 - 31.4	15MW001S
Manganese	7/7	4.6*	241	80.3	N/A	15MW005I
Mercury	2/7	0.12	0.16	0.14	0.1 - 0.1	15MW002S
Selenium	2/7	0.78	0.8*	0.79	0.6 - 6	15MW005S
Sodium	5/7	5,015*	783,000	180,899	14.4 - 14.4	15MW004S
Vanadium	7/7	1.9	7.7	3.3	N/A	15MW004S
Zinc	3/7	3.9*	61.2	23.5	1 - 1	15MW001S
Cyanide	3/7	2.175*	3.3	2.8	2.7 - 2.7	15MW005I

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed.
[2] A value indicated by an asterisk is the average of the detected concentrations in a sample and its duplicate. For nondetected values, one-half the contract-required quantitation limit and contract-required detection limit is used as a surrogate.
[2] The mean of detected concentrations is the arithmetic mean of all samples in which the analyte was detected. It does not include those samples in which the analyte was not detected.

Notes: RCRA = Resource Conservation and Recovery Act.
$\mu g/\ell$ = micrograms per liter.
$CaCO_3$ = calcium carbonate.
PCBs = polychlorinated biphenyls.
NA = not applicable.
BHC = benzene hexachloride.

Table 6-12
Comparison of Analytes Detected in Groundwater Samples at Solid Waste Management Unit (SWMU) 15 to Background Screening and Benchmark Concentrations

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Maximum Concentration[1]	Background Screening Concentration[2]	Frequency Above Background Screening Concentration	Florida Guidance Concentration[3]	Frequency Above Florida Guidance Concentration	Risk-Based Screening Concentration[4]	Frequency Above Risk-Based Screening Concentration
Volatile Analytes (µg/ℓ)							
Carbon disulfide	2	1	1/7	700	0/7	2.1	0/7
Semivolatile Analytes (µg/ℓ)							
bis(2-Ethylhexyl)phthalate	14	6.2	1/7	6	1/7	4.8	1/7
Pesticides/PCBs (µg/ℓ)							
alpha-BHC	0.23	NSC	N/A	0.05	2/7	0.011	2/7
beta-BHC	3.6	NSC	N/A	0.1	2/7	0.037	2/7
delta-BHC	0.029	NSC	N/A	0.05	0/7	NSC	N/A
Inorganics (µg/ℓ)							
Arsenic	62	9.8	2/7	50	1/7	0.038	6/7
Barium	14.6	39	0/7	2,000	0/7	260	0/7
Calcium	129,000	207,466	0/7	NSC	N/A	1,055,398	0/7
Chromium	2.7	10.4	0/7	100	0/7	18	0/7
Cyanide	3.3	1.9	3/7	200	0/7	73	0/7
Iron	496	1,728	0/7	300	2/7	13,267	0/7
Lead	7.5	3.6	1/7	15	0/7	15	0/7
Magnesium	9,950	153,984	0/7	NSC	N/A	118,807	0/7
Manganese	241	210	1/7	50	4/7	18	6/7
Mercury	0.16	0.16	0/7	2	0/7	1.1	0/7
Selenium	0.8*	11.8	0/7	50	0/7	18	0/7
Sodium	783,000	1,519,016	0/7	160,000	1/7	396,022	1/7
Vanadium	7.7	9.2	0/7	49	0/7	26	0/7

See notes at end of table.

Table 6-12 (Continued)
Comparison of Analytes Detected in Groundwater Samples at Solid Waste Management Unit (SWMU) 15 to Background Screening and Benchmark Concentrations

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Maximum Concentration[1]	Background Screening Concentration[2]	Frequency Above Background Screening Concentration	Florida Guidance Concentration[3]	Frequency Above Florida Guidance Concentration	Risk-Based Screening Concentration[4]	Frequency Above Risk-Based Screening Concentration
Zinc	61.2	41.6	1/7	5,000	0/7	1,100	0/7

[1] A value indicated by an asterisk is the average of the detected concentrations in a sample and its duplicate. For nondetected values, one-half the contract-required quantitation limit and contract-required detection limit is used as a surrogate.
[2] The background screening concentration is twice the mean of detected concentrations for inorganic analytes.
[3] Florida Guidance Concentrations (June 1994).
[4] U.S. Environmental Protection Agency Region III risk-based screening concentrations (February 9, 1995). Concentrations for noncarcinogenic risks are adjusted to a hazard index of 0.1.

Notes: RCRA = Resource Conservation and Recovery Act.
$\mu g/\ell$ = micrograms per liter.
N/A = not applicable.
PCBs = polychlorinated biphenyls.
NSC = no screening concentration.
BHC = benzene hexachloride.

The concentrations of arsenic and sodium (62 $\mu g/\ell$ and 783,000 $\mu g/\ell$, respectively) that exceeded the benchmark concentrations were detected in monitoring well MPT-15-MW04S, which is located hydraulically downgradient from SWMU 15 (see Figure 3-2 and Table 3-4). Because the land features at NAVSTA Mayport are influenced by the deposition of dredge material from the Mayport Turning Basin, it cannot be determined whether the concentration of arsenic is related to a release at SWMU 15 or are residual concentrations from the dredge material.

Iron was detected in groundwater samples collected from monitoring wells MPT-15-MW02S and MPT-15-MW05I at concentrations exceeding the benchmark concentration. Monitoring well MPT-15-MW02S is located hydraulically upgradient from SWMU 15, and monitoring well MPT-15-MW05I is located approximately 300 feet from SWMU 15 and not in a flowpath directly hydraulically downgradient (see Figure 3-2 and Table 3-4). Based on the location of these monitoring wells relative to SWMU 15, the concentrations of iron detected in these groundwater samples are not likely related to SWMU 15.

Manganese was detected in four groundwater samples (MPT-15-MW01S, MPT-15-MW03S, MPT-15-MW02S, MPT-15-MW05I) at concentrations that exceed benchmarks. The highest concentrations were detected in monitoring wells MPT-15-MW02S and MPT-15-MW05I (see Table 6-11). Monitoring well MPT-15-MW02S is located hydraulically upgradient from SWMU 15, and monitoring well MPT-15-MW05I is located approximately 300 feet from SWMU 15 and hydraulically sidegradient (see Figure 3-2 and Table 3-4). Based on this distribution, the concentrations of manganese detected in groundwater samples collected from these monitoring wells are not likely related to SWMU 15.

6.2.4 Summary The maximum concentrations of 4,4'-DDE, 4,4'-DDT, and chlordane detected in surface soil (2,800; 790,000; and 9,000 $\mu g/kg$; respectively) suggest that pesticides have been released at SWMU 15. The distribution of the pesticides appears to be in the form of "hot spots," which consistent with the site history is indicative of multiple releases at various random locations during the rinsing of pesticide application equipment.

The pesticides alpha-, beta-, and delta-BHC were detected in monitoring wells immediately hydraulically downgradient of SWMU 15. Although these pesticides were not detected in SWMU 15 surface or subsurface soil samples, it is possible that these pesticides are related to the past storage and handling of pesticides at SWMU 15. The location of the source of these pesticides is unknown.

Arsenic was detected at concentrations that exceed the Florida groundwater guidance concentrations in a groundwater sample collected from the monitoring well closest and hydraulically downgradient from SWMU 15. The other groundwater samples collected from SWMU 15 monitoring wells contained arsenic at concentrations less than the Florida groundwater guidance concentrations. Arsenic was used singularly and as a component of pesticides and herbicides.

6.3 HUMAN HEALTH RISK ASSESSMENT FOR SWMU 15. The location, physical description, and history associated with SWMU 15 are described in Section 6.1. Surface soil, subsurface soil, and groundwater samples were collected during the RFI (Section 6.2). After evaluation and management of the environmental data collected at SWMU 15 (Chapter 2.0), human health chemicals of potential concern

(HHCPCs) were selected and the potential human health risks associated with each medium at the SWMU were characterized.

The methodology for the human health risk assessment is described in Section 2.5 of Volume I of the RFI GIR.

6.3.1 Selection of Chemicals of Potential Concern HHCPCs are defined as chemicals for which data of sufficient quality are available for use in the risk assessment, that are potentially site-related, and that have maximum detected concentrations that are above standards or guidelines; are above risk-based screening concentrations (where available); or, for inorganic analytes, are above background screening concentrations (where available). The methodology used to select HHCPCs is described in Subsection 2.5.2 of the RFI GIR.

6.3.1.1 **Surface Soil** Surface soil sample results from 1993 and 1994 were combined and evaluated together. Surface soil sample locations evaluated in the HHRA (MPT-15SS01 through MPT-15-SS29, MPT-15SS08, MPT-15-SS09, MPT-15-SS19, and MPT-15-SS27) are indicated on Figure 6-2. Twenty-nine surface soil samples and four duplicates were submitted for pesticide analysis during the RFI. Surface soil samples and one duplicate from eight of the sample locations (MPT-15-SS01 through MPT-15-SS08) were also analyzed for VOCs, SVOCs, and inorganics.

Table 6-13 presents the analytes detected in the surface soil at SWMU 15 and the HHCPCs selected for surface soil at SWMU 15. Three pesticides (4,4'-DDE, 4,4'-DDT, and chlordane) and two inorganics (arsenic and beryllium) were retained as HHCPCs.

6.3.1.2 **Subsurface Soil** Ten subsurface soil samples and one duplicate were submitted for chemical analysis during the RFI. Subsurface soil sample results from 1993 and 1994 were combined and evaluated together. Subsurface soil sample locations evaluated in the HHRA (MPT-15-SS01 through MPT-15-SS08 and two samples collected during the installation of MPT-15-MW01S) are indicated on Figure 6-2.

Table 6-14 presents the analytes detected in the subsurface soil at SWMU 15 and the HHCPCs selected for subsurface soil at SWMU 15. One inorganic analyte (arsenic) was retained as an HHCPC.

6.3.1.3 **Groundwater** One groundwater sample was collected during 1993 from monitoring well MPT-15-MW01S, which was the only monitoring well at the SWMU during this sampling event. Six unfiltered groundwater samples and one duplicate were collected from the surficial aquifer during the 1994 sampling event using the low-flow sampling method. Only samples from the most recent sampling round were evaluated in the HHRA. Groundwater sample locations evaluated in the HHRA (MPT-15-MW01S, MPT-15-MW02S, MPT-15-MW03S, MPT-15-MW04S, MPT-15-PMW005I, MPT-15-P01, and a duplicate sample from MPT-15-MW05S) are indicated on Figure 6-2.

Because the low-flow sampling method produces less turbid samples that are more representative of the surficial aquifer than those obtained with a bailer, the preferred data set was from the 1994 sampling event. However, it should be noted that chemicals detected in groundwater samples collected during the 1993 sampling event that were not detected in groundwater samples collected in 1994 were included in the final data set.

Table 6-13
Selection of Human Health Chemicals of Potential Concern
Surface Soil at Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations[2]	Mean of Detected Concentrations[3]	Background Screening Concentration[4]	Risk-Based Screening Concentration[5]	Florida Leaching Value[6]	Florida Cleanup Goals[7]	Selected as HHCPC? (Yes/No)
Volatile Analytes (µg/kg)									
Acetone	3/8	10 - 11	2 - 30	13.7	NA	780,000	NG	130,000	No[8]
Semivolatile Analytes (µg/kg)									
Butylbenzylphthalate	2/8	690 - 18,000	215* - 640	428	NA	1,600,000	NG	15,000,000	No[8]
bis(2-Ethylhexyl)phthalate	1/8	680 - 720	200 - 200	200	NA	46,000	11,000	45,000	No[8]
Pesticides/PCBs (µg/kg)									
4,4'-DDE	28/29	0.7 - 14,000	0.935* - 2,800	179	NA	1,900	NG	2,900	Yes
4,4'-DDT	27/29	1 - 28,000	1.6* - 790,000	29,355	NA	1,900	NG	3,100	Yes
Chlordane	8/29	7 - 14,000	20 - 9,000	2,133	NA	490	NG	800	Yes
Heptachlor	1/29	0.7 - 14,000	16 - 16	16	NA	140	NG	200	No[9]
Heptachlor epoxide	1/29	0.7 - 14,000	85 - 85	85	NA	70	NG	100	No[9]
Inorganic Analytes (mg/kg)									
Antimony	1/8	2.5 - 2.7	2.8 - 2.8	2.8	ND	3.1	NC	26	No[8]
Arsenic	8/8	NR	1.2 - 5	2.4	ND	0.37	NC	0.7	Yes
Barium	8/8	NR	4.3 - 30.6	11.2	5.6	550	NC	5,000	No[8]
Beryllium	8/8	NR	0.07 - 0.17	0.12	0.16	0.15	NC	0.1	Yes
Cadmium	4/8	0.41 - 0.43	0.5 - 0.82*	0.63	2	3.9	NC	37	No[8,10]
Chromium	8/8	NR	2.5 - 14.6	6.3	2.6	39	NC	150	No[8]
Cobalt	8/8	NR	0.26 - 0.7	0.49	ND	470	NC	4,700	No[8]
Copper	8/8	NR	1.1 - 11.4	5.2	2.2	290	NC	2,900	No[8]
Lead	8/8	NR	2.4 - 296.5*	59.8	ND	400"	NC	500	No[8]
Mercury	2/8	0.04 - 0.13	0.07 - 0.575*	0.32	ND	2.3	NC	23	No[8]
Nickel	3/8	1.3 - 1.4	1.4 - 1.9	1.6	ND	160	NC	1,500	No[8]
Selenium	8/8	NR	0.37 - 0.81	0.59	1.36	39	NC	390	No[8,10]
Tin	2/8	3.6 - 3.8	3.75* - 4.2	4	ND	4,700	NC	44,000	No[8]

See notes at end of table.

Table 6-13 (Continued)
Selection of Human Health Chemicals of Potential Concern
Surface Soil at Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concen-trations[2]	Mean of Detected Concentrations[3]	Background Screening Concentration[4]	Risk-Based Screening Concentration[5]	Florida Leaching Value[6]	Florida Cleanup Goals[7]	Selected as HHCPC? (Yes/No)
Vanadium	8/8	NR	1.6 - 3.7	2.8	4	55	NC	480	No[8,10]
Zinc	8/8	NR	9.1 - 171.5*	70.3	2.6	2,300	NC	23,000	No[8]

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed. The following samples were analyzed for pesticides: 15SS01001, 15SS01101, 15SS01201, 15SS01301, 15SS01401, 15SS01501, 15SS01601, 15SS01701, 15SS01801, 15SS01901, 15SS02001, 15SS02101, 15SS02201, 15SS02301, 15SS02401, 15SS02501, 15SS02601, 15SS02701, 15SS02801, 15SS02901, 15SS11, 15SS21, 15SS31, 15SS41, 15SS51, 15SS61, 15SS71, 15SS81, 15SS00901, and four duplicates, 15SS81D, 15SS01901D, 15SS02701D, 15SS00901D (Figure 6-b). Eight of the 29 samples and one duplicate (15SS11, 15SS21, 15SS31, 15SS41, 15SS51, 15SS61, 15SS71, 15SS81, and 15SS81D) were also analyzed for VOCs, SVOCs, and inorganics.
[2] A value indicated by an asterisk is the average of the detected concentrations in a sample and its duplicate. For nondetect values, one-half the contract-required detection limit is used as a surrogate.
[3] The mean of detected concentrations is the arithmetic mean of all samples in which the analyte was detected. It does not include those samples in which the analyte was not detected.
[4] The background screening concentration is twice the mean of detected concentrations for inorganic analytes. The mean analyte concentrations in background samples are identified in Table D-1-1 of Appendix D to the RCRA Facility Investigation General Information Report.
[5] The risk-based screening concentrations are identified in Table D-1-4 of Appendix D to the RFI General Information Report.
[6] The Florida Leaching Values (April 5, 1995) are identified in Table D-1-4 of Appendix D to the RFI General Information Report.
[7] The Florida Cleanup Goals (April 5, 1995) are identified in Table D-1-4 of Appendix D to the RFI General Information Report.
[8] The maximum detected concentration did not exceed the risk-based screening concentration, the Florida Leaching Value, or the Florida Cleanup Goal; therefore, this analyte will not be evaluated in the HHRA.
[9] The frequency of detection is less than or equal to 5 percent and professional judgement was used; therefore, the analyte will not be evaluated in the HHRA.
[10] The maximum detected concentration did not exceed the background screening concentration; therefore, the analyte will not be evaluated in the HHRA.
* No risk-based concentration (RBC) is available for lead in soil due to a lack of toxicity data. Based on U.S. Environmental Protection Agency recommendations, the target level for cleanup goal at Superfund sites is used as the RBC for soil.

Notes: RCRA = Resource Conservation and Recovery Act.
HHCPC = human health chemical of potential concern.
µg/kg = micrograms per kilogram.
NG = not detected in groundwater.
PCBs = polychlorinated biphenyls.
DDE = dichlorodiphenyldichloroethylene.
VOC = volatile organic compounds.
DDT = dichlorodiphenyltrichloroethane.
mg/kg = milligrams per kilogram.
NC = not calculated.
NR = not reported.
ND = not detected in any background samples.
NA = not applicable.
SVOCs = semivolatile organic compounds.

Table 6-14
Selection of Human Health Chemicals of Potential Concern in Subsurface Soil at Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	Mean of Detected Concentrations[2]	Background Screening Concentration[3]	Risk-Based Screening Concentration[4]	Florida Leaching Value[5]	Florida Cleanup Goals[6]	Selected as HHCPC? (Yes/No)
Volatile Analytes (µg/kg)									
Acetone	7/10	10 - 13	2 - 150	30.3	NA	10,000,000	NG	89,000	No[7]
Semivolatile Analytes (µg/kg)									
Butylbenzylphthalate	1/10	340 - 400	380 - 380	380	NA	20,500,000	NG	30,000,000	No[7]
Pesticides/PCBs (µg/kg)									
4,4'-DDE	2/10	0.69 - 0.8	1.9 - 2.1	2	NA	8,500	NG	9,900	No[7]
4,4'-DDT	1/10	1.4 - 2.7	2.4 - 2.4	2.4	NA	8,500	NG	12,000	No[7]
Chlordane	1/10	6.9 - 8	180 - 180	180	NA	2,200	NG	2,800	No[7]
Inorganic Analytes (mg/kg)									
Antimony	1/10	2.5 - 2.6	3 - 3	3	ND	41	NC	21	No[7]
Arsenic	10/10	NR	0.53 - 5.1	1.8	0.9	1.65	NC	3	Yes
Barium	10/10	NR	2.1 - 5.1	3.6	7.2	7,000	NC	7,400	No[7,8]
Beryllium	8/10	0.1 - 0.12	0.05 - 0.14	0.1	0.14	0.65	NC	0.2	No[7,8]
Chromium	9/10	0.78 - 0.78	0.86 - 2.9	1.8	3.4	500	NC	22	No[7,8]
Cobalt	6/10	0.115 - 1.4	0.24 - 0.49	0.34	1.04	6,000	NC	11,000	No[7,8]
Copper	10/10	NR	0.28 - 2.4	0.95	3.6	3,800	NC	7,200	No[7,8]
Lead	10/10	NR	0.3 - 2.6	0.93	2.8	200	NC	1000	No[7,8]
Mercury	1/9	0.04 - 0.09	0.03 - 0.03	0.03	0.06	30.5	NC	48	No[7]
Selenium	7/10	0.1 - 0.22	0.37 - 0.64	0.51	ND	500	NC	990	No[7]
Thallium	1/10	0.15 - 0.27	0.22 - 0.22	0.22	ND	8	NC	NSC	No[7]
Tin	1/10	2.4 - 3.7	4.2 - 4.2	4.2	5.4	50,000	NC	66,000	No[7,8]
Vanadium	10/10	NR	0.86 - 2.2	1.5	3.2	700	NC	480	No[7,8]

See notes at end of table.

Table 6-14 (Continued)
Selection of Human Health Chemicals of Potential Concern in Subsurface Soil at Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	Mean of Detected Concentrations[2]	Background Screening Concentration[3]	Risk-Based Screening Concentration[4]	Florida Leaching Value[5]	Florida Cleanup Goals[6]	Selected as HHCPC? (Yes/No)
Zinc	10/10	NR	1.3 - 7.8	3.4	4.8	30,500	NC	55,000	No[7]

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed. The following samples were analyzed: MP15MS1S2, MP15MS1S6, 15SS12, 15SS22, 15SS32, 15SS42, 15SS52, 15SS62, 15SS72, 15SS82, with a duplicate, 15SS82D (Figure 6-2).
[2] The mean of detected concentrations is the arithmetic mean of all samples in which the analyte was detected. It does not include those samples in which the analyte was not detected.
[3] The background screening concentration is twice the mean of detected concentrations for inorganic analytes. The mean analyte concentrations in background samples are identified in Table D-1-2 of Appendix D to the RCRA Facility Investigation General Information Report.
[4] The risk-based screening concentrations are identified in Table D-1-4 of Appendix D to the RFI General Information Report.
[5] The Florida Leaching Values (April 5, 1995) are identified in Table D-1-4 of Appendix D to the RFI General Information Report.
[6] The Florida Cleanup Goals (April 5, 1995) are identified in Table D-1-4 of Appendix D to the RFI General Information Report. Noncarcinogenic values have been adjusted to a hazard quotient of 0.1.
[7] The maximum detected concentration did not exceed the risk-based screening concentration, the Florida Leaching Value, or the Florida Cleanup Goal; therefore, this analyte will not be evaluated in the Human Health Risk Assessment (HHRA).
[8] The maximum detected concentration did not exceed the background screening concentration; therefore, this analyte will not be evaluated in the HHRA.

Notes: RCRA = Resource Conservation and Recovery Act.
μg/kg = micrograms per kilogram.
NA = not applicable.
NG = not detected in groundwater.
PCBs = polychlorinated biphenyls.
DDE = dichlorodiphenyldichloroethylene.
DDT = dichlorodiphenyltrichloroethane.
mg/kg = milligrams per kilogram.
NC = not calculated.
NR = not reported.
NSC = no screening concentration.
ND = not detected.

Table 6-15 presents the analytes detected in unfiltered groundwater associated with SWMU 15 and the HHCPCs selected for groundwater associated with SWMU 15. One SVOC (bis(2-ethylhexyl)phthalate), three pesticides (alpha-, beta-, and delta-BHC), and two organics (arsenic and manganese) were retained as HHCPCs.

6.3.2 Exposure Assessment Medium-specific receptors and exposure scenarios are identified in Subsections 6.3.2.1 through 6.3.2.3 for current and hypothetical future land use. The information is also summarized in Table 6-16 and Figure 6-5. Receptor-specific exposure parameters for each exposure scenario are presented in Appendix D-3 of the RFI GIR. The risk calculation spreadsheets in Appendix E-4 to this report also contain the exposure parameters for each exposure scenario.

6.3.2.1 Surface Soil Although permission is required to obtain access to NAVSTA Mayport, SWMU 15 and the surrounding area are accessible to Navy personnel and their adult and child dependents. Adult and adolescent trespassers, occupational workers, and site maintenance workers could be exposed to contaminants in surface soil; therefore, exposure of these receptors (ingestion of and direct contact with surface soil and inhalation of particulates from surface soil) is evaluated in the HHRA. In addition, if the SWMU were developed for residential use in the future, adult and child residents and excavation workers could be exposed to contaminants in surface soil. Therefore, exposure to these receptors is evaluated in the HHRA.

6.3.2.2 Subsurface Soil No excavation activities are ongoing at SWMU 15; therefore, no receptors are currently exposed to subsurface soil. However, workers could be exposed to contaminants in subsurface soil if excavation at SWMU 15 occurs in the future; therefore, exposure of an excavation worker (ingestion of and direct contact with subsurface soil as well as inhalation of particulates from subsurface soil) is evaluated in the HHRA.

6.3.2.3 Groundwater Currently, humans do not reside at the SWMU, and groundwater is not used for any potable or nonpotable purpose. However, domestic use of the surficial aquifer (adult ingestion and inhalation of volatiles while showering) would be considered appropriate as part of a hypothetical residential exposure scenario at SWMU 15 if the land use were changed to residential in the future.

6.3.2.4 EPCs EPCs for surface soil, subsurface soil, and groundwater were determined according to procedures outlined in Subsection 2.5.6 of the RFI GIR. The EPCs for analytes selected as HHCPCs for surface soil, subsurface soil, and groundwater are presented in Tables 6-17, 6-18, and 6-19, respectively. The contaminant exposure intakes for the receptors that were evaluated are also presented in the risk calculation spreadsheets in Appendix E-4 to this report.

6.3.3 Toxicity Assessment The purpose of the toxicity assessment is to identify the adverse effects that are associated with exposure to each HHCPC and to identify the relationship between the level of exposure and the severity or likelihood of adverse effects. The toxicity assessment methodology is discussed in Subsection 2.5.8 of the RFI GIR. Appendix D-4 to the RFI GIR contains brief toxicity summaries for the HHCPCs. Appendix E-1 to this report contains dose-response information for the HHCPCs. This information was used to estimate the ELCR for carcinogens and the HI for all HHCPCs in the risk characterization (Subsection 6.3.4). Dose-response values current as of June 1995 for IRIS and November 1994 for HEAST have been used in

Table 6-15
Selection of Human Health Chemicals of Potential Concern in Unfiltered Groundwater Samples Associated with Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations[2]	Mean of Detected Concentrations[3]	Background Screening Concentration[4]	Risk-Based Screening Concentration[5]	Federal MCL[6]	Florida Guidance Concen-tration[7]	0Selected as HHCPC? (Yes/No)
Volatile Analytes (µg/ℓ)									
Carbon disulfide	2/7	5 - 5	1 - 2	1.5	NA	2.1	NS	700	No[8]
Semivolatile Analytes (µg/ℓ)									
bis(2-Ethylhexyl)phthalate	1/7	10 - 10	14 - 14	14	NA	4.8	6	6	Yes
Pesticides/PCBs (µg/ℓ)									
alpha-BHC	2/7	0.02 - 0.1	0.058 - 0.23	0.14	NA	0.011	NS	0.05	Yes
beta-BHC	2/7	0.04 - 0.2	0.84 - 3.6	2.2	NA	0.037	NS	0.1	Yes
delta-BHC	1/7	0.02 - 0.1	0.029 - 0.029	0.03	NA	NSC	NS	0.05	Yes[9]
Inorganic Analytes (µg/ℓ)									
Arsenic	6/7	0.6 - 3	0.7 - 62	13.1	9.8	0.038	50	50	Yes
Barium	4/7	0.4 - 0.4	3.1 - 14.6	7.5	39.0	260	2,000	2,000	No[8,10]
Calcium	7/7	41.7 - 41.7	74,000 - 129,000	88,807	207,466	1,055,398	NS	NS	No[8,10]
Chromium	1/7	2.6 - 2.6	2.7 - 2.7	2.7	10.4	18	100	100	No[8,10]
Cyanide	3/7	2.7 - 2.7	2.175* - 3.3	2.8	1.9	73	200	200	No[8]
Iron	7/7	9.1 - 9.1	102 - 496	212	1,728	13,267	NS	300	No[10]
Lead	3/7	0.6 - 0.6	0.45* - 7.5	2.8	2.6	15	15	15	No[8]
Magnesium	4/7	31.4 - 31.4	2,980* - 9,950	6,115	153,984	118,807	NS	NS	No[8,10]
Manganese	7/7	0.6 - 0.6	4.6* - 241	80.3	210	18	NS	50	Yes
Mercury	2/7	0.1 - 0.1	0.12 - 0.16	0.14	0.16	1.1	2	2	No[8,10]
Selenium	2/7	0.6 - 6	0.78 - 0.8*	0.79	11.8	18	50	50	No[8,10]
Sodium	5/7	14.4 - 14.4	5,015* - 783,000	180,899	1,519,016	396,022	NS	160,000	No[10]
Vanadium	7/7	1.5 - 1.5	1.9 - 7.7	3.3	9.2	26	NS	49	No[8,10]

See notes at end of table.

Table 6-15 (Continued)
Selection of Human Health Chemicals of Potential Concern in Unfiltered Groundwater Samples Associated with Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations[2]	Mean of Detected Concentrations[3]	Background Screening Concentration[4]	Risk-Based Screening Concentration[5]	Federal MCL[6]	Florida Guidance Concentration[7]	Selected as HHCPC? (Yes/No)
Zinc	3/7	1 - 1	3.9* - 61.2	23.5	41.6	1,100	NS	5,000	No[8]

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed. The following samples were analyzed: 15MW001S, 15MW002S, 15MW003S, 15MW004S, 15MW005I, 15MW005S, 15OP001, and a duplicate, 15MW005SD (Figure 6-2).
[2] A value indicated by an asterisk is the average of the detected concentrations in a sample and its duplicate. For nondetect values, one-half the contract-required detection limit is used as a surrogate.
[3] The mean of detected concentrations is the arithmetic mean of all samples in which the analyte was detected. It does not include those samples in which the analyte was not detected.
[4] The background screening concentration is twice the mean of detected concentrations for inorganic analytes. The samples included in the background data set are identified in Table D-1-3 of Appendix D to the RCRA Facility Investigation General Information Report.
[5] The risk-based screening concentrations are identified in Table D-1-5 of Appendix D to the RFI General Information Report.
[6] The Federal MCLs (November 1994) are identified in Table D-1-5 of Appendix D to the RFI General Information Report.
[7] The Florida Guidance Concentrations (June 1994) are identified in Table D-1-5 of Appendix D to the RFI General Information Report.
[8] The maximum detected concentration did not exceed the risk-based screening concentration, the Federal MCLs, or the Florida Guidance Concentration; therefore, this analyte will not be evaluated in the human health risk assessment (HHRA).
[9] The chemical is a member of a class that contains other HHCPCs; therefore, this analyte is retained as an HHCPC.
[10] The maximum detected concentration did not exceed the background screening concentration; therefore, this analyte will not be evaluated in the HHRA.

Notes: RCRA = Resource Conservation and Recovery Act.
HHCPC = human health chemical of potential concern.
NA = not applicable.
$\mu g/\ell$ = micrograms per liter.
NSC = no screening concentration.
MCL = maximum contaminant level.
PCB = polychlorinated biphenyl.
BHC = hexachlorocyclohexane.
NS = no standard or guideline available.

Table 6-16
Summary of Potential Human Exposure Pathways at Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Medium of Exposure	Route of Exposure	Potentially Exposed Population	Selected for Evaluation?	Reason for Selection or Exclusion
Current Land Use				
Surface Soil	Dermal contact with soil, ingestion of soil, and inhalation of fugitive dust.	Resident (child and adult) Trespasser (adolescent and adult) Occupational worker (adult) Site maintenance worker (adult) Excavation worker (adult)	No Yes Yes Yes No	No humans currently reside at the SWMU. Adolescents and adults may be exposed to contaminants in the surface soil while trespassing. Under current land use, occupational worker and site maintenance worker exposure to contaminants in surface soil is not likely, but may occur. No earthwork is currently being conducted at the SWMU.
Subsurface Soil	Dermal contact with soil, ingestion of soil, and inhalation of fugitive dust.	Excavation worker (adult)	No	No earthwork is currently being conducted at the SWMU.
Groundwater: Surficial Aquifer	Ingestion of groundwater as drinking water and inhalation of volatiles while showering.	Resident (adult)	No	There are no current exposures to groundwater.
Future Land Use				
Surface Soil	Dermal contact with soil, ingestion of soil, and inhalation of fugitive dust.	Resident (child and adult) Trespasser (adolescent and adult) Occupational worker (adult) Site maintenance worker (adult) Excavation worker (adult)	Yes No No Yes Yes	If the SWMUs were developed for residential use, residents could be exposed to contaminants in surface soil. The trespasser and occupational worker exposure scenarios are only evaluated under current land use. If the SWMUs were developed for industrial or residential use, site maintenance workers could be exposed to contaminants in surface soil. Excavation workers could be exposed to contaminants in surface soil if the SWMUs were developed for industrial or residential use.
Subsurface Soil	Dermal contact with soil, ingestion of soil, and inhalation of fugitive dust.	Excavation worker (adult)	Yes	Excavation workers could be exposed to contaminants in subsurface soil if the SWMU were developed for industrial or residential use.
Groundwater: Surficial Aquifer	Ingestion of groundwater as drinking water and inhalation of volatiles while showering.	Resident (adult)	Yes	If the SWMUs were developed for residential use, residents could be exposed to contaminants in the surficial aquifer.

Note: RCRA = Resource Conservation and Recovery Act.

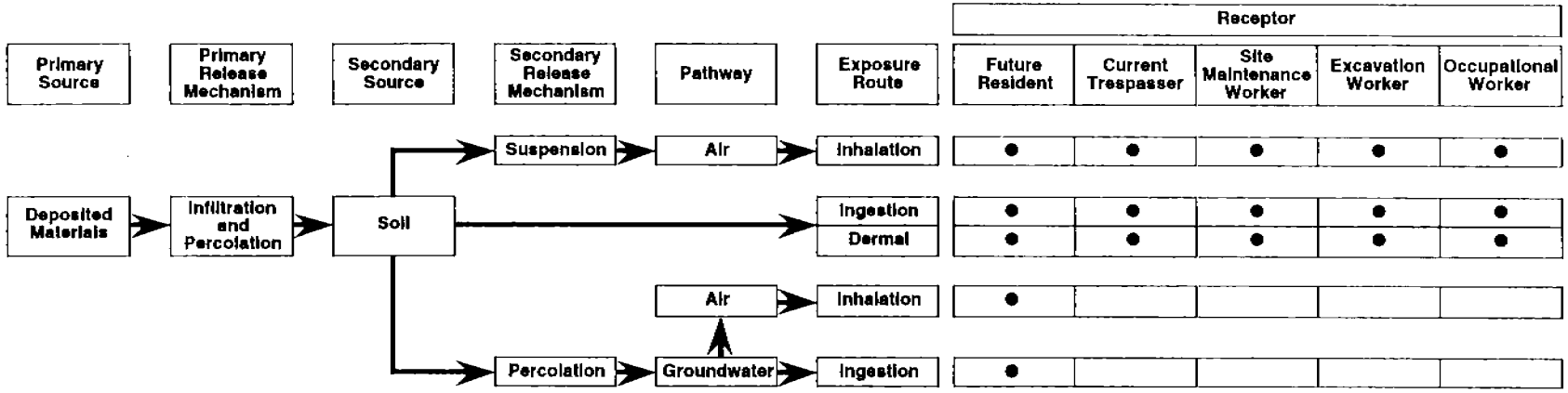


FIGURE 6-5

COMPLETE EXPOSURE PATHWAYS FOR HUMAN RECEPTORS, SWMU 15

RCRA FACILITY INVESTIGATION REPORT, GROUP II SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

8533-08 950524WEM

Table 6-17
Exposure Point Concentrations for Human Health Chemicals of Potential Concern in Surface Soil at Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Frequency of Detection[1]	Maximum Detected Concentration	95 Percent UCL[2]	Exposure Point Concentration[3]
Pesticides/PCBs (µg/kg)				
4,4'-DDE	28/29	2,800	2,951	2,800
4,4'-DDT	27/29	790,000	14,186	14,186
Chlordane	8/29	9,000	8,022	8,022
Inorganic Analytes (mg/kg)				
Arsenic	8/8	5	4	4
Beryllium	8/8	0.17	0.15	0.15

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the number of samples analyzed.
[2] The 95 percent UCL is calculated on the arithmetic mean of all samples using one-half the contract-required quantitation limit or contract-required detection limit for nondetected concentrations.
[3] The exposure point concentration equals the 95 percent UCL unless the maximum detected concentration is less than the 95 percent UCL. If there are three or less total samples, the maximum detected concentration is the exposure point concentration.

Notes: RCRA = Resource Conservation and Recovery Act.
UCL = upper confidence limit.
µg/kg = microgram per kilogram.
mg/kg = milligram per kilogram.
DDE = dichlorodiphenyldichloroethene.
DDT = dichlorodiphenyltrichloroethane.
PCB = polychlorinated biphenyl.

Table 6-18
Exposure Point Concentrations for Human Health Chemicals of Potential Concern in Subsurface Soil at Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Frequency of Detection[1]	Maximum Detected Concentration	95 Percent UCL[2]	Exposure Point Concentration[3]
Inorganic Analytes (mg/kg)				
Arsenic	10/10	5.1	2.9	2.9

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the number of samples analyzed.
[2] The 95 percent UCL is calculated on the arithmetic mean of all samples using one-half the contract-required quantitation limit or contract-required detection limit for nondetected concentrations.
[3] The exposure point concentration equals the 95 percent UCL unless the maximum detected concentration is less than the 95 percent UCL. If there are three or less total samples, the maximum detected concentration is the exposure point concentration.

Notes: UCL = upper confidence level.
RCRA = Resource Conservation and Recovery Act.
mg/kg = milligrams per kilogram.

Table 6-19
Exposure Point Concentrations for Human Health Chemicals of Potential Concern in Unfiltered Groundwater Associated with Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Frequency of Detection[1]	Maximum Detected Concentration	95 Percent UCL[2]	Exposure Point Concentration[3]
Semivolatile Analytes (μg/ℓ)				
bis(2-Ethylhexyl)phthalate	1/7	14	9	9
Pesticides/PCBs (μg/ℓ)				
alpha-BHC	2/7	0.23	0.44	0.23
beta-BHC	2/7	3.6	728	3.6
delta-BHC	1/7	0.03	0.04	0.03
Inorganic Analytes (μg/ℓ)				
Arsenic	6/7	62	1,176	62
Manganese	7/7	241	944	241

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the number of samples analyzed.
[2] The 95 percent UCL is calculated on the arithmetic mean of all samples using one-half the contract-required quantitation limit or contract-required detection limit for non-detected concentrations.
[3] The exposure point concentration equals 95 percent UCL unless the maximum detected concentration is less than the 95 percent UCL. If there are three or less total samples, the maximum detected concentration is the exposure point concentration.

Notes: RCRA = Resource Conservation and Recovery Act.
UCL = upper confidence limit.
μg/ℓ = microgram per liter.
PCB = polychlorinated biphenyls.
BHC = hexachlorocyclohexane.

this HHRA. Uncertainties associated with chemical-specific toxicity values are discussed in Subsection 6.3.5.

6.3.4 Risk Characterization Both carcinogenic and noncarcinogenic risks were estimated for each HHCPC and each complete exposure pathway selected for evaluation in the exposure assessment, as described in Subsection 2.5.9 of the RFI GIR Figure 6-6 summarizes the cancer risks associated with current land use at SWMU 15. Figure 6-7 presents an HI summary for current land use at SWMU 15. Figure 6-8 summarizes the cancer risks associated with future land use at SWMU 15. Figure 6-9 presents an HI summary for future land use at SWMU 15. Risk estimates for potential exposures to surface soil, subsurface soil, and groundwater under current and future land use scenarios are discussed in Paragraphs 6.3.4.1, 6.3.4.2, and 6.3.4.3. Table 6-20 presents a summary of the human health risk. The risk characterization results are presented in Tables E-4-1 through E-4-17 in Appendix E-4 to this report.

6.3.4.1 **Surface Soil** Chlordane, 4,4'-DDT, and arsenic are the major contaminants contributing to the ELCRs for all receptors. The risk characterization results for surface soil exposure scenarios are shown in Tables E-4-1 through E-4-14 in Appendix E-4 to this report. For current land use, the cancer risk associated with surface soil ingestion, dermal contact, and fugitive dust inhalation is $4x10^{-6}$ for the trespasser. The cancer risk for the adult occupational worker is $8x10^{-6}$. The cancer risk for the adult site maintenance worker is $2x10^{-6}$. For potential future land use, the cancer risk for the resident is $5x10^{-5}$. The cancer risk for the adult excavation worker is $2x10^{-7}$.

The noncancer risks associated with surface soil ingestion, dermal contact, and inhalation of fugitive dust for current land use are all below an HI of 1 (adolescent trespasser, adult trespasser, adult occupational worker, and adult site maintenance worker). For potential future land use, the adult resident and adult excavation worker HIs are below 1. The HI for the child resident is 3. Chlordane (HQ = 2) is the major contributor to this HI, with 4,4'-DDT contributing an HI of 0.5.

RGOs for the ELCRs and HIs associated with the occupational worker, the receptor most likely to be exposed under current land use, and the future resident, the receptor most likely to be exposed under future land use, are presented in Subsection 6.3.6. RGOs for the occupational worker have been developed because it is unlikely that SWMU 15 will be developed for future residential use.

6.3.4.2 **Subsurface Soil** For future land use, the cancer risk associated with subsurface soil ingestion, dermal contact, and fugitive dust inhalation is $4x10^{-8}$ for the adult excavation worker. The only contaminant contributing cancer risk to the ELCR for the adult excavation worker is arsenic because it was the only analyte selected as an HHCPC.

The noncancer risk for subsurface soil ingestion, dermal contact, and fugitive dust inhalation for future land use is below an HI of 1 (adult excavation worker). Arsenic (HQ = 0.005) is the only contributor to this HI.

The risk characterization results for subsurface soil exposure scenarios are shown in Tables E-4-15 and E-4-16 in Appendix E-4 to this report. RGOs were not developed for arsenic in subsurface soil because the ELCR did not exceed $1x10^{-6}$, and the HI did not exceed 0.1.

Cancer Risk Summary, Current Land Use

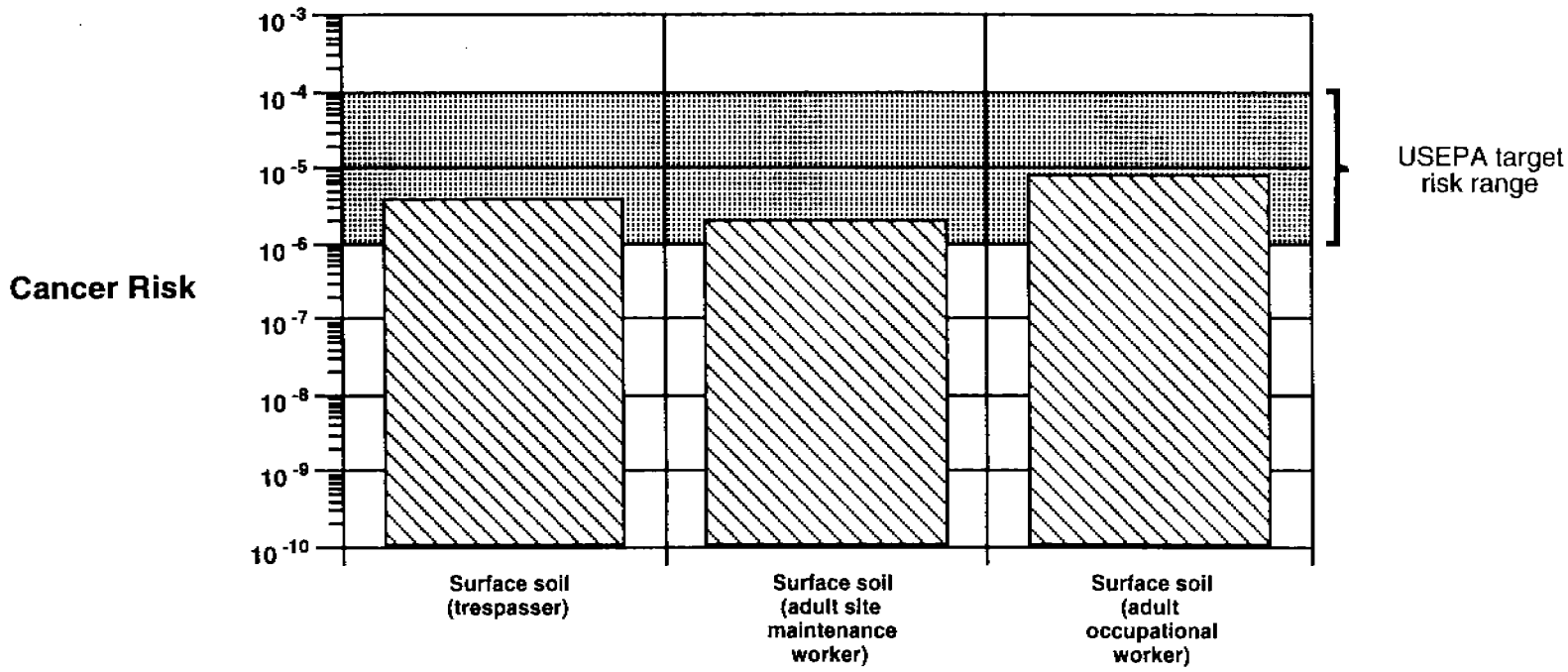


FIGURE 6-6

CANCER RISK SUMMARY,
CURRENT LAND USE,
SWMU 15

RCRA FACILITY INVESTIGATION REPORT, GROUP II SWMUs

U.S. NAVAL STATION
MAYPORT, FLORIDA

8533-08 950524WEM

Hazard Index Summary, Current Land Use

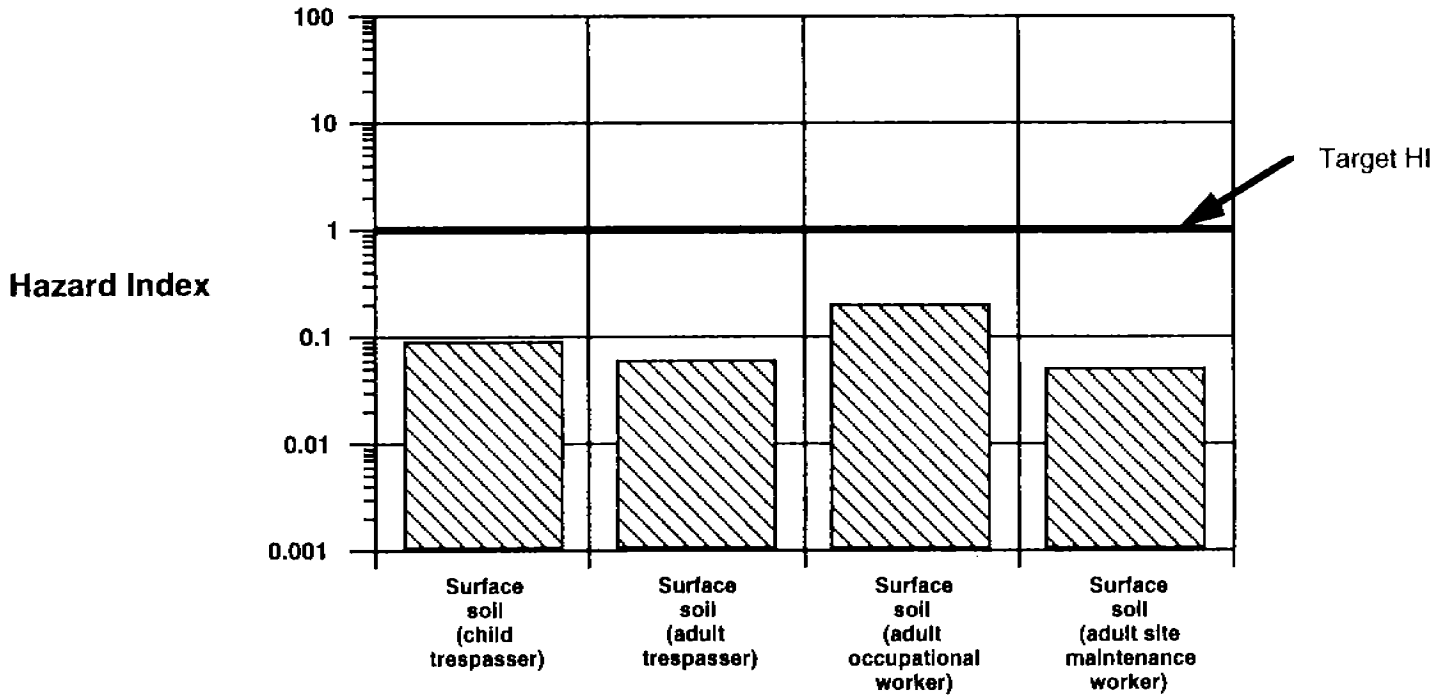


FIGURE 6-7

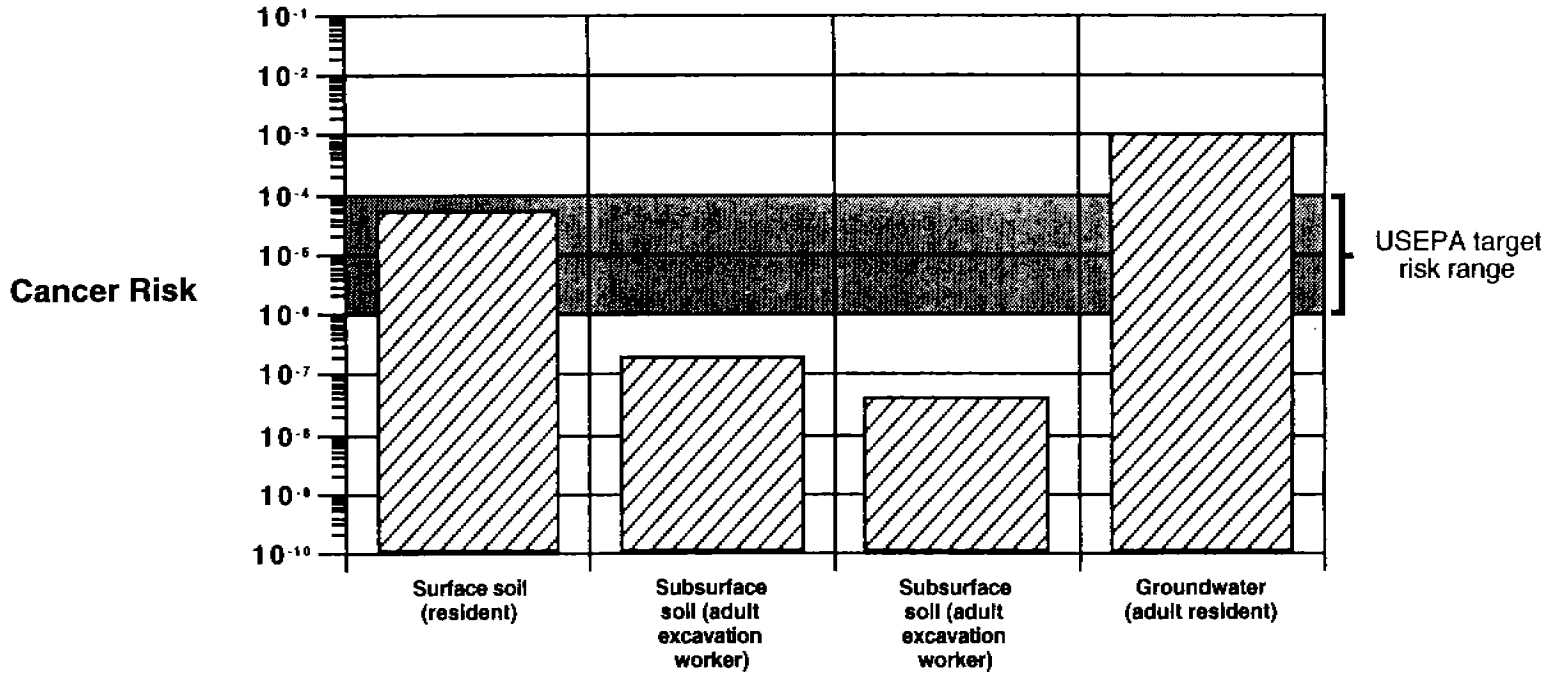
HAZARD INDEX SUMMARY, CURRENT LAND USE, SWMU 15

RCRA FACILITY INVESTIGATION REPORT, GROUP II SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

8533-08 950524WEM

Cancer Risk Summary, Future Land Use



NOTES:
SWMU = Solid Waste Management Unit
USEPA = U.S. Environmental Protection Agency

FIGURE 6-8
CANCER RISK SUMMARY,
FUTURE LAND USE,
SWMU 15

RCRA FACILITY INVESTIGATION
REPORT, GROUP II SWMUs

U.S. NAVAL STATION
MAYPORT, FLORIDA

8533-08 fig 6-8 111095MAW

Hazard Index Summary, Future Land Use

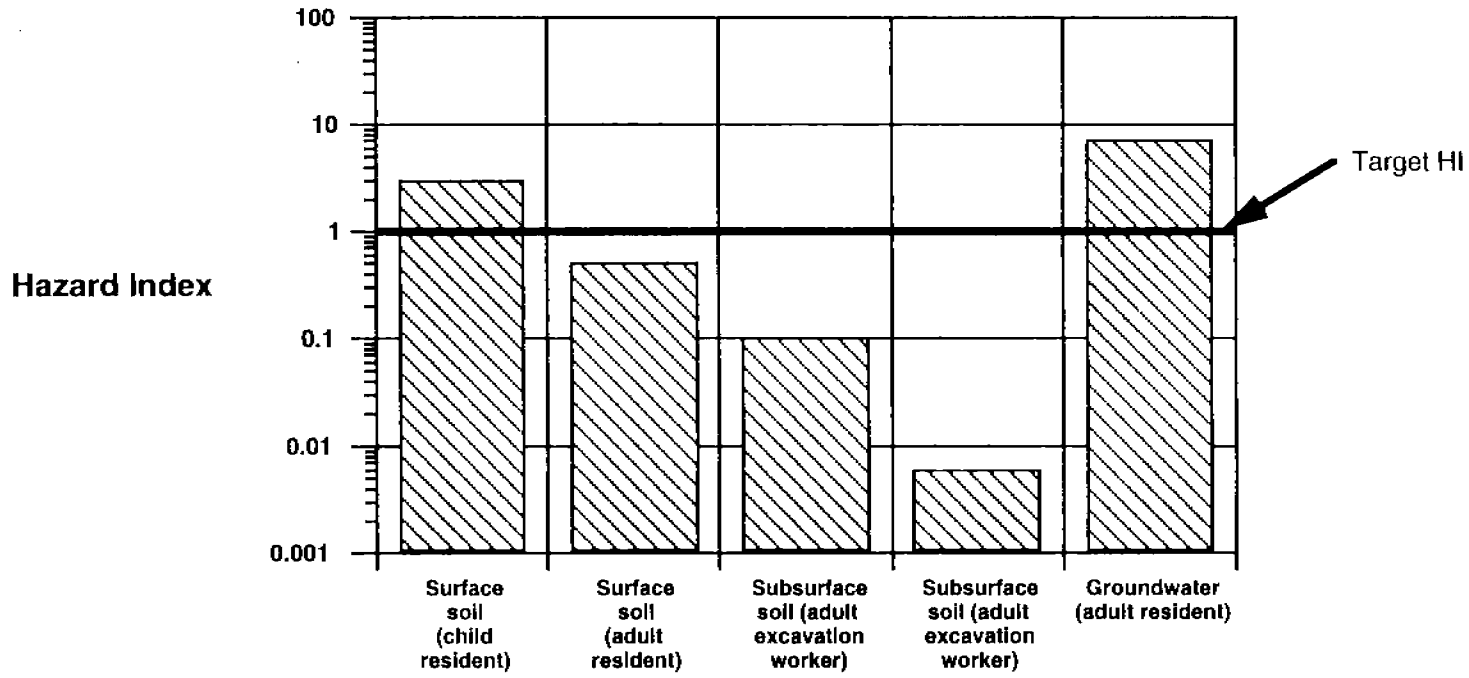


FIGURE 6-9

HAZARD INDEX SUMMARY,
FUTURE LAND USE,
SWMU 15

RCRA FACILITY INVESTIGATION
REPORT, GROUP II SWMUs

U.S. NAVAL STATION
MAYPORT, FLORIDA

8533-08 950524WEM

Table 6-20
Human Health Risk Summary for Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Land Use	Exposure Route	Hazard Index[1]	Estimated Lifetime Cancer Risk
Current Land Use			
Surface Soil			
Adolescent trespasser	Incidental ingestion	0.05	1×10^{-6}
	Dermal contact	0.04	1×10^{-6}
	Inhalation of particulates	[1]0	7×10^{-9}
Total adolescent trespasser:		0.09	2×10^{-6}
Adult trespasser	Incidental ingestion	0.03	1×10^{-6}
	Dermal contact	0.03	1×10^{-6}
	Inhalation of particulates	[1]0	7×10^{-9}
Total adult trespasser:		0.06	2×10^{-6}
Total trespasser:			4×10^{-6}
Adult occupational worker	Incidental ingestion	0.09	4×10^{-6}
	Dermal contact	0.07	4×10^{-6}
	Inhalation of particulates	[1]0	3×10^{-7}
Total occupational worker:		0.2	8×10^{-6}
Adult site maintenance worker	Incidental ingestion	0.025	1×10^{-6}
	Dermal contact	0.021	1×10^{-6}
	Inhalation of particulates	[1]0	4×10^{-8}
Total site maintenance worker:		0.05	2×10^{-6}
Future Land Use			
Surface Soil			
Child resident	Incidental ingestion	2.2	2×10^{-5}
	Dermal contact	0.4	5×10^{-6}
	Inhalation of particulates	[1]0	5×10^{-7}
Total child resident:		3.0	3×10^{-5}
Adult resident	Incidental ingestion	0.24	1×10^{-5}
	Dermal contact	0.24	1×10^{-5}
	Inhalation of particulates	[1]0	4×10^{-7}
Total adult resident:		0.5	2×10^{-5}
Total resident:			5×10^{-5}
Adult excavation worker	Incidental ingestion	0.1	2×10^{-7}
	Dermal contact	0.02	5×10^{-8}
	Inhalation of particulates	[1]0	1×10^{-9}
Total excavation worker:		0.1	2×10^{-7}

See notes at end of table.

Table 6-20 (Continued)
Human Health Risk Summary for Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Land Use	Exposure Route	Hazard Index[1]	Estimated Lifetime Cancer Risk
Future Land Use (Continued)			
Subsurface Soil			
Adult excavation worker	Incidental ingestion	0.0054	4×10^{-8}
	Dermal contact	0.00007	4×10^{-10}
	Inhalation of particulates	[1]0	1×10^{-9}
Total excavation worker:		0.006	4×10^{-8}
Surficial Aquifer			
Adult resident	Ingestion of groundwater as drinking water	7	1×10^{-3}
	Inhalation of volatiles while showering	NC	NC
Total adult resident:		7	1×10^{-3}

[1] A hazard index could not be calculated for inhalation exposures because inhalation reference doses were not available for the human health chemicals of potential concern (HHCPCs).

Note: RCRA = Resource Conservation and Recovery Act.
NC = not calculated because no volatiles were selected as HHCPCs.

6.3.4.3 **Groundwater** The risk characterization results for the groundwater exposure scenario are shown in Table E-4-17 in Appendix E-4 to this report. There is no exposure to groundwater from the surficial aquifer under current land use. The cancer risk associated with ingestion of groundwater as drinking water is $1x10^{-3}$ for the adult resident. No VOCs were selected as HHCPCs in groundwater, so cancer risk to the adult resident associated with inhalation of VOCs during showering was not evaluated. Arsenic is the major contributor to the ELCR for the future resident, with alpha-BHC contributing a risk of $2x10^{-5}$ and beta-BHC contributing a risk of $8x10^{-5}$. Five of the six detected concentrations of arsenic were below the Federal and State drinking water standards, which are both 50 $\mu g/\ell$. A single concentration (62 $\mu g/\ell$) was above the drinking water standard.

The HI for groundwater ingestion was 7 for the adult resident. Arsenic (HQ = 6) and manganese (HQ = 1) were the major contributors to this HI. No VOCs were selected as HHCPCs in groundwater, so noncancer risk to the adult resident associated with inhalation of VOCs during showering was not evaluated.

RGOs for the ELCR and HI associated with the adult resident are presented in Subsection 6.3.6. Inclusion of arsenic in this table is not intended to be a statement that remediation of arsenic is necessary. Five of the six detected arsenic concentrations are less than Federal and State drinking water standards. One sample result (62 $\mu g/\ell$) is higher than the standards, while the other five samples have concentrations ranging from 0.7 to 10.4 $\mu g/\ell$. This single sample drives most of the carcinogenic and noncarcinogenic risks at SWMU 15. If this sample result is not representative of site conditions, then the ELCR and the total HI for groundwater would be several-fold lower.

<u>6.3.5 Uncertainty Analysis</u> General uncertainties associated with the collection, analysis, and evaluation of data; exposure assessment; toxicity assessment; and the risk estimation process are discussed in Subsection 2.5.10 of the RFI GIR. Site-specific uncertainties that are important for the interpretation of the calculated risk estimates for surface soil, subsurface soil, and groundwater at SWMU 15 are discussed below.

- Residential land use was the assumed future land use scenario according to USEPA Region IV guidance (USEPA, 1991). It is likely, however, that the area near SWMU 15 will remain industrial because of its proximity to the flightline.

- Some uncertainty is associated with the representativeness of the groundwater data collected to complete the risk evaluation at SWMU 15. Generally, because the low-flow method was used, turbidity in the unfiltered groundwater samples was minimal. However, the analytical data from some of the unfiltered samples may indicate high inorganic concentrations as a result of suspended solids.

- A single sample is responsible for most of the carcinogenic and noncarcinogenic risk associated with future residential groundwater ingestion at SWMU 15. The other groundwater samples from SWMU 15 contained arsenic at concentrations consistent with background levels.

- The arsenic CSF is a source of uncertainty in the HHRA for the surficial aquifer because concentrations of arsenic that tend to be present in the area surrounding NAVSTA Mayport are high enough to consistently cause

arsenic to be a significant contributor to cancer risks. The oral CSF for inorganic arsenic is based on dose-response data for skin cancer incidence obtained by Tseng, et al. (1968). Individuals in this study were exposed to high levels of inorganic arsenic in drinking water (170 μg/ml). Arsenic exposure was approximated based on estimates of water intake. Other exposure pathways contributing to total exposure, such as ingestion of fish, livestock, and plants, were not assessed, potentially resulting in an underestimate of arsenic exposure. The oral slope factor was calculated using a model that assumes the dose-response curve is linear at low doses. Recent evidence suggests that low doses of arsenic may be largely detoxified by methylation, producing a nonlinear dose-response curve (Goyer, 1991). In the Tseng, et al. study, the saturation of the normal detoxification pathways coupled with an underestimate of exposure may have resulted in an overestimate of cancer risk for this SWMU. Based on the uncertainties associated with the arsenic CSF, risk management guidance (USEPA, 1988f) suggests that cancer risk may be up to tenfold lower than predicted.

- The manganese drinking water RfD of 5.00E-03 mg/kg-day is based on a single epidemiological study conducted in Greece (Kondakis, et al., 1989). Limitations of study design coupled with the lack of supporting studies may have resulted in a significant overestimate of the risks associated with drinking water ingestion of manganese. The critical study assessed neurological function in an adequate number of individuals residing in three geographically distinct areas of Greece, each area with significantly different levels of manganese endemic to the local water supply. The study did not investigate and quantitate other potential dietary sources of manganese in the study groups. The levels of manganese in locally grown produce and livestock can be presumed to reflect the local concentration of manganese in the water supply (i.e., the high manganese area would also have local food with higher levels of manganese than the areas with lower levels of manganese in water). This study flaw may have resulted in the establishment of an artificially low oral drinking water RfD. Additionally, the study assessed neurological function only in individuals greater than 50 years of age. The neurological degeneration documented to be associated with high chronic manganese consumption was nonspecific in nature and could have resulted from a number of other neurological diseases, such as Parkinsonism and Alzheimer's disease, which increase in prevalence with age. Because this study did not control for the presence of other neurological diseases or for patients with a family history of neurological disease there is an uncertainty to the cause-and-effect relationship of manganese to the toxic endpoint. Therefore, the HQ associated with manganese may be overestimated.

- Some uncertainty is associated with the high detection limits for some of the pesticides. Lower levels of pesticides may not have been detected, which would lead to an underestimate of risk associated with these pesticides.

- The presence of TICs has not been established with a degree of certainty great enough to warrant their inclusion in the HHRA for any medium at SWMU 15. The relative number of TICs is low in comparison to the number of detected contaminants. Furthermore, few toxicity data are available

to evaluate the potential health effects of these analytes even if they were considered for quantitative evaluation. Because TICs were not evaluated there is a potential for underestimation of the health risks associated with future land uses.

6.3.6 Remedial Goal Options As required by USEPA Region IV guidance, RGOs are presented in a table of potential media cleanup levels. Potential media cleanup levels have been identified for HHCPCs whose maximum detected concentrations exceed Federal or State standards or Florida guidance values, or that have associated cancer risks greater than $1x10^{-6}$ or HQs greater than 0.1. Potential media cleanup levels include concentrations at various risk levels and Federal and State standards and guidance values. These potential media cleanup levels are not actual cleanup levels. These values are provided here for informational purposes to assist risk-management decisionmaking concerning the need for a CMS and within the CMS itself.

6.3.6.1 **Surface Soil** Potential medium cleanup levels have been identified for two receptors, the resident and the occupational worker, under the assumption that future residential development at SWMU 15, though possible, is unlikely. RGOs based on assumed industrial land use may provide more appropriate information for a CMS.

Table 6-21 presents RGOs for future resident exposure to surface soil at SWMU 15. The total cancer risk to the child and adult residents associated with arsenic, beryllium, chlordane, 4,4'-DDE, and 4,4'-DDT exceeded $1x10^{-6}$. The total HIs for the child resident associated with arsenic, chlordane, and 4,4'-DDE exceeded 0.1.

Table 6-22 presents RGOs for occupational worker exposure to surface soil at SWMU 15. Arsenic, chlordane, and 4,4'-DDT were associated with cancer risks greater than $1x10^{-6}$. Chlordane was associated with an HQ of 0.1.

6.3.6.2 **Subsurface Soil** RGOs were not developed for subsurface soil because the ELCR did not exceed $1x10^{-6}$, and the HI did not exceed 0.1.

6.3.6.3 **Groundwater** Table 6-23 presents RGOs for future resident ingestion of groundwater at SWMU 15. The total cancer risk to the adult resident associated with bis(2-ethylhexyl)phthalate, alpha-BHC, beta-BHC, and arsenic exceeded $1x10^{-6}$. The HIs for the adult resident associated with arsenic and manganese exceeded 0.1. The maximum detected concentrations of iron and sodium exceeded Florida groundwater guidance concentrations.

6.4 ECOLOGICAL RISK ASSESSMENT FOR SWMU 15. The following subsections describe the results of the ERA for contamination in surface soil and groundwater at SWMU 15 (the Old Pesticide Handling Area). The ERA was completed according to the methodology described in Section 2.4 of the RFI GIR (ABB-ES, 1995a) and includes selection of ECPCs (Subsection 6.4.1), exposure assessment (Subsection 6.4.2), ecological effects assessment (Subsection 6.4.3), risk characterization (Subsection 6.4.4), and uncertainty analyses (Subsection 6.4.5). Each of these sections discusses surface soil and groundwater separately.

Table 6-21
Summary of Remedial Goal Options for Human Health at Solid Waste Management Unit (SWMU) 15
Surface Soil, Future Residential Land Use

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Range of Detected Concentrations[1]	Excess Lifetime Cancer Risk Risk Range			Hazard Quotient Risk Range			Florida Cleanup Goals[2]	Florida Leaching Value[3]
		10^{-4}	10^{-5}	10^{-6}	0.1	1	10		
Surface Soil (µg/kg)									
Future Land Use, Resident									
Arsenic	1,200 - 5,000	38,390	3,839	384	2353	23,530	235,300	700	NC
Beryllium	70 - 170	4,400	440	44	NA	NA	NA	100	NC
Chlordane	20 - 9,000	38,200	3,820	382	422	4,222	42,220	800	2,100
4,4'-DDE	0.935* - 2,800	87,500	8,750	875	NA	NA	NA	2,900	200
4,4'-DDT	1.6* - 790,000	83,450	8,345	835	262,700	26,270	2,627	3,100	500

[1] A value indicated by an asterisk is the average of the detected concentrations in a sample and its duplicate. For nondetect values, one-half the contract-required quantitation limit or contract-required detection limit (CRQL/CRDL) is used as a surrogate.
[2] The Florida Cleanup Goals (April 5, 1995) are identified in Table D-1-4 of Appendix D to the RCRA Facility Investigation (RFI) General Information Report.
[3] The Florida Leaching Values (April 5, 1995) are identified in Table D-1-4 of Appendix D to the RFI General Information Report.

Notes: RCRA = Resource Conservation and Recovery Act.
µg/kg = micrograms per kilogram.
NA = not applicable.
NC = not calculated.
DDE = dichlorodiphenyldichloroethene.
DDT = dichlorodiphenyltrichloroethane.

Table 6-22
Summary of Remedial Goal Options for Human Health at Solid Waste Management Unit (SWMU) 15
Surface Soil, Current Industrial Land Use

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Range of Detected Concentrations[1]	Excess Lifetime Cancer Risk Risk Range			Hazard Quotient Risk Range			Florida Cleanup Goals[2]	Florida Leaching Value[3]
		10^{-4}	10^{-5}	10^{-6}	0.1	1	10		
Surface Soil (µg/kg)									
Current Land Use, Occupational Worker									
Arsenic	1,200 - 5,000	289,900	28,990	2,899	NA	NA	NA	3,000	NC
Chlordane	20 - 9,000	275,200	27,520	2,752	8,022	80,220	802,200	2,800	2,100
4,4'-DDE	0.935* - 2,800	NA	NA	NA	NA	NA	NA	9,900	200
4,4'-DDT	1.6* - 790,000	504,800	50,480	5,048	NA	NA	NA	12,000	500

[1] A value indicated by an asterisk is the average of the detected concentrations in a sample and its duplicate. For nondetect values, one-half the contract-required quantitation limit or contract-required detection limit is used as a surrogate.
[2] The Industrial Florida Cleanup Goals (April 5, 1995) are identified in Table D-1-4 of Appendix D-1 to the RCRA Facility Investigation (RFI) General Information Report.
[3] The Florida Leaching Values (April 5, 1995) are identified in Table D-1-4 of Appendix D-1 to the RFI General Information Report.

Notes: RCRA = Resource Conservation and Recovery Act.
µg/kg = micrograms per kilogram.
NA = not applicable.
NC = not calculated.
DDE = dichlorodiphenyldichloroethene.
DDT = dichlorodiphenyltrichloroethane.

Table 6-23
Summary of Remedial Goal Options for Human Health at Solid Waste Management Unit (SWMU) 15 Groundwater, Future Land Use

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Range of Detected Concentrations[1]	Excess Lifetime Cancer Risk Risk Range			Hazard Quotient Risk Range			Federal Maximum Contaminant Level[2]	Florida Primary Standard[3]
		10^{-4}	10^{-5}	10^{-6}	0.1	1	10		
Groundwater (μg/ℓ)									
Future Land Use, Resident									
Arsenic	0.7 - 62	5.6	0.56	0.06	1.1	10.9	109	50	50
alpha-BHC	0.058 - 0.23	1.3	0.13	0.01	NA	NA	NA	NS	[6]0.05
beta-BHC	0.84 - 3.6	4.7	0.47	0.05	NA	NA	NA	NS	[6]0.1
bis(2-Ethylhexyl)-phthalate	14 - 14	600	60	6	NA	NA	NA	8	6
Iron[4]	102 - 496	NA	NA	NA	NA	NA	NA	NS	[5]300
Manganese	4.6* - 241	NA	NA	NA	1,850	185	18.5	NS	[5]50
Sodium[4]	5,015* - 783,000	NA	NA	NA	NA	NA	NA	NS	[5]160,000

[1] A value indicated by an asterisk is the average of the detected concentrations in a sample and its duplicate. For nondetect values, one-half the contract-required quantitation limit and contract-required detection limit is used as a surrogate.
[2] The Federal maximum contaminant levels (MCLs) (November 1994) are identified in Table D-1-5 of Appendix D to the RCRA Facility Investigation (RFI) General Information Report.
[3] The Florida Primary Standards (June 1994) are identified in Table D-1-5 of Appendix D to the RFI General Information Report.
[4] This analyte was not selected as an human health chemicals of potential concern for groundwater because the maximum detected concentration did not exceed the background screening concentration. However, the maximum detected concentration exceeded the analyte's risk-based screening concentration, Federal MCL, or Florida Guidance Concentration. Therefore, remedial goal options are presented for this analyte.
[5] This value is a Florida Secondary Standard.
[6] This value is a Florida Guidance Concentration. The Florida Guidance Concentrations (June 1994) are identified in Table D-1-5 of Appendix D to the RFI General Information Report.

Notes: RCRA = Resource Conservation and Recovery Act.
μg/ℓ = micrograms per liter.
BHC = hexachlorocyclohexane.
NA = not applicable.
NS = no standard available.

6.4.1 Selection of Ecological Chemicals of Potential Concern Analytes were determined to be an ECPC according to the process described in Subsection 2.4.1 of the RFI GIR (ABB-ES, 1995a). ECPCs for surface soil and groundwater at SWMU 15 were selected as described in the following subsections.

6.4.1.1 **Surface Soil** In 1993, eight surface soil samples (MPT-15-SS1 through MPT-15-SS8) were collected and analyzed for volatiles, semivolatiles, pesticides and PCBs, and inorganics. In 1994, an additional 21 samples (MPT-15-SS9 through MPT-15-SS29) were collected and analyzed for pesticides and PCBs only. Figure 6-3 shows the 29 surface soil sampling locations for SWMU 15. Table 6-24 provides a summary of the analytical results, including the frequency of detection, range of detected concentrations, range of reporting limits, mean of detected concentrations, and the screening background concentrations for each of the analytes. In addition, maximum and average EPCs are provided for analytes selected as ECPCs. Calcium, iron, magnesium, potassium, and sodium were not included in the screening process because they are naturally occurring nutrients.

Eighteen of the 23 analytes detected in surface soil were selected as ECPCs. One volatile (acetone), 2 semivolatiles (butylbenzylphthalate and bis[2-ethylhexyl]-phthalate), 3 pesticides (4,4'-DDE, 4,4'-DDT, and chlordane), and 12 inorganics were selected as ECPCs.

6.4.1.2 **Groundwater** The monitoring well system installed to examine potential contamination to the groundwater at SWMU 15 is described in Section 6.2. The locations of the six monitoring wells (MPT-15-MW01S, MPT-15-MW02S, MPT-15-MW03S, MPT-15-MW04S, MPT-15-MW05I, and MPT-15-MW05S) are shown on Figure 6-2.

The unfiltered groundwater data for SWMU 15 are summarized in Table 6-25. Use of unfiltered groundwater data to estimate contaminant exposures for aquatic life is highly conservative. The measurement of contaminants in unfiltered samples includes both the fraction of contaminants sorbed onto particles and the dissolved forms. Only the dissolved fraction of contaminants in the groundwater is likely to be transported in groundwater and discharged to the St. Johns River. Generally, only the fraction of the contaminant in the dissolved phase is biologically available and potentially toxic to aquatic organisms (USEPA, 1993).

Ten of 19 analytes detected in groundwater from SWMU 15 were selected as ECPCs. The 10 analytes include 1 volatile (carbon disulfide), 1 semivolatile (bis(2-ethylhexyl)phthalate), 3 pesticides (alpha-BHC, beta-BHC, and delta-BHC), and 5 inorganics (arsenic, cyanide, lead, manganese, and mercury).

6.4.2 **Exposure Assessment** The exposure assessment identifies exposure pathways and estimates the magnitude of contaminant exposures for terrestrial wildlife and aquatic receptors associated with contamination in surface soil and groundwater. Exposure pathways were identified for aquatic and terrestrial receptors in the contaminant pathway model for SWMU 15, which is shown on Figure 6-10.

6.4.2.1 **Surface Soil** Routes of exposure for terrestrial wildlife for which exposure concentrations were measured or estimated include direct or indirect ingestion of soil and ingestion of contaminated food. Concentrations of the ECPCs measured in surface soil from SWMU 15 were used to estimate contaminant exposures for terrestrial wildlife. The lesser of the maximum detected concentration or the 95 percent UCL calculated on the log-transformed

Table 6-24
Selection of Ecological Chemicals of Potential Concern
in Surface Soil Samples Associated with Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Range of Detected Concentrations[2]	Range of Reporting Limits	Mean of Detected Concentrations[3]	Screening Background Concentration[4]	Analyte ECPC? (Yes/No)	95 Percent UCL[5]	Arithmetic Mean[6]	Exposure Point Concentration	
									Maximum[7]	Average[8]
Volatile Analytes (µg/kg)										
Acetone	3/8	2 - 30	10 - 11	13.7	ND	Yes	18.5	8.5	18.5	8.5
Semivolatile Analytes (µg/kg)										
Butylbenzylphthalate	2/8	215* - 640	690 - 18,000	428	ND	Yes	5,943	1,454	640	640
bis(2-Ethylhexyl)-phthalate	1/8	200	680 - 720	200	ND	Yes	388	333	200	200
Pesticides/PCBs (µg/kg)										
4,4'-DDE	28/29	0.935* - 2,800	0.7 - 14,000	179	2.3	Yes	2,951	415	2,800	415
4,4'-DDT	27/29	1.6* - 790,000	1 - 28,000	29,355	ND	Yes	14,186	27,331	790,000[9]	27,331
Chlordane	8/29	20 - 9,000	7 - 14,000	2,133	ND	Yes	8,022	864	8,022	864
Heptachlor	1/29	16	0.7 - 14,000	16	ND	No[10]				
Heptachlor epoxide	1/29	85	0.7 - 14,000	85	ND	No[10]				
Inorganic Analytes (mg/kg)										
Antimony	1/8	2.8	2.5 - 2.7	2.8	ND	Yes	1.8	1.5	1.8	1.5
Arsenic	8/8	1.2 - 5	NR	2.4	ND	Yes	4	2.4	4	2.4
Barium	8/8	4.3 - 30.6	NR	11.2	5.6	Yes	26.1	11.2	26.1	11.2
Beryllium	8/8	0.07 - 0.17	NR	0.12	0.16	Yes	0.15	0.12	0.15	0.12
Cadmium	4/8	0.5 - 0.82*	0.41 - 0.43	0.63	2	No[11]				
Chromium	8/8	2.5 - 14.6	NR	6.3	2.6	Yes	11.4	6.3	11.4	6.3
Cobalt	8/8	0.26 - 0.7	NR	0.49	ND	Yes	0.64	0.49	0.64	0.49
Copper	8/8	1.1 - 11.4	NR	5.2	2.2	Yes	15.6	5.2	11.4	5.2
Lead	8/8	2.4 - 296.5*	NR	59.8	ND	Yes	1,287	59.8	296.5	59.8
Mercury	2/8	0.07 - 0.575*	0.04 - 0.13	0.32	ND	Yes	0.4	0.11	0.4	0.11
Nickel	3/8	1.4 - 1.9	1.3 - 1.4	1.6	ND	Yes	1.6	1	1.6	1

See notes at end of table.

Table 6-24 (Continued)
Selection of Ecological Chemicals of Potential Concern in Surface Soil Samples Associated with Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Range of Detected Concentrations[2]	Range of Reporting Limits	Mean of Detected Concentrations[3]	Screening Background Concentration[4]	Analyte ECPC? (Yes/No)	95 Percent UCL[5]	Arithmetic Mean[6]	Exposure Point Concentration	
									Maximum[7]	Average[8]
Selenium	8/8	0.37 - 0.81	NR	0.59	1.36	No[11]				
Tin	2/8	3.75* - 4.2	3.6 - 3.8	4	ND	Yes	3.2	2.4	3.2	2.4
Vanadium	8/8	1.6 - 3.7	NR	2.8	4	No[11]				
Zinc	8/8	9.1 - 171.5*	NR	70.3	2.6	Yes	276	70.3	171.5	70.3

[1] Frequency of detection is the number of samples in which the analyte is detected divided by the total number of samples analyzed. In 1993, surface soil samples were analyzed for volatiles, semivolatiles, pesticides and PCBs, and inorganics from eight locations (MPT-15-SS01 through MPT-15-SS08; Figure 6-2). In 1994, an additional 21 samples were collected and analyzed for pesticides and PCBs at locations MPT-15-SS09 through MPT-15-SS29 (Figure 6-2).
[2] A value indicated by an asterisk is the average of the detected concentration in a sample and its duplicate. For nondetect values, one-half of the contract-required quantitation limit and contract-required detection limit is used as a surrogate.
[3] The average of detected concentrations is the arithmetic mean of all samples in which the analyte was detected; it does not include those samples in which the analyte was not detected.
[4] Background sample locations include MPT-B-SS1, MPT-B-SS2, MPT-B-SS3, MPT-B-SS4, MPT-B-SS5, and MPT-B-SS6, with a duplicate at MPT-B-SS1. The average concentrations of analytes detected in the background locations are listed in the RCRA Facility Investigation (RFI) General Information Report (ABB Environmental Services, Inc., 1995a). Two times the background concentration is calculated for inorganics.
[5] The 95 percent UCL is calculated on the log-transformed average of all concentrations using the formula provided in the U.S. Environmental Protection Agency (USEPA) Region IV Supplemental Guidance (USEPA, 1991).
[6] The arithmetic mean of all concentrations assigns a value of one-half of the contract-required quantitation limit for organics and method detection limit for inorganics to all nondetects.
[7] The maximum exposure concentration is equal to the 95 percent UCL or the maximum detected concentration, whichever is less.
[8] The average exposure concentration is equal to the arithmetic mean or the maximum detected concentration, whichever is less.
[9] Due to the wide variability in the range of detected concentrations of 4,4'-DDT and the resulting 95 percent UCL, the maximum detected concentration was used as the maximum exposure point concentration.
[10] Analyte is detected in less than 5 percent of samples.
[11] Maximum detected concentration is less than one time the average background concentration for organics or two times the average background concentration for inorganics.

Notes: RCRA = Resource Conservation and Recovery Act.
ECPC = ecological chemical of potential concern.
UCL = upper confidence limit.
µg/kg = micrograms per kilogram.
PCB = polychlorinated biphenyl.
DDE = dichlorodiphenyldichloroethene.
DDT = dichlorodiphenyltrichloroethane.
NR = not reported.
ND = not detected.
mg/kg = milligrams per kilogram.

Table 6-25
Selection of Ecological Chemicals of Potential Concern in Groundwater Samples Associated with Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Range of Detected Concentrations[2]	Mean of Detected Concentrations[3]	Screening Reference Concentration[4]	Florida Surface Water Quality Standards[5]	Analyte ECPC? (Yes/No)	95 percent UCL[6]	Arithmetic Mean[7]	Exposure Point Concentrations	
									Max[8]	Ave[9]
Volatile Analytes (µg/ℓ)										
Carbon disulfide	2/7	1 - 2	1.5	1	NA	Yes	3.1	2.2	0.012	
Semivolatile Analytes (µg/ℓ)										
bis(2-Ethylhexyl)-phthalate	1/7	14	14	6.2	NA	Yes	9	6.3	1.5×10^{-32}	
Pesticides/PCBs (µg/ℓ)										
alpha-BHC	2/7	0.058 - 0.23	0.14	ND	NA	Yes	0.44	0.05	2.9×10^{-60}	
beta-BHC	2/7	0.84 - 3.6	2.2	ND	0.046	Yes	728	0.65	9.5×10^{-62}	
delta-BHC	1/7	0.029	0.03	ND	NA	Yes	0.04	0.02	1.7×10^{-67}	
Inorganic Analytes (µg/ℓ)										
Arsenic	6/7	0.7 - 62	13.1	9.8	50	Yes	1,176	11.3	62	11.3
Barium	4/7	3.1 - 14.6	7.5	39	NA	No[10]				
Calcium	7/7	74,000 - 129,000	88,807	207,466	NA	No[10,12]				
Chromium	1/7	2.7	2.7	10.4	50	No[10,11]				
Cyanide	3/7	2.175* - 3.3	2.8	1.9	1.0	Yes	2.8	1.3	2.8	1.3
Iron	7/7	102 - 496	212	1,728	300	No[10]				
Lead	3/7	0.45* - 7.5	2.8	2.6	5.6	Yes	8.6	1.4	7.5	1.4
Magnesium	4/7	2,980* - 9,950	6,115	153,984	NA	No[10,11]				
Manganese	7/7	4.6* - 241	80.3	210	NA	Yes	944	80.3	241	80.3
Mercury	2/7	0.12 - 0.16	0.14	0.16	0.025	Yes	0.13	0.08	0.13	0.08
Selenium	2/7	0.78 - 0.8*	0.79	11.8	71	No[10,11]				
Sodium	5/7	5,015* - 783,000	180,899	1,519,016	NA	No[12]				

See notes at end of table.

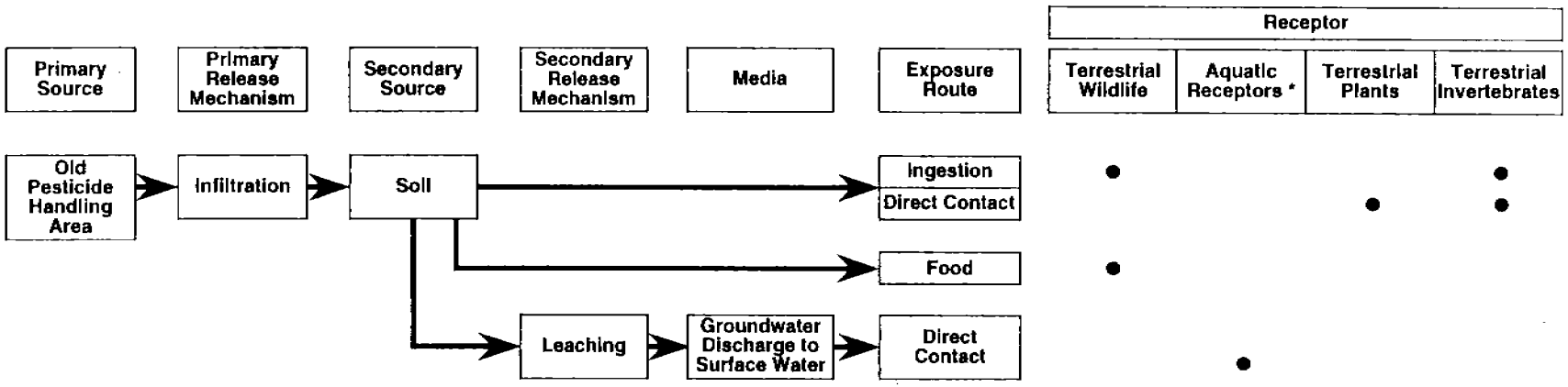
Table 6-25 (Continued)
Selection of Ecological Chemicals of Potential Concern in Groundwater Samples Associated with Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Range of Detected Concentrations[2]	Mean of Detected Concentrations[3]	Screening Reference Concentration[4]	Florida Surface Water Quality Standards[5]	Analyte ECPC? (Yes/No)	95 Percent UCL[6]	Arithmetic Mean[7]	Exposure Point Concentrations	
									Max[8]	Ave[9]
Sodium	5/7	5,015* - 783,000	180,899	1,519,016	NA	No[12]				
Vanadium	7/7	1.9 - 7.7	3.3	9.2	NA	No[10]				
Zinc	3/7	3.9* - 61.2	23.5	41.6	86	No[11]				

[1] Frequency of detection is the number of samples in which the analyte is detected divided by the total number of samples analyzed (MPT-15-MW01S, MPT-15-MW02S, MPT-15-MW03S, MPT-15-MW04S, MPT-15-MW05I, MPT-15-MW05S, MPT-15-P01, with a duplicate at MPT-15-MW05S; Figure 6-2).
[2] A value indicated by an asterisk is the average of the detected concentration is a sample and its duplicate. For nondetect values, one-half of the contract-required quantitation limit (CRQL) and contract-required detection limit is used as a surrogate.
[3] The average of detected concentrations is the arithmetic mean of all samples in which the analyte was detected; it does not include those samples in which the analyte was not detected.
[4] Background sample locations include MPT-1-MW01S, MPT-S-MW01S, MPT-8-MW05S, MPT-8-MW05I, MPT-8-MW05D, MPT-B-MW01S, MPT-B-MW01I, and MPT-B-MW01D, with a duplicate at MPT-S-MW01S. The average concentrations of analytes detected in the background locations are listed in the RCRA Facility Investigation (RFI) General Information Report. Two times the background concentration is calculated for inorganics.
[5] Florida Department of Environmental Protection, 62-302 Florida Administrative Code (1995 version); surface water quality standards for Class III marine waters.
[6] The 95 percent UCL is calculated on the log-transformed average of all concentrations using the formula provided in the U.S. Environmental Protection Agency Region IV Supplemental Guidance (USEPA, 1991).
[7] The arithmetic mean of all concentrations assigns a value of one-half of the CRQL for organics and Method Detection Limit for inorganics to all nondetects.
[8] Maximum exposure concentrations for organics are predicted based on the Groundwater Transport and Dilution Model in Appendix F-4. The maximum exposure concentration for inorganics is equal to the 95 percent UCL or the maximum detected concentration, whichever is less.
[9] The average exposure concentration for inorganics is equal to the arithmetic mean or the maximum detected concentration, whichever is less.
[10] Maximum detected concentration is less than one time the average background concentration for organics or less than two times the average background concentration for inorganics.
[11] Maximum detected concentration is less than the Florida surface water quality standard and, therefore, the analyte will not be evaluated in the Ecological Risk Assessment.
[12] Analyte is an essential nutrient and is not present at toxic levels.

Notes: RCRA = Resource Conservation and Recovery Act.
ECPC = ecological chemical of potential concern.
UCL = upper confidence limit.
Max = maximum.
Ave = average.
$\mu g/\ell$ = micrograms per liter.
NA = not available.
PCB = polychlorinated biphenyls.
BHC = benzene hexachloride
ND = not detected in the background samples.



* Aquatic receptors include invertebrates, plants, algae, amphibians, fish, and reptiles.

FIGURE 6-10

CONTAMINANT PATHWAY MODEL FOR ECOLOGICAL RECEPTORS, SWMU 15

RCRA FACILITY INVESTIGATION REPORT, GROUP II SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

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arithmetic average was selected as the maximum EPC. The average of all samples, with a value of one-half the sample quantitation limit (SQL) assigned for samples in which the analyte was not detected, was used to represent the average EPC unless it exceeded the maximum EPC, in which case the maximum EPC was used for both scenarios. The actual amount of an ECPC to which a wildlife species may be exposed as a result of direct or indirect ingestion is dependent on the habits of the species.

Habitat for terrestrial wildlife at SWMU 15 is described in Subsection 6.1.1. The wildlife species that may be expected to occur at or in the vicinity of SWMU 15 are listed in the RFI GIR (ABB-ES, 1995a). As it is not possible to evaluate ECPC exposure concentrations for every terrestrial wildlife species potentially residing at SWMU 15, five species were selected as representative wildlife species for evaluation in a food chain model. These species serve as representatives in a model that predicts surface soil contaminant exposures for wildlife species based on their position in the food chain. Because contaminant exposures for terrestrial wildlife are primarily related to what the organism eats, how much it eats, and how it feeds, the representative wildlife species were chosen to represent the trophic levels typical of an overgrown field community. Life history information used to estimate exposures for each of the representative wildlife species is summarized in Table 6-26. Although the predominantly sandy soil at SWMU 15 is not ideal habitat for soil invertebrates, a complete food web model was developed for this site to estimate exposure concentrations to various primary and secondary consumers that may forage in this area. The representative wildlife species selected for SWMU 15 include the following:

- Southern short-tailed shrew (*Blarina carolinensis*) The short-tailed shrew finds suitable habitat in forests, fields, marshes, and brush. This small carnivorous mammal has a limited home range, a small body size, and a voracious appetite (Godin, 1977), factors that increase the likelihood that these organisms will encounter significant contaminant concentrations. The short-tailed shrew feeds on earthworms, snails, centipedes, insects, small vertebrates, and slugs (DeGraaf and Rudis, 1986).

- Eastern cottontail (*Slyvilagus floridanus*) This species represents a small mammalian herbivore that may come into contact with surface soil at SWMU 15 as a result of ingestion. The eastern cottontail was selected to represent a mammalian species that would be maximally exposed (i.e., receive higher doses as a result of small body size) to contaminants in the surface soil.

- Gray fox (*Urocyon cinereoargenteus*) This omnivorous mammal prefers open woodlands and grassy fields and is most active in the night and at dawn and dusk. It is an opportunistic predator, feeding on small mammals, birds, reptiles, and invertebrates as well as berries and other fruits (Burt and Grossenheider, 1976).

- American robin (*Turdus migratorius*) The robin is often seen in developed areas, including maintained grass lawns. Its diet consists of fruit, earthworms, insects, and other invertebrates (DeGraaf and Rudis, 1986). The robin represents an avian omnivore.

Table 6-26
Exposure Parameters for Representative Wildlife Species, Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Representative Wildlife Species	Body Weight (g)	Reported Diet	Soil/Sediment Ingestion (% of diet)	Assumed Diet for Exposure Assessment (% of diet)	Food Ingestion Rate (kg/day)	Home Range (acres)	Population Density (N/acre)
Short-tailed shrew (*Blarina brevicauda*)	[1]17.27	Earthworms, slugs & snails, fungi, insects, and vegetation[2]	10% soil[2,3]	78% Invertebrates 12% Plants 10% Soil	[4]0.0024	[2]0.96 ± 0.09	[2]0.15 - 299
Eastern cottontail (*Sylvilagus floridanus*)	[5]1,189	Green vegetation in the summer; bark and twigs in the winter[2]	2% soil	98% Plants 2% Soil	[4]0.079	[2]7.39 ± 0.7	[2]2.72 ± 1.01
Gray fox (*Urocyon cinereoargenteus*)	[2]4,500	Small mammals, birds, and invertebrates, as well as berries and other fruits[2,6]	3% soil[2,6]	57% Small mammals 20% Invertebrates 10% Birds 10% Plants 3% Soil	[4]0.237	[2,6]1,727 ± 339	[2,6]0.114 - 0.190
American robin (*Turdus migratorius*)	[2]77.3 ± 0.36	Mostly invertebrates and some fruits[2]	10% soil[3]	83% Invertebrates 7% Plants 10% Soil	[7]0.011	[2]1.04 [b]	4.89 ± 1.19 (pairs/ac)[2]
Red-tailed hawk (*Buteo jamaicensis*)	957 (FL hawks are smaller; lowest value chosen)[2]	Primarily small mammals; also birds, snakes, turtles, frogs, crickets, beetles, crayfishes, carp[2]	0.5% soil[3]	70% Small mammals 29.5% Small birds 0.5% Soil	[7]0.115	[2]4,377 [b]	0.0037 ± [2]0.0007

See notes at end of table.

Table 6-26 (Continued)
Exposure Parameters for Representative Wildlife Species, Solid Waste Management Unit (SWMU) 15

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

References:
[1] Mean of means reported for males and females in summer and fall (U.S. Environmental Protection Agency [USEPA], 1993b).
[2] Wildlife Exposure Factors Handbook (USEPA, 1993b).
[3] American woodcock value used for American robin. Surrogates was chosen based on similarities in diet. Other values were based on diet composition (USEPA, 1993b).
[4] By mammal equation based on body weight (wt.) in kg. Food ingestion (kg/day) = $0.0687 \times wt^{0.822}$ (USEPA, 1993b).
[5] Average of adult males and adult females (USEPA, 1993b).
[6] Red fox value used for gray fox (USEPA, 1993b).
[7] By bird equation based on wt. in kg. Food ingestion (kg/day) = $0.0582 \times wt^{0.651}$ (USEPA, 1993b).

Notes: RCRA = Resource Conservation and Recovery Act.
g = grams.
% = percent.
kg/day = kilograms per day.
N/acre = number per acre.
FL = Florida.

- Red-tailed hawk (*Buteo jamaicensis*) This bird of prey forages in open country, frequently on woodland edges. It feeds primarily on small mammals, although invertebrates, reptiles, and small birds are also part of its diet. Red-tailed hawks are frequently seen perched adjacent to open fields (DeGraaf and Rudis, 1986).

Terrestrial wildlife species may be exposed to contamination in surface soil by ingestion (direct or indirect) of surface soil and ingestion of food that has been contaminated as a result of accumulating contaminant(s) from the soil. A simple model is used to estimate potential dietary exposures (PDEs) for each of the representative wildlife species for each of the ECPCs. The PDE is calculated based on the predicted concentrations of the ECPCs in food items that the species would consume, the amount of soil it would ingest, the relative amount of different food items in its diet, body weight, and food ingestion rate. The equations to calculate PDEs are shown in Table 2-7 of the RFI GIR (ABB-ES, 1995a).

Bioaccumulation factors (BAFs), the reported ratios of an analyte in biological tissue to environmental media, were used to predict ECPC concentrations in food items (plants, small mammals, and avian species). BAFs are listed in Appendix F-2. Concentrations of inorganics in soil invertebrate tissue were predicted based on BAFs. Concentrations of pesticides and semivolatiles were, however, measured in earthworms exposed to soil from SWMU 15. The measured values were then used in place of predicted invertebrate tissue concentrations based on BAF values. The PDEs calculated for each of the representative wildlife species for each of the ECPCs in surface soil are presented in Appendix F-3. Further details regarding the formulas and exposure parameters used to calculate PDEs are elaborated in Subsection 2.4.2 of the RFI GIR (ABB-ES, 1995a).

The assumed acreage (0.9 acre) of SWMU 15 is smaller than the home range for each of the representative wildlife species. All five representative wildlife species are expected to actively forage within SWMU 15 year-round. Exposure assumptions (body weights, food ingestion rate, relative consumption of food items, etc.) for each representative wildlife species for SWMU 15 are provided in Table 6-26.

6.4.2.2 Groundwater Aquatic receptors in the St. Johns River may be exposed to contamination in groundwater from SWMU 15 as it discharges to the surface water of the river. Exposure concentrations for aquatic receptors in the St. Johns River related to groundwater ECPCs were estimated based on a model that predicts the transport of groundwater to surface water for SWMUs that are not adjacent to water bodies. The model, which is presented in Appendix F-4, predicts EPCs of organic ECPCs for aquatic receptors associated with groundwater at SWMU 15 based on hydraulic, soil, and subsurface soil properties; the contaminant source; transport distance; and the physical and chemical properties of the contaminant. The predicted maximum concentrations of each of the organic ECPCs at the point of discharge, as calculated by the model, are provided in Table 6-25. A reliable model to evaluate the transport of metals in groundwater does not exist. Maximum and average exposure concentrations for inorganic analytes are also provided based on the 95 percent UCL or the maximum detected concentration, and the arithmetic mean.

This worst-case exposure scenario, based on the maximum exposure concentration, assumes no dilution once groundwater is discharged from SWMU 15 to the St. Johns River. Based on contaminant transport modeling (Appendix F-4) it is not likely

that pesticides detected in the groundwater sample at SWMU 15 have migrated to the St. Johns River. A less conservative exposures also was evaluated based on assumptions of 10, 100, and 1,000 times dilution of groundwater (and respective maximum detected groundwater ECPC concentrations) as it discharges to the St. Johns River. The dilution of existing groundwater conditions is used to model a reasonable scenario where groundwater through advection, dispersion, mixing and retardation would discharge to a surface water body. This is used to assess whether an adverse impact to the environment is probable.

6.4.3 Ecological Effects Assessment The ecological effects assessment describes the potential adverse effects associated with the identified ECPCs to ecological receptors. Potential or adverse ecological effects for ECPCs in surface soil and groundwater are described in the following paragraphs.

6.4.3.1 **Surface Soil** The ecological effects assessment for SWMU 15 surface soil includes separate assessments for terrestrial wildlife, plants, and soil invertebrates. Ecological effects for terrestrial wildlife and plants are predicted based on available literature toxicity information whereas the toxicity of ECPCs in surface soil for soil invertebrates is measured directly by the use of soil toxicity tests.

Terrestrial Wildlife. The ecological effects assessment for ECPCs in surface soil at SWMU 15 includes identification of reference toxicity values (RTVs) for avian and mammalian receptors. The RTV relates the dose of a respective ECPC in an oral exposure with an adverse effect. For each ECPC identified and each representative wildlife species selected, lethal and sublethal RTVs are identified. A lethal RTV represents the threshold for lethal effects and is based on oral dose lethal to 50 percent of a test population (LD_{50}) values. The lethal RTV is one-fifth of the lowest reported LD_{50} for the closest related test species. One-fifth of an oral LD_{50} is considered to be protective of lethal effects for 99.9 percent of individuals in a test population (USEPA, 1986c). An assumption is made that the value represented by one-fifth of an oral LD_{50} would be protective of 99.9 percent of the individuals within the terrestrial wildlife populations at SWMU 15 and represents a level of acceptable risk. A sublethal RTV is also identified that represents a threshold dose for effects that impair or prevent reproduction, growth, or survival. Toxicity data for avian species are limited; in cases where toxicity information is unavailable, RTVs are not identified and risks associated with the predicted exposure for the respective ECPC are not evaluated. The absence of specific data for a taxonomic group does not imply that there is no anticipated toxicological effect associated with contaminant exposure by these receptors.

The dose-response information used to derive RTVs is included as Appendix F-5. The RTVs derived for each of the representative wildlife species for each of the ECPCs in surface soil at SWMU 15 are summarized in Appendix F-27 and listed in Appendix F-3.

Terrestrial Plants. The potential toxicity of ECPCs in surface soils at SWMU 15 to terrestrial plants is evaluated based on available literature information on concentrations of ECPCs in soil associated with adverse effects to growth, reproduction, or survival. Toxicity data for plants are limited, and available information exists for only a small subset of ECPCs (Appendix F-7). Available literature-reported phytotoxicity values for surface soil ECPCs at SWMU 15 are reported in Table 6-27.

Table 6-27
Comparison of Solid Waste Management Unit (SWMU) 15 Surface Soil Ecological Chemicals of Potential Concern (ECPCs) with Phytotoxicity Values

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

ECPC[1]	Maximum Exposure Point Concentration[2]	Average Exposure Point Concentration[2]	Phytoxicity Benchmark Values[3]
Inorganic Analytes (mg/kg)			
Antimony	1.8	1.5	5
Arsenic	4	2.4	11.2
Barium	26.1	11.2	500
Beryllium	0.15	0.12	10
Chromium[4]	11.4	6.3	11 - 31
Cobalt	0.64	0.49	25
Copper	11.4	5.2	40 - 60
Lead	297	59.8	500
Mercury[4]	0.4	0.11	0.3
Nickel	1.6	1	25
Tin	3.2	2.4	50
Zinc[4]	172	70.3	25

[1] ECPCs are listed only if literature-reported phytoxicity information is available.
[2] From Table 6-21.
[3] Phytotoxicity information is included as Appendix F-7.
[4] Maximum and/or average exposure concentration is greater than the lowest phytotoxicity value.

Notes: RCRA = Resource Conservation and Recovery Act.
mg/kg = milligrams per kilogram.

Terrestrial Soil Invertebrates. The protocol to assess toxicity of ECPCs in surface soil is measured by use of a 30-day survival toxicity test with earthworms, *Eisenia foetida* (Springborn Laboratories, 1994). The protocol used in the 30-day subacute toxicity test with earthworms is included in Appendix F-8. The methods described in the earthworm protocols generally meet the standard procedure described in the protocol for short-term toxicity screening of hazardous waste site soil (Green and others, 1989).

The surface soil toxicity samples were collected concurrently with surface soil samples analyzed for pesticides and PCBs and represent split samples. The results of the chemical analyses of the surface soil can be used to establish a relationship between contaminant exposure concentrations and the responses in the toxicity tests.

Soil toxicity testing results using *E. foetida* are presented in Table 6-28. Four of the surface soil samples (MPT-15-SS12, MPT-15-SS15, MPT-15-SS20, and MPT-15-SS23) were toxic to the earthworm with respective mortalities of 6.3, 100, 1.3, and 8.8 percent. The mortalities observed were greater than either the reference location soil (MPT-15-SS30) and the laboratory control soil. The earthworms gained weight in all samples, with the exception of MPT-15-SS23, where the weight change of -6.2 percent was statistically different from the control.

Concentrations of three semivolatiles (benzoic acid, pentachlorophenol, and bis(2-ethylhexyl)phthalate) and eight pesticides (4,4'-DDD, 4,4'-DDE, 4,4'-DDT, chlordane, dieldrin, endrin aldehyde, heptachlor epoxide, and isodrin) were detected in the samples of worm tissue. Chlordane, endrin aldehyde, heptachlor epoxide, and isodrin were not detected in the control sample MPT-15-SS30. Chemical analysis was not conducted for the worms placed in soil from sampling location MPT-15-SS15 because of the rapid decomposition upon the mortality. Chemical analysis also was not conducted on the laboratory control sample.

6.4.3.2 **Groundwater** The ecological effects assessment describes the potential adverse effects associated with ECPCs in groundwater to aquatic receptors. The methodology for the ecological effects assessment for groundwater is described in the RFI GIR (ABB-ES, 1995a).

In addition to the methodology described in the GIR to obtain EPCs, contaminant transport modeling also was conducted to predict the concentration of (ECPCs) as they discharge at a hypothetical point at the St. Johns River. Each ECPC was modeled individually using a classical advection-dispersion equation. The model and assumptions are described further in Appendix F-4.

Ecological effects are estimated based on aquatic toxicity benchmarks. Aquatic toxicity information for the ECPCs is obtained from searches of the USEPA AQUIRE database (Appendix F-1). Information on the aquatic toxicity of SWMU 15 groundwater ECPCs to marine life from the AQUIRE database is presented in Table 6-29. Table 6-29 provides a range of concentrations associated with lethal and sublethal effects to fish, invertebrates, mollusks, and algae. For each ECPC, the effect concentrations from AQUIRE are compared with the exposure concentrations to evaluate potential risks in Subsection 6.4.4.

Table 6-28
Results of Toxicity Testing with *Eisenia foetida* in Surface Soils from Solid Waste Management Unit 15[1]

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station Mayport
Mayport, Florida

Analytical Batch Number:	R9137	NA	R9137	R9137	R9137	R9137	R9137	NA
Sample Matrix:	Worms	Worms	Worms	Worms	Worms	Worms	Worms	Worms
Sample Location:	MPT-15-SS12	MPT-15-SS15	MPT-15-SS16	MPT-15-SS17	MPT-15-SS20	MPT-15-SS23	MPT-15-SS30	Control
Sample No.:	15E01201	15E01501	15E01601	15E01701	15E02001	15E02301	15E03001	NA
Date Sampled:	20-OCT-94	20-OCT-94	20-OCT-94	20-OCT-94	20-OCT-94	20-OCT-94	20-OCT-94	NA
Mortality (%)	6.3[2]	100[3]	0	0	1.3[2]	8.8	0	0
Weight Change (%)	8.5	NA	25.8	30	13.6	-6.2[2]	24	21.5
Semivolatiles (µg/kg)								
Benzoic acid	1,900 J	NA	1,500 J	1,900 J	1,100 J	980 J	1,100 J	NA
Pentachlorophenol	800 J	NA	540 J	680 J	680 J	640 J	540 J	NA
Bis(2-ethylhexyl)phthalate	--	NA	2,100	--	--	--	1,700 J	NA
Pesticides (µg/kg)								
4,4'-DDD	--	NA	--	--	--	2,600 J	5.1 J	NA
4,4'-DDE	130	NA	820	19 J	8.5 J	4,000	7.9 J	NA
4,4'-DDT	31	NA	500	60	6.4	76,000 J	270 J	NA
Chlordane	--	NA	3,500 J	--	--	--	--	NA
Dieldrin	3.8	NA	--	4.0 J	5.4 J	--	3.3 J	NA
Endrin aldehyde	--	NA	--	2.3 J	--	--	--	NA
Heptachlor epoxide	1.9 J	NA	46 J	--	--	--	--	NA
Isodrin	2.9	NA	--	--	--	--	--	NA

[1] Toxicity testing methods and results are described in Appendix F-8.
[2] Considered to be substantially different than reference or control (i.e. biologically significant).
[3] Significantly different from the control.

Notes: RCRA = Resource Conservation and Recovery Act.
µg/kg = micrograms per kilogram.
% = percent.
NA = Sample not submitted for analysis.
DDD = dichlorodiphenyldichloroethane.
DDT = dichlorodiphenyltrichloroethane.
DDE = dichlorodiphenyldichloroethylene.
J = estimated value.

Table 6-29
Results of AQUIRE Search for Toxicity of Groundwater ECPCs at Solid Waste Management Unit (SWMU) 15 to Marine Aquatic Receptors

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Fish		Invertebrates		Mollusks		Algae and Aquatic Plants
	Lethal	Sublethal	Lethal	Sublethal	Lethal	Sublethal	Sublethal
Volatile Analytes ($\mu g/\ell$)							
Carbon disulfide	--	--	--	--	--	--	--
Semivolatile Analytes ($\mu g/\ell$)							
bis(2-Ethylhexyl)phthalate	--	--	--	--	--	--	--
Pesticides ($\mu g/\ell$)							
alpha-BHC	--	--	--	--	--	--	--
beta-BHC	--	--	--	--	--	--	--
delta-BHC	--	--	--	--	--	--	--
Inorganic Analytes ($\mu g/\ell$)[2]							
Arsenic	--	--	--	--	--	--	$1 / 2.5 \times 10^4$
Cyanide	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	$3 / 2.0 \times 10^4$	--

[1] Toxicity information was retrieved from AQUIRE and is included as Appendix F-1.
[2] Toxicity information for lead and mercury was not searched in AQUIRE because sufficient aquatic toxicity information was retrieved from Ambient Water Quality Criteria (U.S. Environmental Protection Agency, 1986b).

Notes: RCRA = Resource Conservation and Recovery Act.
Values expressed as number of studies per range of concentrations.
ECPC = ecological chemical of potential concern.
$\mu g/\ell$ = micrograms per liter.
BHC = benzene hexachloride.
-- = no information available.
AQUIRE = Aquatic Information Retrieval.

6.4.4 Risk Characterization The following paragraphs evaluate the potential adverse ecological effects for terrestrial wildlife, terrestrial plants, and terrestrial soil invertebrates resulting from exposure to ECPCs in surface soil. Risks are also characterized for aquatic receptors potentially exposed in the future to ECPCs in groundwater.

6.4.4.1 **Surface Soil** Potential risks associated with exposures to ECPCs in surface soil at SWMU 15 are discussed below. Risks are discussed separately for terrestrial wildlife, terrestrial plants, and terrestrial soil invertebrates.

Terrestrial Wildlife. Risks for the representative wildlife species associated with ingestion of surface soil and food are quantitatively evaluated using HQs, which are calculated for each ECPC by dividing the PDE by the RTV. HIs are determined for each representative wildlife species by summing the HQs for all ECPCs. When the estimated PDE is less than the RTV (i.e., the HQ < 1), the contaminant exposure is assumed to fall below the range considered to be associated with adverse effects for growth, reproduction, and survival (of the individual organism), and no risks to wildlife populations are assumed. When the HQ or HI is greater than 1, a discussion of the ecological significance is included and risk is assumed. The number of affected individuals in a population presumably increases with increasing HQ or HI values; therefore, the likelihood of population level effects occurring is generally expected to increase with higher HQ or HI values.

The lethal and sublethal HQs and HIs calculated for the representative wildlife species at SWMU 15 for exposures to ECPCs in surface soil are presented in Appendix F-3. The resulting lethal and sublethal HIs for the representative wildlife species are summarized in Table 6-30 and graphically depicted in Figure 6-11. The HIs indicate that terrestrial wildlife exposed to soil contamination at SWMU 15 is not at risk for lethal effects. The results, however, indicate that sublethal effects (reduction of growth or reproduction) for small insectivorous or omnivorous mammals and birds are possible. The sublethal effects predicted are associated with 4,4-DDT. Because the HIs for both the average and maximum exposure exceed 10, it is assumed that population level effects are possible.

Terrestrial Plants. Risks for terrestrial plants resulting from exposure to the ECPCs in surface soil are characterized based on a comparison of available literature-reported phytotoxicity benchmark values and exposure point concentrations of surface soil ECPCs. A comparison of available literature-reported phytotoxicity values and exposure point concentrations of surface soil ECPCs at SWMU 15 is presented in Table 6-27. Maximum EPCs for chromium and mercury and maximum and average EPCs for zinc are above the literature-reported phytotoxicity benchmark values. Average EPCs for chromium and mercury are less than the phytoxicity benchmark values. Maximum detected concentrations of chromium, mercury, and maximum and average concentrations of zinc in surface soil samples at SWMU 15 may be toxic to plant life. It should be noted that the vegetation at this site does not appear to be stressed.

Terrestrial Invertebrates. Based on the results of toxicity testing that measure the growth and survival of test populations, the contamination present in surface

Table 6-30
Hazard Indices for Representative Wildlife Species Exposed to Ecological Chemicals of Potential Concern in Surface Soil at Solid Waste Management Unit (SWMU) 15[1]

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Receptors	Average Exposure/ Lethal RTVs	Maximum Exposure/ Lethal RTVs	Average Exposure/ Sublethal RTVs	Maximum Exposure/ Sublethal RTVs
Southern short-tailed shrew	0.25	0.99	15	67
Eastern cottontail	1.5×10^{-3}	7.5×10^{-3}	2.6×10^{-3}	7.8×10^{-3}
Gray fox	9.5×10^{-5}	1.9×10^{-3}	2.7×10^{-5}	1.0×10^{-4}
American robin	6.2×10^{-2}	0.18	22	89
Red-tailed hawk	1.9×10^{-5}	3.3×10^{-4}	8.3×10^{-3}	0.24

[1]A model of the potential exposures to surface soil at SWMU 15 and risks for terrestrial wildlife is presented in Appendix F-3.

Notes: RCRA = Resource Conservation and Recovery Act.
RTV = reference toxicity value.

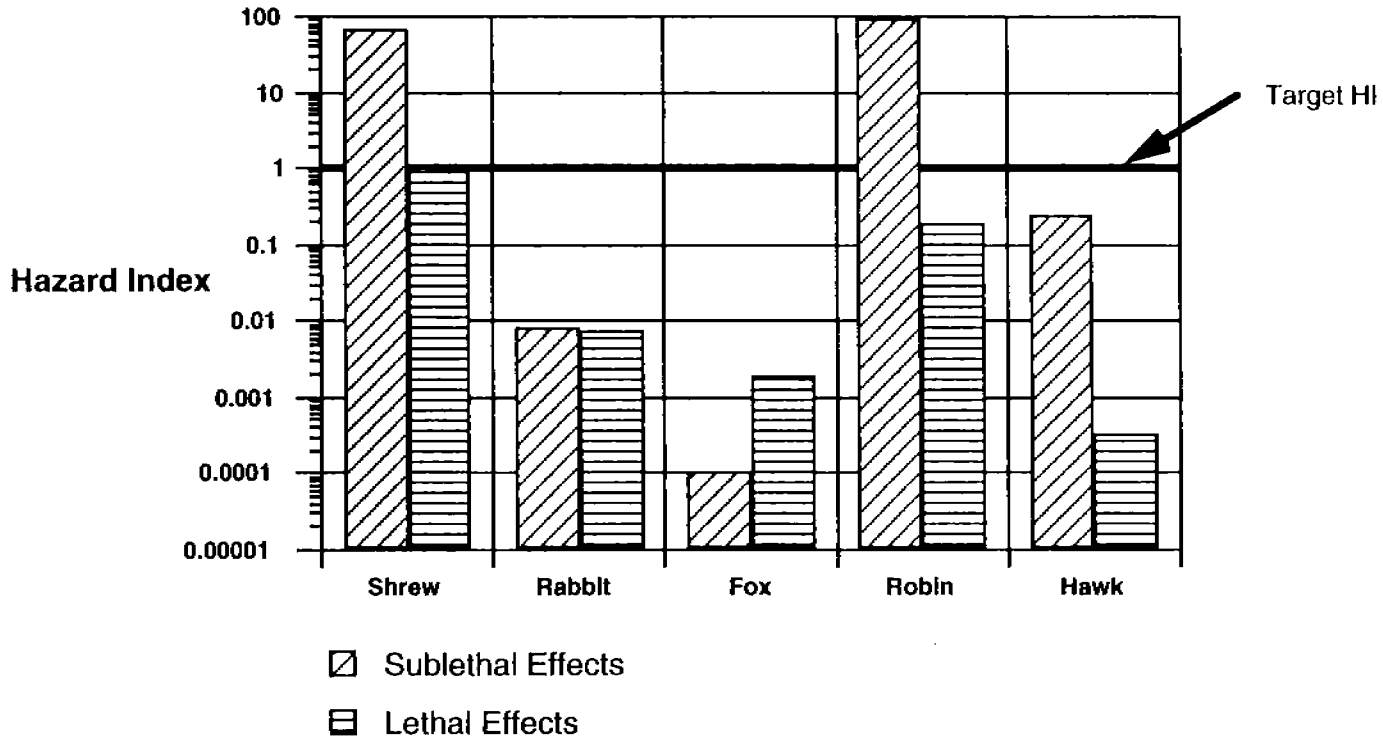

FIGURE 6-11

HAZARD INDEX SUMMARY,
EXPOSURE TO SWMU 15 SURFACE SOIL FOR
TERRESTRIAL WILDLIFE

RCRA FACILITY INVESTIGATION
REPORT, GROUP II SWMUs

U.S. NAVAL STATION
MAYPORT, FLORIDA

8533-08 950524WEM

soil at SWMU 15 may present an unacceptable risk for soil invertebrates. The mortality observed, however, could not be correlated with the concentrations of pesticides in SWMU 15 surface soil (Appendix F-9). Chemicals present in surface soil from MPT-15-SS15 are likely the cause of 100 percent mortality in earthworms. The surface soil sample contained lower concentrations of DDE (1.1 μg/kg), DDT (2.5 μg/kg), and chlordane (31 μg/kg) when compared with the other surface soil samples from SWMU 15 where mortality was not observed. The surface soil samples collected during the 1994 sampling event including the toxicity testing locations were not analyzed for inorganic analytes; therefore, it is not possible to evaluate if metals may have been associated with the observed mortality.

6.4.4.2 **Groundwater** The predicted maximum and average exposure concentrations for the groundwater ECPCs in the St. Johns River (Table 6-22) are compared to the State of Florida surface water quality standards for Class III marine waters (62-303, FAC), AWQC (USEPA, 1986b), and the lowest reported aquatic toxicity benchmark from AQUIRE in Table 6-31. For comparative purposes, the concentrations of analytes in the surface water of the St. Johns River north and northwest of SWMU 15 (MPT-B-SW13, MPT-B-SW14, and MPT-B-SW15) and background surface water locations (MPT-B-SW1 through MPT-B-SW7) (RFI GIR [ABB-ES, 1995a]) are presented in Table 6-31.

The maximum groundwater EPCs of cyanide and lead exceed the toxicity benchmark values. Although the maximum exposure point concentration of arsenic exceeds the Florida surface water quality standard, this standard is not directly applicable to aquatic receptors because it is based on human health concerns and not toxicity to aquatic life. Future discharge of cyanide and lead in groundwater to the St. Johns River is not expected to present a risk for aquatic receptors for the following reasons:

- It is expected that some dilution will occur as the groundwater is discharged to surface water, and actual exposure concentrations in the river will be lower than the benchmarks.

- The fraction of metals biologically available and potentially toxic to aquatic receptors is likely to be considerably less than the concentrations measured. The unfiltered analyses of the groundwater represents both dissolved and nondissolved phases of the metal. Only the dissolved phase of the metal is considered to be biologically available and potentially toxic to aquatic receptors (USEPA, 1993c).

- The average EPC of lead (1.4 μg/ℓ) is below the lowest toxicity benchmark of 5.6 μg/ℓ.

- The average EPC cyanide (1.3 μg/ℓ) are almost equal to the toxicity benchmark of 1.0 μg/ℓ and are within the range of concentrations measured in background surface water samples from the St. Johns River at 1.1 to 3.9 μg/ℓ.

Average and maximum groundwater EPCs exceed the aquatic benchmarks. Future discharge of mercury at these concentrations may pose an unacceptable risk for aquatic life in the St. Johns River. Mercury is, however, detected in groundwater upgradient of SWMU 15 at an average concentration of 0.08 μg/ℓ (Table 6-25), which is equal to the average EPC for groundwater at SWMU 15. This suggests that any discharge of mercury in

Table 6-31
Comparison of Solid Waste Management Unit (SWMU) 15 Groundwater Ecological Chemical of Potential Concern Exposure Concentrations (in St. Johns River) with Toxicity Benchmarks

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	St. Johns River Exposure Concentration: Maximum / Average Exposure Point Concentration In Groundwater[1]	Florida Surface Water Quality Standard[2]	Federal AWQC[3]	AQUIRE[4] (Lowest reported adverse effect concentration)	Concentrations Detected in Surface Waters of St. Johns River[5]	Concentrations Detected in Background Surface Water Samples[6]	Results of Comparison
Volatile Analytes (µg/ℓ)							
Carbon disulfide	2 / 2	NA	NA	NA	ND	ND	Benchmark not available
Semivolatile Analytes (µg/ℓ)							
bis(2-ethylhexyl)- phthalate	9 / 6.3	NA	360[7]	NA	ND	ND	Benchmark not exceeded
Pesticides (µg/ℓ)							
alpha-BHC	2.9×10^{-80}	NA	NA	NA	ND	ND	Benchmark not available
beta-BHC	9.5×10^{-62}	NA	NA	NA	ND	ND	Benchmark not available
delta-BHC	1.7×10^{-67}	NA	NA	NA	ND	ND	Benchmark not available
Inorganic Analytes (µg/ℓ)							
Arsenic	62 / 11.3	36[8]	36	25,000	ND	0.86 - 8.1	Applicable benchmark not exceeded
Cyanide	2.8 / 1.3	1.0	NA	NA	1.1 - 3.9	0.92 - 3	Exceedance of 1.8 times the lowest benchmark
Lead	7.5 / 1.4	5.6	8.5	NA	ND	0.91 - 1.5	Exceedance of 1.3 times the lowest benchmark
Manganese	241 / 80.3	NA	NA	20,000	ND	10.4 - 98.7	Benchmark not exceeded

See notes at end of table.

Table 6-31 (Continued)
Comparison of Solid Waste Management Unit (SWMU) 15 Groundwater Ecological Chemicals of Potential Concern Exposure Concentrations (in St. Johns River) with Toxicity Benchmarks

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	St. Johns River Exposure Concentration: Maximum / Average Exposure Point Concentration in Groundwater[1]	Florida Surface Water Quality Standard[2]	Federal AWQC[3]	AQUIRE[4] (Lowest reported adverse effect concentration)	Concentrations Detected in Surface Waters of St. Johns River[5]	Concentrations Detected in Background Surface Water Samples[6]	Results of Comparison
Mercury	0.13 / 0.08	0.025	0.025	NS	ND	ND	Exceedance of 5.2 times the lowest benchmark

[1] From Table 6-25.
[2] Florida Department of Environmental Protection, 62-302 Florida Administrative Code (1995 version); surface water quality standards for Class III marine waters.
[3] U.S. Environmental Protection Agency (USEPA) Ambient Water Quality Chronic Criteria (USEPA, 1986b).
[4] From Table 6-29.
[5] Range of detected concentrations from the RCRA Facility Investigation (RFI) General Information Report (ABB-ES, 1995a).
[6] Background sample locations include MPT-B-SW1, MPT-B-SW2, MPT-B-SW3, MPT-B-SW4, MPT-B-SW5, MPT-B-SW6, and MPT-B-SW7. The concentrations of organic and inorganic analytes detected in background surface water samples are listed in Tables 3-15 and 3-16, respectively, of the RFI General Information Report (ABB-ES, 1995a).
[7] Proposed standard or criteria.
[8] State of Florida surface water quality standard is based on human health concerns and not toxicity to aquatic life.

Notes: RCRA = Resource Conservation and Recovery Act.
AWQC = ambient water quality criteria.
$\mu g/\ell$ = micrograms per liter.
NA = not available.
ND = not detected.
BHC = benzene hexachloride.
NS = not sampled.
AQUIRE = Aquatic Information Retrieval.

groundwater to the St. Johns River and subsequent risks are not likely to be associated with SWMU 15.

6.4.5 Uncertainty Analyses A number of uncertainties and assumptions are inherent in the ecological risk assessment process. The NAVSTA Mayport GIR (ABB-ES, 1995a) summarizes general ERA uncertainties. Specific uncertainties associated with the evaluation of risks from potential surface soil and groundwater contamination at SWMU 15 include the following:

- It is not possible to evaluate if metals are associated with earthworm mortality in toxicity tests because the surface soil samples submitted for toxicity testing were not analyzed for inorganic analytes.

- Lack of information concerning the toxicity of surface soil ECPCs to avian species may result in an underestimation of risks.

- Lack of information concerning the toxicity of surface soil ECPCs to plants may result in an underestimation of risks to terrestrial plants.

- The analyses of the groundwater included both dissolved and nondissolved phases of the metal. Only the dissolved phase of the metal is considered to be biologically available and potentially toxic to aquatic receptors (USEPA, 1993c). The metals concentrations used are an overestimate of exposure and risks.

- Aquatic toxicity benchmarks are not available for carbon disulfide, alpha-BHC, beta-BHC, and delta-BHC, resulting in a possible underestimate of risks.

7.0 SWMU 16 - OLD TRANSFORMER STORAGE YARD

SWMU 16, the Old Transformer Storage Yard, is located in the northern part of NAVSTA Mayport, approximately 75 feet east of the FISC Fuel Farm and 280 feet south of the St. Johns River (Figure 7-1). This section provides a description and history of SWMU 16, a description of the ecological setting at SWMU 16, results and interpretation of environmental sample analyses, and human health and ecological risk assessments.

7.1 SWMU 16 DESCRIPTION. The Old Transformer Storage Yard is part of an abandoned asphalt runway, located to the east of Tank 204, approximately 280 feet south of the St. Johns River. The area was used for transformer storage from 1981 to 1987. During the October 1985 site visit for the IAS, approximately 20 transformers reported to contain non-PCB oil were observed at the site (ESE, 1986).

It is not known if any transformers containing PCB oils were stored at this location; however, minor spills and leaks of transformer oil are reported to have occurred while the transformers were stored in this area. Much of the asphalt surface of the site was cracked or broken up; potential contamination could reach the underlying soil through the cracks in the pavement (A. T. Kearny, 1989).

The abandoned runway at SWMU 16 consisted of a base of limestone gravel that was covered with an asphalt surface. After the removal of the transformers in 1987, the area was covered with a pulverized clayey limestone to smooth the surface and was used as a long-term parking lot.

All three layers (limestone base, asphalt, and clayey limestone) were excavated in April 1995 in preparation for a new paving project scheduled in May 1995. According to facility personnel, the excavated material was temporarily stockpiled at NAVSTA Mayport for a future paving project (Figure 7-1).

Ecological Setting. Coastal Berm communities are present along the St. Johns River approximately 300 feet north of SWMU 16. A description of the Coastal Berm community and a list of aquatic species expected to exist in the St. Johns River are presented in the NAVSTA Mayport GIR (ABB-ES, 1995a).

7.1.1 Previous Investigations at SWMU 16 The Old Transformer Storage Yard was identified during the IAS and designated as NIRP IAS Site 16, but was not included in the ESI. No previous environmental data have been collected at this location. The Old Transformer Storage Yard was identified as an SWMU requiring an RFI in the NAVSTA Mayport HSWA permit (A.T. Kearney, 1989).

7.1.2 RFI Field Activities RFI field activities were conducted at SWMU 16 in two sampling events, one occurring in 1993 and the other in 1994. In 1993, groundwater monitoring wells were installed and surface and subsurface soil samples and groundwater samples were collected. In 1994, an additional groundwater monitoring well was installed and groundwater samples were collected from the existing and newly installed monitoring wells. Tables 2-1 and 2-2 (Section 2.1) provide an overview of the analytical and data management programs for the Group II SWMUs. Sampling procedures, background sampling data,

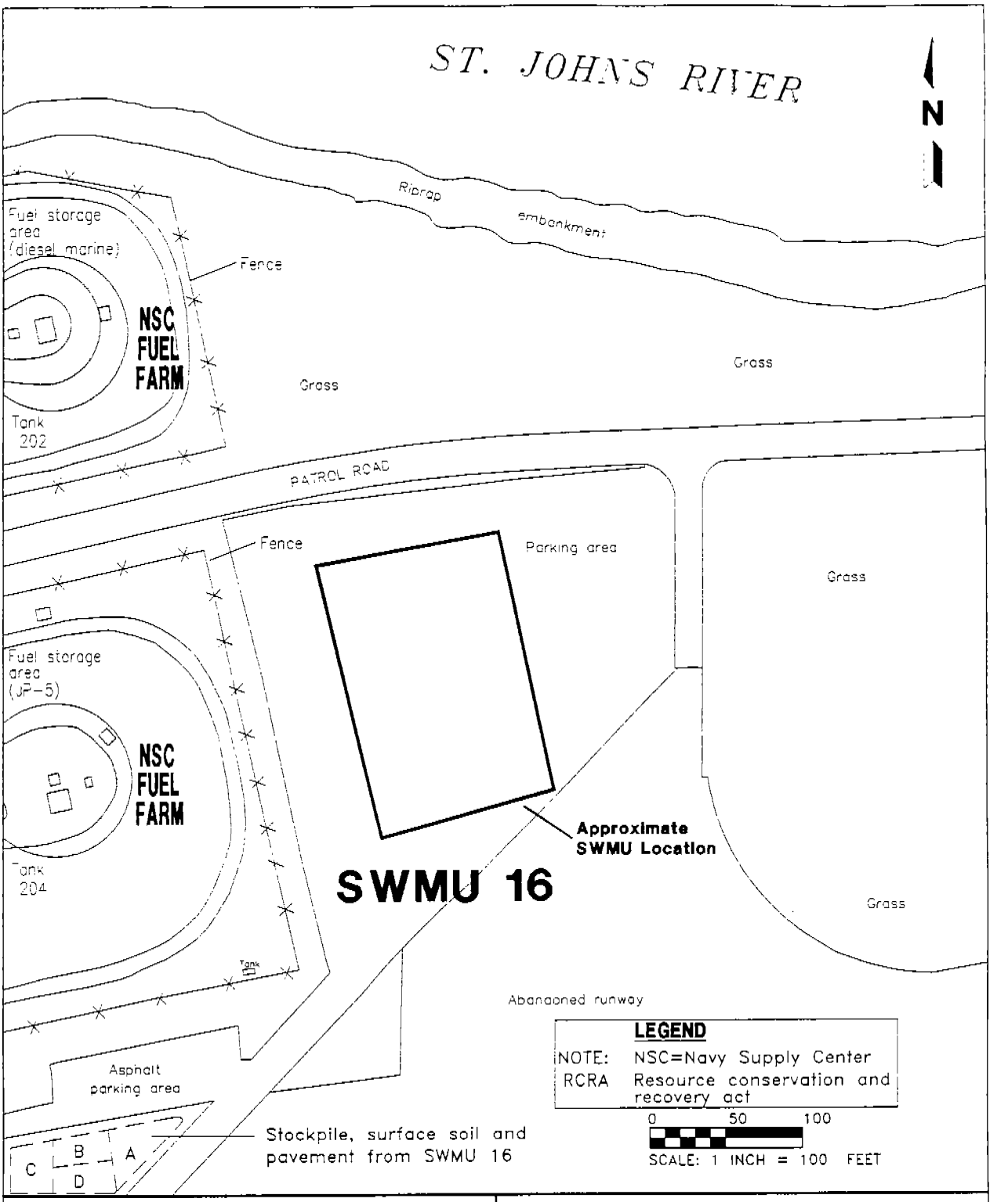

FIGURE 7-1
SOLID WASTE MANAGEMENT UNIT (SWMU) 16 LOCATION MAP

RCRA FACILITY INVESTIGATION REPORT, GROUP II SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

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and other installationwide sampling information are provided in the NAVSTA Mayport GIR (ABB-ES, 1995a).

7.1.2.1 1993 RFI Field Activities

Surface and Subsurface Soil Sampling. Thirty-seven surface soil samples were collected from SWMU 16 in 1993. The surface soil samples were collected from a 37-point nonrandom hexagonal sampling grid superimposed over the suspected SWMU 16 source area (Figure 7-2). The surface soil samples were collected from a horizon centered on the old asphalt surface, including approximately 0.26 inch of the limerock base material. The samples were screened in the field for PCBs, using RISc™ immunoassay tests that are PCB-specific for Aroclor-1242, Aroclor-1254, and Aroclor-1260 (MDL of 1,000 μg/kg). Seven of these samples were split and shipped to an analytical laboratory for confirmatory analysis of PCBs using USEPA method 8080.

Six subsurface soil samples were collected beneath the old runway surface (at a depth of approximately 1 to 1.5 feet bls) at the time of the sampling activities. Two of these samples were split and shipped to an analytical laboratory for confirmatory analysis of PCBs using USEPA method 8080. These samples were collected to assess whether PCBs may have migrated through the old asphalt surface. Six subsurface soil samples were collected from soil borings drilled for the installation of monitoring wells at SWMU 16 (Figure 7-2): two from boring MPT-16-MW01D (one from 2 feet bls and one from 8 feet bls), two from boring MPT-16-MW02S (one from 2 feet bls and one from 8 feet bls), and two from boring MPT-16-MW03S (one from 2 feet bls and 1 from 8 feet bls). Subsurface samples were analyzed for VOCs, SVOCs, pesticides, PCBs, inorganics, and cyanide.

Monitoring Well Installation. Three monitoring wells were installed in 1993; one was screened in the intermediate zone of the surficial aquifer (MPT-11-MW01I), and two were screened across the water table (MPT-11-MW02S and MPT-11-MW03S).

Groundwater Sampling. Two shallow groundwater samples were collected from monitoring wells MPT-16-MW02S and MPT-16-MW03S (Figure 7-2). The screened intervals for the two shallow wells are 5 to 15 feet bls. One groundwater sample was collected from intermediate zone monitoring well MPT-16-MW01I, screened from 25 to 30 feet bls. A duplicate groundwater sample was also collected from monitoring well MPT-16-MW03S. A bailer was used to purge the monitoring wells and collect the groundwater samples. The groundwater samples were analyzed for VOCs, SVOCs, pesticides, PCBs, inorganics, cyanide, and water quality parameters.

7.1.2.2 1994 RFI Field Activities A new shallow monitoring well (MPT-16-MW04s) was installed and screened at 5 to 15 feet bls. Groundwater samples were collected from shallow monitoring wells MPT-16-MW02S, MPT-16-MW03S, and MPT-16-MW04S and intermediate monitoring well MPT-16-MW01I (Figure 7-2). Low-flow sampling with a peristaltic pump was used to purge the monitoring wells and collect the groundwater samples (sampling procedures are described in the NAVSTA Mayport GIR [ABB-ES, 1995a]). The groundwater samples were analyzed for VOCs, SVOCs, pesticides, PCBs, inorganics, and cyanide. Samples from monitoring wells MPT-16-MW01I, MPT-16-MW-02S, and MPT-16-MW04S were also analyzed for water quality parameters.

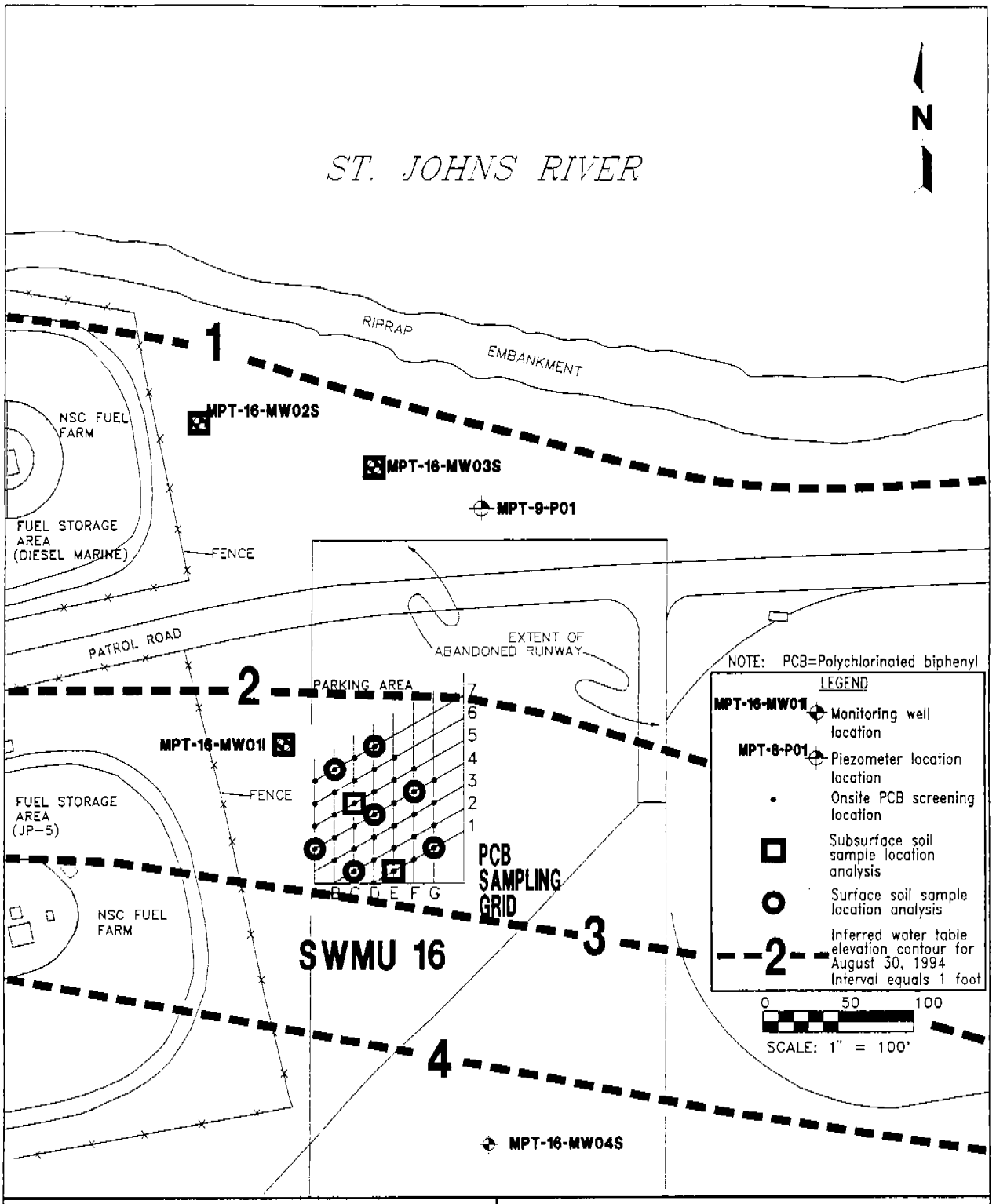

FIGURE 7-2

SUBSURFACE SOIL, SURFACE SOIL, GROUNDWATER SAMPLE LOCATIONS, AND POTENTIOMETRIC SURFACE MAP, SOLID WASTE MANAGEMENT UNIT (SWMU) 16

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RCRA FACILITY INVESTIGATION REPORT, GROUP II SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

7.2 FINDINGS. The nature and distribution of analytes detected in SWMU 16 surface soil, subsurface soil, and groundwater are described in the following subsections.

7.2.1 Surface Soil Assessment The results of the RISc™ immunoassay tests did not indicate the presence of PCBs, specifically Aroclor-1242, Aroclor-1254, or Aroclor-1260. However, PCBs were detected at low levels in the surface soil samples submitted for laboratory analysis. The PCB Aroclor-1260 was detected in all the confirmation surface soil samples at concentrations below 200 μg/kg. The PCB Aroclor-1248 was detected in surface soil sample MPT-16-SSA04 at a concentration of 69 μg/kg. Table 7-1 presents the results of field screening and offsite analyses.

The concentration of PCBs detected in surface soil was less than the Florida cleanup goal of 1,000 μg/kg. However, concentrations of Aroclor-1260 in surface soil samples from locations MPT-16-SSD04, MPT-16-SSB07, and MPT-16-SSA04 exceeded the USEPA Region III RBC (72 μg/kg). The presence of PCBs in the surface soil samples suggest that oil containing PCBs may have been released at SWMU 16.

In 1995, the surface soil and pavement (approximately 18 inches beneath the land surface) at SWMU 16 were removed to prepare the area prior to paving for use as a parking lot. The excavated materials were temporarily stockpiled approximately 250 feet southwest of SWMU 16 (Figure 7-1). The paved site will be used as a parking lot for Naval personnel deployed on ships berthed at Mayport Turning Basin.

7.2.2 Subsurface Soil Assessment Four subsurface soil samples were collected from the same sampling grid as the surface soil samples. These samples also were field screened for PCBs using the RISc™ immunoassay test. Two of these samples were also submitted to an analytical laboratory for confirmatory analysis using USEPA method 8080 (PCBs only).

The results of the RISc™ immunoassay tests did not indicate the presence of PCBs, specifically Aroclor-1242, Aroclor-1254, or Aroclor-1260. The PCB Aroclor-1260 was detected in one confirmation sample (SSC5D) at 22 μg/kg. Table 7-1 presents the results of field screening and offsite analyses for PCBs.

In addition to the samples collected from the grid, subsurface soil samples were collected during the installation of monitoring wells MPT-16-MW01I, MPT-16-MW02S, and MPT-16-MW03S (Figure 7-2). Tables 7-2 and 7-3 present the concentrations of chemicals detected in each sample, Table 7-4 lists statistics for each chemical that was detected, and Table 7-5 shows how detected concentrations compare to background screening and benchmark concentrations.

7.2.2.1 Organics VOCs, SVOCs, pesticides, and PCBs were detected in the subsurface soil samples collected from the monitoring well soil borings. None of these compounds were detected at concentrations greater than their respective benchmarks.

The VOCs acetone, benzene, and toluene were detected as single occurrences (Table 7-4). The source of these compounds is unknown and it is unlikely that these compounds are related to the releases from the transformer storage yard.

Table 7-1
Polychlorinated Biphenyls in Soil at Solid Waste Management Unit (SWMU) 16

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Sample Location	Northing[1]	Easting[1]	Field Screening Sample Results		Laboratory Analysis[2]	
			Depth (inches)			
			0 to 4	12 to 18	0 to 4	12 to 18
16SSA4	2205152	367578	ND	–	190	NS
16SSA5	2205167	367577	ND	–	–	–
16SSA6	2205184	367576	ND	–	–	–
16SSA7	2205196	367575	ND	–	–	–
16SSB3	2205150	367592	ND	ND	–	–
16SSB4	2205165	367591	ND	–	–	–
16SSB5	2205179	367589	ND	–	–	–
16SSB6	2205194	367589	ND	–	–	–
16SSB7	2205208	367588	ND	–	140	–
16SSC2	2205147	367607	ND	–	52	–
16SSC3	2205162	367606	ND	–	–	–
16SSC4	2205176	367605	ND	–	–	–
16SSC5	2205190	367604	ND	ND	–	22
16SSC6	2205205	367602	ND	–	–	–
16SSC7	2205220	367602	ND	ND	–	–
16SSD1	2205145	367621	ND	–	–	–
16SSD2	2205157	367620	ND	–	–	–
16SSD3	2205173	367619	ND	–	–	–
16SSD4	2205188	367619	ND	–	76	–
16SSD5	2205203	367618	ND	–	–	–
16SSD6	2205219	367617	ND	–	–	–
16SSD7	2205232	367617	ND	–	63	–
16SSE1	2205154	367636	ND	ND	–	18 U
16SSE2	2205170	367634	ND	–	–	–
16SSE3	2205185	367633	ND	–	–	–
16SSE4	2205199	367632	ND	–	–	–
16SSE5	2205214	367631	ND	–	–	–
16SSE6	2205230	367631	ND	–	–	–
16SSF1	2205169	367650	ND	–	–	–
16SSF2	2205182	367649	ND	–	–	–
16SSF3	2205197	367648	ND	–	–	–
16SSF4	2205213	367646	ND	–	20	–
16SSF4DUP	2205213	367646	–	–	9.8	NS
16SSF5	2205228	367645	ND	–	–	–
16SSG1	2205181	367663	ND	ND	28	–
16SSG2	2205195	367662	ND	–	–	–
16SSG3	2205211	367662	ND	–	–	–
16SSG4	2205225	367661	ND	ND	–	–

[1] State Plane Coordinate System.
[2] Aroclor-1260, Method 8080.

Notes: RCRA = Resource Conservation and Recovery Act.
Field screening results reported in milligrams per kilogram (mg/kg). Detection limit 1 mg/kg.
Laboratory analysis results reported in micrograms per kilogram.
ND = none detected.
– = field screening or laboratory analysis not conducted.
NS = no sample collected.
U = target analyte not detected.
DUP = duplicate.

Table 7-2
Organic Analytes Detected in Subsurface Soil Samples at Solid Waste Management Unit (SWMU) 16

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	2382	3488	2375
Sample Matrix:	Soil	Soil	Soil
Sample Location:	MPT-16-MW01I	MPT-16-MW02S	MPT-16-MW03S
Sample No.:	MP16MS1D8	MP16MS2S8	MP16MS3S2
Date Sampled:	14-JAN-93	14-JAN-93	14-JAN-93
Sample Depth (ft bls):	7 to 8	7 to 8	1 to 2
Volatile Analytes (µg/kg)			
Acetone	54	–	–
Benzene	2 J	–	–
Toluene	–	–	2 J
Semivolatile Analytes (µg/kg)			
2-Methylnaphthalene	–	100,000 J	–
Dibenzofuran	–	4,900 J	–
Fluorene	–	2,500 J	–
N-Nitrosodiphenylamine (1)	41 J	–	–
bis(2-Ethylhexyl)phthalate	220 J	–	–
Pesticides and PCBs (µg/kg)			
Chlordane	–	–	45
Aroclor-1260	–	–	17 J

Notes: RCRA = Resource Conservation and Recovery Act.
ft bls = feet below land surface.
µg/kg = micrograms per kilogram.
J = estimated value.
– = analyte not detected.
PCBs = polychlorinated biphenyls.

Table 7-3
Inorganic Analytes Detected in Subsurface Soil Samples at Solid Waste Management (SWMU) 16

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Analytical Batch No.:	3488	3488	3488	3488	3488
Sample Matrix:	Soil	Soil	Soil	Soil	Soil
Sample Location:	MPT-16-MW01I	MPT-16-MW02S	MPT-16-MW02S	MPT-16-MW03S	MPT-16-MW03S
Sample No.:	MP16MS1D8	MP16MS2S8	MP16MS2S2	MP16MS3S2	MP16MS3S8
Date Sampled:	14-JAN-93	14-JAN-93	14-JAN-93	14-JAN-13	14-JAN-93
Sample Depth (ft bls):	7 to 8	7 to 8	1 to 2	1 to 2	7 to 8
Inorganic Analytes (mg/kg)					
Antimony	–	–	–	2.7 J	3.3 J
Arsenic	0.78 J	3.5	0.68 J	0.66 J	0.57 J
Barium	3.9 J	7.7 J	5.6 J	15.8 J	4 J
Beryllium	–	0.28 J	0.13 J	–	–
Cadmium			–	0.35 J	
Chromium	1.8 J	9.7 J	1.8 J	6.5 J	–
Cobalt	–	1.4 J	–	–	–
Copper	0.79 J	1.9 J	1 J	6.5	0.63 J
Lead	0.7	2.5	1.1	9.9	0.46 J
Mercury	–	1.1 J	0.05 J	0.04 J	0.13 J
Nickel	–	2.1 J	–	4.3 J	–
Selenium	–	0.36 J	–	0.14 J	0.12 J
Thallium	0.15 J	0.23 J	–	–	0.18 J
Tin	3	–	–	–	–
Vanadium	1.8 J	10.6 J	3.5 J	13.5 J	1.6 J
Zinc	4.7 J	11.2 J	5.3 J	19.3 J	3.3 J
Cyanide	1	–	–	–	–

Notes: RCRA = Resource Conservation and Recovery Act.
I = intermediate monitoring well.
D = intermediate monitoring well.
S = shallow monitoring well.
ft bls = feet below land surface.
mg/kg = milligrams per kilogram.
– = analyte not detected.
J = estimated value.

Table 7-4
Summary of Chemicals Detected in Subsurface Soil at Solid Waste Management Unit (SWMU) 16

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Minimum Concentration[2]	Maximum Concentration[2]	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration
Volatile Analytes (µg/kg)						
Acetone	1/6	54	54	54	11 - 2,400	MP16MS1D8
Benzene	1/6	2	2	2	5 - 740	MP16MS1D8
Toluene	1/6	2	2	2	5 - 740	MP16MS3S2
Semivolatile Analytes (µg/kg)						
2-Methylnaphthalene	1/6	100,000	100,000	100,000	340 - 690	MP16MS2S8
Dibenzofuran	1/6	4,900	4,900	4,900	340 - 690	MP16MS2S8
Fluorene	1/6	2,500	2,500	2,500	340 - 690	MP16MS2S8
N-Nitrosodiphenylamine (1)	1/6	41	41	41	340 - 15,000	MP16MS1D8
bis(2-Ethylhexyl)phthalate	1/6	220	220	220	340 - 15,000	MP16MS1D8
Pesticides/PCBs (µg/kg)						
Aroclor-1260	2/8	17	22	20	18 - 99	16SSC5D
Chlordane	1/6	45	45	45	7 - 39	MP16MS3S2
Inorganic Analytes (mg/kg)						
Antimony	2/6	2.7	3.3	3	2.5 - 2.8	MP16MS3S8
Arsenic	6/6	0.57	3.5	1.14	N/A	MP16MS2S8
Barium	6/6	3.9	15.8	7.2	N/A	MP16MS3S2
Beryllium	2/6	0.13	0.28	0.21	0.1 - 0.11	MP16MS2S8
Cadmium	1/6	0.35	0.35	0.35	0.25 - 0.28	MP16MS3S2
Chromium	4/6	1.8	9.7	4.9	0.77 - 0.85	MP16MS2S8
Cobalt	1/6	1.4	1.4	1.4	1.2 - 1.3	MP16MS2S8
Copper	6/6	0.63	6.5	1.93	N/A	MP16MS3S2
Lead	6/6	0.27	9.9	2.49	N/A	MP16MS3S2
Mercury	5/5	0.04	1.1	0.28	N/A	MP16MS2S8
Nickel	2/6	2.1	4.3	3.2	1.6 - 1.8	MP16MS3S2

See notes at end of table.

Table 7-4 (Continued)
Summary of Chemicals Detected in Subsurface Soil at Solid Waste Management Unit (SWMU) 16

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Minimum Concentration[2]	Maximum Concentration[2]	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration
Selenium	3/6	0.12	0.36	0.21	0.1 - 0.11	MP16MS2S8
Thallium	3/6	0.15	0.23	0.19	0.15 - 0.15	MP16MS2S8
Tin	1/6	3	3	3	2.4 - 2.7	MP16MS1D8
Vanadium	6/6	1.6	13.5	5.8	N/A	MP16MS3S2
Zinc	6/6	3.3	19.3	7.9	N/A	MP16MS3S2
Cyanide	1/6	1	1	1	0.16 - 0.17	MP16MS1D8

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed.
[2] A value indicated by an asterisk is the average of the detected concentrations in a sample and its duplicate. For nondetected values, one-half the contract-required quantitation limits/contract-required detection limit is used as a surrogate.
[3] The mean of detected concentrations is the arithmetic mean of all samples in which the analyte was detected. It does not include those samples in which the analyte was not detected.

Notes: RCRA = Resource Conservation and Recovery Act.
µg/kg = micrograms per kilogram.
PCBs = polychlorinated biphenyls.
mg/kg = milligram per kilogram.
N/A = not applicable.

Table 7-5
Comparison of Analytes Detected in Solid Waste Management Unit (SWMU) 16
Subsurface Soil to Background Screening and Benchmark Concentrations

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Maximum Concentration[1]	Background Screening Concentration[2]	Frequency Above Background Screening Concentration	Florida Soil Cleanup Goal[3]	Frequency Above Florida Soil Cleanup Goal	Risk-Based Screening Concentration[4]	Frequency Above Risk-Based Screening Concentration
Volatile Analytes (µg/kg)							
Acetone	54	NSC	N/A	890,000	0/6	20,000,000	0/6
Benzene	2	NSC	N/A	1,100	0/6	200,000	0/6
Toluene	2	NSC	N/A	1,800,000	0/6	41,000,000	0/6
Semivolatile Analytes (µg/kg)							
2-Methylnaphthalene	100,000	NSC	N/A	5,800,000	0/6	NSC	N/A
Dibenzofuran	4,900	NSC	N/A	2,400,000	0/6	820,000	0/6
Fluorene	2,500	NSC	N/A	21,000,000	0/6	8,200,000	0/6
N-Nitrosodiphenylamine (1)	41	NSC	N/A	69,000	0/6	1,200,000	0/6
bis(2-Ethylhexyl)phthalate	220	NSC	N/A	100,000	0/6	410,000	0/6
Pesticides/PCBs (µg/kg)							
Aroclor-1260	22	NSC	N/A	3,500	0/8	740	0/8
Chlordane	45	NSC	N/A	2,800	0/6	4,400	0/6
Inorganics (mg/kg)							
Antimony	3.3	NSC	N/A	210	0/6	82	0/6
Arsenic	3.5	0.9	1/6	3	1/6	3.3	1/6
Barium	15.8	7.2	2/6	74,000	0/6	14,000	0/6
Beryllium	0.28	0.14	1/6	0.2	1/6	1.3	0/6
Cadmium	0.35	NSC	N/A	600	0/6	100	0/6
Chromium	9.7	3.4	2/6	220	0/6	1,000	0/6
Cobalt	1.4	1.04	1/6	110,000	0/6	12,000	0/6
Copper	6.5	3.6	1/6	72,000	0/6	7,600	0/6
Lead	9.9	2.8	1/6	1,000	0/6	400	0/6
Mercury	1.1	0.06	2/5	480	0/5	61	0/5

See notes at end of table.

Table 7-5 (Continued)
Comparison of Analytes Detected in Solid Waste Management Unit (SWMU) 16 Subsurface Soil to Background Screening and Benchmark Concentrations

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Maximum Concentration[1]	Background Screening Concentration[2]	Frequency Above Background Screening Concentration	Florida Soil Cleanup Goal[3]	Frequency Above Florida Soil Cleanup Goal	Risk-Based Screening Concentration[4]	Frequency Above Risk-Based Screening Concentration
Nickel	4.3	NSC	N/A	11,000	0/6	4,100	0/6
Selenium	0.36	NSC	N/A	9,900	0/6	1,000	0/6
Thallium	0.23	NSC	N/A	NSC	N/A	16	0/6
Tin	3	5.4	0/6	660,000	0/6	100,000	0/6
Vanadium	13.5	3.2	4/6	4,800	0/6	1,400	0/6
Zinc	19.3	4.8	3/6	550,000	0/6	61,000	0/6
Cyanide	1	0.66	1/6	40,000	0/6	4,100	0/6

[1] A value indicated by an asterisk is the average of the detected concentrations in a sample and its duplicate. For nondetected values, 1/2 the CRQL/CRDL is used as a surrogate.
[2] The background screening concentration is twice the mean of detected concentrations for inorganic analytes.
[3] Florida Cleanup Goals (April 5, 1995).
[4] USEPA Region III risk-based screening concentrations (February 9, 1995). Concentrations for non-carcinogenic risks are adjusted to a Hazard Index of 0.1.

Notes: RCRA = Resource Conservation and Recovery Act.
μg/kg = micrograms per kilogram.
mg/kg = milligrams per kilogram.
PCB = polychlorinated biphenyl.
N/A = not applicable.
NSC = no screening concentration.

Petroleum-related SVOCs, 2-methylnaphthalene, dibenzofuran, and fluorene were detected in the subsurface soil samples (Table 7-4). The VOCs (benzene and toluene) and SVOCs were not detected in samples collected from the 3- to 4-foot sampling interval, which suggests that subsurface contamination may have migrated laterally from a nearby source, such as the FISC Fuel Farm (Figure 7-2).

The SVOCs bis(2-ethylhexyl)phthalate and N-nitrosodiphenylamine were detected as single occurrences in subsurface soil samples collected from the boring for monitoring well MPT-16-MW01I (Table 7-4, Figure 7-2). The source of these compounds is unknown, and it is unlikely that these compounds are related to the releases from the transformer storage yard.

The pesticide chlordane was detected at a concentration of 45 μg/kg in a subsurface soil sample collected at a depth of 3 to 4 feet bls from the soil boring for monitoring well MPT-16-MW03S. Chlordane is probably residue from historical application of pesticide.

The PCB Aroclor-1260 was detected at 17 μg/kg in the subsurface soil sample collected from the 3- to 4-foot interval in the soil boring for monitoring well MPT-16-MW03S. This concentration is below the benchmark concentrations. The presence of this compound in this sample may indicate that it is a residue from the former storage of transformers. However, it should be noted that this sample was collected from across Patrol Road, and transformers were not reported to have been stored at this location. Surface soil samples were not collected at this location, so the presence of Aroclor-1260 in surface soil at this location has not been confirmed.

7.2.2.2 **Inorganics** Seventeen inorganic target analytes were detected in subsurface soil samples (Table 7-4); 12 of these analytes were detected at concentrations which exceed background screening concentrations or were not detected in background subsurface soil samples (Table 7-5). Arsenic and beryllium were detected at concentrations which exceed benchmark concentrations (Table 7-5).

Arsenic and beryllium were detected at concentrations above benchmark values in the subsurface soil sample collected from the 9- to 10-foot sampling interval in the soil boring for monitoring well MPT-16-MW02S. These analytes were not detected at concentrations above benchmark values in the subsurface soil sample collected from the 3- to 4-foot sampling interval in the same boring. In addition, this sample was collected from across Patrol Road, away from the suspected source area.

Because the land features at NAVSTA Mayport are influenced by the deposition of dredge material from Mayport Turning Basin, the concentrations of arsenic and beryllium are not likely related to a release at SWMU 16, but are residual concentrations from the dredge material.

On July 19, 1995, Navy personnel collected four composite samples (sampling locations A through D; Figure 7-1) of the materials excavated from SWMU 16 and analyzed the samples using the RISc™ immunoassay test (specific to Aroclors-1242, -1254, and -1260. Each composite sample was made of four discrete samples collected at depths of 6 to 8 inches beneath the surface of the stockpiled material. The composite of the four discrete samples was made by mixing the samples in a decontaminated stainless steel mixing bowl. Samples for laboratory confirmation were not collected.

The composite samples were compared against a 1 ppm standard. The results (A 0.91 ppm, B 0.92 ppm, C 0.92 ppm, and D 0.83 ppm) suggest that PCBS, if present, are at concentrations less than the human health-based residential (1 μg/kg) and industrial (3.5 μg/kg) Florida Soil Cleanup Goals (FDEP, 1995).

7.2.3 **Groundwater Assessment** Groundwater samples were collected from four monitoring wells and analyzed for VOCs, SVOCs, pesticides, PCBs, and inorganics. The following subsections describe the results of the analyses. Figure 7-2 shows the sampling locations, Tables 7-6 and 7-7 present the concentrations of chemicals detected in each sample, Table 7-8 lists statistics for each chemical that was detected, and Table 7-9 shows how concentrations compare to background screening and benchmark concentrations.

7.2.3.1 **Organics** Three organic compounds (carbon disulfide, 2-methylnaphthalene, and bis[2-ethylhexyl]phthalate) were each detected once at estimated concentrations below CRQLs. The detected concentration of bis(2-ethylhexyl)phthalate was slightly above the benchmark value in the groundwater sample collected from monitoring well MPT-16-MW01I (Table 7-9).

2-Methylnaphthalene was detected in the groundwater sample collected from monitoring well MPT-16-MW02S and is likely associated with the detection of this and other petroleum-related organic compounds detected in the subsurface soil sample at this location (see Subsection 7.2.2). It is unlikely that the petroleum-related organic compounds are related to a release from SWMU 16.

7.2.3.2 **Inorganics** Thirteen inorganic target analytes were detected in groundwater samples, and only copper was detected at a concentration that exceeded a background screening value. Arsenic, iron, and manganese were detected at concentrations that exceed benchmark concentrations but are not in excess of background screening concentrations (Table 7-9).

Arsenic was detected at concentrations that exceed benchmark concentrations in groundwater samples collected from monitoring wells MPT-16-MW03S (located hydraulically downgradient from SWMU 16) and MPT-16-MW04S (located hydraulically upgradient of SWMU 16). Iron and manganese also were detected at concentrations that exceed benchmark values in groundwater samples from monitoring wells MPT-16-MW02S (located hydraulically downgradient from SWMU 16) and monitoring well MPT-16-MW04S. Because (1) there is no known source of these inorganics associated with the transformer storage area, (2) these inorganics were detected above benchmark concentrations in samples from an upgradient monitoring well, and (3) these inorganics were detected at concentrations below background screening concentrations, it is unlikely that they are related to SWMU 16. These inorganics may reflect natural variations in groundwater quality.

7.2.4 **Summary** Low concentrations of PCBs detected in surface and subsurface soil samples suggest that oil containing PCBs may have been released from transformers stored at the site. However, most of the soil where the PCBs were detected was recently removed and paved for use as a parking lot.

Fuel-related compounds were detected in subsurface soil samples collected from just above the water table at the location of monitoring well MPT-16-MW02S. The petroleum-related compounds were not detected in shallower subsurface soil samples, suggesting that they have migrated laterally from an adjacent source,

Table 7-6
Organic Analytes Detected in Groundwater Samples at Solid Waste Management Unit (SWMU) 16

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analytical Batch No.:	3507	M742	2391	M741	2390	3507	M741	M747
Sample Matrix:	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Sample Location:	MPT-16-MW01	MPT-16-MW001I	MPT-16-MW02S	MPT-16-MW02S	MPT-16-MW03	MPT-16-MW03	MPT-16-MW03S	MPT-16-MW04S
Sample No.:	16MW1D	16MW001I	16MW2	16MW002S	16MW3	16MW3Dup	16MW003S	16MW004S
Date Sampled:	29-JAN-93	29-JUN-94	01-FEB-93	28-JUN-94	29-JAN-93	29-JAN-93	28-JUN-94	07-JUL-94
Volatile Analytes (μg/ℓ)								
Carbon disulfide	--	--	--	--	--	--	1 J	--
Semivolatile Analytes (μg/ℓ)								
2-Methylnaphthalene	--	--	5 J	6 J	--	--	--	--
bis(2-Ethylhexyl)-phthalate	3 J	5 J	3 J	--	--	3 J	--	--

Notes: RCRA = Resource Conservation and Recovery Act.
I = intermediate monitoring well.
D = intermediate monitoring well.
S = shallow monitoring well.
μg/ℓ = micrograms per liter.
J = estimated value.
-- = analyte not detected.

Table 7-7
Inorganic Analytes Detected in Groundwater Samples at Solid Waste Management Unit (SWMU) 16

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Analytical Batch No.:	2390	M742	2391	M741	2390	2390	M741	M747
Sample Matrix:	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Sample Location:	MPT-16-MW01I	MPT-16-MW01I	MPT-16-MW02S	MPT-16-MW02S	MPT-16-MW03	MPT-16-MW03	MPT-16-MW03S	MPT-16-MW04S
Sample No.:	16MW1D	16MW001I	16MW2	16MW002S	16MW3	16MW3Dup	16MW003S	16MW004S
Date Sampled:	29-JAN-93	29-JUN-94	01-FEB-93	28-JUN-94	29-JAN-93	29-JAN-93	28-JUN-94	07-JUL-94
Inorganic Analytes (µg/ℓ)								
Arsenic	0.76 J	–	29.6	–	21.3	23.7	8.2 J	4.9 J
Barium	–	–	32.8 J	3.2 J	25.7 J	31 J	2.9 J	7.9 J
Beryllium	–	–	1.8 J	–	0.94 J	1.2 J	–	–
Calcium	42,000	58,600	–	111,000	113,000	118,000	102,000	93,300
Chromium	–	–	46.5	–	33.1	42.4	–	–
Cobalt	–	–	10.6 J	–	4.4 J	7.3 J	–	–
Copper	–	3.5 J	9 J	–	2.8 J	2 J	–	–
Iron	301 J	29.2 J	–	499	21,600 J	26,600 J	–	312
Lead	–	–	28.3	–	–	195	–	1.3 J
Magnesium	19,800	10,200	–	12,000	10,300	11,300	7,200	6,350
Manganese	–	7 J	–	37.7	194	237	8.4 J	89.5
Mercury	–	–	0.28	–	–	–	–	–
Nickel	–	–	19.2 J	–	–	14.6 J	–	–
Selenium	–	–	2.8 J	–	–	–	1.9 J	–
Silver	–	–	2.8 J	–	–	–	–	–
Sodium	NA	7,500 J	NA	21,500 J	NA	NA	8,450 J	14,100 J
Tin	–	–	–	–	–	56 J	–	–
Vanadium	–	–	59.7	–	39.4 J	48.9 J	5.6 J	–
Zinc	34.6 J	–	140	6.9 J	57.6 J	76.9 J	11.7 J	–
Cyanide	NA	0.89 J	NA	–	NA	NA	–	0.43 J

See notes at end of table.

Table 7-7 (Continued)
Inorganic Analytes Detected in Groundwater Samples at Solid Waste Management Unit (SWMU) 16

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Analytical Batch No.:	M742	2390	2392	M741	2390	M747
Sample Matrix:	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Sample Location:	MPT-16-MW001I	MPT-16-MW01	MPT-16-MW02	MPT-16-MW02S	MPT-16-MW03	MPT-16-MW04S
Sample No.:	16MW001I	16MW1D	16MW2	16MW002S	16MW3	16MW004S
Date Sampled:	29-JUN-94	29-JAN-93	01-FEB-93	28-JUN-94	29-JAN-93	07-JUL-94
Groundwater Quality (mg/ℓ)						
Alkalinity as $CaCO_3$	172	213	477	328	262	343
Ammonia as N	0.9	1.1	1.9	0.7	--	--
Chloride	10.8	16.6	21.7	27.7	10.8	18.9
Hardness as $CaCO_3$	182	194	320	320	376	490
Nitrate+Nitrite as N	--	--	--	--	0.12	--
Oil and grease	--	0.3	541		0.1	--
Phosphorous as P, total	0.16	0.53	1.44	0.2	1.22	2.4
Sulfate	1	--	27	1.8	69.5	57.9
Sulfide	6.4	1.6	2.2	1	0.2	--
Total dissolved solids	283	270	541	484	368	341
Total kjeldahl nitrogen	0.8	1.6	7.5	1.6	4.3	0.9
Total organic carbon	1.9	6.1	17	10.9	3.7	6.6
Color (APHA)						
Color	15	40	25	25	25	20
pH (units)						
pH	7.8	7.5	7	7.1	7.3	7.5

Notes: RCRA = Resource Conservation and Recovery Act.
Dup = Duplicate.
S = shallow.
μg/ℓ = micrograms per liter.
J = estimated value.
-- analyte not detected.
NA = not applicable.
mg/ℓ = milligrams per liter.
$CaCO_3$ = calcium carbonate.
N = nitrogen.
APHA = American Public Health Association.

Table 7-8
Summary of Chemicals Detected in Groundwater at Solid Waste Management Unit (SWMU) 16

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Minimum Concentration[2]	Maximum Concentration[2]	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration
Water Quality Parameters						
Alkalinity as $CaCO_3$	3/3	172	343	281	N/A	16MW004S
Ammonia-N	2/3	0.7	0.9	0.8	0.3 - 0.3	16MW001I
Chloride	3/3	10.8	27.7	19.1	N/A	16MW002S
Color	3/3	15	25	20	N/A	16MW002S
Hardness as $CaCO_3$	3/3	182	490	331	N/A	16MW004S
Phosphorous-P, total	3/3	0.16	2.4	0.92	N/A	16MW004S
Sulfate	3/3	1	57.9	20.2	N/A	16MW004S
Sulfide	2/3	1	6.4	3.7	1 - 1	16MW001I
Total dissolved solids	3/3	283	484	369	N/A	16MW002S
Total Kjeldahl nitrogen	3/3	0.8	1.6	1.1	N/A	16MW002S
Total organic carbon	3/3	1.9	10.9	6.5	N/A	16MW002S
Total petroleum hydrocarbons	2/4	0.07	0.14	0.11	0.05 - 0.05	16MW002S
pH	3/3	7.1	7.8	7.5	N/A	16MW001I
Volatile Analytes (µg/ℓ)						
Carbon disulfide	1/4	1	1	1	5 - 5	16MW003S
Semivolatile Analytes (µg/ℓ)						
2-Methylnaphthalene	1/4	6	6	6	10 - 10	16MW002S
bis(2-Ethylhexyl)phthalate	1/4	5	5	5	10 - 10	16MW001I
Inorganic Analytes (µg/ℓ)						
Arsenic	2/4	4.9	8.2	6.6	10 - 10	16MW003S
Barium	3/4	2.9	7.9	4.7	200 - 200	16MW004S
Calcium	4/4	58,600	111,000	91,225	N/A	16MW002S
Copper	1/4	3.5	3.5	3.5	25 - 25	16MW001I
Iron	3/4	29.2	499	280.1	100 - 100	16MW002S

See notes at end of table.

Table 7-8 (Continued)
Summary of Chemicals Detected in Groundwater at Solid Waste Management Unit (SWMU) 16

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Minimum Concentration[2]	Maximum Concentration[2]	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration
Lead	1/4	1.3	1.3	1.3	3 - 3	16MW004S
Magnesium	4/4	6,350	12,000	8,938	N/A	16MW002S
Manganese	4/4	7	89.5	35.7	N/A	16MW004S
Selenium	1/4	1.9	1.9	1.9	5 - 5	16MW003S
Sodium	4/4	7,500	21,500	12,888	N/A	16MW002S
Vanadium	1/4	5.6	5.6	5.6	50 - 50	16MW003S
Zinc	2/4	6.9	11.7	9.3	20 - 20	16MW003S
Cyanide	2/4	0.43	0.89	0.66	2.7 - 2.7	16MW001I

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed.
[2] A value indicated by an asterisk is the average of the detected concentrations in a sample and its duplicate. For nondetected values, one-half the contract-required quantitation limit/contract-required detection limit is used as a surrogate.
[3] The mean of detected concentrations is the arithmetic mean of all samples in which the analyte was detected. It does not include those samples in which the analyte was not detected.

Notes: RCRA = Resource Conservation and Recovery Act.
$\mu g/\ell$ = micrograms per liter.
$CaCO_3$ = calcium carbonate.
NA = not applicable.
N = nitrogen.

Table 7-9
Comparison of Analytes Detected in Solid Waste Management Unit (SWMU) 16 Groundwater to Background Screening and Benchmark Concentrations

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Maximum Concentration[1]	Background Screening Concentration[2]	Frequency Above Background Screening Concentration	Florida Guidance Concentration[3]	Frequency Above Florida Guidance Concentration	Risk-Based Screening Concentration[4]	Frequency Above Risk-Based Screening Concentration
Volatile Analytes (μg/ℓ)							
Carbon disulfide	1	1	0/4	700	0/4	2.1	0/4
Semivolatile Analytes (μg/ℓ)							
2-Methylnaphthalene	6	NSC	N/A	NSC	N/A	NSC	N/A
bis(2-Ethylhexyl)phthalate	5	6.2	0/4	6	0/4	4.8	1/4
Inorganic Analytes (μg/ℓ)							
Arsenic	8.2	9.8	0/4	50	0/4	0.038	2/4
Barium	7.9	39	0/4	2,000	0/4	260	0/4
Calcium	111,000	207,466	0/4	NSC	N/A	1,055,398	0/4
Copper	3.5	2.8	1/4	1,000	0/4	140	0/4
Iron	499	1,728	0/4	300	2/4	13,267	0/4
Lead	1.3	3.6	0/4	15	0/4	15	0/4
Magnesium	12,000	153,984	0/4	NSC	N/A	118,807	0/4
Manganese	89.5	210	0/4	50	1/4	18	2/4
Selenium	1.9	11.8	0/4	50	0/4	18	0/4
Sodium	21,500	1,519,016	0/4	160,000	0/4	396,022	0/4
Vanadium	5.6	9.2	0/4	49	0/4	26	0/4
Zinc	11.7	41.6	0/4	5,000	0/4	1,100	0/4
Cyanide	0.89	1.9	0/4	200	0/4	73	0/4

[1] A value indicated by an asterisk is the average of the detected concentrations in a sample and its duplicate. For nondetected values, one-half the contract-required quantitation limit/contract-required detection limit is used as a surrogate.
[2] The background screening concentration is twice the mean of detected concentrations for inorganic analytes.
[3] Florida Guidance Concentrations (June 1994).
[4] U.S. Environmental Protection Agency Region III risk-based screening concentrations (February 9, 1995). Concentrations for noncarcinogenic risks are adjusted to a hazard index of 0.1.

Notes: RCRA = Resource Conservation and Recovery Act.
μg/ℓ = micrograms per liter.
NSC = no screening concentration.
N/A = not applicable.

possibly the FISC Fuel Farm (Figure 7-2), and are not related to a release from SWMU 16.

7.3 HUMAN HEALTH RISK ASSESSMENT FOR SWMU 16. The location, physical description, and history associated with SWMU 16 are described in Section 7.1. Subsurface soil and groundwater samples were collected during the RFI field program (Section 7.1). Surface soil exposure will not be considered in the HHRA because up to 18 inches of surface soil have been removed, and the area has been paved with asphalt.

After evaluation and management of the environmental data collected at SWMU 16 (Chapter 2.0), HHCPCs were selected, and the potential human health risks associated with each medium at the waste site were characterized. The methodology for the human health risk assessment is described in Section 2.5 of Volume I of the NAVSTA Mayport GIR.

7.3.1 Selection of Chemicals of Potential Concern HHCPCs are defined as chemicals for which data of sufficient quality are available for use in the risk assessment, are potentially site-related, and are present at concentrations that are above standards or guidelines. In addition, they are above risk-based screening concentrations (where available) or, for inorganic analytes, above background screening concentrations (where available). The methodology used to select HHCPCs is described in Subsection 2.5.2 of the NAVSTA Mayport GIR.

7.3.1.1 **Subsurface Soil** Eight subsurface soil samples and two duplicate samples were submitted for chemical analysis during the RFI. Subsurface soil sample locations evaluated in the HHRA (MPT-16-SSC5D, MPT-16-SSE1D, and two samples collected from each of the borings associated with monitoring wells MPT-16-MW01I, MPT-16-MW02S, and MPT-16-MW03S) are indicated on Figure 7-2.

Table 7-10 presents the analytes detected in the subsurface soil at SWMU 16 and the HHCPCs selected. Only arsenic and beryllium were retained as HHCPCs.

7.3.1.2 **Groundwater** Unfiltered groundwater samples were collected from the surficial aquifer using bailers and low-flow sampling methods. Because the low-flow sampling method produces less turbid samples that are more representative of the surficial aquifer than those obtained with a bailer, the preferred data set was from the 1994 sampling event. However, it should be noted that chemicals detected in groundwater samples collected during the 1993 sampling event that were not detected in groundwater samples collected in 1994 were included in the final data set. Groundwater sample locations evaluated in the HHRA (MPT-16-MW01I, MPT-16-MW02S, MPT-16-MW03S, and MPT-16-MW04S) are indicated on Figure 7-2.

Table 7-11 presents the analytes detected in unfiltered groundwater associated with SWMU 16 and the HHCPCs selected for groundwater associated with SWMU 16. One SVOC (bis(2-ethylhexyl)phthalate) was retained as an HHCPC.

7.3.2 Exposure Assessment Medium-specific receptors and exposure scenarios are identified in paragraphs 7.3.2.1 and 7.3.2.2 for current and future land use. The information is also summarized in Table 7-12 and on Figure 7-3. Receptor-specific exposure parameters for each exposure scenario are presented in Appendix D-3 of the NAVSTA Mayport GIR. The risk calculation spreadsheets in Appendix E-5 to this report also contain the exposure parameters for each exposure scenario.

Table 7-10
Selection of Human Health Chemicals of Potential Concern in Subsurface Soil Samples at Solid Waste Management Unit (SWMU) 16

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	Mean of Detected Concentrations[2]	Background Screening Concentration[3]	Risk-based Screening Concentration[4]	Florida Leaching Value[5]	Florida Soil Cleanup Goals[6]	Selected as HHCPC? (Yes/No)
Volatile Analytes (µg/kg)									
Acetone	1/6	11 - 2,400	54 - 54	54	NA	10,000,000	NG	89,000	No[7]
Benzene	1/6	5 - 740	2 - 2	2	NA	200,000	NG	1,100	No[7]
Toluene	1/6	5 - 740	2 - 2	2	NA	20,500,000	NG	180,000	No[7]
Semivolatile Analytes (µg/kg)									
2-Methylnaphthalene	1/6	340 - 690	100,000 - 100,000	100,000	NA	4,100,000	NC	580,000	No[7]
Dibenzofuran	1/6	340 - 690	4,900 - 4,900	4900	NA	410,000	NG	240,000	No[7]
Fluorene	1/6	340 - 690	2,500 - 2,500	2500	NA	4,100,000	NG	210,000	No[7]
N-Nitrosodiphenylamine	1/6	340 - 15,000	41 - 41	41	NA	1,200,000	NG	69,000	No[7]
bis(2-Ethylhexyl)phthalate	1/6	340 - 15,000	220 - 220	220	NA	410,000	11,000	100,000	No[7]
Pesticides/PCBs (µg/kg)									
Aroclor-1260	2/8	18 - 99	17 - 22	19.5	NA	740	NG	3,500	No[7]
Chlordane	1/6	7 - 39	45 - 45	45	NA	4,400	NG	2,800	No[7]
Inorganic Analytes (mg/kg)									
Antimony	2/6	2.5 - 2.8	2.7 - 3.3	3	ND	41	NC	21	No[7]
Arsenic	6/6	NR	0.57 - 3.5	1.1	0.9	3.3	NC	3	Yes
Barium	6/6	NR	3.9 - 15.8	7.2	7.2	7,000	NC	7,400	No[7]
Beryllium	2/6	0.1 - 0.11	0.13 - 0.28	0.21	0.14	1.3	NC	0.2	Yes
Cadmium	1/6	0.25 - 0.28	0.35 - 0.35	0.35	ND	50	NC	60	No[7]
Chromium	4/6	0.77 - 0.85	1.8 - 9.7	4.9	3.4	500	NC	22	No[7]
Cobalt	1/6	1.2 - 1.3	1.4 - 1.4	1.4	1.04	6,000	NC	11,000	No[7]
Copper	6/6	NR	0.63 - 6.5	1.9	3.6	3,800	NC	7,200	No[7]
Lead	6/6	NR	0.27 - 9.9	2.5	2.8	400	NC	1,000	No[7]
Mercury	5/5	NR	0.04 - 1.1	0.28	0.06	30	NC	48	No[7]
Nickel	2/6	1.6 - 1.8	2.1 - 4.3	3.2	ND	2,050	NC	1,100	No[7]

See notes at end of table.

Table 7-10 (Continued)
Selection of Human Health Chemicals of Potential Concern in Subsurface Soil Samples at Solid Waste Management Unit (SWMU) 16

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	Mean of Detected Concentrations[2]	Background Screening Concentration[3]	Risk-based Screening Concentration[4]	Florida Leaching Value[5]	Florida Soil Cleanup Goals[6]	Selected as HHCPC? (Yes/No)
Selenium	3/6	0.1 - 0.11	0.12 - 0.36	0.21	ND	500	NC	990	No[7]
Thallium	3/6	0.15 - 0.15	0.15 - 0.23	0.19	ND	8	NC	NS	No[7]
Tin	1/6	2.4 - 2.7	3 - 3	3	5.4	50,000	NC	66,000	No[7,8]
Vanadium	6/6	NR	1.6 - 13.5	5.8	3.2	700	NC	480	No[7]
Zinc	6/6	NR	3.3 - 19.3	7.9	4.8	30,500	NC	55,000	No[7]
Cyanide	1/6	0.16 - 0.17	1 - 1	1	0.66	2,050	NC	4,000	No[7]

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed. The following samples were analyzed: MP16MS1D8, MP16MS1D2, MP16MS2S2, MP16MS2S8, MP16MS3S2, MP16MS3S8, and 16SSC5D and 16SSE1D.
[2] The mean of detected concentrations is the arithmetic mean of all samples in which the analyte was detected. It does not include those samples in which the analyte was not detected.
[3] The background screening concentration is twice the mean of detected concentrations for inorganic analytes. The mean analyte concentrations in background samples are identified in Table D-1-2 of Appendix D of the RCRA Facility Investigation (RFI) General Information Report.
[4] The risk-based screening concentrations are identified in Table D-1-4 of Appendix D to the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) General Information Report.
[5] The Florida Leaching Values (April 5, 1995) are identified in Table D-1-4 of Appendix D to the RFI General Information Report.
[6] The Florida Cleanup Goals (April 5, 1995) are identified in Table D-1-4 of Appendix D to the RFI General Information Report. Noncarcinogenic values have been adjusted to a hazard index of 0.1.
[7] The maximum detected concentration did not exceed the risk-based screening concentration, the Florida cleanup goal, or the Florida leaching value; therefore, this analyte will not be evaluated in the Human Health Risk Assessment (HHRA).
[8] The maximum detected concentration did not exceed the background screening concentration; therefore, this analyte will not be evaluated in the HHRA.

Notes: RCRA = Resource Conservation and Recovery Act
HHCPC = human health chemical of potential concern.
μg/kg = micrograms per kilogram.
NA = not applicable.
NG = not detected in groundwater.
NC = not calculated.
PCB = polychlorinated biphenyl.
mg/kg = milligrams per kilogram.
NR = not reported.
ND = not detected in any background samples.
NS = no standard or guideline.

Table 7-11
Selection of Human Health Chemicals of Potential Concern in Unfiltered Groundwater Samples Associated with Solid Waste Management Unit (SWMU) 16

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	Mean of Detected Concentrations[2]	Background Screening Concentration[3]	Risk-based Screening Concentration[4]	Federal MCL[5]	Florida Guidance Concentration[6]	Selected as HHCPC? (Yes/No)
Volatile Analytes (µg/ℓ)									
Carbon disulfide	1/4	5 - 5	1 - 1	1	NA	2.1	NS	700	No[7]
Semivolatile Analytes (µg/ℓ)									
2-Methyl-naphthalene	1/4	10 - 10	6 - 6	6	NA	150	NS	6.8	No[7]
bis(2-Ethylhexyl)-phthalate	1/4	10 - 10	5 - 5	5	NA	4.8	6	6	Yes
Inorganic Analytes (µg/ℓ)									
Arsenic	2/4	10 - 10	4.9 - 8.2	6.6	9.8	0.038	50	50	No[8]
Barium	3/4	200 - 200	2.9 - 7.9	4.7	39	260	2,000	2,000	No[7,8]
Calcium	4/4	5,000 - 5,000	58,600 - 111,000	91,225	207,466	1,055,398	NS	NS	No[7,8]
Copper	1/4	25 - 25	3.5 - 3.5	3.5	2.8	140	1300	1000	No[7]
Cyanide	2/4	2.7 - 10	0.43 - 0.89	0.66	1.9	73	200	200	No[7,8]
Iron	3/4	100 - 100	29.2 - 499	280	1,728	13,267	NS	300	No[8]
Lead	1/4	3 - 3	1.3 - 1.3	1.3	2.6	15	15	15	No[7,8]
Magnesium	4/4	5,000 - 5,000	6,350 - 12,000	8,938	153,984	118,807	NS	NS	No[7,8]
Manganese	4/4	15 - 15	7 - 89.5	35.7	210	18	NS	50	No[8]
Selenium	1/4	5 - 5	1.9 - 1.9	1.9	11.8	18	50	50	No[7,8]
Sodium	4/4	5,000 - 5,000	7,500 - 21,500	12,888	1,519,016	396,022	NS	160,000	No[7,8]
Vanadium	1/4	50 - 50	5.6 - 5.6	5.6	9.2	26	NS	49	No[7,8]
Zinc	2/4	20 - 20	6.9 - 11.7	9.3	41.6	1,100	NS	5,000	No[7,8]

See notes at end of table.

Table 7-11 (Continued)
Selection of Human Health Chemicals of Potential Concern
in Unfiltered Groundwater Samples Associated with Solid Waste Management Unit (SWMU) 16

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	Mean of Detected Concentrations[2]	Background Screening Concentration[3]	Risk-based Screening Concentration[4]	Federal MCL[5]	Florida Guidance Concentration[6]	Selected as HHCPC? (Yes/No)
Total Petroleum Hydrocarbons (mg/ℓ)	2/4	0.05 - 0.06	0.07 - 0.14	0.11	NA	NA	NS	5	No[7]

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed. The following samples were analyzed: 16MW001I, 16MW002S, 16MW003S, 16MW004S (Figure 7-2).
[2] The mean of detected concentrations is the arithmetic mean of all samples in which the analyte was detected. It does not include those samples in which the analyte was not detected.
[3] The background screening concentration is twice the mean of detected concentrations for inorganic analytes. The mean analyte concentrations in background samples are identified in Table D-1-3 of Appendix D to the RCRA Facility Investigation (RFI) General Information Report.
[4] The risk-based screening concentrations are identified in Table D-1-5 of Appendix D to the RFI General Information Report.
[5] The Federal MCLs (November 1994) are identified in Table D-1-5 of Appendix D to the RFI General Information Report.
[6] The Florida Guidance Concentrations (June 1994) are identified in Table D-1-5 of Appendix D to the RFI General Information Report.
[7] The maximum detected concentration did not exceed the risk-based screening concentration, the Federal MCL, or the Florida Guidance Concentration; therefore, this analyte will not be evaluated in the Human Health Risk Assessment (HHRA).
[8] The maximum detected concentration did not exceed the background screening concentration; therefore, this analyte will not be evaluated in HHRA.
[9] The frequency of detection is less than or equal to 5 percent and professional judgement was used; therefore, the analyte will not be evaluated in the HHRA.
[10] The Region III RBC for Naphthalene was used as a surrogate.

Notes: RCRA = Resource Conservation and Recovery Act.
MCL = maximum contaminant level.
HHCPC = human health chemical of potential concern.
μg/ℓ = micrograms per liter.
NA = not applicable.
NS = no standard or guideline
mg/ℓ = milligrams per liter.

Table 7-12
Summary of Potential Human Exposure Pathways at Solid Waste Management Unit (SWMU) 16

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Medium of Exposure	Route of Exposure	Potentially Exposed Population	Selected for Evaluation?	Reason for Selection or Exclusion
Current Land Use				
Subsurface Soil	Dermal contact with soil, ingestion of soil, and inhalation of fugitive dust.	Excavation worker (adult)	No	No earthwork is currently being conducted at the site.
Groundwater: Surficial Aquifer	Ingestion of groundwater as drinking water and inhalation of volatiles while showering.	Resident (adult)	No	There are no current exposures to groundwater.
Future Land Use				
Subsurface Soil	Dermal contact with soil, ingestion of soil, and inhalation of fugitive dust.	Excavation worker (adult)	Yes	Excavation workers could be exposed to contaminants in subsurface soil if the site were developed for industrial or residential use.
Groundwater: Surficial Aquifer	Ingestion of groundwater as drinking water and inhalation of volatiles while showering.	Resident (adult)	Yes	If the site were developed for residential use, residents could be exposed to contaminants in the surficial aquifer.

Note: RCRA = Resource Conservation and Recovery Act.

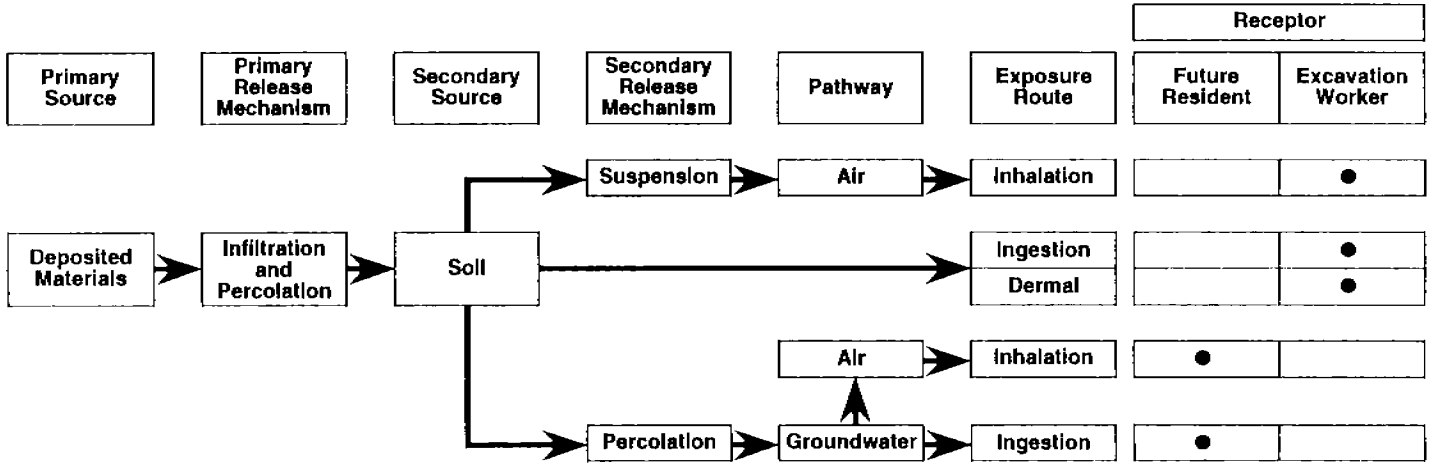


FIGURE 7-3

COMPLETE EXPOSURE PATHWAYS FOR HUMAN RECEPTORS, SWMU 16

RCRA FACILITY INVESTIGATION REPORT, GROUP II SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

8533-08 950524WEM

7.3.2.1 **Subsurface Soil** No excavation activities are ongoing at SWMU 16; therefore, no receptors are currently exposed to subsurface soil. However, workers could be exposed to contaminants in subsurface soil if excavation at SWMU 16 occurs in the future; therefore, exposure of an excavation worker (ingestion of and direct contact with subsurface soil as well as inhalation of particulates from subsurface soil) is evaluated in the HHRA.

7.3.2.2 **Groundwater** Currently, humans do not reside at the site, and groundwater is not used for any potable or nonpotable purpose. However, domestic use of the surficial aquifer (adult ingestion and inhalation of volatiles while showering) would be considered appropriate as part of a hypothetical residential exposure scenario at SWMU 16 if the land use were changed to residential in the future.

7.3.2.3 **EPCs** EPCs for subsurface soil and groundwater were determined according to procedures outlined in Subsection 2.5.6 of the NAVSTA Mayport GIR. The EPCs for analytes selected as HHCPCs for subsurface soil and groundwater are presented in Tables 7-13 and 7-14, respectively. The contaminant exposure intakes for the receptors that were evaluated are also presented in the risk calculation spreadsheets in Appendix E-5 to this report.

7.3.3 Toxicity Assessment The purpose of the toxicity assessment is to identify the adverse effects associated with exposure to each HHCPC and to identify the relationship between the level of exposure and the severity or likelihood of adverse effects. The toxicity assessment methodology is discussed in Subsection 2.5.8 of the NAVSTA Mayport GIR. Appendix D-4 to the NAVSTA Mayport GIR contains brief toxicity summaries for the HHCPCs. Appendix E-1 contains dose-response information for the HHCPCs. This information was used to estimate the ELCR for carcinogens and the HI for all HHCPCs in the risk characterization (Subsection 7.3.4). Dose-response values current as of June 1995 for IRIS and November 1994 for HEAST have been used in this HHRA. Uncertainties associated with chemical-specific toxicity values are discussed in Subsection 7.3.5.

7.3.4 Risk Characterization Both carcinogenic and noncarcinogenic risks were estimated for each HHCPC and each complete exposure pathway selected for evaluation in the exposure assessment, as described in Subsection 2.5.9 of the NAVSTA Mayport GIR. Figure 7-4 summarizes the cancer risks associated with future land use at SWMU 16. Figure 7-5 presents an HI summary for future land use at SWMU 16. Risk estimates for potential exposures to subsurface soil and groundwater under current and future land use scenarios are discussed in paragraphs 7.3.4.1 and 7.3.4.2. Table 7-15 summarizes the risk estimates. The risk characterization results are presented in Tables E-5-1 through E-5-3 in Appendix E-5.

7.3.4.1 **Subsurface Soil** The risk characterization results for subsurface soil exposure scenarios are shown in Tables E-5-1 and E-5-2 in Appendix E-5. For future land use, the cancer risk associated with subsurface soil ingestion, dermal contact, and fugitive dust inhalation is 6×10^{-8} for the adult excavation worker. Arsenic and beryllium were the only HHCPCs contributing to the ELCR for the adult excavation worker.

The noncancer risk for subsurface soil ingestion, dermal contact, and fugitive dust inhalation for future land use is below an HI of 1 (adult excavation worker).

Table 7-13
Exposure Point Concentrations for Human Health Chemicals of Potential Concern in Subsurface Soil Samples at Solid Waste Management Unit (SWMU) 16

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Frequency of Detection [1]	Maximum Detected Concentration	95 Percent UCL [2]	Exposure Point Concentration [3]
Inorganic Analytes (mg/kg)				
Arsenic	6/6	3.5	2.9	2.9
Beryllium	2/6	0.28	0.28	0.28

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the number of samples analyzed.
[2] The 95 percent UCL is calculated on the arithmetic mean of all samples using one-half the contract-required quantitation limit or contract-required detection limit for nondetected concentrations.
[3] The exposure point concentration equals the 95 percent UCL unless the maximum detected concentration is less than the 95 percent UCL. If there are three or less total samples, the maximum detected concentration is the exposure point concentration.

Notes: RCRA = Resource Conservation and Recovery Act.
UCL = upper confidence limit.
mg/kg = milligram per kilogram.

Table 7-14
Exposure Point Concentrations for Human Health Chemicals of Potential Concern in Unfiltered Groundwater Samples Associated with Solid Waste Management Unit (SWMU) 16

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Frequency of Detection[1]	Maximum Detected Concentration	95 Percent UCL[2]	Exposure Point Concentration[3]
Semivolatile Analytes (μg/ℓ)				
bis(2-Ethylhexyl)phthalate	1/4	5	6	5

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the number of samples analyzed.
[2] The 95 percent UCL was calculated on the arithmetic mean of all samples using one-half the contract-required quantitation limit or contract-required detection limit for nondetected concentrations.
[3] The exposure point concentration equals 95 percent UCL unless the maximum detected concentration is less than the 95 percent UCL. If there are three or less total samples, the maximum detected concentration is the exposure point concentration.

Notes: RCRA = Resource Conservation and Recovery Act.
UCL = upper confidence limit.
μg/ℓ = microgram per liter.

Cancer Risk Summary, Future Land Use

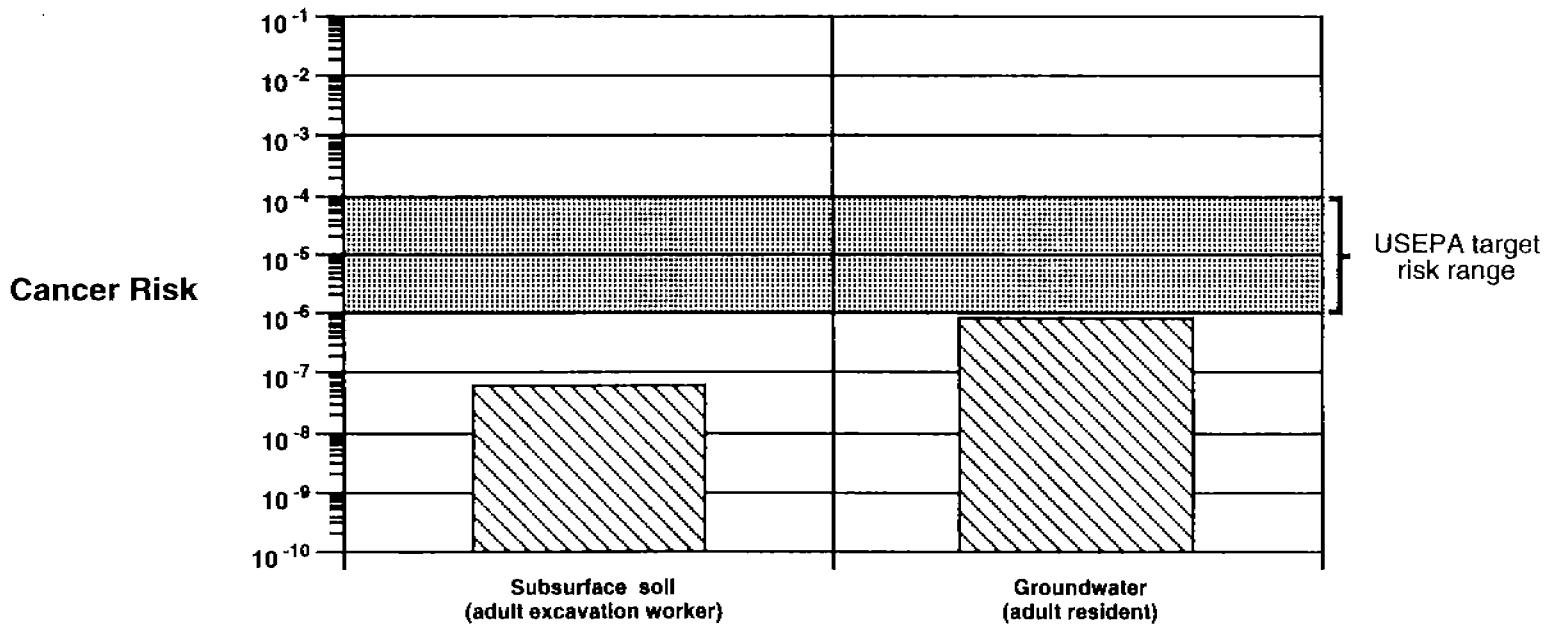


FIGURE 7-4

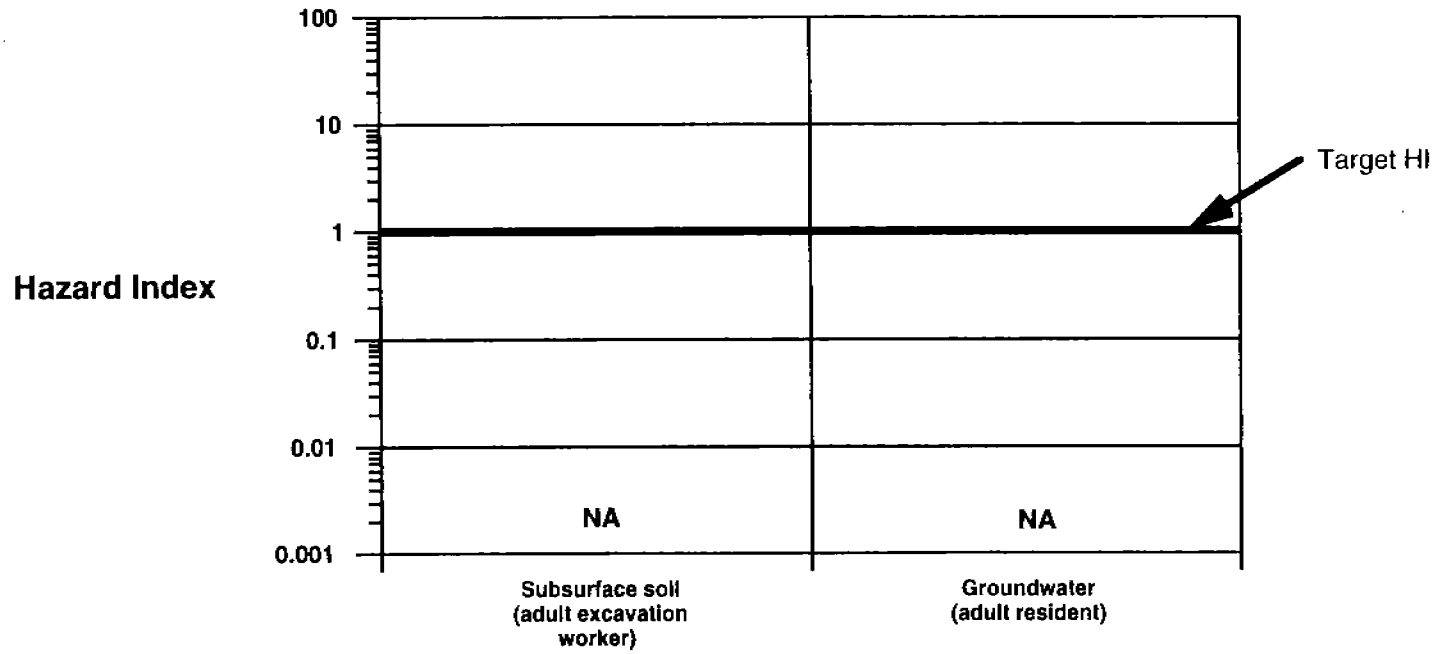
CANCER RISK SUMMARY, FUTURE LAND USE, SWMU 16

RCRA FACILITY INVESTIGATION REPORT, GROUP II SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

8533-08 950524WEM

Hazard Index Summary, Future Land Use



NA = Hazard Index is less than 0.001.

FIGURE 7-5

HAZARD INDEX SUMMARY, FUTURE LAND USE, SWMU 16

RCRA FACILITY INVESTIGATION REPORT, GROUP II SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

8533-08 950524WEM

Table 7-15
Human Health Risk Summary for SWMU 16

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Land Use	Exposure Route	Hazard Index	Estimated Lifetime Cancer Risk
Future Land Use			
Subsurface Soil			
Adult excavation worker	Incidental ingestion.	$9x10^{-3}$	$4.4x10^{-8}$
	Dermal contact.	$1x10^{-4}$	$1.2x10^{-8}$
	Inhalation of particulates.	[1]0	$1x10^{-9}$
Total excavation worker:		$9x10^{-3}$	$6x10^{-8}$
Surficial Aquifer:			
Adult resident	Ingestion of groundwater as drinking water.	$7x10^{-3}$	$8x10^{-7}$
	Inhalation of volatiles while showering.	NC	NC
Total adult resident:		$7x10^{-3}$	$8x10^{-7}$

Notes: A hazard index could not be calculated for inhalation exposures because inhalation reference doses were not available for the human health chemicals of potential concern (HHCPCs).

RCRA = Resource Conservation and Recovery Act.
NC = not calculated because no volatiles were selected as HHCPCs.

RGOs were not developed for subsurface soil because the ELCR did not exceed $1x10^{-6}$ and the HI did not exceed 0.1.

7.3.4.2 **Groundwater** The risk characterization results for the groundwater exposure scenario are shown in Table E-5-3 in Appendix E-5. There is no exposure to groundwater from the surficial aquifer under current land use. The cancer risk associated with a hypothetical future residential land use scenario for ingestion of groundwater as drinking water is $8x10^{-7}$ for the adult resident. No VOCs were selected as HHCPCs in groundwater, so cancer risk to the adult resident associated with inhalation of VOCs during showering was not evaluated. Bis(2-ethylhexyl)phthalate, the selected HHCPC, was detected in only one sample at a concentration of 5 $\mu g/\ell$. This is below the Florida primary standard of 6 $\mu g/\ell$.

The HI for groundwater ingestion was 0.007 for the adult resident. No VOCs were selected as HHCPCs in groundwater, so noncancer risk to the adult resident associated with inhalation of VOCs during showering was not evaluated.

No HHCPC exceeded an ELCR of 10^{-6} or an HQ of 0.1. However, two chemicals (iron and manganese) exceeded Florida secondary standards. Secondary standards were not established to protect human health. Iron and manganese will be discussed in Subsection 7.3.6.

<u>7.3.5 Uncertainty Analysis</u> General uncertainties associated with the collection, analysis, and evaluation of data; exposure assessment; toxicity assessment; and the risk estimation process are discussed in Subsection 2.5.10 of the NAVSTA Mayport GIR. Site-specific uncertainties that are important for the interpretation of the calculated risk estimates for subsurface soil and groundwater at SWMU 16 are discussed below.

- Residential land use was the assumed future land use scenario according to USEPA Region IV guidance (USEPA, 1991). It is likely, however, that the area near SWMU 16 will remain industrial because of its proximity to the flightline.

- The manganese drinking water RfD of $5.00x10^{-3}$ mg/kg-day is based on a single epidemiological study conducted in Greece (Kondakis, et al., 1989). Limitations with study design coupled with the lack of supporting studies may have resulted in a significant overestimate of the risks associated with drinking water ingestion of manganese.

- The presence of TICs has not been established with a degree of certainty great enough to warrant their inclusion in the HHRA for any medium at SWMU 16. The relative number of TICs is low in comparison to the contaminants detected using the target compound list (TCL) and target analyte list (TAL) methods. Furthermore, few toxicity data are available to evaluate the potential health effects of these analytes even if they were considered for quantitative evaluation. The inability to evaluate TICs in the HHRA may result in a potential underestimation of the health risks associated with future land uses.

<u>7.3.6 Remedial Goal Options</u> No HHCPC exceeded an ELCR of 10^{-6} or an HQ of 0.1. However, two chemicals, iron (maximum detected concentration of 499 $\mu g/\ell$) and manganese (maximum detected concentration of 89.5 $\mu g/\ell$), exceeded Florida secondary standards of 300 and 50 $\mu g/\ell$, respectively. These values are provided

here for informational purposes to assist risk-management decision making concerning the need for a CMS and for use within the CMS itself.

7.4 ECOLOGICAL RISK ASSESSMENT FOR SWMU 16. The following subsections describe the results of the ERA for SWMU 16, the Old Transformer Storage Yard. The ERA was completed according to the methodology described in Section 2.4 of the RFI GIR (ABB-ES, 1995a) and includes selection of ECPCs (Subsection 7.4.1), exposure assessment (Subsection 7.4.2), ecological effects assessment (Subsection 7.4.3), risk characterization (Subsection 7.4.4), and uncertainty analyses (Subsection 7.4.5). Exposure pathways for ecological receptors at SWMU 16 are limited to groundwater. It is expected that terrestrial receptors would not be present at SWMU 16 because currently the area is a paved parking (formerly a parking lot with a shell rock surface). The St. Johns River is located approximately 300 feet north of SWMU 16.

7.4.1 Selection of Ecological Chemicals of Potential Concern Analytes were determined to be an ECPC according to the process described in Subsection 2.4.1 of the RFI GIR (ABB-ES, 1995a). Aquatic receptors in the St. Johns River may be exposed to groundwater contamination as it discharges to the surface. For this reason, analytes detected in groundwater at SWMU 16 are screened as ECPCs.

The monitoring well system installed at SWMU 16 to examine potential contamination of the groundwater is described in Subsection 7.2.3. The locations of the four monitoring wells (MPT-16-MW1I, MPT-16-MW2S, MPT-16-MW3S, and MPT-16-MW4S) are shown on Figure 7-2. The unfiltered groundwater data for SWMU 16 are summarized in Table 7-16. Use of unfiltered groundwater data to estimate contaminant exposures for aquatic life is highly conservative. The measurement of contaminants in unfiltered samples includes both the fraction of contaminants sorbed onto particles and the dissolved forms. Only the dissolved fraction of contaminants in the groundwater is likely to be transported in groundwater and discharged to the St. Johns River. Generally, only the fraction of the contaminant in the dissolved phase is biologically available and potentially toxic to aquatic organisms (USEPA, 1993c).

Table 7-16 provides a summary of the analytical results, including the frequency of detection, range of detected concentrations, range of reporting limits, mean of detected concentrations, and the screening background concentrations for each of the analytes. In addition, maximum and average exposure point concentrations are provided for analytes selected as ECPCs. Calcium, magnesium, and sodium were not included in the screening process because they are naturally occurring nutrients.

Three of 16 analytes detected in groundwater from SWMU 16 were selected as ECPCs. The three analytes include one volatile (carbon disulfide), one semivolatile (2-methylnaphthalene), and one inorganic (copper).

7.4.2 Exposure Assessment The exposure assessment identifies exposure pathways and estimates the magnitude of contaminant exposures for aquatic receptors for ECPCs in groundwater. Exposure pathways for SWMU 16 were identified for aquatic receptors in the contaminant pathway model (Figure 7-6).

Table 7-16
Selection of Ecological Chemicals of Potential Concern in Unfiltered Groundwater Samples Associated With Solid Waste Management Unit (SWMU) 16

RCRA Facility investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Frequency of Detection[1]	Range of Detected Concentrations	Mean of Detected Concentrations[2]	Screening Reference Concentration[3]	Florida Surface Water Quality Standards[4]	Analyte ECPC? (Yes/No)	95 Percent UCL[5]	Arithmetic Mean[6]	Exposure Point Concentrations	
									Maximum[7]	Average[8]
Volatile Analytes (µg/ℓ)										
Carbon disulfide	1/4	1	1	1	NA	Yes	5.6	2.1	1	1
Semivolatile Analytes (µg/ℓ)										
2-Methylnaphthalene	1/4	6	6	ND	NA	Yes	6.1	5.3	6	5.3
bis(2-Ethylhexyl)phthalate	1/4	5	5	6.2	NA	No[9]				
Inorganic Analytes (µg/ℓ)										
Arsenic	2/4	4.9 - 8.2	6.6	9.8	50	No[9,10]				
Barium	3/4	2.9 - 7.9	4.7	39	NA	No[9]				
Calcium	4/4	58,600 - 111,000	91,225	207,466	NA	No[9,11]				
Copper	1/4	3.5	3.5	2.8	2.9	Yes	58	10.3	3.5	3.5
Cyanide	2/4	0.43 - 0.89	0.66	1.9	1.0	No[9,10]				
Iron	3/4	29.2 - 499	280	1,728	300	No[9]				
Lead	1/4	1.3	1.3	2.6	5.6	No[9,10]				
Magnesium	4/4	6,350 - 12,000	8,938	153,984	NA	No[9,11]				
Manganese	4/4	7 - 89.5	35.7	210	NA	No[9]				
Selenium	1/4	1.9	1.9	11.8	71	No[9,10]				
Sodium	4/4	7,500 - 21,500	12,888	1,519,016	NA	No[9,11]				
Vanadium	1/4	5.6	5.6	9.2	NA	No[9]				
Zinc	2/4	6.9 - 11.7	9.3	41.6	86	No[9,10]				

See notes on following page.

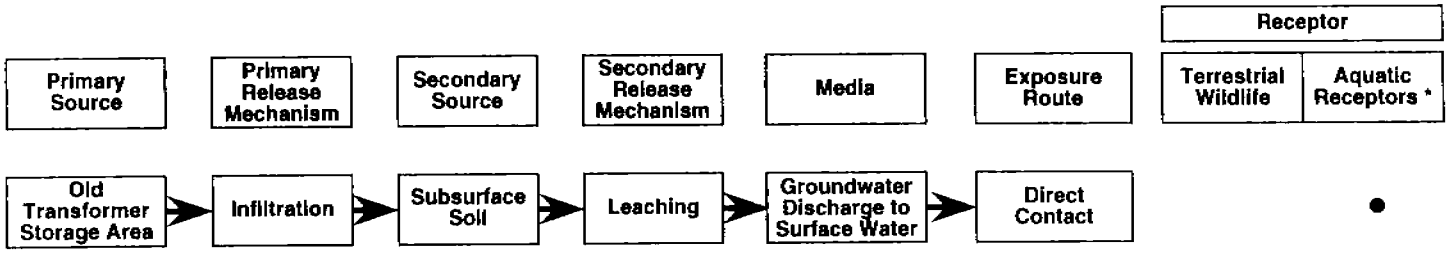
Table 7-16 (Continued)
Selection of Ecological Chemicals of Potential Concern in Unfiltered Groundwater Samples Associated With Solid Waste Management Unit (SWMU) 16

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Notes from previous page.

[1] Frequency of detection is the number of samples in which the analyte is detected divided by the total number of samples analyzed (MPT-16-MW1I, MPT-16-MW2S, MPT-16-MW3S, MPT-16-MW4S; Figure 7-2).
[2] The average of detected concentrations is the arithmetic mean of all samples in which the analyte was detected; it does not include those samples in which the analyte was not detected.
[3] Background sample locations include MPT-1-MW1S, MPT-S-MW1S, MPT-8-MW5S, MPT-8-MW5I, MPT-8-MW5D, MPT-B-MW1S, MPT-B-MW1I, and MPT-B-MW1D, with a duplicate at MPT-S-MW1S. The average concentrations of analytes detected in the background locations are listed in of the RCRA Facility Investigation (RFI) General Information Report (ABB-ES, 1995a). Two times the background concentration is calculated for inorganics.
[4] Florida Department of Environmental Protection, 62-302 Florida Administrative Code (1995 version); surface water quality standards for Class III marine waters.
[5] The 95 percent UCL is calculated on the log-transformed average of all concentrations using the formula provided in the U.S. Environmental Protection Agency Region IV Supplemental Guidance (USEPA, 1991).
[6] The arithmetic mean of all concentrations assigns a value of one-half of the contract-required quantitation limit for organics and method detection limit MDL for inorganics to all nondetects.
[7] The maximum exposure concentration is equal to the 95 percent UCL or the maximum detected concentration, whichever is less.
[8] The average exposure concentration is equal to the arithmetic mean or the maximum detected concentration, whichever is less.
[9] Maximum detected concentration is less than one time the average background concentration for organics or less than two times the average background concentration for inorganics.
[10] Maximum detected concentration is less than the Florida surface water quality standard and, therefore, the analyte will not be evaluated in the Ecological Risk Assessment.
[11] Analyte is an essential nutrient and is not present at toxic levels.

Notes: RCRA = Resource Conservation and Recovery Act.
ECPC = ecological chemical of potential concern.
$\mu g/\ell$ = micrograms per liter.
NA = not available.
ND = not detected in the background sample.
UCL = upper confidence limit.



* Aquatic receptors include invertebrates, plants, algae, amphibians, fish, and reptiles.

FIGURE 7-6

CONTAMINANT PATHWAY MODEL FOR ECOLOGICAL RECEPTORS, SWMU 16

RCRA FACILITY INVESTIGATION REPORT, GROUP II SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

8533-08 950524WEM

Aquatic receptors in the St. Johns River may be exposed to contamination in groundwater from SWMU 16 as it discharges to the surface water. Exposure concentrations of groundwater ECPCs for aquatic receptors in the St. Johns River are estimated based on a worst-case exposure scenario. It is assumed that the average and maximum EPCs of ECPCs in groundwater (Table 7-16) are the concentrations to which the receptors would be exposed in the St. Johns River. This worst-case exposure scenario assumes no reduction in contaminant concentrations as a result of transport from the SWMU 16 area to the St. Johns River and no dilution once the contaminant is discharged.

The data collected for SWMU 16 suggest that chemicals attributed to SWMU 16 are not discharging to the St. Johns River. Therefore, less conservative exposures are also evaluated based on assumptions of 10, 100, and 1,000 times dilution of the groundwater (and respective maximum detected groundwater ECPC concentrations) as it is discharged into the St. Johns River. The dilution of existing groundwater conditions is used to model a reasonable scenario where groundwater through advection, dispersion, mixing, and retardation would discharge to a surface water body. This is used to assess whether an adverse environment to the impact is probable.

7.4.3 **Ecological Effects Assessment** The ecological effects assessment describes the potential adverse effects associated with ECPCs in groundwater to aquatic receptors. Ecological effects are estimated based on aquatic toxicity benchmarks. Aquatic toxicity information for the ECPCs is obtained from searches of the USEPA AQUIRE database (Appendix F-1). Table 7-17 provides a summary of the toxicity testing information available from the AQUIRE search and a range of concentrations associated with lethal and sublethal effects to fish, invertebrates, mollusks, and algae. For each ECPC, the effect concentrations from AQUIRE are compared with the exposure concentrations to evaluate potential risks in Subsection 7.4.4.

7.4.4 **Risk Characterization** Risks are evaluated for aquatic life associated with exposures to ECPCs in groundwater from SWMU 16 as it discharges to the St. Johns River. The predicted maximum and average concentrations for groundwater ECPCs in the St. Johns River are compared to the State of Florida surface water quality standards for Class III marine water (62-302, FAC), the AWQC (USEPA, 1986b), and the lowest reported adverse effect concentration in AQUIRE listed in Table 7-18. For comparative purposes, the concentrations of analytes in the surface water of the St. Johns River north of SWMU 16 (MPT-B-SW13, MPT-B-SW14, and MPT-B-SW15) and background surface water locations (MPT-B-SW1 through MPT-B-SW7) (RFI GIR [ABB-ES, 1995a]) are presented in Table 7-18.

Because aquatic toxicity information is not available for carbon disulfide, it is not possible to evaluate if adverse effects will occur for aquatic organisms as a result of exposures to carbon disulfide.

Of all of the groundwater ECPCs, only the predicted surface water concentrations of copper exceed the available screening values. Copper was detected in one out of four monitoring wells at a concentration of 3.5 $\mu g/\ell$. This concentration is slightly higher than the Florida surface water quality standard and AWQC of 2.9 $\mu g/\ell$ for copper. Based on these standards, a dilution of less than five times the concentration of copper in groundwater would not result in lethal or sublethal effects for aquatic receptors in the St. Johns River. In addition, copper from unfiltered groundwater samples may be associated with suspended solids, not the dissolved phase, which is bioavailable. Further review of the copper AWQC

Table 7-17
Results of AQUIRE Search for Toxicity of Groundwater Ecological Chemicals of Potential Concern at Solid Waste Management Unit (SWMU) 16 to Marine Aquatic Receptors

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	Fish		Invertebrates		Mollusks		Algae and Aquatic Plants
	Lethal	Sublethal	Lethal	Sublethal	Lethal	Sublethal	Sublethal
Volatile Analytes (μg/ℓ)							
Carbon disulfide	--	--	--	--	--	--	--
Semivolatile Analytes (μg/ℓ)							
2-Methylnaphthalene	11 / 2,000 - 6,000	5 / 300 - 10,000	10 / 600 - 5,000	--	--	--	--
Inorganic Analytes (μg/ℓ)[2]							

[1] Toxicity information was retrieved from AQUIRE and is included as Appendix F-1.
[2] Toxicity information for copper was not searched in AQUIRE because sufficient aquatic toxicity information was retrieved from Ambient Water Quality Criteria (U.S. Environmental Protection Agency, 1986b).

Notes: RCRA = Resource Conservation and Recovery Act.
Values are expressed in number of studies per range of concentrations.
μg/ℓ = micrograms per liter.
-- = field screening or laboratory analysis not conducted.
AQUIRE = Aquatic Information Retrieval.

Copper ?

Table 7-18
Comparison of Solid Waste Management Unit (SWMU) 16
Groundwater Ecological Chemical of Potential Concern (ECPC)
Exposure Concentrations (in St. Johns River) with Toxicity Benchmarks

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Analyte	St. Johns River Exposure Concentration: Maximum / Average Exposure Point Concentration in Groundwater[1]	Florida Surface Water Quality Standard[2]	Federal AWQC[3]	AQUIRE[4] (Lowest reported adverse effect concentration)	Concentrations Detected in Surface Waters of St. Johns River[5]	Concentrations Detected in Background Surface Water Samples[6]	Results of Comparison
Volatile Analytes (µg/ℓ)							
Carbon disulfide	1 / 1	NA	NA	NA	ND	ND	Benchmark not available
Semivolatile Analytes (µg/ℓ)							
2-Methylnaphthalene	6 / 5.3	NA	NA	300	ND	ND	Benchmark not exceeded
Inorganic Analytes (µg/ℓ)							
Copper	3.5 / 3.5	2.9	2.9	NS	4.1 - 5	2.4 - 37.2	Exceedance of 1.2 times the lowest benchmark

[1] From Table 7-16.
[2] Florida Department of Environmental Protection, 62-302, Florida Administrative Code (1995 version); surface water quality standards for Class III marine waters.
[3] U.S. Environmental Protection Agency (USEPA) Ambient Water Quality Chronic Criteria (USEPA, 1986b).
[4] From Table 7-17.
[5] Range of detected concentrations from of the RCRA Facility Investigation (RFI) General Information Report (ABB Environmental Service, Inc. [ABB-ES], 1995a).
[6] Background sample locations include MPT-B-SW1, MPT-B-SW2, MPT-B-SW3, MPT-B-SW4, MPT-B-SW5, MPT-B-SW6, and MPT-B-SW7. The concentrations of organic and inorganic analytes detected in background surface water samples are listed in Tables 3-15 and 3-16, respectively, of the RFI General Information Report (ABB-ES, 1995a).

Notes: RCRA = Resource Conservation and Recovery Act.
ECPC = ecological chemical of potential concern.
µg/ℓ = milligrams per liter.
NA = not available.
ND = not detected.
NS = not sampled.

document (USEPA, 1984) indicates the maximum detected concentration of copper in groundwater at 3.5 $\mu g/\ell$ is lower than the lowest concentration associated with adverse effects for saltwater species (including saltwater algae and bay scallops). Therefore, future discharges of copper to the surface water of the St. Johns River are not anticipated to pose an unacceptable risk to aquatic receptors.

7.4.5 Uncertainty Analyses A number of uncertainties and assumptions are inherent in the ecological risk assessment process. The NAVSTA Mayport GIR (ABB-ES, 1995a) summarizes general ERA uncertainties. Specific uncertainties associated with the evaluation of risks from potential groundwater contamination at SWMU 16 include the following.

- The lack of aquatic toxicity benchmarks for carbon disulfide may result in an underestimation of risks for aquatic life.

- The presumption of no risks for aquatic life resulting from potential exposures to copper in groundwater assumes, in part, that the dilution of groundwater as it is discharged into the St. Johns River is at least 5 times. If dilution is less, risks may be underestimated.

8.0 CONCLUSIONS AND RECOMMENDATIONS

The following subsections summarize the results of the Group II RFI and present recommendations for the Group II SWMUs.

8.1 SWMUs 6, 7, 8, 9, 10, AND 11 (OWTP Area). The RFI data suggest that hydrocarbon-related compounds have been released from the former waste oil pit, the Sludge Drying Beds, and the Fuel Spill Area (SWMUs 6, 7, and 11, respectively). These compounds have migrated downward into subsurface soil and have spread laterally in the soil just above the water table. These hydrocarbon-related compounds are affecting groundwater quality and are likely the source of LNAPL measured in monitoring wells hydraulically downgradient of SWMUs 6 and 7.

The groundwater flow of the surficial aquifer at the OWTP area is generally toward the north and ultimately discharges into the St. Johns River. Groundwater flow velocities are estimated at 69 to 87 feet per year. However, based on analytical results from groundwater samples, the hydrocarbons and related chemicals have not reached the St. Johns River. The retardation of the hydrocarbons moving toward the St. Johns River may be related to factors such as the fine-grained sandy matrix of the surficial aquifer, the viscosity of the hydrocarbons, and tidal fluctuations causing smearing of the hydrocarbons over a large area.

Sludge samples collected from SWMU 7 contained petroleum-related chemicals at concentrations higher than the Florida clean soil criteria under 62-775, FAC. Petroleum-related chemicals detected in a sludge sample collected from SWMU 8 were less than the Florida clean soil criteria.

The RFI data suggest that water discharged to the percolation pond (SWMU 8) after treatment in the OWTP has affected groundwater hydraulically downgradient of SWMU 8. The compounds affecting groundwater quality are chemicals used in the OWTP (primarily inorganics), degradation products of hydrocarbons, and solvents.

None of the organic chemicals were detected in the groundwater samples at concentrations that exceed Florida groundwater guidance concentrations. However, iron, manganese, and sodium were detected at concentrations that exceed Florida groundwater guidance concentrations. The concentrations of these chemicals may be related to the intrusion of sea water through the former discharge pipe at SWMU 8 during extreme high tides or the intrusion of estuarine or marine water into the surficial aquifer during tidal fluctuations.

There are no indications of releases of hazardous constituents from the OWTP (SWMU 9) or the RCRA Hazardous Waste Storage Area (SWMU 10).

8.1.1 Human Health Risk Assessment The HHRA evaluated unfiltered groundwater samples collected from the OWTP area. For future land use, the calculated ELCR associated with unfiltered groundwater ($2x10^{-4}$) exceeds the USEPA acceptable cancer risk range. The cancer risk is attributable to arsenic. However, the arsenic CSF may result in an overestimate of cancer risk. Risk management guidance (USEPA, 1988) suggests that cancer risk may be up to tenfold lower than predicted. Furthermore, all detected arsenic concentrations were below the Federal and State drinking water standards, which are both 50 $\mu g/\ell$; therefore, remediation for arsenic does not appear to be warranted.

The calculated noncancer risk associated with potential future domestic use of groundwater from the OWTP area (HI=10) exceeds the USEPA target HI of 1. Manganese (HQ=7) and iron (HQ=3) are the major contributors to this HI. However, the HQ for iron probably overestimates risk because the RfD is conservative (i.e., it underestimates the dose at which toxic effects might occur, as described in Subsection 4.3.5). In addition, the manganese and iron concentrations in groundwater at the OWTP area are likely the result of the diffusion of estuarine or marine water in the surficial aquifer during tidal fluctuations (See paragraph 4.2.3.3). Because the surficial aquifer beneath this site area is subject to the intrusion of estuarine or marine water, it is not likely to be used as a water supply; therefore, remediation for manganese and iron do not appear to be warranted.

8.1.2 Ecological Risk Assessment Potential risks for aquatic receptors were evaluated for exposure to ECPCs in groundwater at the point of discharge to the St. Johns River. Comparison of the average and maximum EPCs of each ECPC with available criteria and toxicity benchmarks is the basis of the ecological risk characterization.

EPCs of phenanthrene, cyanide, iron, nickel, and mercury exceed the lowest toxicity benchmark concentrations. The presumption of no risks for aquatic life resulting from potential exposures to ECPCs detected in groundwater samples (phenanthrene, cyanide, iron, and nickel) assumes that groundwater containing these chemicals has not yet reached the St. Johns River.

Although EPCs of mercury exceed the toxicity benchmarks, it is unlikely that mercury detected in groundwater is related to the OWTP Area. If concentrations of mercury detected in groundwater are discharged to the St. Johns River in the future, they could represent a risk for aquatic receptors as a result of bioconcentration and bioaccumulation in fish and invertebrate tissue. However, it is not likely that mercury represents a threat to ecological receptors as it was detected in only 3 of 23 groundwater samples collected in 1994. Remediation of the ECPCs does not appear to be warranted.

8.1.3 Recommendations A CMS is recommended for the free-phase hydrocarbons at the Oily Waster Treatment Plant Area and surface and subsurface soils that contain hydrocarbons at SWMUs 6 and 7 in excess of the Florida clean soil criteria (FAC 62-775 FAC).

Interim measures have been implemented during the summer of 1995 for the recovery of the free-phase hydrocarbons at the Oily Waster Treatment Plant Area. A monitoring program should be implemented to assess the effectiveness of the recovery system and determine if modifications are necessary and to assess whether additional remedial measures will be required to mitigate petroleum related constituents dissolved in groundwater. Additionally, the monitoring program will be used to assess whether human health and or ecological risk assessment should be conducted during or at the conclusion of the interim measures. The monitoring program should be included in the CMS.

Additionally, a technology demonstrations for thermal desorption of surface and subsurface soils containing hydrocarbons will be held at SWMUs 6 and 7. The technology demonstration is to be conducted in 1996 under the Navy Environmental Leadership program (NELP). Based on the results of the technology demonstration, it is likely that the thermal desorption technology may be selected as the final remedy for the subsurface soils. However, evaluation of this and other methods

to remediate the surface and subsurface soils at SWMUs 6 and 7 should be conducted during the CMS. Remedial goal options for the technology demonstration and final remedy should be the Florida clean soil criteria (FAC 62-775).

8.2 SWMU 12. The RFI data suggest that there has not been a release of hazardous constituents from the Neutralization Basin. However, the RFI data suggest that sodium hydroxide, which was released when the sodium hydroxide storage tank was removed in 1992, has affected groundwater quality.

8.2.1 Human Health Risk Assessment The HHRA evaluated unfiltered groundwater samples collected from SWMU 12. For a hypothetical future land use, the calculated ELCR associated with unfiltered groundwater ($9x10^{-4}$) exceeds the USEPA acceptable cancer risk range. Arsenic is the only contaminant that contributes to the cancer risk. However, the arsenic CSF may result in an overestimate of cancer risk (Subsection 5.3.5). Risk management guidance (USEPA, 1988) suggests that cancer risk may be up to tenfold lower than predicted. A single sample is responsible for the cancer risk estimate at SWMU 12; this sample may not be representative of site conditions, because the remaining samples contained arsenic at concentrations consistent with background levels. Furthermore, arsenic concentrations were below the Federal and State drinking water standards. Therefore, remediation for arsenic is not warranted.

The noncancer risk associated with a hypothetical future domestic use of groundwater at SWMU 12 (HI=4) exceeds the USEPA target HI of 1. Arsenic (HQ=3.9) and vanadium (0.43) are the major contributors to this HI.

Organic chemicals detected in the groundwater samples collected from SWMU 12 are not consistent with the use of the neutralization basin. With exception of phenol, the organic chemicals were detected at concentrations less than Florida groundwater guidance concentrations. The Florida groundwater guidance concentration for phenol is based on organoleptic properties. Iron, manganese, sodium and vanadium were detected at concentrations that exceed Florida groundwater guidance concentrations; however, these chemicals may be related either to the diffusion of marine or estuarine water into the surficial aquifer during tidal fluctuations or to the release of sodium hydroxide. This release may have resulted in the mobilization of naturally occurring inorganic analytes during rainfall events, which become dissolved constituents in groundwater. Although there are hypothetical cancer and noncancer risks to human health, based on current use of SWMU, 12 there is no human health exposure to groundwater, and it is very unlikely that there would be an exposure under a hypothetical future use residential scenario. Therefore, remediation of these chemicals is not warranted.

8.2.2 Ecological Risk Assessment Potential risks for aquatic receptors were evaluated for exposures to ECPCs in groundwater at the point of discharge to the St. Johns River. Comparison of the average and maximum EPCs of each ECPC with available criteria and toxicity benchmarks is the basis of the ecological risk characterization.

EPCs of copper, lead, and nickel in groundwater exceed toxicity benchmark values. Current concentrations of copper, lead, and nickel are not expected to present a risk for aquatic receptors. The fraction of metals biologically available and potentially toxic to aquatic receptors is likely to be less than the concen-

trations measured in the unfiltered groundwater samples; therefore, remediation of these chemicals to protect ecological receptors is not warranted.

8.2.3 Recommendations No further investigation is recommended for SWMU 12. The sodium hydroxide release should be an area of concern separate from SWMU 12, and an SWMU assessment should be conducted to determine the potential impact, if any, to the environment. Subsurface soil samples should be collected to assess whether the sodium hydroxide release poses an adverse effect to human health or the environment and/or is potentially a hazardous material based on pH. Surface soil samples are not required because the area where the release occurred has been covered with clean soil and vegetation.

8.3 SWMU 15. The RFI data suggest that pesticides have been released at the Old Pesticide Storage Area (SWMU 15). The pesticides 4,4'-DDE, 4,4'-DDT, and chlordane were detected in surface soil and subsurface soil. The distribution of the pesticides appears to be in the form of "hot spots," which consistent with site history, is indicative of multiple releases at various random locations during the rinsing of pesticide application equipment. Alpha- and beta-BHC and arsenic were detected in groundwater samples; the source of these chemicals is unknown.

8.3.1 Human Health Risk Assessment The HHRA evaluated surface soil, subsurface soil, and unfiltered groundwater in samples collected at SMWU 15. For current and a hypothetical future land use scenarios, the calculated cancer risks associated with surface soil and unfiltered groundwater exceed the USEPA acceptable risk range of 10^{-6} to 10^{-4}. For future land use scenarios, the calculated noncancer risks associated with surface soil and unfiltered groundwater exceed the USEPA target HI of 1.

8.3.1.1 **Surface Soil** The total cancer risks for surface soil ingestion, dermal contact, and fugitive dust inhalation for all current and future receptors (except the adult excavation worker) exceed the USEPA acceptable risk range. The highest ELCR for surface soil under current land use ($8x10^{-6}$) was associated with the adult occupational worker. The highest ELCR for surface soil under future land use ($6x10^{-5}$) was associated with the resident. Chlordane, 4,4'-DDT, and arsenic are the major contributors to the ELCRs for all receptors. However, the arsenic CSF may result in an overestimate of cancer risk (Subsection 6.3.5). The noncancer risk for surface soil under future land use is greater than 1 for the child resident (HI=3). Chlordane (HQ=2) and 4,4'-DDT (HQ=0.5) are the major contributors to this HI.

8.3.1.2 **Subsurface Soil** The total ELCR for subsurface soil ingestion, dermal contact, and fugitive dust inhalation for future land use ($4x10^{-8}$) does not exceed the USEPA acceptable cancer risk range. The predicted noncancer risk for subsurface soil under future land use (0.006) is below an HI of 1.

8.3.1.3 **Groundwater** The total cancer risk for unfiltered groundwater ingestion under future land use ($1x10^{-3}$) exceeds the USEPA acceptable risk range. Arsenic ($1x10^{-3}$), alpha-BHC ($2x10^{-5}$), beta-BHC ($8x10^{-5}$), and bis(2-ethylhexyl)phthalate ($1x10^{-6}$) contribute to this ELCR. However, the arsenic CSF may result in an overestimate of cancer risk (Subsection 7.3.5). Risk management guidance (USEPA, 1988) suggests that cancer risk may be up to tenfold lower than predicted. The predicted noncancer risk for unfiltered groundwater under future land use (HI=7)

exceeds the USEPA target HI of 1. Arsenic (HQ=6) and manganese (HQ=1) were the major contributors to this HI. However, the HQ associated with manganese may have been overestimated because the RfD for manganese may be artificially low (Subsection 6.3.5).

8.3.2 Ecological Risk Assessment Potential adverse ecological effects were evaluated for terrestrial wildlife, plants, and soil invertebrates resulting from exposure to ECPCs in surface soil. Risks are also characterized for aquatic receptors potentially exposed to ECPCs in groundwater at the point of discharge to the St. Johns River.

Terrestrial wildlife exposed to surface soil contamination at SWMU 15 is not at risk for lethal effects; however, the results indicate that sublethal effects (reduction of growth and reproduction) for small insectivorous or omnivorous mammals and birds are possible. The sublethal effects predicted are associated with 4,4-DDT. Because the HIs for both the average and maximum exposure exceed 10, it is assumed that population-level effects are possible.

Based on a comparison of literature-reported phytotoxicity values and exposure concentrations of surface soil ECPCs, concentrations of chromium, mercury, and zinc may be toxic to plant life. However, the average EPCs for chromium and mercury were below the phytoxicity values. Vegetation at this site does not appear to be stressed. Remediation of these chemicals to protect plant life does not appear to be warranted.

Based on the results of toxicity testing that measured the growth and survival of test populations, the analytes detected in surface soil at SWMU 15 may present an unacceptable risk for soil invertebrates. The observed mortality could not be correlated with the concentrations of pesticides detected in SWMU 15 surface soil samples.

The maximum groundwater exposure point concentrations of cyanide, lead, and mercury exceed the toxicity benchmark values. However, discharges of cyanide and lead are not expected to present a risk for aquatic receptors based on the fraction of metals biologically available and potentially toxic to aquatic receptors is likely to be less than the concentrations measured in the unfiltered groundwater samples. Although EPCs of mercury exceed the toxicity benchmarks, it is unlikely that mercury in groundwater is associated with SWMU 15, as the maximum detected concentration was in the groundwater sample from a monitoring well hydraulically upgradient from SWMU 15. Remediation of these chemicals to protect aquatic receptors does not appear to be warranted.

8.3.3 Recommendations A CMS is recommended for SWMU 15 surface soil based on the potential for adverse risk due to exposure for both current and hypothetical future scenarios by human and ecological receptors to pesticides in the soil. A technology demonstration to bioaugment *in situ* soil at SWMU 15 is to be conducted in 1996 under the NELP. Based on the results of the technology demonstration, it is likely that the bioaugmentation technology may become the final remedy for the surface soil. However, evaluation of this and other methods to remediate the surface soil at SWMU 15 should be conducted during the CMS. Target treatment goals for the technology demonstration and final remedy should be based on Florida Soil Cleanup Goals and concentrations that are protective of ecological receptors.

Concentrations of alpha- and beta-BHC and potentially arsenic present a hypothetical future risk to use of groundwater by human receptors; therefore, a CMS appears to be warranted. Because it is not known what effect, if any, the bioaugmentation technology may have on causing migration of the pesticides in soil, it is recommended that additional assessment activities to determine the horizontal and vertical extent of these chemicals in groundwater be completed subsequent to the technology demonstration activities. Additionally, groundwater sampling collected from monitoring wells should include analysis for arsenic. This analysis should be conducted to assess and confirm whether arsenic is present at concentrations that exceed Florida groundwater guidance concentrations.

8.4 SWMU 16. Low concentrations of PCBs (less than 200 μg/kg) detected in surface and subsurface soil samples suggest that oil containing PCBs may have been released from transformers stored at the site. However, the soil where the PCBs were detected was recently removed and the area paved for use as a parking lot.

8.4.1 Human Health Risk Assessment The HHRA evaluated subsurface soil and unfiltered groundwater samples collected at SWMU 16. For future land use, the calculated cancer risks associated with subsurface soil and unfiltered groundwater do not exceed the USEPA acceptable risk range. The calculated noncancer risks for subsurface soil and unfiltered groundwater under future land use are less than the USEPA target HI of 1.

8.4.1.1 **Subsurface Soil** The total cancer risk for subsurface soil under future land use ($6x10^{-8}$) did not exceed the USEPA acceptable risk range. The noncancer risk for subsurface soil under future land use (HI=0.009) was less than the USEPA target HI of 1.

8.4.1.2 **Groundwater** The total cancer risk for unfiltered groundwater under future land use ($8x10^{-7}$) did not exceed the USEPA acceptable risk range. The noncancer risk for unfiltered groundwater under future land use (HI=0.007) was less than the USEPA target HI of 1.

8.4.2 Ecological Risk Assessment Potential risks for aquatic receptors were evaluated for exposures to ECPCs in groundwater at the point of discharge to the St. Johns River. Comparison of the average and maximum exposure concentrations of each ECPC with available criteria and toxicity benchmarks is the basis of the ecological risk characterization.

Although exposure concentrations of copper exceed available screening values, future discharges of copper to the surface water are not anticipated to pose an unacceptable risk to aquatic receptors based on the fraction of metals biologically available and potentially toxic to aquatic receptors. The fraction of metals biologically available and potentially toxic to aquatic receptors is likely to be less than the concentrations measured in the unfiltered groundwater samples. In addition, the maximum detected concentration of copper in the SWMU 16 groundwater samples is lower than the lowest concentration associated with adverse effects for saltwater species (including saltwater algae and bay scallops) (USEPA, 1984).

8.4.3 Recommendations The data collected for the RFI for SWMU 16 suggest that there are no current or future human health or ecological risks due to chemicals released at this site. Surface soils containing PCBs at concentrations less than

1 $\mu g/kg$ were excavated and removed from the site and the site was paved for use as a parking lot. Therefore, no further investigation at this time is recommended for SWMU 16.

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APPENDIX A

1993 AND 1994 VALIDATED RFI ANALYTICAL DATA

Appendix A-1:	Subsurface Soil Sample Analyses, SWMUs 6, 7, 8, 9, 10, and 11
Appendix A-2:	Surface Water Sample Analyses, SWMUs 6, 7, 8, 9, 10, and 11
Appendix A-3:	Sludge Sample Analyses, SWMUs 6, 7, 8, 9, 10, and 11
Appendix A-4:	Groundwater Analyses, SWMUs 6, 7, 8, 9, 10, and 11
Appendix A-5:	Groundwater Sample Analyses, SWMU 12
Appendix A-6:	Surface Soil Sample Analyses, SWMU 15
Appendix A-7:	Subsurface Soil Sample Analyses, SWMU 15
Appendix A-8:	Groundwater Sample Analyses, SWMU 15
Appendix A-9:	Worm Tissue Sample Analyses, SWMU 15
Appendix A-10:	Surface Soil Sample Analyses, SWMU 16
Appendix A-11:	Subsurface Soil Sample Analyses, SWMU 16
Appendix A-12:	Groundwater Soil Sample Analyses, SWMU 16

APPENDIX A-1

SUBSURFACE SOIL SAMPLE ANALYSES, SWMUs 6, 7, 8, 9, 10, AND 11

AR01 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:	23829001				34901001				23827001				34889001			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT8BS3S7				MPT8BS3S7				MPT8MS4S2				MPT8MS4S2			
Collect Date:	15-JAN-93				15-JAN-93				14-JAN-93				14-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES ug/kg																
Chloromethane	1400	U	ug/kg	1400	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Bromomethane	1400	U	ug/kg	1400	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Vinyl chloride	1400	U	ug/kg	1400	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Chloroethane	1400	U	ug/kg	1400	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Methylene chloride	690	U	ug/kg	690	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Acetone	2100	U	ug/kg	2100	-		ug/kg		61		ug/kg		-		ug/kg	
Carbon disulfide	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,1-Dichloroethane	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,1-Dichloroethene	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dichloroethene (total)	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Chloroform	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dichloroethane	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
2-Butanone	1400	U	ug/kg	1400	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
1,1,1-Trichloroethane	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Carbon tetrachloride	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Bromodichloromethane	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dichloropropane	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
cis-1,3-Dichloropropene	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Trichloroethene	150	J	ug/kg		-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Dibromochloromethane	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,1,2-Trichloroethane	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Benzene	160	J	ug/kg		-		ug/kg		3	J	ug/kg		-		ug/kg	
trans-1,3-Dichloropropene	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Bromoform	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
4-Methyl-2-pentanone	1400	U	ug/kg	1400	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
2-Hexanone	1400	U	ug/kg	1400	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Tetrachloroethene	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,1,2,2-Tetrachloroethane	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Toluene	170	J	ug/kg		-		ug/kg		3	J	ug/kg		-		ug/kg	
Chlorobenzene	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Ethylbenzene	1500		ug/kg		-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Styrene	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Xylenes (total)	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Dichlorodifluoromethane	1400	U	ug/kg	1400	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Trichlorofluoromethane	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,3-Dichlorobenzene	690	U	ug/kg	690	76000	U	ug/kg	76000	5	U	ug/kg	5	350	U	ug/kg	350
Acrolein	14000	U	ug/kg	14000	-		ug/kg		18	J	ug/kg		-		ug/kg	
Iodomethane	1400	U	ug/kg	1400	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
1,4-Dichlorobenzene	690	U	ug/kg	690	76000	U	ug/kg	76000	5	U	ug/kg	5	350	U	ug/kg	350
Acrylonitrile	14000	U	ug/kg	14000	-		ug/kg		110	U	ug/kg	110	-		ug/kg	
Dibromomethane	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dichlorobenzene	690	U	ug/kg	690	76000	U	ug/kg	76000	5	U	ug/kg	5	350	U	ug/kg	350
2-Chloroethylvinylether	1400	R	ug/kg		-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Ethyl methacrylate	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2,3-Trichloropropane	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
trans-1,4-Dichloro-2-butene	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Isobutyl alcohol	28000	R	ug/kg		-		ug/kg		220	U	ug/kg	220	-		ug/kg	
1,1,1,2-Tetrachloroethane	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dibromo-3-chloropropane	1400	U	ug/kg	1400	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
1,2-Dibromoethane	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	

ARO1 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:	23829001				34901001				23827001				34889001			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT8BS3S7				MPT8BS3S7				MPT8MS4S2				MPT8MS4S2			
Collect Date:	15-JAN-93				15-JAN-93				14-JAN-93				14-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	28000	R	ug/kg		-		ug/kg		220	R	ug/kg		-		ug/kg	
3-Chloropropene	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Acetonitrile	14000	U	ug/kg	14000	-		ug/kg		110	U	ug/kg	110	-		ug/kg	
Chloroprene	28000	U	ug/kg	28000	-		ug/kg		220	U	ug/kg	220	-		ug/kg	
Methacrylonitrile	690	U	ug/kg	690	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Methyl methacrylate	1400	U	ug/kg	1400	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Pentachloroethane	1400	U	ug/kg	1400	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Propionitrile	14000	U	ug/kg	14000	-		ug/kg		110	U	ug/kg	110	-		ug/kg	
Vinyl acetate	1400	U	ug/kg	1400	-		ug/kg		11	U	ug/kg	11	-		ug/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:	23827002				23827002RE				34889002				34884005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT8MS4S8				MPT8MS4S8				MPT8MS4S8				28S85S02			
Collect Date:	14-JAN-93				14-JAN-93				14-JAN-93				13-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES ug/kg																
Chloromethane	1400	U	ug/kg	1400	1400	R	ug/kg		-		ug/kg		11	U	ug/kg	11
Bromomethane	1400	U	ug/kg	1400	1400	R	ug/kg		-		ug/kg		11	U	ug/kg	11
Vinyl chloride	1400	U	ug/kg	1400	1400	R	ug/kg		-		ug/kg		11	U	ug/kg	11
Chloroethane	1400	U	ug/kg	1400	1400	R	ug/kg		-		ug/kg		11	U	ug/kg	11
Methylene chloride	690	U	ug/kg	690	380	R	ug/kg		-		ug/kg		5	U	ug/kg	5
Acetone	2500	U	ug/kg	2500	2200	R	ug/kg		-		ug/kg		11	U	ug/kg	11
Carbon disulfide	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
1,1-Dichloroethane	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
1,1-Dichloroethene	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
1,2-Dichloroethene (total)	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
Chloroform	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
1,2-Dichloroethane	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
2-Butanone	1400	U	ug/kg	1400	1400	R	ug/kg		-		ug/kg		11	U	ug/kg	11
1,1,1-Trichloroethane	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
Carbon tetrachloride	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
Bromodichloromethane	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
1,2-Dichloropropane	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
cis-1,3-Dichloropropene	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
Trichloroethene	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
Dibromochloromethane	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
1,1,2-Trichloroethane	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
Benzene	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
trans-1,3-Dichloropropene	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
Bromoform	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
4-Methyl-2-pentanone	1400	U	ug/kg	1400	1400	R	ug/kg		-		ug/kg		11	U	ug/kg	11
2-Hexanone	1400	U	ug/kg	1400	1400	R	ug/kg		-		ug/kg		11	U	ug/kg	11
Tetrachloroethene	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
1,1,2,2-Tetrachloroethane	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
Toluene	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
Chlorobenzene	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
Ethylbenzene	470	J	ug/kg		340	R	ug/kg		-		ug/kg		5	U	ug/kg	5
Styrene	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
Xylenes (total)	1600		ug/kg		1400	R	ug/kg		-		ug/kg		5	U	ug/kg	5
Dichlorodifluoromethane	1400	U	ug/kg	1400	1400	R	ug/kg		-		ug/kg		11	U	ug/kg	11
Trichlorofluoromethane	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
1,3-Dichlorobenzene	690	U	ug/kg	690	690	R	ug/kg		37000	UJ	ug/kg		350	U	ug/kg	350
Acrolein	14000	U	ug/kg	14000	14000	R	ug/kg		-		ug/kg		110	U	ug/kg	110
Iodomethane	1400	U	ug/kg	1400	1400	R	ug/kg		-		ug/kg		11	U	ug/kg	11
1,4-Dichlorobenzene	690	U	ug/kg	690	690	R	ug/kg		37000	UJ	ug/kg		350	U	ug/kg	350
Acrylonitrile	14000	U	ug/kg	14000	14000	R	ug/kg		-		ug/kg		110	U	ug/kg	110

AR01 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:	23827002				23827002RE				34889002				34884005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT8MS4S8				MPT8MS4S8				MPT8MS4S8				2BS85S02			
Collect Date:	14-JAN-93				14-JAN-93				14-JAN-93				13-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
1,2-Dichlorobenzene	690	U	ug/kg	690	690	R	ug/kg		37000	UJ	ug/kg		350	U	ug/kg	350
2-Chloroethylvinylether	1400	R	ug/kg		1400	R	ug/kg		-		ug/kg		11	U	ug/kg	11
Ethyl methacrylate	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
1,2,3-Trichloropropane	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
trans-1,4-Dichloro-2-butene	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
Isobutyl alcohol	28000	U	ug/kg	28000	28000	R	ug/kg		-		ug/kg		210	U	ug/kg	210
1,1,1,2-Tetrachloroethane	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
1,2-Dibromo-3-chloropropane	1400	U	ug/kg	1400	1400	R	ug/kg		-		ug/kg		11	U	ug/kg	11
1,2-Dibromoethane	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
1,4-Dioxane	28000	R	ug/kg		28000	R	ug/kg		-		ug/kg		210	R	ug/kg	
3-Chloropropene	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
Acetonitrile	14000	U	ug/kg	14000	14000	R	ug/kg		-		ug/kg		110	U	ug/kg	110
Chloroprene	28000	U	ug/kg	28000	28000	R	ug/kg		-		ug/kg		210	U	ug/kg	210
Methacrylonitrile	690	U	ug/kg	690	690	R	ug/kg		-		ug/kg		5	U	ug/kg	5
Methyl methacrylate	1400	U	ug/kg	1400	1400	R	ug/kg		-		ug/kg		11	U	ug/kg	11
Pentachloroethane	1400	U	ug/kg	1400	1400	R	ug/kg		-		ug/kg		11	U	ug/kg	11
Propionitrile	14000	U	ug/kg	14000	14000	R	ug/kg		-		ug/kg		110	U	ug/kg	110
Vinyl acetate	1400	U	ug/kg	1400	1400	R	ug/kg		-		ug/kg		11	U	ug/kg	11

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:		34884006				34901002				34901003				34915004			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		2BS85DD79				MPT8MS6S2				MPT8MS6S7				MPT8MS7S2			
Collect Date:		13-JAN-93				15-JAN-93				15-JAN-93				18-JAN-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/kg																
Chloromethane		12	U	ug/kg	12	11	U	ug/kg	11	13	U	ug/kg	13	11	U	ug/kg	11
Bromomethane		12	U	ug/kg	12	11	U	ug/kg	11	13	U	ug/kg	13	11	U	ug/kg	11
Vinyl chloride		12	U	ug/kg	12	11	U	ug/kg	11	13	U	ug/kg	13	11	U	ug/kg	11
Chloroethane		12	U	ug/kg	12	11	U	ug/kg	11	13	U	ug/kg	13	11	U	ug/kg	11
Methylene chloride		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	10	U	ug/kg	10
Acetone		16	U	ug/kg	16	11	U	ug/kg	11	13	U	ug/kg	13	13	U	ug/kg	13
Carbon disulfide		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
1,1-Dichloroethane		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
1,1-Dichloroethene		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
1,2-Dichloroethene (total)		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Chloroform		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
1,2-Dichloroethane		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
2-Butanone		12	U	ug/kg	12	11	U	ug/kg	11	13	U	ug/kg	13	11	U	ug/kg	11
1,1,1-Trichloroethane		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Carbon tetrachloride		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Bromodichloromethane		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
1,2-Dichloropropane		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
cis-1,3-Dichloropropene		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Trichloroethene		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Dibromochloromethane		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
1,1,2-Trichloroethane		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Benzene		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
trans-1,3-Dichloropropene		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Bromoform		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
4-Methyl-2-pentanone		12	U	ug/kg	12	11	U	ug/kg	11	13	U	ug/kg	13	11	U	ug/kg	11
2-Hexanone		12	U	ug/kg	12	11	U	ug/kg	11	13	U	ug/kg	13	11	U	ug/kg	11
Tetrachloroethene		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
1,1,2,2-Tetrachloroethane		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Toluene		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Chlorobenzene		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Ethylbenzene		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Styrene		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Xylenes (total)		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Dichlorodifluoromethane		12	U	ug/kg	12	11	U	ug/kg	11	13	U	ug/kg	13	11	U	ug/kg	11
Trichlorofluoromethane		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
1,3-Dichlorobenzene		400	U	ug/kg	400	350	U	ug/kg	350	6	U	ug/kg	6	6	U	ug/kg	6
Acrolein		120	U	ug/kg	120	110	U	ug/kg	110	130	U	ug/kg	130	110	U	ug/kg	110
Iodomethane		12	U	ug/kg	12	11	U	ug/kg	11	13	U	ug/kg	13	11	U	ug/kg	11
1,4-Dichlorobenzene		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	6	U	ug/kg	6
Acrylonitrile		120	U	ug/kg	120	110	U	ug/kg	110	130	U	ug/kg	130	110	U	ug/kg	110

AR01 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:	34884006				34901002				34901003				34915004			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	28S85DD79				MPT8MS6S2				MPT8MS6S7				MPT8MS7S2			
Collect Date:	13-JAN-93				15-JAN-93				15-JAN-93				18-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
1,2-Dichlorobenzene	400	U	ug/kg	400	5	U	ug/kg	5	420	U	ug/kg	420	6	U	ug/kg	6
2-Chloroethylvinylether	12	U	ug/kg	12	11	U	ug/kg	11	13	U	ug/kg	13	11	R	ug/kg	
Ethyl methacrylate	6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
1,2,3-Trichloropropane	6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
trans-1,4-Dichloro-2-butene	6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Isobutyl alcohol	240	R	ug/kg		210	R	ug/kg		250	R	ug/kg		230	U	ug/kg	230
1,1,1,2-Tetrachloroethane	6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
1,2-Dibromo-3-chloropropane	12	U	ug/kg	12	11	U	ug/kg	11	13	U	ug/kg	13	11	U	ug/kg	11
1,2-Dibromoethane	6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
1,4-Dioxane	240	R	ug/kg		210	R	ug/kg		250	R	ug/kg		230	U	ug/kg	230
3-Chloropropene	6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Acetonitrile	120	U	ug/kg	120	110	U	ug/kg	110	130	U	ug/kg	130	110	U	ug/kg	110
Chloroprene	240	U	ug/kg	240	210	U	ug/kg	210	250	U	ug/kg	250	230	U	ug/kg	230
Methacrylonitrile	6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Methyl methacrylate	12	U	ug/kg	12	11	U	ug/kg	11	13	U	ug/kg	13	11	U	ug/kg	11
Pentachloroethane	12	U	ug/kg	12	11	U	ug/kg	11	13	U	ug/kg	13	11	U	ug/kg	11
Propionitrile	120	U	ug/kg	120	110	U	ug/kg	110	130	U	ug/kg	130	110	U	ug/kg	110
Vinyl acetate	12	U	ug/kg	12	11	U	ug/kg	11	13	U	ug/kg	13	11	U	ug/kg	11

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:	34915004RE				23888001				34915005				34915006			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT8MS7S2				MPT8MS7S9				MPT8MS7S9				MPT8MS8S2			
Collect Date:	18-JAN-93				18-JAN-93				18-JAN-93				18-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES ug/kg																
Chloromethane	11	R	ug/kg		61	U	ug/kg	61	-		ug/kg		11	U	ug/kg	11
Bromomethane	11	R	ug/kg		61	U	ug/kg	61	-		ug/kg		11	U	ug/kg	11
Vinyl chloride	11	R	ug/kg		61	U	ug/kg	61	-		ug/kg		11	U	ug/kg	11
Chloroethane	11	R	ug/kg		61	U	ug/kg	61	-		ug/kg		11	U	ug/kg	11
Methylene chloride	8	R	ug/kg		61	U	ug/kg	61	-		ug/kg		6	U	ug/kg	6
Acetone	7	R	ug/kg		130	U	ug/kg	130	-		ug/kg		16	U	ug/kg	16
Carbon disulfide	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
1,1-Dichloroethane	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
1,1-Dichloroethene	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
1,2-Dichloroethene (total)	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
Chloroform	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
1,2-Dichloroethane	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
2-Butanone	11	R	ug/kg		61	U	ug/kg	61	-		ug/kg		11	U	ug/kg	11
1,1,1-Trichloroethane	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
Carbon tetrachloride	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
Bromodichloromethane	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
1,2-Dichloropropane	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
cis-1,3-Dichloropropene	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
Trichloroethene	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
Dibromochloromethane	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
1,1,2-Trichloroethane	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
Benzene	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
trans-1,3-Dichloropropene	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
Bromoform	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
4-Methyl-2-pentanone	11	R	ug/kg		61	U	ug/kg	61	-		ug/kg		11	U	ug/kg	11
2-Hexanone	11	R	ug/kg		61	U	ug/kg	61	-		ug/kg		11	U	ug/kg	11
Tetrachloroethene	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
1,1,2,2-Tetrachloroethane	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
Toluene	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
Chlorobenzene	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
Ethylbenzene	6	R	ug/kg		130	J	ug/kg		-		ug/kg		5	U	ug/kg	5
Styrene	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
Xylenes (total)	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
Dichlorodifluoromethane	11	R	ug/kg		61	U	ug/kg	61	-		ug/kg		11	U	ug/kg	11
Trichlorofluoromethane	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
1,3-Dichlorobenzene	6	R	ug/kg		30	U	ug/kg	30	31000	U	ug/kg	31000	5	U	ug/kg	5
Acrolein	110	R	ug/kg		610	U	ug/kg	610	-		ug/kg		110	U	ug/kg	110
Iodomethane	11	R	ug/kg		61	U	ug/kg	61	-		ug/kg		11	U	ug/kg	11
1,4-Dichlorobenzene	6	R	ug/kg		30	U	ug/kg	30	31000	U	ug/kg	31000	5	U	ug/kg	5
Acrylonitrile	110	R	ug/kg		610	U	ug/kg	610	-		ug/kg		110	U	ug/kg	110

AR01 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:	34915004RE				23888001				34915005				34915006			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT8MS7S2				MPT8MS7S9				MPT8MS7S9				MPT8MS8S2			
Collect Date:	18-JAN-93				18-JAN-93				18-JAN-93				18-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
1,2-Dichlorobenzene	6	R	ug/kg		30	U	ug/kg	30	31000	U	ug/kg	31000	5	U	ug/kg	5
2-Chloroethylvinylether	11	R	ug/kg		61	U	ug/kg	61	-		ug/kg		11	R	ug/kg	
Ethyl methacrylate	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
1,2,3-Trichloropropane	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
trans-1,4-Dichloro-2-butene	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
Isobutyl alcohol	230	R	ug/kg		1200	U	ug/kg	1200	-		ug/kg		210	U	ug/kg	210
1,1,1,2-Tetrachloroethane	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
1,2-Dibromo-3-chloropropane	11	R	ug/kg		61	U	ug/kg	61	-		ug/kg		11	U	ug/kg	11
1,2-Dibromoethane	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
1,4-Dioxane	230	R	ug/kg		1200	R	ug/kg		-		ug/kg		210	R	ug/kg	
3-Chloropropene	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
Acetonitrile	110	R	ug/kg		610	U	ug/kg	610	-		ug/kg		110	U	ug/kg	110
Chloroprene	230	R	ug/kg		1200	U	ug/kg	1200	-		ug/kg		210	U	ug/kg	210
Methacrylonitrile	6	R	ug/kg		30	U	ug/kg	30	-		ug/kg		5	U	ug/kg	5
Methyl methacrylate	11	R	ug/kg		61	U	ug/kg	61	-		ug/kg		11	U	ug/kg	11
Pentachloroethane	11	R	ug/kg		61	U	ug/kg	61	-		ug/kg		11	U	ug/kg	11
Propionitrile	110	R	ug/kg		610	U	ug/kg	610	-		ug/kg		110	U	ug/kg	110
Vinyl acetate	11	R	ug/kg		61	U	ug/kg	61	-		ug/kg		11	U	ug/kg	11

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:	34915007				M7789001				M7789002				M7789003			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT8MS8S9				08BS01316				08BS01511				08BS01511D			
Collect Date:	18-JAN-93				26-AUG-94				30-AUG-94				30-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES ug/kg																
Chloromethane	11	U	ug/kg	11	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
Bromomethane	11	U	ug/kg	11	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
Vinyl chloride	11	U	ug/kg	11	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
Chloroethane	11	U	ug/kg	11	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
Methylene chloride	7	U	ug/kg	7	5.8	U	ug/kg	5.8	5.9	U	ug/kg	5.9	5.9	U	ug/kg	5.9
Acetone	11	U	ug/kg	11	-		ug/kg		-		ug/kg		-		ug/kg	
Carbon disulfide	6	U	ug/kg	6	-		ug/kg		-		ug/kg		-		ug/kg	
1,1-Dichloroethane	6	U	ug/kg	6	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
1,1-Dichloroethene	6	U	ug/kg	6	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
1,2-Dichloroethene (total)	6	U	ug/kg	6	-		ug/kg		-		ug/kg		-		ug/kg	
Chloroform	6	U	ug/kg	6	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
1,2-Dichloroethane	6	U	ug/kg	6	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
2-Butanone	11	U	ug/kg	11	-		ug/kg		-		ug/kg		-		ug/kg	
1,1,1-Trichloroethane	6	U	ug/kg	6	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
Carbon tetrachloride	6	U	ug/kg	6	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
Bromodichloromethane	6	U	ug/kg	6	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
1,2-Dichloropropane	6	U	ug/kg	6	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
cis-1,3-Dichloropropene	6	U	ug/kg	6	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
Trichloroethene	6	U	ug/kg	6	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
Dibromochloromethane	6	U	ug/kg	6	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
1,1,2-Trichloroethane	6	U	ug/kg	6	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
Benzene	6	U	ug/kg	6	-		ug/kg		-		ug/kg		-		ug/kg	
trans-1,3-Dichloropropene	6	U	ug/kg	6	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
Bromoform	6	U	ug/kg	6	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
4-Methyl-2-pentanone	11	U	ug/kg	11	-		ug/kg		-		ug/kg		-		ug/kg	
2-Hexanone	11	U	ug/kg	11	-		ug/kg		-		ug/kg		-		ug/kg	
Tetrachloroethene	6	U	ug/kg	6	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
1,1,2,2-Tetrachloroethane	6	U	ug/kg	6	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
Toluene	6	U	ug/kg	6	-		ug/kg		-		ug/kg		-		ug/kg	
Chlorobenzene	6	U	ug/kg	6	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
Ethylbenzene	6	U	ug/kg	6	-		ug/kg		-		ug/kg		-		ug/kg	
Styrene	6	U	ug/kg	6	-		ug/kg		-		ug/kg		-		ug/kg	
Xylenes (total)	6	U	ug/kg	6	-		ug/kg		-		ug/kg		-		ug/kg	
Dichlorodifluoromethane	11	U	ug/kg	11	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
Trichlorofluoromethane	6	U	ug/kg	6	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
1,3-Dichlorobenzene	370	U	ug/kg	370	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
Acrolein	110	U	ug/kg	110	-		ug/kg		-		ug/kg		-		ug/kg	
Iodomethane	11	U	ug/kg	11	-		ug/kg		-		ug/kg		-		ug/kg	
1,4-Dichlorobenzene	6	U	ug/kg	6	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
Acrylonitrile	110	U	ug/kg	110	-		ug/kg		-		ug/kg		-		ug/kg	

AR01 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:	34915007				M7789001				M7789002				M7789003			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT8MS8S9				08BS01316				08BS01511				08BS01511D			
Collect Date:	18-JAN-93				26-AUG-94				30-AUG-94				30-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	6	U	ug/kg	6	-		ug/kg		-		ug/kg		-		ug/kg	
1,2-Dichlorobenzene	370	U	ug/kg	370	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
2-Chloroethylvinylether	11	R	ug/kg		1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2	1.2	U	ug/kg	1.2
Ethyl methacrylate	6	U	ug/kg	6	-		ug/kg		-		ug/kg		-		ug/kg	
1,2,3-Trichloropropane	6	U	ug/kg	6	-		ug/kg		-		ug/kg		-		ug/kg	
trans-1,4-Dichloro-2-butene	6	U	ug/kg	6	-		ug/kg		-		ug/kg		-		ug/kg	
Isobutyl alcohol	220	U	ug/kg	220	-		ug/kg		-		ug/kg		-		ug/kg	
1,1,1,2-Tetrachloroethane	6	U	ug/kg	6	-		ug/kg		-		ug/kg		-		ug/kg	
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11	-		ug/kg		-		ug/kg		-		ug/kg	
1,2-Dibromoethane	6	U	ug/kg	6	-		ug/kg		-		ug/kg		-		ug/kg	
1,4-Dioxane	220	R	ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
3-Chloropropene	6	U	ug/kg	6	-		ug/kg		-		ug/kg		-		ug/kg	
Acetonitrile	4	J	ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Chloroprene	220	U	ug/kg	220	-		ug/kg		-		ug/kg		-		ug/kg	
Methacrylonitrile	6	U	ug/kg	6	-		ug/kg		-		ug/kg		-		ug/kg	
Methyl methacrylate	11	U	ug/kg	11	-		ug/kg		-		ug/kg		-		ug/kg	
Pentachloroethane	11	U	ug/kg	11	-		ug/kg		-		ug/kg		-		ug/kg	
Propionitrile	110	U	ug/kg	110	-		ug/kg		-		ug/kg		-		ug/kg	
Vinyl acetate	11	U	ug/kg	11	-		ug/kg		-		ug/kg		-		ug/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:	34901001				34889001				34889002				34884005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT8BS3S7				MPT8MS4S2				MPT8MS4S8				28S85S02			
Collect Date:	15-JAN-93				14-JAN-93				14-JAN-93				13-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/kg																
N-Nitrosodimethylamine	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Phenol	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Aniline	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
bis (2-Chloroethyl) ether	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Benzyl Alcohol	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
2-Methylphenol	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
bis(2-Chloroisopropyl)ether	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
N-Nitroso-di-n-propylamine	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Hexachloroethane	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Nitrobenzene	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Isophorone	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
2-Nitrophenol	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
2,4-Dimethylphenol	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Benzoic acid	370000	U	ug/kg	370000	1700	U	ug/kg	1700	180000	UJ	ug/kg		1700	U	ug/kg	1700
bis(2-Chloroethoxy)methane	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
2,4-Dichlorophenol	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
1,2,4-Trichlorobenzene	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Naphthalene	39000	J	ug/kg		350	U	ug/kg	350	22000	J	ug/kg		350	U	ug/kg	350
4-Chloroaniline	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Hexachlorobutadiene	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
4-Chloro-3-methylphenol	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
2-Methylnaphthalene	170000		ug/kg		350	U	ug/kg	350	83000	J	ug/kg		350	U	ug/kg	350
Hexachlorocyclopentadiene	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
2,4,6-Trichlorophenol	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Dimethylphthalate	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
2,4,5-Trichlorophenol	370000	U	ug/kg	370000	1700	U	ug/kg	1700	180000	UJ	ug/kg		1700	U	ug/kg	1700
2-Chloronaphthalene	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
2-Nitroaniline	370000	U	ug/kg	370000	1700	U	ug/kg	1700	180000	UJ	ug/kg		1700	U	ug/kg	1700
Acenaphthylene	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
2,6-Dinitrotoluene	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
3-Nitroaniline	370000	U	ug/kg	370000	1700	U	ug/kg	1700	180000	UJ	ug/kg		1700	U	ug/kg	1700
Acenaphthene	23000	J	ug/kg		350	U	ug/kg	350	6300	J	ug/kg		350	U	ug/kg	350
2,4-Dinitrophenol	370000	U	ug/kg	370000	1700	U	ug/kg	1700	180000	UJ	ug/kg		1700	U	ug/kg	1700
4-Nitrophenol	370000	U	ug/kg	370000	1700	U	ug/kg	1700	180000	UJ	ug/kg		1700	U	ug/kg	1700
Dibenzofuran	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
2,4-Dinitrotoluene	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Diethylphthalate	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
4-Chlorophenyl-phenylether	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Fluorene	31000	J	ug/kg		350	U	ug/kg	350	13000	J	ug/kg		350	U	ug/kg	350
4-Nitroaniline	370000	U	ug/kg	370000	1700	U	ug/kg	1700	180000	UJ	ug/kg		1700	U	ug/kg	1700
4,6-Dinitro-2-methylphenol	370000	U	ug/kg	370000	1700	U	ug/kg	1700	180000	UJ	ug/kg		1700	U	ug/kg	1700
N-Nitrosodiphenylamine (1)	22000	J	ug/kg		350	U	ug/kg	350	8000	J	ug/kg		350	U	ug/kg	350
1,2-Diphenylhydrazine	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
4-Bromophenyl-phenylether	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Hexachlorobenzene	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Pentachlorophenol	370000	U	ug/kg	370000	1700	U	ug/kg	1700	180000	UJ	ug/kg		1700	U	ug/kg	1700
Phenanthrene	42000	J	ug/kg		350	U	ug/kg	350	19000	J	ug/kg		350	U	ug/kg	350
Anthracene	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Di-n-Butylphthalate	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Fluoranthene	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350

AR01 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:	34901001				34889001				34889002				34884005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT8BS3S7				MPT8MS4S2				MPT8MS4S8				2BS85S02			
Collect Date:	15-JAN-93				14-JAN-93				14-JAN-93				13-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Pyrene	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Butylbenzylphthalate	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
3,3'-Dichlorobenzidine	150000	U	ug/kg	150000	700	U	ug/kg	700	74000	UJ	ug/kg		690	U	ug/kg	690
Benzo(a)anthracene	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Chrysene	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
bis(2-Ethylhexyl)phthalate	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Di-n-octylphthalate	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Benzo(b)fluoranthene	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Benzo(k)fluoranthene	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Benzo(a)pyrene	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Indeno(1,2,3-cd)pyrene	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Dibenz(a,h)anthracene	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Benzo(g,h,i)perylene	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
2-Picoline	370000	U	ug/kg	370000	1700	U	ug/kg	1700	180000	UJ	ug/kg		1700	U	ug/kg	1700
Methyl methanesulfonate	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Ethyl methanesulfonate	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Acetophenone	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
N-Nitrosopiperidine	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Phenyl-tert-butylamine	370000	U	ug/kg	370000	1700	U	ug/kg	1700	180000	UJ	ug/kg		1700	U	ug/kg	1700
2,6-Dichlorophenol	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
N-Nitroso-di-n-butylamine	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
N-Nitrosodiethylamine	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
N-Nitrosopyrrolidine	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Benzidine	370000	U	ug/kg	370000	1700	U	ug/kg	1700	180000	UJ	ug/kg		1700	U	ug/kg	1700
1,2,4,5-Tetrachlorobenzene	370000	U	ug/kg	370000	1700	U	ug/kg	1700	180000	UJ	ug/kg		1700	U	ug/kg	1700
Pentachlorobenzene	370000	U	ug/kg	370000	1700	U	ug/kg	1700	180000	UJ	ug/kg		1700	U	ug/kg	1700
1-Naphthylamine	370000	U	ug/kg	370000	1700	U	ug/kg	1700	180000	UJ	ug/kg		1700	U	ug/kg	1700
2-Naphthylamine	370000	U	ug/kg	370000	1700	U	ug/kg	1700	180000	UJ	ug/kg		1700	U	ug/kg	1700
2,3,4,6-Tetrachlorophenol	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Phenacetin	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
4-Aminobiphenyl	370000	U	ug/kg	370000	1700	U	ug/kg	1700	180000	UJ	ug/kg		1700	U	ug/kg	1700
Pentachloronitrobenzene	370000	U	ug/kg	370000	1700	U	ug/kg	1700	180000	UJ	ug/kg		1700	U	ug/kg	1700
Pronamide	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
p-(Dimethylamino)azobenzene	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
7,12-Dimethylbenz(A)Anthracene	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
3-Methylcholanthrene	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Pyridine	370000	U	ug/kg	370000	1700	U	ug/kg	1700	180000	UJ	ug/kg		1700	U	ug/kg	1700
N-Nitrosomethylethylamine	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
N-Nitrosomorpholine	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
o-Toluidine	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Hexachloropropene	370000	U	ug/kg	370000	1700	U	ug/kg	1700	180000	UJ	ug/kg		1700	U	ug/kg	1700
p-Phenylenediamine	3700000	R	ug/kg		17000	R	ug/kg		1800000	R	ug/kg		17000	R	ug/kg	
Safrole	370000	U	ug/kg	370000	1700	U	ug/kg	1700	180000	UJ	ug/kg		1700	U	ug/kg	1700
Isosafrole	370000	U	ug/kg	370000	1700	U	ug/kg	1700	180000	UJ	ug/kg		1700	U	ug/kg	1700
1,4-Naphthoquinone	7600000	U	ug/kg	7600000	34000	U	ug/kg	34000	3700000	UJ	ug/kg		34000	U	ug/kg	34000
1,3-Dinitrobenzene	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
5-Nitro-o-toluidine	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
1,3,5-Trinitrobenzene	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
4-Nitroquinoline-1-oxide	3700000	R	ug/kg		17000	U	ug/kg	17000	1800000	R	ug/kg		17000	U	ug/kg	17000
Methapyrilene	370000	U	ug/kg	370000	1700	U	ug/kg	1700	180000	UJ	ug/kg		1700	U	ug/kg	1700
3,3'-Dimethylbenzidine	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
Hexachlorophene	3700000	U	ug/kg	3700000	17000	U	ug/kg	17000	1800000	UJ	ug/kg		17000	U	ug/kg	17000

ARO1 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:	34901001				34889001				34889002				34884005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT8BS3S7				MPT8MS4S2				MPT8MS4S8				2BS85S02			
Collect Date:	15-JAN-93				14-JAN-93				14-JAN-93				13-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Aramite	370000	R	ug/kg		1700	R	ug/kg		180000	R	ug/kg		1700	R	ug/kg	
2-Chlorophenol	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350
3- & 4-Methylphenol (2)	-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Hexachloropropene	370000	U	ug/kg	370000	1700	U	ug/kg	1700	180000	UJ	ug/kg		1700	U	ug/kg	1700
2-Acetylaminofluorene	76000	U	ug/kg	76000	350	U	ug/kg	350	37000	UJ	ug/kg		350	U	ug/kg	350

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:		34884006				34901002				34901003				34915004			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		2BS85DD79				MPT8MS6S2				MPT8MS6S7				MPT8MS7S2			
Collect Date:		13-JAN-93				15-JAN-93				15-JAN-93				18-JAN-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg																
N-Nitrosodimethylamine		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Phenol		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Aniline		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
bis (2-Chloroethyl) ether		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Benzyl Alcohol		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
2-Methylphenol		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
bis(2-Chloroisopropyl)ether		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
N-Nitroso-di-n-propylamine		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Hexachloroethane		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Nitrobenzene		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Isophorone		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
2-Nitrophenol		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
2,4-Dimethylphenol		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Benzoic acid		65	J	ug/kg		1700	U	ug/kg	1700	2000	U	ug/kg	2000	3700	U	ug/kg	3700
bis(2-Chloroethoxy)methane		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
2,4-Dichlorophenol		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
1,2,4-Trichlorobenzene		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Naphthalene		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
4-Chloroaniline		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Hexachlorobutadiene		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
4-Chloro-3-methylphenol		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
2-Methylnaphthalene		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Hexachlorocyclopentadiene		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
2,4,6-Trichlorophenol		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Dimethylphthalate		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
2,4,5-Trichlorophenol		1900	U	ug/kg	1900	1700	U	ug/kg	1700	2000	U	ug/kg	2000	3700	U	ug/kg	3700
2-Chloronaphthalene		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
2-Nitroaniline		1900	U	ug/kg	1900	1700	U	ug/kg	1700	2000	U	ug/kg	2000	3700	U	ug/kg	3700
Acenaphthylene		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
2,6-Dinitrotoluene		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
3-Nitroaniline		1900	U	ug/kg	1900	1700	U	ug/kg	1700	2000	U	ug/kg	2000	3700	U	ug/kg	3700
Acenaphthene		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
2,4-Dinitrophenol		1900	U	ug/kg	1900	1700	U	ug/kg	1700	2000	U	ug/kg	2000	3700	U	ug/kg	3700
4-Nitrophenol		1900	U	ug/kg	1900	1700	U	ug/kg	1700	2000	U	ug/kg	2000	3700	U	ug/kg	3700
Dibenzofuran		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
2,4-Dinitrotoluene		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Diethylphthalate		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
4-Chlorophenyl-phenylether		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Fluorene		400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
4-Nitroaniline		1900	U	ug/kg	1900	1700	U	ug/kg	1700	2000	U	ug/kg	2000	3700	U	ug/kg	3700

AR01 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:	34884006				34901002				34901003				34915004			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	2BS85DD79				MPT8MS6S2				MPT8MS6S7				MPT8MS7S2			
Collect Date:	13-JAN-93				15-JAN-93				15-JAN-93				18-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	1900	U	ug/kg	1900	1700	U	ug/kg	1700	2000	U	ug/kg	2000	3700	U	ug/kg	3700
N-Nitrosodiphenylamine (1)	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
1,2-Diphenylhydrazine	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
4-Bromophenyl-phenylether	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Hexachlorobenzene	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Pentachlorophenol	1900	U	ug/kg	1900	1700	U	ug/kg	1700	2000	U	ug/kg	2000	3700	U	ug/kg	3700
Phenanthrene	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Anthracene	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Di-n-Butylphthalate	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Fluoranthene	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Pyrene	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Butylbenzylphthalate	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
3,3'-Dichlorobenzidine	800	U	ug/kg	800	700	U	ug/kg	700	840	U	ug/kg	840	1500	U	ug/kg	1500
Benzo(a)anthracene	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Chrysene	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
bis(2-Ethylhexyl)phthalate	400	U	ug/kg	400	57	J	ug/kg		420	U	ug/kg	420	760	U	ug/kg	760
Di-n-octylphthalate	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Benzo(b)fluoranthene	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Benzo(k)fluoranthene	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Benzo(a)pyrene	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Indeno(1,2,3-cd)pyrene	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Dibenz(a,h)anthracene	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Benzo(g,h,i)perylene	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
2-Picoline	1900	U	ug/kg	1900	1700	U	ug/kg	1700	2000	U	ug/kg	2000	3700	U	ug/kg	3700
Methyl methanesulfonate	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Ethyl methanesulfonate	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Acetophenone	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
N-Nitrosopiperidine	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Phenyl-tert-butylamine	1900	U	ug/kg	1900	1700	U	ug/kg	1700	2000	U	ug/kg	2000	3700	U	ug/kg	3700
2,6-Dichlorophenol	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
N-Nitroso-di-n-butylamine	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
N-Nitrosodiethylamine	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
N-Nitrosopyrrolidine	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Benzidine	1900	U	ug/kg	1900	1700	U	ug/kg	1700	2000	U	ug/kg	2000	3700	U	ug/kg	3700
1,2,4,5-Tetrachlorobenzene	1900	U	ug/kg	1900	1700	U	ug/kg	1700	2000	U	ug/kg	2000	3700	U	ug/kg	3700
Pentachlorobenzene	1900	U	ug/kg	1900	1700	U	ug/kg	1700	2000	U	ug/kg	2000	3700	U	ug/kg	3700
1-Naphthylamine	1900	U	ug/kg	1900	1700	U	ug/kg	1700	2000	U	ug/kg	2000	3700	U	ug/kg	3700
2-Naphthylamine	1900	U	ug/kg	1900	1700	U	ug/kg	1700	2000	U	ug/kg	2000	3700	U	ug/kg	3700
2,3,4,6-Tetrachlorophenol	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Phenacetin	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
4-Aminobiphenyl	1900	U	ug/kg	1900	1700	U	ug/kg	1700	2000	U	ug/kg	2000	3700	U	ug/kg	3700
Pentachloronitrobenzene	1900	U	ug/kg	1900	1700	U	ug/kg	1700	2000	U	ug/kg	2000	3700	U	ug/kg	3700
Pronamide	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
p-(Dimethylamino)azobenzene	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
7,12-Dimethylbenz(A)Anthracene	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
3-Methylcholanthrene	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Pyridine	1900	U	ug/kg	1900	1700	U	ug/kg	1700	2000	U	ug/kg	2000	3700	U	ug/kg	3700
N-Nitrosomethylethylamine	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
N-Nitrosomorpholine	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
o-Toluidine	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Hexachloropropene	1900	U	ug/kg	1900	1700	U	ug/kg	1700	2000	U	ug/kg	2000	3700	U	ug/kg	3700
p-Phenylenediamine	18000	R	ug/kg		17000	R	ug/kg		19000	R	ug/kg		29000	R	ug/kg	

AR01 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:	34884006				34901002				34901003				34915004			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	2BS85DD79				MPT8MS6S2				MPT8MS6S7				MPT8MS7S2			
Collect Date:	13-JAN-93				15-JAN-93				15-JAN-93				18-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	1900	U	ug/kg	1900	1700	U	ug/kg	1700	2000	U	ug/kg	2000	3700	U	ug/kg	3700
Isosafrole	1900	U	ug/kg	1900	1700	U	ug/kg	1700	2000	U	ug/kg	2000	3700	U	ug/kg	3700
1,4-Naphthoquinone	35000	U	ug/kg	35000	35000	U	ug/kg	35000	36000	U	ug/kg	36000	46000	U	ug/kg	46000
1,3-Dinitrobenzene	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
5-Nitro-o-toluidine	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
1,3,5-Trinitrobenzene	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
4-Nitroquinoline-1-oxide	18000	U	ug/kg	18000	17000	U	ug/kg	17000	19000	U	ug/kg	19000	29000	R	ug/kg	
Methapyrilene	1900	U	ug/kg	1900	1700	U	ug/kg	1700	2000	U	ug/kg	2000	3700	U	ug/kg	3700
3,3'-Dimethylbenzidine	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
Hexachlorophene	18000	U	ug/kg	18000	17000	U	ug/kg	17000	19000	U	ug/kg	19000	29000	U	ug/kg	29000
Aramite	1900	R	ug/kg		1700	R	ug/kg		2000	R	ug/kg		3700	R	ug/kg	
2-Chlorophenol	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760
3- & 4-Methylphenol (2)	-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Hexachloropropene	1900	U	ug/kg	1900	1700	U	ug/kg	1700	2000	U	ug/kg	2000	3700	U	ug/kg	3700
2-Acetylaminofluorene	400	U	ug/kg	400	350	U	ug/kg	350	420	U	ug/kg	420	760	U	ug/kg	760

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:		34915005				34915006				34915007				M7789001		
Site		GROUP2				GROUP2				GROUP2				GROUP2		
Locator		MPT8MS7S9				MPT8MS8S2				MPT8MS8S9				08BS01316		
Collect Date:		18-JAN-93				18-JAN-93				18-JAN-93				26-AUG-94		
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg																
N-Nitrosodimethylamine		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
Phenol		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
Aniline		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
bis (2-Chloroethyl) ether		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
Benzyl Alcohol		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
2-Methylphenol		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
bis(2-Chloroisopropyl)ether		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
N-Nitroso-di-n-propylamine		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
Hexachloroethane		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
Nitrobenzene		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
Isophorone		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
2-Nitrophenol		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
2,4-Dimethylphenol		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
Benzoic acid		150000	U	ug/kg	150000	3400	U	ug/kg	3400	1800	U	ug/kg	1800	-		ug/kg	
bis(2-Chloroethoxy)methane		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
2,4-Dichlorophenol		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
1,2,4-Trichlorobenzene		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
Naphthalene		27000	J	ug/kg		700	U	ug/kg	700	370	U	ug/kg	370	600		ug/kg	
4-Chloroaniline		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
Hexachlorobutadiene		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
4-Chloro-3-methylphenol		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
2-Methylnaphthalene		99000		ug/kg		700	U	ug/kg	700	370	U	ug/kg	370	2100		ug/kg	
Hexachlorocyclopentadiene		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
2,4,6-Trichlorophenol		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
Dimethylphthalate		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
2,4,5-Trichlorophenol		150000	U	ug/kg	150000	3400	U	ug/kg	3400	1800	U	ug/kg	1800	-		ug/kg	
2-Chloronaphthalene		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
2-Nitroaniline		150000	U	ug/kg	150000	3400	U	ug/kg	3400	1800	U	ug/kg	1800	-		ug/kg	
Acenaphthylene		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	600	U	ug/kg	600
2,6-Dinitrotoluene		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
3-Nitroaniline		150000	U	ug/kg	150000	3400	U	ug/kg	3400	1800	U	ug/kg	1800	-		ug/kg	
Acenaphthene		11000	J	ug/kg		700	U	ug/kg	700	370	U	ug/kg	370	600	U	ug/kg	600
2,4-Dinitrophenol		150000	U	ug/kg	150000	3400	U	ug/kg	3400	1800	U	ug/kg	1800	-		ug/kg	
4-Nitrophenol		150000	U	ug/kg	150000	3400	U	ug/kg	3400	1800	U	ug/kg	1800	-		ug/kg	
Dibenzofuran		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
2,4-Dinitrotoluene		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
Diethylphthalate		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
4-Chlorophenyl-phenylether		31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
Fluorene		17000	J	ug/kg		700	U	ug/kg	700	370	U	ug/kg	370	600	U	ug/kg	600
4-Nitroaniline		150000	U	ug/kg	150000	3400	U	ug/kg	3400	1800	U	ug/kg	1800	-		ug/kg	

AR01 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:	34915005				34915006				34915007				M7789001			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT8MS7S9				MPT8MS8S2				MPT8MS8S9				08BS01316			
Collect Date:	18-JAN-93				18-JAN-93				18-JAN-93				26-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	150000	U	ug/kg	150000	3400	U	ug/kg	3400	1800	U	ug/kg	1800	-		ug/kg	
N-Nitrosodiphenylamine (1)	10000	J	ug/kg		700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
1,2-Diphenylhydrazine	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
4-Bromophenyl-phenylether	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
Hexachlorobenzene	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
Pentachlorophenol	150000	U	ug/kg	150000	3400	U	ug/kg	3400	1800	U	ug/kg	1800	-		ug/kg	
Phenanthrene	23000	J	ug/kg		700	U	ug/kg	700	370	U	ug/kg	370	600	U	ug/kg	600
Anthracene	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	600	U	ug/kg	600
Di-n-Butylphthalate	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
Fluoranthene	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	600	U	ug/kg	600
Pyrene	3300	J	ug/kg		700	U	ug/kg	700	370	U	ug/kg	370	600	U	ug/kg	600
Butylbenzylphthalate	31000	U	ug/kg	31000	170	J	ug/kg		370	U	ug/kg	370	-		ug/kg	
3,3'-Dichlorobenzidine	63000	U	ug/kg	63000	1400	U	ug/kg	1400	740	U	ug/kg	740	-		ug/kg	
Benzo(a)anthracene	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	600	U	ug/kg	600
Chrysene	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	600	U	ug/kg	600
bis(2-Ethylhexyl)phthalate	31000	U	ug/kg	31000	880		ug/kg		370	U	ug/kg	370	-		ug/kg	
Di-n-octylphthalate	31000	U	ug/kg	31000	4000		ug/kg		370	U	ug/kg	370	-		ug/kg	
Benzo(b)fluoranthene	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	600	U	ug/kg	600
Benzo(k)fluoranthene	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	600	U	ug/kg	600
Benzo(a)pyrene	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	600	U	ug/kg	600
Indeno(1,2,3-cd)pyrene	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	600	U	ug/kg	600
Dibenz(a,h)anthracene	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	600	U	ug/kg	600
Benzo(g,h,i)perylene	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	600	U	ug/kg	600
2-Picoline	150000	U	ug/kg	150000	3400	U	ug/kg	3400	1800	U	ug/kg	1800	-		ug/kg	
Methyl methanesulfonate	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
Ethyl methanesulfonate	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
Acetophenone	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
N-Nitrosopiperidine	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
Phenyl-tert-butylamine	150000	U	ug/kg	150000	3400	U	ug/kg	3400	1800	U	ug/kg	1800	-		ug/kg	
2,6-Dichlorophenol	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
N-Nitroso-di-n-butylamine	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
N-Nitrosodiethylamine	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
N-Nitrosopyrrolidine	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
Benzidine	150000	U	ug/kg	150000	3400	U	ug/kg	3400	1800	U	ug/kg	1800	-		ug/kg	
1,2,4,5-Tetrachlorobenzene	150000	U	ug/kg	150000	3400	U	ug/kg	3400	1800	U	ug/kg	1800	-		ug/kg	
Pentachlorobenzene	150000	U	ug/kg	150000	3400	U	ug/kg	3400	1800	U	ug/kg	1800	-		ug/kg	
1-Naphthylamine	150000	U	ug/kg	150000	3400	U	ug/kg	3400	1800	U	ug/kg	1800	-		ug/kg	
2-Naphthylamine	150000	U	ug/kg	150000	3400	U	ug/kg	3400	1800	U	ug/kg	1800	-		ug/kg	
2,3,4,6-Tetrachlorophenol	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
Phenacetin	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
4-Aminobiphenyl	150000	U	ug/kg	150000	3400	U	ug/kg	3400	1800	U	ug/kg	1800	-		ug/kg	
Pentachloronitrobenzene	150000	U	ug/kg	150000	3400	U	ug/kg	3400	1800	U	ug/kg	1800	-		ug/kg	
Pronamide	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
p-(Dimethylamino)azobenzene	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
7,12-Dimethylbenz(A)Anthracene	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
3-Methylcholanthrene	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
Pyridine	150000	U	ug/kg	150000	3400	U	ug/kg	3400	1800	U	ug/kg	1800	-		ug/kg	
N-Nitrosomethylethylamine	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
N-Nitrosomorpholine	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
o-Toluidine	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
Hexachloropropene	150000	U	ug/kg	150000	3400	U	ug/kg	3400	1800	U	ug/kg	1800	-		ug/kg	
p-Phenylenediamine	1500000	R	ug/kg		27000	R	ug/kg		17000	R	ug/kg		-		ug/kg	

AR01 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:	34915005				34915006				34915007				M7789001			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT8MS7S9				MPT8MS8S2				MPT8MS8S9				08BS01316			
Collect Date:	18-JAN-93				18-JAN-93				18-JAN-93				26-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	150000	U	ug/kg	150000	3400	U	ug/kg	3400	1800	U	ug/kg	1800	-		ug/kg	
Isosafrole	150000	U	ug/kg	150000	3400	U	ug/kg	3400	1800	U	ug/kg	1800	-		ug/kg	
1,4-Naphthoquinone	3100000	U	ug/kg	3100000	44000	U	ug/kg	44000	34000	U	ug/kg	34000	-		ug/kg	
1,3-Dinitrobenzene	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
5-Nitro-o-toluidine	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
1,3,5-Trinitrobenzene	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
4-Nitroquinoline-1-oxide	1500000	U	ug/kg	1500000	27000	R	ug/kg		17000	R	ug/kg		-		ug/kg	
Methapyrilene	150000	U	ug/kg	150000	3400	U	ug/kg	3400	1800	U	ug/kg	1800	-		ug/kg	
3,3'-Dimethylbenzidine	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
Hexachlorophene	1500000	U	ug/kg	1500000	27000	U	ug/kg	27000	17000	U	ug/kg	17000	-		ug/kg	
Aramite	150000	R	ug/kg		3400	R	ug/kg		1800	R	ug/kg		-		ug/kg	
2-Chlorophenol	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	
3- & 4-Methylphenol (2)	-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Hexachloropropene	150000	U	ug/kg	150000	3400	U	ug/kg	3400	1800	U	ug/kg	1800	-		ug/kg	
2-Acetylaminofluorene	31000	U	ug/kg	31000	700	U	ug/kg	700	370	U	ug/kg	370	-		ug/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:		M7789002				M7789003			
Site		GROUP2				GROUP2			
Locator		08BS01511				08BS01511D			
Collect Date:		30-AUG-94				30-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg								
N-Nitrosodimethylamine		-		ug/kg		-		ug/kg	
Phenol		-		ug/kg		-		ug/kg	
Aniline		-		ug/kg		-		ug/kg	
bis (2-Chloroethyl) ether		-		ug/kg		-		ug/kg	
Benzyl Alcohol		-		ug/kg		-		ug/kg	
2-Methylphenol		-		ug/kg		-		ug/kg	
bis(2-Chloroisopropyl)ether		-		ug/kg		-		ug/kg	
N-Nitroso-di-n-propylamine		-		ug/kg		-		ug/kg	
Hexachloroethane		-		ug/kg		-		ug/kg	
Nitrobenzene		-		ug/kg		-		ug/kg	
Isophorone		-		ug/kg		-		ug/kg	
2-Nitrophenol		-		ug/kg		-		ug/kg	
2,4-Dimethylphenol		-		ug/kg		-		ug/kg	
Benzoic acid		-		ug/kg		-		ug/kg	
bis(2-Chloroethoxy)methane		-		ug/kg		-		ug/kg	
2,4-Dichlorophenol		-		ug/kg		-		ug/kg	
1,2,4-Trichlorobenzene		-		ug/kg		-		ug/kg	
Naphthalene		58	U	ug/kg	58	58	U	ug/kg	58
4-Chloroaniline		-		ug/kg		-		ug/kg	
Hexachlorobutadiene		-		ug/kg		-		ug/kg	
4-Chloro-3-methylphenol		-		ug/kg		-		ug/kg	
2-Methylnaphthalene		58	U	ug/kg	58	58	U	ug/kg	58
Hexachlorocyclopentadiene		-		ug/kg		-		ug/kg	
2,4,6-Trichlorophenol		-		ug/kg		-		ug/kg	
Dimethylphthalate		-		ug/kg		-		ug/kg	
2,4,5-Trichlorophenol		-		ug/kg		-		ug/kg	
2-Chloronaphthalene		-		ug/kg		-		ug/kg	
2-Nitroaniline		-		ug/kg		-		ug/kg	
Acenaphthylene		58	U	ug/kg	58	58	U	ug/kg	58
2,6-Dinitrotoluene		-		ug/kg		-		ug/kg	
3-Nitroaniline		-		ug/kg		-		ug/kg	
Acenaphthene		58	U	ug/kg	58	58	U	ug/kg	58
2,4-Dinitrophenol		-		ug/kg		-		ug/kg	
4-Nitrophenol		-		ug/kg		-		ug/kg	
Dibenzofuran		-		ug/kg		-		ug/kg	
2,4-Dinitrotoluene		-		ug/kg		-		ug/kg	
Diethylphthalate		-		ug/kg		-		ug/kg	
4-Chlorophenyl-phenylether		-		ug/kg		-		ug/kg	
Fluorene		58	U	ug/kg	58	58	U	ug/kg	58
4-Nitroaniline		-		ug/kg		-		ug/kg	

AR01 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:	M7789002				M7789003			
Site	GROUP2				GROUP2			
Locator	08BS01511				08BS01511D			
Collect Date:	30-AUG-94				30-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	-		ug/kg		-		ug/kg	
N-Nitrosodiphenylamine (1)	-		ug/kg		-		ug/kg	
1,2-Diphenylhydrazine	-		ug/kg		-		ug/kg	
4-Bromophenyl-phenylether	-		ug/kg		-		ug/kg	
Hexachlorobenzene	-		ug/kg		-		ug/kg	
Pentachlorophenol	-		ug/kg		-		ug/kg	
Phenanthrene	58	U	ug/kg	58	58	U	ug/kg	58
Anthracene	58	U	ug/kg	58	58	U	ug/kg	58
Di-n-Butylphthalate	-		ug/kg		-		ug/kg	
Fluoranthene	58	U	ug/kg	58	58	U	ug/kg	58
Pyrene	58	U	ug/kg	58	58	U	ug/kg	58
Butylbenzylphthalate	-		ug/kg		-		ug/kg	
3,3'-Dichlorobenzidine	-		ug/kg		-		ug/kg	
Benzo(a)anthracene	58	U	ug/kg	58	58	U	ug/kg	58
Chrysene	58	U	ug/kg	58	58	U	ug/kg	58
bis(2-Ethylhexyl)phthalate	-		ug/kg		-		ug/kg	
Di-n-octylphthalate	-		ug/kg		-		ug/kg	
Benzo(b)fluoranthene	58	U	ug/kg	58	58	U	ug/kg	58
Benzo(k)fluoranthene	58	U	ug/kg	58	58	U	ug/kg	58
Benzo(a)pyrene	58	U	ug/kg	58	58	U	ug/kg	58
Indeno(1,2,3-cd)pyrene	58	U	ug/kg	58	58	U	ug/kg	58
Dibenz(a,h)anthracene	58	U	ug/kg	58	58	U	ug/kg	58
Benzo(g,h,i)perylene	58	U	ug/kg	58	58	U	ug/kg	58
2-Picoline	-		ug/kg		-		ug/kg	
Methyl methanesulfonate	-		ug/kg		-		ug/kg	
Ethyl methanesulfonate	-		ug/kg		-		ug/kg	
Acetophenone	-		ug/kg		-		ug/kg	
N-Nitrosopiperidine	-		ug/kg		-		ug/kg	
Phenyl-tert-butylamine	-		ug/kg		-		ug/kg	
2,6-Dichlorophenol	-		ug/kg		-		ug/kg	
N-Nitroso-di-n-butylamine	-		ug/kg		-		ug/kg	
N-Nitrosodiethylamine	-		ug/kg		-		ug/kg	
N-Nitrosopyrrolidine	-		ug/kg		-		ug/kg	
Benzidine	-		ug/kg		-		ug/kg	
1,2,4,5-Tetrachlorobenzene	-		ug/kg		-		ug/kg	
Pentachlorobenzene	-		ug/kg		-		ug/kg	
1-Naphthylamine	-		ug/kg		-		ug/kg	
2-Naphthylamine	-		ug/kg		-		ug/kg	
2,3,4,6-Tetrachlorophenol	-		ug/kg		-		ug/kg	
Phenacetin	-		ug/kg		-		ug/kg	
4-Aminobiphenyl	-		ug/kg		-		ug/kg	
Pentachloronitrobenzene	-		ug/kg		-		ug/kg	
Pronamide	-		ug/kg		-		ug/kg	
p-(Dimethylamino)azobenzene	-		ug/kg		-		ug/kg	
7,12-Dimethylbenz(A)Anthracene	-		ug/kg		-		ug/kg	
3-Methylcholanthrene	-		ug/kg		-		ug/kg	
Pyridine	-		ug/kg		-		ug/kg	
N-Nitrosomethylethylamine	-		ug/kg		-		ug/kg	
N-Nitrosomorpholine	-		ug/kg		-		ug/kg	
o-Toluidine	-		ug/kg		-		ug/kg	
Hexachloropropene	-		ug/kg		-		ug/kg	
p-Phenylenediamine	-		ug/kg		-		ug/kg	

AR01 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:	M7789002				M7789003			
Site	GROUP2				GROUP2			
Locator	088S01511				088S01511D			
Collect Date:	30-AUG-94				30-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole		-	ug/kg			-	ug/kg	
Isosafrole		-	ug/kg			-	ug/kg	
1,4-Naphthoquinone		-	ug/kg			-	ug/kg	
1,3-Dinitrobenzene		-	ug/kg			-	ug/kg	
5-Nitro-o-toluidine		-	ug/kg			-	ug/kg	
1,3,5-Trinitrobenzene		-	ug/kg			-	ug/kg	
4-Nitroquinoline-1-oxide		-	ug/kg			-	ug/kg	
Methapyrilene		-	ug/kg			-	ug/kg	
3,3'-Dimethylbenzidine		-	ug/kg			-	ug/kg	
Hexachlorophene		-	ug/kg			-	ug/kg	
Aramite		-	ug/kg			-	ug/kg	
2-Chlorophenol		-	ug/kg			-	ug/kg	
3- & 4-Methylphenol (2)		-	ug/kg			-	ug/kg	
Hexachloropropene		-	ug/kg			-	ug/kg	
2-Acetylaminofluorene		-	ug/kg			-	ug/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:	23750001				23750002				23749004				23749005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT8MS4S2				MPT8MS4S8				28S85S02				28S85DD79			
Collect Date:	14-JAN-93				14-JAN-93				13-JAN-93				13-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs ug/kg																
alpha-BHC	1.5	U	ug/kg	1.5	7.6	U	ug/kg	7.6	.71	U	ug/kg	.71	.82	U	ug/kg	.82
beta-BHC	2.9	U	ug/kg	2.9	15	U	ug/kg	15	1.4	U	ug/kg	1.4	1.6	U	ug/kg	1.6
delta-BHC	1.5	U	ug/kg	1.5	7.6	U	ug/kg	7.6	.71	U	ug/kg	.71	.82	U	ug/kg	.82
gamma-BHC (Lindane)	1.5	U	ug/kg	1.5	7.6	U	ug/kg	7.6	.71	U	ug/kg	.71	.82	U	ug/kg	.82
Heptachlor	1.5	U	ug/kg	1.5	7.6	U	ug/kg	7.6	.71	U	ug/kg	.71	.82	U	ug/kg	.82
Aldrin	1.5	U	ug/kg	1.5	7.6	U	ug/kg	7.6	.71	U	ug/kg	.71	.82	U	ug/kg	.82
Heptachlor epoxide	1.5	U	ug/kg	1.5	7.6	U	ug/kg	7.6	.71	U	ug/kg	.71	.82	U	ug/kg	.82
Endosulfan I	1.5	U	ug/kg	1.5	7.6	U	ug/kg	7.6	.71	U	ug/kg	.71	.82	U	ug/kg	.82
Dieldrin	1.5	U	ug/kg	1.5	7.6	U	ug/kg	7.6	.71	U	ug/kg	.71	.82	U	ug/kg	.82
4,4-DDE	12		ug/kg		7.6	U	ug/kg	7.6	.71	U	ug/kg	.71	.82	U	ug/kg	.82
Endrin	2.9	U	ug/kg	2.9	15	U	ug/kg	15	1.4	U	ug/kg	1.4	1.6	U	ug/kg	1.6
Endosulfan II	2.9	U	ug/kg	2.9	15	U	ug/kg	15	1.4	U	ug/kg	1.4	1.6	U	ug/kg	1.6
4,4-DDD	2.9	U	ug/kg	2.9	15	U	ug/kg	15	1.4	U	ug/kg	1.4	1.6	U	ug/kg	1.6
Endosulfan sulfate	2.9	U	ug/kg	2.9	15	U	ug/kg	15	1.4	U	ug/kg	1.4	1.6	U	ug/kg	1.6
4,4-DDT	21		ug/kg		15	U	ug/kg	15	1.4	U	ug/kg	1.4	1.6	U	ug/kg	1.6
Methoxychlor	6	U	ug/kg	6	31	U	ug/kg	31	2.9	U	ug/kg	2.9	3.3	U	ug/kg	3.3
Endrin aldehyde	2.9	U	ug/kg	2.9	15	U	ug/kg	15	1.4	U	ug/kg	1.4	1.6	U	ug/kg	1.6
Endrin ketone	2.9	U	ug/kg	2.9	15	U	ug/kg	15	1.4	U	ug/kg	1.4	1.6	U	ug/kg	1.6
Chlordane	15	U	ug/kg	15	76	U	ug/kg	76	7.1	U	ug/kg	7.1	8.2	U	ug/kg	8.2
Chlorobenzilate	44	U	ug/kg	44	230	U	ug/kg	230	21	U	ug/kg	21	24	U	ug/kg	24
Diallate	89	U	ug/kg	89	450	U	ug/kg	450	43	U	ug/kg	43	49	U	ug/kg	49
Toxaphene	73	U	ug/kg	73	380	U	ug/kg	380	35	U	ug/kg	35	40	U	ug/kg	40
Isodrin	1.8	U	ug/kg	1.8	9.1	U	ug/kg	9.1	.85	U	ug/kg	.85	.98	U	ug/kg	.98
Kepone	89	U	ug/kg	89	230	U	ug/kg	230	43	UJ	ug/kg		49	UJ	ug/kg	
Aroclor-1016	73	U	ug/kg	73	380	U	ug/kg	380	35	U	ug/kg	35	40	U	ug/kg	40
Aroclor-1221	150	U	ug/kg	150	760	U	ug/kg	760	71	U	ug/kg	71	82	U	ug/kg	82
Aroclor-1232	150	U	ug/kg	150	760	U	ug/kg	760	71	U	ug/kg	71	82	U	ug/kg	82
Aroclor-1242	73	U	ug/kg	73	380	U	ug/kg	380	35	U	ug/kg	35	40	U	ug/kg	40
Aroclor-1248	73	U	ug/kg	73	380	U	ug/kg	380	35	U	ug/kg	35	40	U	ug/kg	40
Aroclor-1254	38	U	ug/kg	38	190	U	ug/kg	190	18	U	ug/kg	18	21	U	ug/kg	21
Aroclor-1260	38	U	ug/kg	38	190	U	ug/kg	190	18	U	ug/kg	18	21	U	ug/kg	21

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:		23763002			23763003			23775003			23775004		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		MPT8MS6S2			MPT8MS6S7			MPT8MS7S2			MPT8MS7S9		
Collect Date:		15-JAN-93			15-JAN-93			18-JAN-93			18-JAN-93		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg												
alpha-BHC		.73 U	ug/kg	.73	.85 U	ug/kg	.85	.73 U	ug/kg	.73	3.5 U	ug/kg	3.5
beta-BHC		1.4 U	ug/kg	1.4	1.6 U	ug/kg	1.6	1.4 U	ug/kg	1.4	6.8 U	ug/kg	6.8
delta-BHC		.73 U	ug/kg	.73	.85 U	ug/kg	.85	.73 U	ug/kg	.73	3.5 U	ug/kg	3.5
gamma-BHC (Lindane)		.73 U	ug/kg	.73	.85 U	ug/kg	.85	.73 U	ug/kg	.73	3.5 U	ug/kg	3.5
Heptachlor		.73 U	ug/kg	.73	.85 U	ug/kg	.85	.73 U	ug/kg	.73	3.5 U	ug/kg	3.5
Aldrin		.73 U	ug/kg	.73	.85 U	ug/kg	.85	.73 U	ug/kg	.73	3.5 U	ug/kg	3.5
Heptachlor epoxide		.73 U	ug/kg	.73	.85 U	ug/kg	.85	.73 U	ug/kg	.73	3.5 U	ug/kg	3.5
Endosulfan I		.73 U	ug/kg	.73	.85 U	ug/kg	.85	.73 U	ug/kg	.73	3.5 U	ug/kg	3.5
Dieldrin		.73 U	ug/kg	.73	.85 U	ug/kg	.85	.73 U	ug/kg	.73	3.5 U	ug/kg	3.5
4,4-DDE		.73 U	ug/kg	.73	.85 U	ug/kg	.85	18	ug/kg		3.5 U	ug/kg	3.5
Endrin		1.4 U	ug/kg	1.4	1.6 U	ug/kg	1.6	1.4 U	ug/kg	1.4	6.8 U	ug/kg	6.8
Endosulfan II		1.4 U	ug/kg	1.4	1.6 U	ug/kg	1.6	1.4 U	ug/kg	1.4	6.8 U	ug/kg	6.8
4,4-DDD		1.4 U	ug/kg	1.4	1.6 U	ug/kg	1.6	1.4 U	ug/kg	1.4	6.8 U	ug/kg	6.8
Endosulfan sulfate		1.4 U	ug/kg	1.4	1.6 U	ug/kg	1.6	1.4 U	ug/kg	1.4	6.8 U	ug/kg	6.8
4,4-DDT		1.4 U	ug/kg	1.4	1.6 U	ug/kg	1.6	1.8	ug/kg		6.8 U	ug/kg	6.8
Methoxychlor		2.9 U	ug/kg	2.9	3.4 U	ug/kg	3.4	2.9 U	ug/kg	2.9	14 U	ug/kg	14
Endrin aldehyde		1.4 U	ug/kg	1.4	1.6 U	ug/kg	1.6	1.4 U	ug/kg	1.4	6.8 U	ug/kg	6.8
Endrin ketone		1.4 U	ug/kg	1.4	1.6 U	ug/kg	1.6	1.4 U	ug/kg	1.4	6.8 U	ug/kg	6.8
Chlordane		7.3 U	ug/kg	7.3	8.5 U	ug/kg	8.5	7.3 U	ug/kg	7.3	35 U	ug/kg	35
Chlorobenzilate		22 U	ug/kg	22	25 U	ug/kg	25	22 U	ug/kg	22	100 U	ug/kg	100
Diallate		43 U	ug/kg	43	51 U	ug/kg	51	43 U	ug/kg	43	210 U	ug/kg	210
Toxaphene		36 U	ug/kg	36	42 U	ug/kg	42	36 U	ug/kg	36	170 U	ug/kg	170
Isodrin		.87 U	ug/kg	.87	1 U	ug/kg	1	.87 U	ug/kg	.87	4.2 U	ug/kg	4.2
Kepone		43 U	ug/kg	43	51 U	ug/kg	51	43 U	ug/kg	43	100 U	ug/kg	100
Aroclor-1016		36 U	ug/kg	36	42 U	ug/kg	42	36 U	ug/kg	36	170 U	ug/kg	170
Aroclor-1221		73 U	ug/kg	73	85 U	ug/kg	85	73 U	ug/kg	73	350 U	ug/kg	350
Aroclor-1232		73 U	ug/kg	73	85 U	ug/kg	85	73 U	ug/kg	73	350 U	ug/kg	350
Aroclor-1242		36 U	ug/kg	36	42 U	ug/kg	42	36 U	ug/kg	36	170 U	ug/kg	170
Aroclor-1248		36 U	ug/kg	36	42 U	ug/kg	42	36 U	ug/kg	36	170 U	ug/kg	170
Aroclor-1254		18 U	ug/kg	18	22 U	ug/kg	22	18 U	ug/kg	18	88 U	ug/kg	88
Aroclor-1260		18 U	ug/kg	18	22 U	ug/kg	22	18 U	ug/kg	18	88 U	ug/kg	88

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

ARO1 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:		23775005				23775006			
Site		GROUP2				GROUP2			
Locator		MPT8MS8S2				MPT8MS8S9			
Collect Date:		18-JAN-93				18-JAN-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg								
alpha-BHC		3.6	U	ug/kg	3.6	.77	U	ug/kg	.77
beta-BHC		7.1	U	ug/kg	7.1	1.5	U	ug/kg	1.5
delta-BHC		3.6	U	ug/kg	3.6	.77	U	ug/kg	.77
gamma-BHC (Lindane)		3.6	U	ug/kg	3.6	.77	U	ug/kg	.77
Heptachlor		3.6	U	ug/kg	3.6	.77	U	ug/kg	.77
Aldrin		3.6	U	ug/kg	3.6	.77	U	ug/kg	.77
Heptachlor epoxide		3.6	U	ug/kg	3.6	.77	U	ug/kg	.77
Endosulfan I		3.6	U	ug/kg	3.6	.77	U	ug/kg	.77
Dieldrin		3.6	U	ug/kg	3.6	.77	U	ug/kg	.77
4,4-DDE		63		ug/kg		.77	U	ug/kg	.77
Endrin		7.1	U	ug/kg	7.1	1.5	U	ug/kg	1.5
Endosulfan II		7.1	U	ug/kg	7.1	1.5	U	ug/kg	1.5
4,4-DDD		7.1	U	ug/kg	7.1	1.5	U	ug/kg	1.5
Endosulfan sulfate		7.1	U	ug/kg	7.1	1.5	U	ug/kg	1.5
4,4-DDT		62		ug/kg		1.5	U	ug/kg	1.5
Methoxychlor		15	U	ug/kg	15	3.1	U	ug/kg	3.1
Endrin aldehyde		7.1	U	ug/kg	7.1	1.5	U	ug/kg	1.5
Endrin ketone		7.1	U	ug/kg	7.1	1.5	U	ug/kg	1.5
Chlordane		36	U	ug/kg	36	7.7	U	ug/kg	7.7
Chlorobenzilate		110	U	ug/kg	110	23	U	ug/kg	23
Diallate		220	U	ug/kg	220	46	U	ug/kg	46
Toxaphene		180	U	ug/kg	180	38	U	ug/kg	38
Isodrin		4.3	U	ug/kg	4.3	.92	U	ug/kg	.92
Kepone		220	U	ug/kg	220	46	U	ug/kg	46
Aroclor-1016		180	U	ug/kg	180	38	U	ug/kg	38
Aroclor-1221		360	U	ug/kg	360	77	U	ug/kg	77
Aroclor-1232		360	U	ug/kg	360	77	U	ug/kg	77
Aroclor-1242		180	U	ug/kg	180	38	U	ug/kg	38
Aroclor-1248		180	U	ug/kg	180	38	U	ug/kg	38
Aroclor-1254		92	U	ug/kg	92	20	U	ug/kg	20
Aroclor-1260		92	U	ug/kg	92	20	U	ug/kg	20

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:	34901001				34889001				34889002				34884005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT8BS3S7				MPT8MS4S2				MPT8MS4S8				2BS85S02			
Collect Date:	15-JAN-93				14-JAN-93				14-JAN-93				13-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	2.8	U	mg/kg	2.8	2.6	U	mg/kg	2.6	2.7	U	mg/kg	2.7	3.2	J	mg/kg	
Arsenic	.32	J	mg/kg		.82	J	mg/kg		.16	U	mg/kg	.16	.68	J	mg/kg	
Barium	3.1	J	mg/kg		5.2	J	mg/kg		43.9	J	mg/kg		6	J	mg/kg	
Beryllium	.11	U	mg/kg	.11	.11	U	mg/kg	.11	.23	J	mg/kg		.11	U	mg/kg	.11
Cadmium	.28	UJ	mg/kg		.26	UJ	mg/kg		1.8	J	mg/kg		.25	UJ	mg/kg	
Chromium	.85	UJ	mg/kg		1.5	J	mg/kg		14.2	J	mg/kg		.78	UJ	mg/kg	
Cobalt	1.3	U	mg/kg	1.3	1.2	U	mg/kg	1.2	1.7	J	mg/kg		1.2	U	mg/kg	1.2
Copper	6.2		mg/kg		1.8	J	mg/kg		5.9		mg/kg		.72	J	mg/kg	
Cyanide	.17	U	mg/kg	.17	.16	U	mg/kg	.16	.17	U	mg/kg	.17	.16	U	mg/kg	.16
Lead	.28	J	mg/kg		.88		mg/kg		.25	J	mg/kg		.25	J	mg/kg	
Mercury	.1	J	mg/kg		.03	J	mg/kg		.04	J	mg/kg		.03	J	mg/kg	
Nickel	1.8	U	mg/kg	1.8	1.7	U	mg/kg	1.7	8.6	J	mg/kg		1.6	U	mg/kg	1.6
Selenium	.11	U	mg/kg	.11	.11	U	mg/kg	.11	.11	U	mg/kg	.11	.11	UJ	mg/kg	
Silver	.48	U	mg/kg	.48	.45	U	mg/kg	.45	.48	U	mg/kg	.48	.44	U	mg/kg	.44
Thallium	.16	U	mg/kg	.16	.19	J	mg/kg		.16	J	mg/kg		.15	U	mg/kg	.15
Tin	2.7	U	mg/kg	2.7	2.5	U	mg/kg	2.5	2.6	U	mg/kg	2.6	2.4	U	mg/kg	2.4
Vanadium	1.2	J	mg/kg		3.2	J	mg/kg		27.4	J	mg/kg		1.9	J	mg/kg	
Zinc	3.5	J	mg/kg		3.9	J	mg/kg		21.8	J	mg/kg		2.9	J	mg/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:	34884006				34901002				34901003				34915004			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	2BS85DD79				MPT8MS6S2				MPT8MS6S7				MPT8MS7S2			
Collect Date:	13-JAN-93				15-JAN-93				15-JAN-93				18-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	2.9	U	mg/kg	2.9	2.6	U	mg/kg	2.6	3.1	U	mg/kg	3.1	2.8	U	mg/kg	2.8
Arsenic	1.1	J	mg/kg		.19	J	mg/kg		.91	J	mg/kg		.56	J	mg/kg	
Barium	3.6	J	mg/kg		7.1	J	mg/kg		3.4	J	mg/kg		11	J	mg/kg	
Beryllium	.12	U	mg/kg	.12	.11	U	mg/kg	.11	.13	U	mg/kg	.13	.13	J	mg/kg	
Cadmium	.29	UJ	mg/kg		.26	UJ	mg/kg		.3	UJ	mg/kg		.28	UJ	mg/kg	
Chromium	2	J	mg/kg		.79	UJ	mg/kg		3.3	J	mg/kg		4.7	J	mg/kg	
Cobalt	1.4	U	mg/kg	1.4	1.2	U	mg/kg	1.2	1.5	U	mg/kg	1.5	1.3	U	mg/kg	1.3
Copper	.99	J	mg/kg		3.5	J	mg/kg		3.7	J	mg/kg		8.5		mg/kg	
Cyanide	.18	U	mg/kg	.18	.16	U	mg/kg	.16	.19	U	mg/kg	.19	.17	U	mg/kg	.17
Lead	1.4		mg/kg		.26	J	mg/kg		.71	J	mg/kg		11.4		mg/kg	
Mercury	.06	J	mg/kg		.06	J	mg/kg		.06	J	mg/kg		.03	UJ	mg/kg	
Nickel	1.9	U	mg/kg	1.9	1.6	U	mg/kg	1.6	2	U	mg/kg	2	2.5	J	mg/kg	
Selenium	.12	U	mg/kg	.12	.11	UJ	mg/kg		.13	U	mg/kg	.13	.12	UJ	mg/kg	
Silver	.51	U	mg/kg	.51	.45	U	mg/kg	.45	.53	U	mg/kg	.53	.49	U	mg/kg	.49
Thallium	.22	J	mg/kg		.15	U	mg/kg	.15	.18	U	mg/kg	.18	.16	U	mg/kg	.16
Tin	2.8	U	mg/kg	2.8	2.5	U	mg/kg	2.5	2.9	U	mg/kg	2.9	2.7	U	mg/kg	2.7
Vanadium	1.5	J	mg/kg		1.8	J	mg/kg		2.8	J	mg/kg		7.8	J	mg/kg	
Zinc	3.4	J	mg/kg		2.5	J	mg/kg		5.7	J	mg/kg		32.6	J	mg/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Soil Boring Data

Lab Sample Number:	34915005				34915006				34915007			
Site	GROUP2				GROUP2				GROUP2			
Locator	MPT8MS7S9				MPT8MS8S2				MPT8MS8S9			
Collect Date:	18-JAN-93				18-JAN-93				18-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg												
Antimony	2.9	U	mg/kg	2.9	2.6	U	mg/kg	2.6	2.7	U	mg/kg	2.7
Arsenic	.29	J	mg/kg		.23	J	mg/kg		.36	J	mg/kg	
Barium	3.7	J	mg/kg		4.5	J	mg/kg		4.8	J	mg/kg	
Beryllium	.12	U	mg/kg	.12	.11	U	mg/kg	.11	.11	U	mg/kg	.11
Cadmium	.29	UJ	mg/kg		.26	UJ	mg/kg		.27	UJ	mg/kg	
Chromium	1.3	J	mg/kg		2.2	J	mg/kg		.84	UJ	mg/kg	
Cobalt	1.4	U	mg/kg	1.4	1.2	U	mg/kg	1.2	1.3	U	mg/kg	1.3
Copper	1.7	J	mg/kg		1.5	J	mg/kg		1.2	J	mg/kg	
Cyanide	.18	U	mg/kg	.18	.16	U	mg/kg	.16	.17	U	mg/kg	.17
Lead	.36	J	mg/kg		9.5		mg/kg		.52	J	mg/kg	
Mercury	.03	UJ	mg/kg		.04	J	mg/kg		.05	J	mg/kg	
Nickel	1.8	U	mg/kg	1.8	1.6	U	mg/kg	1.6	1.7	U	mg/kg	1.7
Selenium	.12	U	mg/kg	.12	.17	J	mg/kg		.11	UJ	mg/kg	
Silver	.5	U	mg/kg	.5	.45	U	mg/kg	.45	.48	U	mg/kg	.48
Thallium	.17	U	mg/kg	.17	.15	U	mg/kg	.15	.16	U	mg/kg	.16
Tin	2.8	U	mg/kg	2.8	2.5	U	mg/kg	2.5	2.6	U	mg/kg	2.6
Vanadium	1.7	J	mg/kg		2.4	J	mg/kg		2	J	mg/kg	
Zinc	2.9	J	mg/kg		4.9	J	mg/kg		3	J	mg/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

APPENDIX A-2

SURFACE WATER SAMPLE ANALYSES, SWMUs 6, 7, 8, 9, 10, AND 11

AR01 - Trend Report
Group2 Surface Water Data

Lab Sample Number:		34923001				01537001				01537002				34923002			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		MPT8SW1				MPT8SW1				MPT8SW1D				MPT8SW2			
Collect Date:		19-JAN-93				18-FEB-93				18-FEB-93				19-JAN-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/l																
Chloromethane		-		ug/l		10	U	ug/l	10	10	U	ug/l	10	-		ug/l	
Bromomethane		-		ug/l		10	U	ug/l	10	10	U	ug/l	10	-		ug/l	
Vinyl chloride		-		ug/l		10	U	ug/l	10	10	U	ug/l	10	-		ug/l	
Chloroethane		-		ug/l		10	U	ug/l	10	10	U	ug/l	10	-		ug/l	
Methylene chloride		-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
Acetone		-		ug/l		190	J	ug/l		180	J	ug/l		-		ug/l	
Carbon disulfide		-		ug/l		11		ug/l		10		ug/l		-		ug/l	
1,1-Dichloroethane		-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
1,1-Dichloroethene		-		ug/l		5	UJ	ug/l		5	UJ	ug/l		-		ug/l	
1,2-Dichloroethene (total)		-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
Chloroform		-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
1,2-Dichloroethane		-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
2-Butanone		-		ug/l		10		ug/l		11		ug/l		-		ug/l	
1,1,1-Trichloroethane		-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
Carbon tetrachloride		-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
Bromodichloromethane		-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
1,2-Dichloropropane		-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
cis-1,3-Dichloropropene		-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
Trichloroethene		-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
Dibromochloromethane		-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
1,1,2-Trichloroethane		-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
Benzene		-		ug/l		21		ug/l		18		ug/l		-		ug/l	
trans-1,3-Dichloropropene		-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
Bromoform		-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
4-Methyl-2-pentanone		-		ug/l		10	U	ug/l	10	10	U	ug/l	10	-		ug/l	
2-Hexanone		-		ug/l		10	U	ug/l	10	10	U	ug/l	10	-		ug/l	
Tetrachloroethene		-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
1,1,2,2-Tetrachloroethane		-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
Toluene		-		ug/l		53		ug/l		48		ug/l		-		ug/l	
Chlorobenzene		-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
Ethylbenzene		-		ug/l		14		ug/l		13		ug/l		-		ug/l	
Styrene		-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
Xylenes (total)		-		ug/l		86		ug/l		77		ug/l		-		ug/l	
Dichlorodifluoromethane		-		ug/l		10	U	ug/l	10	10	U	ug/l	10	-		ug/l	
Trichlorofluoromethane		-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
1,3-Dichlorobenzene		10	U	ug/l	10	5	U	ug/l	5	5	U	ug/l	5	10	U	ug/l	10
Acrolein		-		ug/l		100	R	ug/l		100	R	ug/l		-		ug/l	
Iodomethane		-		ug/l		10	U	ug/l	10	10	U	ug/l	10	-		ug/l	
1,4-Dichlorobenzene		10	U	ug/l	10	5	U	ug/l	5	5	U	ug/l	5	10	U	ug/l	10
Acrylonitrile		-		ug/l		100	U	ug/l	100	100	U	ug/l	100	-		ug/l	
Dibromomethane		-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
1,2-Dichlorobenzene		10	U	ug/l	10	5	U	ug/l	5	5	U	ug/l	5	10	U	ug/l	10
2-Chloroethylvinylether		-		ug/l		10	U	ug/l	10	10	U	ug/l	10	-		ug/l	
Ethyl methacrylate		-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
1,2,3-Trichloropropane		-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
trans-1,4-Dichloro-2-butene		-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
Isobutyl alcohol		-		ug/l		1000	R	ug/l		1000	R	ug/l		-		ug/l	
1,1,1,2-Tetrachloroethane		-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
1,2-Dibromo-3-chloropropane		-		ug/l		10	U	ug/l	10	10	U	ug/l	10	-		ug/l	
1,2-Dibromoethane		-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	

AR01 - Trend Report
Group2 Surface Water Data

Lab Sample Number:	34923001				01537001				01537002				34923002			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT8SW1				MPT8SW1				MPT8SW1D				MPT8SW2			
Collect Date:	19-JAN-93				18-FEB-93				18-FEB-93				19-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	-		ug/l		200	R	ug/l		200	U	ug/l	200	-		ug/l	
3-Chloropropene	-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
Acetonitrile	-		ug/l		100	R	ug/l		100	R	ug/l		-		ug/l	
Chloroprene	-		ug/l		200	R	ug/l		200	R	ug/l		-		ug/l	
Methacrylonitrile	-		ug/l		5	U	ug/l	5	5	U	ug/l	5	-		ug/l	
Methyl methacrylate	-		ug/l		10	U	ug/l	10	10	U	ug/l	10	-		ug/l	
Pentachloroethane	-		ug/l		10	U	ug/l	10	10	U	ug/l	10	-		ug/l	
Propionitrile	-		ug/l		100	U	ug/l	100	100	U	ug/l	100	-		ug/l	
Vinyl acetate	-		ug/l		10	U	ug/l	10	10	U	ug/l	10	-		ug/l	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Surface Water Data

Lab Sample Number:	01537003
Site	GROUP2
Locator	MPT8SW2
Collect Date:	18-FEB-93

		VALUE	QUAL	UNITS	DL
VOLATILES	ug/l				
Chloromethane		10	U	ug/l	10
Bromomethane		10	U	ug/l	10
Vinyl chloride		10	U	ug/l	10
Chloroethane		10	U	ug/l	10
Methylene chloride		5	U	ug/l	5
Acetone		210	J	ug/l	
Carbon disulfide		4	J	ug/l	
1,1-Dichloroethane		5	U	ug/l	5
1,1-Dichloroethene		5	U	ug/l	5
1,2-Dichloroethene (total)		5	U	ug/l	5
Chloroform		5	U	ug/l	5
1,2-Dichloroethane		5	U	ug/l	5
2-Butanone		15		ug/l	
1,1,1-Trichloroethane		5	U	ug/l	5
Carbon tetrachloride		5	U	ug/l	5
Bromodichloromethane		5	U	ug/l	5
1,2-Dichloropropane		5	U	ug/l	5
cis-1,3-Dichloropropene		5	U	ug/l	5
Trichloroethene		5	U	ug/l	5
Dibromochloromethane		5	U	ug/l	5
1,1,2-Trichloroethane		5	U	ug/l	5
Benzene		63		ug/l	
trans-1,3-Dichloropropene		5	U	ug/l	5
Bromoform		5	U	ug/l	5
4-Methyl-2-pentanone		10	U	ug/l	10
2-Hexanone		10	U	ug/l	10
Tetrachloroethene		5	U	ug/l	5
1,1,2,2-Tetrachloroethane		5	U	ug/l	5
Toluene		160		ug/l	
Chlorobenzene		5	U	ug/l	5
Ethylbenzene		36		ug/l	
Styrene		5	U	ug/l	5
Xylenes (total)		230	J	ug/l	
Dichlorodifluoromethane		10	U	ug/l	10
Trichlorofluoromethane		5	UJ	ug/l	
1,3-Dichlorobenzene		5	U	ug/l	5
Acrolein		100	R	ug/l	
Iodomethane		10	U	ug/l	10
1,4-Dichlorobenzene		5	U	ug/l	5
Acrylonitrile		100	U	ug/l	100

AR01 - Trend Report
Group2 Surface Water Data

Lab Sample Number: 01537003
Site GROUP2
Locator MPT8SW2
Collect Date: 18-FEB-93

	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/l	5
1,2-Dichlorobenzene	5	U	ug/l	5
2-Chloroethylvinylether	10	U	ug/l	10
Ethyl methacrylate	5	U	ug/l	5
1,2,3-Trichloropropane	5	U	ug/l	5
trans-1,4-Dichloro-2-butene	5	U	ug/l	5
Isobutyl alcohol	1000	R	ug/l	
1,1,1,2-Tetrachloroethane	5	U	ug/l	5
1,2-Dibromo-3-chloropropane	10	U	ug/l	10
1,2-Dibromoethane	5	U	ug/l	5
1,4-Dioxane	200	R	ug/l	
3-Chloropropene	5	U	ug/l	5
Acetonitrile	100	R	ug/l	
Chloroprene	200	R	ug/l	
Methacrylonitrile	5	U	ug/l	5
Methyl methacrylate	10	U	ug/l	10
Pentachloroethane	10	U	ug/l	10
Propionitrile	100	U	ug/l	100
Vinyl acetate	10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Surface Water Data

Lab Sample Number:	34923001				34923002			
Site	GROUP2				GROUP2			
Locator	MPT8SW1				MPT8SW2			
Collect Date:	19-JAN-93				19-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/l								
N-Nitrosodimethylamine	10	U	ug/l	10	10	U	ug/l	10
Phenol	10	U	ug/l	10	10	U	ug/l	10
Aniline	10	U	ug/l	10	10	U	ug/l	10
bis (2-Chloroethyl) ether	10	U	ug/l	10	10	U	ug/l	10
Benzyl Alcohol	10	U	ug/l	10	10	U	ug/l	10
2-Methylphenol	14		ug/l		84		ug/l	
bis(2-Chloroisopropyl)ether	10	U	ug/l	10	10	U	ug/l	10
N-Nitroso-di-n-propylamine	10	U	ug/l	10	10	U	ug/l	10
Hexachloroethane	10	U	ug/l	10	10	U	ug/l	10
Nitrobenzene	10	U	ug/l	10	10	U	ug/l	10
Isophorone	10	U	ug/l	10	10	U	ug/l	10
2-Nitrophenol	10	U	ug/l	10	10	U	ug/l	10
2,4-Dimethylphenol	45		ug/l		160		ug/l	
Benzoic acid	50	U	ug/l	50	50	U	ug/l	50
bis(2-Chloroethoxy)methane	10	U	ug/l	10	10	U	ug/l	10
2,4-Dichlorophenol	10	U	ug/l	10	10	U	ug/l	10
1,2,4-Trichlorobenzene	10	U	ug/l	10	10	U	ug/l	10
Naphthalene	7	J	ug/l		140		ug/l	
4-Chloroaniline	10	U	ug/l	10	10	U	ug/l	10
Hexachlorobutadiene	10	U	ug/l	10	10	U	ug/l	10
4-Chloro-3-methylphenol	10	U	ug/l	10	10	U	ug/l	10
2-Methylnaphthalene	11		ug/l		84		ug/l	
Hexachlorocyclopentadiene	10	U	ug/l	10	10	U	ug/l	10
2,4,6-Trichlorophenol	10	U	ug/l	10	10	U	ug/l	10
Dimethylphthalate	10	U	ug/l	10	10	U	ug/l	10
2,4,5-Trichlorophenol	50	U	ug/l	50	50	U	ug/l	50
2-Chloronaphthalene	10	U	ug/l	10	10	U	ug/l	10
2-Nitroaniline	50	U	ug/l	50	50	U	ug/l	50
Acenaphthylene	10	U	ug/l	10	10	U	ug/l	10
2,6-Dinitrotoluene	10	U	ug/l	10	10	U	ug/l	10
3-Nitroaniline	50	U	ug/l	50	50	U	ug/l	50
Acenaphthene	3	J	ug/l		4	J	ug/l	
2,4-Dinitrophenol	50	U	ug/l	50	50	U	ug/l	50
4-Nitrophenol	50	U	ug/l	50	50	U	ug/l	50
Dibenzofuran	10	U	ug/l	10	2	J	ug/l	
2,4-Dinitrotoluene	10	U	ug/l	10	10	U	ug/l	10
Diethylphthalate	10	U	ug/l	10	2	J	ug/l	
4-Chlorophenyl-phenylether	10	U	ug/l	10	10	U	ug/l	10
Fluorene	4	J	ug/l		5	J	ug/l	
4-Nitroaniline	50	U	ug/l	50	50	U	ug/l	50
4,6-Dinitro-2-methylphenol	50	U	ug/l	50	50	U	ug/l	50
N-Nitrosodiphenylamine (1)	10	U	ug/l	10	10	U	ug/l	10
1,2-Diphenylhydrazine	10	U	ug/l	10	10	U	ug/l	10
4-Bromophenyl-phenylether	10	U	ug/l	10	10	U	ug/l	10
Hexachlorobenzene	10	U	ug/l	10	10	U	ug/l	10
Pentachlorophenol	50	U	ug/l	50	50	U	ug/l	50
Phenanthrene	3	J	ug/l		6	J	ug/l	
Anthracene	10	U	ug/l	10	10	U	ug/l	10
Di-n-Butylphthalate	10	U	ug/l	10	10	U	ug/l	10
Fluoranthene	10	U	ug/l	10	10	U	ug/l	10

AR01 - Trend Report
Group2 Surface Water Data

Lab Sample Number:	34923001				34923002			
Site	GROUP2				GROUP2			
Locator	MPT8SW1				MPT8SW2			
Collect Date:	19-JAN-93				19-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Pyrene	10	U	ug/l	10	10	U	ug/l	10
Butylbenzylphthalate	10	U	ug/l	10	10	U	ug/l	10
3,3'-Dichlorobenzidine	20	U	ug/l	20	20	U	ug/l	20
Benzo(a)anthracene	10	U	ug/l	10	10	U	ug/l	10
Chrysene	10	U	ug/l	10	10	U	ug/l	10
bis(2-Ethylhexyl)phthalate	10	U	ug/l	10	3	J	ug/l	
Di-n-octylphthalate	10	U	ug/l	10	10	U	ug/l	10
Benzo(b)fluoranthene	10	U	ug/l	10	10	U	ug/l	10
Benzo(k)fluoranthene	10	U	ug/l	10	10	U	ug/l	10
Benzo(a)pyrene	10	U	ug/l	10	10	U	ug/l	10
Indeno(1,2,3-cd)pyrene	10	U	ug/l	10	10	U	ug/l	10
Dibenz(a,h)anthracene	10	U	ug/l	10	10	U	ug/l	10
Benzo(g,h,i)perylene	10	U	ug/l	10	10	U	ug/l	10
2-Picoline	50	U	ug/l	50	50	U	ug/l	50
Methyl methanesulfonate	10	U	ug/l	10	10	U	ug/l	10
Ethyl methanesulfonate	10	U	ug/l	10	10	U	ug/l	10
Acetophenone	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopiperidine	10	U	ug/l	10	10	U	ug/l	10
Phenyl-tert-butylamine	50	U	ug/l	50	50	U	ug/l	50
2,6-Dichlorophenol	10	U	ug/l	10	10	U	ug/l	10
N-Nitroso-di-n-butylamine	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosodiethylamine	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopyrrolidine	10	U	ug/l	10	10	U	ug/l	10
Benzidine	50	U	ug/l	50	50	U	ug/l	50
1,2,4,5-Tetrachlorobenzene	50	U	ug/l	50	50	U	ug/l	50
Pentachlorobenzene	50	U	ug/l	50	50	U	ug/l	50
1-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50
2-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50
2,3,4,6-Tetrachlorophenol	10	U	ug/l	10	10	U	ug/l	10
Phenacetin	10	U	ug/l	10	10	U	ug/l	10
4-Aminobiphenyl	50	U	ug/l	50	50	U	ug/l	50
Pentachloronitrobenzene	50	U	ug/l	50	50	U	ug/l	50
Pronamide	10	U	ug/l	10	10	U	ug/l	10
p-(Dimethylamino)azobenzene	10	U	ug/l	10	10	U	ug/l	10
7,12-Dimethylbenz(A)Anthracene	10	U	ug/l	10	10	U	ug/l	10
3-Methylcholanthrene	10	U	ug/l	10	10	U	ug/l	10
Pyridine	50	U	ug/l	50	50	U	ug/l	50
N-Nitrosomethylethylamine	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosomorpholine	10	U	ug/l	10	10	U	ug/l	10
o-Toluidine	10	U	ug/l	10	10	U	ug/l	10
Hexachloropropene	50	U	ug/l	50	50	U	ug/l	50
p-Phenylenediamine	500	R	ug/l		500	R	ug/l	
Safrole	50	U	ug/l	50	50	U	ug/l	50
Isosafrole	50	U	ug/l	50	50	U	ug/l	50
1,4-Naphthoquinone	1000	U	ug/l	1000	1000	U	ug/l	1000
1,3-Dinitrobenzene	10	U	ug/l	10	10	U	ug/l	10
5-Nitro-o-toluidine	10	U	ug/l	10	10	U	ug/l	10
1,3,5-Trinitrobenzene	10	U	ug/l	10	10	U	ug/l	10
4-Nitroquinoline-1-oxide	500	U	ug/l	500	500	U	ug/l	500
Methapyrilene	50	U	ug/l	50	50	U	ug/l	50
3,3'-Dimethylbenzidine	10	U	ug/l	10	10	U	ug/l	10
Hexachlorophene	500	U	ug/l	500	500	U	ug/l	500

AR01 - Trend Report
Group2 Surface Water Data

Lab Sample Number:	34923001				34923002			
Site	GROUP2				GROUP2			
Locator	MPT8SW1				MPT8SW2			
Collect Date:	19-JAN-93				19-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Aramite	50	R	ug/l		50	R	ug/l	
2-Chlorophenol	10	U	ug/l	10	10	U	ug/l	10
3- & 4-Methylphenol (2)	-		ug/l		-		ug/l	
Hexachloropropene	50	U	ug/l	50	50	U	ug/l	50
2-Acetylaminofluorene	10	U	ug/l	10	10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Surface Water Data

Lab Sample Number:		23790001				23790002			
Site		GROUP2				GROUP2			
Locator		MPT8SW1				MPT8SW2			
Collect Date:		19-JAN-93				19-JAN-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/l								
alpha-BHC		.2	UJ	ug/l		.2	R	ug/l	
beta-BHC		.4	UJ	ug/l		.4	R	ug/l	
delta-BHC		.2	UJ	ug/l		.2	R	ug/l	
gamma-BHC (Lindane)		.2	UJ	ug/l		.2	R	ug/l	
Heptachlor		.2	UJ	ug/l		.2	R	ug/l	
Aldrin		.2	UJ	ug/l		.2	R	ug/l	
Heptachlor epoxide		.2	U	ug/l	.2	.2	U	ug/l	.2
Endosulfan I		.2	U	ug/l	.2	.2	U	ug/l	.2
Dieldrin		.2	U	ug/l	.2	.2	U	ug/l	.2
4,4-DDE		.2	U	ug/l	.2	.2	U	ug/l	.2
Endrin		.4	U	ug/l	.4	.4	U	ug/l	.4
Endosulfan II		.4	U	ug/l	.4	.4	U	ug/l	.4
4,4-DDD		.4	U	ug/l	.4	.4	U	ug/l	.4
Endosulfan sulfate		.4	U	ug/l	.4	.4	U	ug/l	.4
4,4-DDT		.4	U	ug/l	.4	.4	U	ug/l	.4
Methoxychlor		.8	U	ug/l	.8	.8	U	ug/l	.8
Endrin aldehyde		.4	U	ug/l	.4	.4	U	ug/l	.4
Endrin ketone		.2	U	ug/l	.2	.2	U	ug/l	.2
Chlordane		2	U	ug/l	2	2	U	ug/l	2
Chlorobenzilate		5	U	ug/l	5	5	U	ug/l	5
Diallate		10	U	ug/l	10	10	U	ug/l	10
Toxaphene		10	U	ug/l	10	10	U	ug/l	10
Isodrin		.2	U	ug/l	.2	.2	U	ug/l	.2
Kepone		2	U	ug/l	2	5	U	ug/l	5
Aroclor-1016		10	U	ug/l	10	10	U	ug/l	10
Aroclor-1221		20	U	ug/l	20	20	U	ug/l	20
Aroclor-1232		20	U	ug/l	20	20	U	ug/l	20
Aroclor-1242		10	U	ug/l	10	10	U	ug/l	10
Aroclor-1248		10	U	ug/l	10	10	U	ug/l	10
Aroclor-1254		5	U	ug/l	5	5	U	ug/l	5
Aroclor-1260		5	U	ug/l	5	5	U	ug/l	5

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Surface Water Data

Lab Sample Number:		34923001				34923002			
Site		GROUP2				GROUP2			
Locator		MPT8SW1				MPT8SW2			
Collect Date:		19-JAN-93				19-JAN-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (WATER)	ug/l								
Antimony		35.9	J	ug/l		17.2	J	ug/l	
Arsenic		7	U	ug/l	7	.7	UJ	ug/l	
Barium		37.1	J	ug/l		10.5	J	ug/l	
Beryllium		.5	U	ug/l	.5	.5	U	ug/l	.5
Cadmium		1.2	U	ug/l	1.2	1.2	U	ug/l	1.2
Calcium		-		ug/l		-		ug/l	
Chromium		6	J	ug/l		3.7	U	ug/l	3.7
Cobalt		5.8	U	ug/l	5.8	5.9	J	ug/l	
Copper		6.6	U	ug/l	6.6	4.4	U	ug/l	4.4
Cyanide		3	U	ug/l	3	3	U	ug/l	3
Iron		-		ug/l		-		ug/l	
Lead		6	UJ	ug/l		6	UJ	ug/l	
Magnesium		-		ug/l		-		ug/l	
Manganese		-		ug/l		-		ug/l	
Mercury		.1	J	ug/l		.1	U	ug/l	.1
Nickel		29.8	J	ug/l		11.2	J	ug/l	
Selenium		5	U	ug/l	5	.5	UJ	ug/l	
Silver		2.1	U	ug/l	2.1	2.1	U	ug/l	2.1
Sodium		-		ug/l		-		ug/l	
Thallium		7	UJ	ug/l		3.5	UJ	ug/l	
Tin		11.6	U	ug/l	11.6	11.6	U	ug/l	11.6
Vanadium		3.7	J	ug/l		4.2	J	ug/l	
Zinc		16.7	J	ug/l		2.2	U	ug/l	2.2

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

APPENDIX A-3

SLUDGE SAMPLE ANALYSES, SWMUs 6, 7, 8, 9, 10, AND 11

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		34923003				34923003RE				35074001				35074002			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		MPT8SL1				MPT8SL1				8SL1A				8SL1AD			
Collect Date:		19-JAN-93				19-JAN-93				02-FEB-93				02-FEB-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/kg																
Chloromethane		24	U	ug/kg	24	24	R	ug/kg		11	U	ug/kg	11	11	U	ug/kg	11
Bromomethane		24	U	ug/kg	24	24	R	ug/kg		11	U	ug/kg	11	11	U	ug/kg	11
Vinyl chloride		24	U	ug/kg	24	24	R	ug/kg		11	U	ug/kg	11	11	U	ug/kg	11
Chloroethane		24	U	ug/kg	24	24	R	ug/kg		11	U	ug/kg	11	11	U	ug/kg	11
Methylene chloride		12	U	ug/kg	12	6	R	ug/kg		2	U	ug/kg	2	3	U	ug/kg	3
Acetone		24	U	ug/kg	24	7	R	ug/kg		2	J	ug/kg		3	J	ug/kg	
Carbon disulfide		7	J	ug/kg		8	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,1-Dichloroethane		12	U	ug/kg	12	12	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,1-Dichloroethene		12	U	ug/kg	12	12	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloroethene (total)		12	U	ug/kg	12	12	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Chloroform		12	U	ug/kg	12	12	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloroethane		12	U	ug/kg	12	12	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
2-Butanone		24	U	ug/kg	24	24	R	ug/kg		11	U	ug/kg	11	11	U	ug/kg	11
1,1,1-Trichloroethane		12	U	ug/kg	12	12	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Carbon tetrachloride		12	U	ug/kg	12	12	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Bromodichloromethane		12	U	ug/kg	12	12	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloropropane		12	U	ug/kg	12	12	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
cis-1,3-Dichloropropene		12	U	ug/kg	12	12	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Trichloroethene		12	U	ug/kg	12	12	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Dibromochloromethane		12	U	ug/kg	12	12	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,1,2-Trichloroethane		12	U	ug/kg	12	12	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Benzene		12	U	ug/kg	12	12	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
trans-1,3-Dichloropropene		12	U	ug/kg	12	12	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Bromoform		12	U	ug/kg	12	12	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
4-Methyl-2-pentanone		24	UJ	ug/kg		24	R	ug/kg		11	U	ug/kg	11	11	U	ug/kg	11
2-Hexanone		24	UJ	ug/kg		24	R	ug/kg		11	U	ug/kg	11	11	U	ug/kg	11
Tetrachloroethene		12	UJ	ug/kg		12	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,1,2,2-Tetrachloroethane		12	UJ	ug/kg		12	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Toluene		12	UJ	ug/kg		12	R	ug/kg		5	U	ug/kg	5	5	UJ	ug/kg	
Chlorobenzene		12	UJ	ug/kg		12	R	ug/kg		5	U	ug/kg	5	5	UJ	ug/kg	
Ethylbenzene		12	UJ	ug/kg		12	R	ug/kg		5	U	ug/kg	5	5	UJ	ug/kg	
Styrene		12	UJ	ug/kg		12	R	ug/kg		5	U	ug/kg	5	5	UJ	ug/kg	
Xylenes (total)		12	UJ	ug/kg		12	R	ug/kg		5	UJ	ug/kg		5	UJ	ug/kg	
Dichlorodifluoromethane		24	U	ug/kg	24	24	R	ug/kg		11	U	ug/kg	11	11	U	ug/kg	11
Trichlorofluoromethane		12	U	ug/kg	12	12	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,3-Dichlorobenzene		12	UJ	ug/kg		12	R	ug/kg		710	U	ug/kg	710	5	UJ	ug/kg	
Acrolein		240	U	ug/kg	240	240	R	ug/kg		110	U	ug/kg	110	110	U	ug/kg	110
Iodomethane		24	U	ug/kg	24	24	R	ug/kg		11	U	ug/kg	11	11	U	ug/kg	11
1,4-Dichlorobenzene		12	UJ	ug/kg		12	R	ug/kg		710	U	ug/kg	710	5	UJ	ug/kg	
Acrylonitrile		240	U	ug/kg	240	240	R	ug/kg		110	U	ug/kg	110	110	U	ug/kg	110
Dibromomethane		12	U	ug/kg	12	12	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichlorobenzene		12	UJ	ug/kg		12	R	ug/kg		710	U	ug/kg	710	5	UJ	ug/kg	
2-Chloroethylvinylether		24	R	ug/kg		24	R	ug/kg		11	U	ug/kg	11	11	U	ug/kg	11
Ethyl methacrylate		12	U	ug/kg	12	12	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,2,3-Trichloropropane		12	U	ug/kg	12	12	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
trans-1,4-Dichloro-2-butene		12	U	ug/kg	12	12	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Isobutyl alcohol		470	U	ug/kg	470	470	R	ug/kg		220	U	ug/kg	220	220	U	ug/kg	220
1,1,1,2-Tetrachloroethane		12	UJ	ug/kg		12	R	ug/kg		5	UJ	ug/kg		5	UJ	ug/kg	
1,2-Dibromo-3-chloropropane		24	UJ	ug/kg		24	R	ug/kg		11	UJ	ug/kg		11	UJ	ug/kg	
1,2-Dibromoethane		12	U	ug/kg	12	12	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:	34923003				34923003RE				35074001				35074002			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT8SL1				MPT8SL1				8SL1A				8SL1AD			
Collect Date:	19-JAN-93				19-JAN-93				02-FEB-93				02-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	470	R	ug/kg		470	R	ug/kg		220	R	ug/kg		220	R	ug/kg	
3-Chloropropene	12	U	ug/kg	12	12	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Acetonitrile	240	U	ug/kg	240	240	R	ug/kg		110	U	ug/kg	110	110	U	ug/kg	110
Chloroprene	470	UJ	ug/kg		470	R	ug/kg		220	UJ	ug/kg		220	UJ	ug/kg	
Methacrylonitrile	12	U	ug/kg	12	12	R	ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Methyl methacrylate	24	U	ug/kg	24	24	R	ug/kg		11	U	ug/kg	11	11	U	ug/kg	11
Pentachloroethane	24	UJ	ug/kg		24	R	ug/kg		11	UJ	ug/kg		11	UJ	ug/kg	
Propionitrile	240	U	ug/kg	240	240	R	ug/kg		110	U	ug/kg	110	110	U	ug/kg	110
Vinyl acetate	24	U	ug/kg	24	24	R	ug/kg		11	U	ug/kg	11	11	U	ug/kg	11

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		34923005				34923005RE				R8977001				R8977002			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		MPT8SL3				MPT8SL3				08SL00401				08SL00401D			
Collect Date:		19-JAN-93				19-JAN-93				27-OCT-94				27-OCT-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/kg																
Chloromethane		12	U	ug/kg	12	12	R	ug/kg		13	U	ug/kg	13	14	U	ug/kg	14
Bromomethane		12	U	ug/kg	12	12	R	ug/kg		13	U	ug/kg	13	14	U	ug/kg	14
Vinyl chloride		12	U	ug/kg	12	12	R	ug/kg		13	U	ug/kg	13	14	U	ug/kg	14
Chloroethane		12	U	ug/kg	12	12	R	ug/kg		13	U	ug/kg	13	14	U	ug/kg	14
Methylene chloride		11	U	ug/kg	11	11	R	ug/kg		7	U	ug/kg	7	7	U	ug/kg	7
Acetone		25	U	ug/kg	25	6	R	ug/kg		13	U	ug/kg	13	16	U	ug/kg	16
Carbon disulfide		6	U	ug/kg	6	6	R	ug/kg		7	U	ug/kg	7	7	U	ug/kg	7
1,1-Dichloroethane		6	U	ug/kg	6	6	R	ug/kg		7	U	ug/kg	7	7	U	ug/kg	7
1,1-Dichloroethene		6	U	ug/kg	6	6	R	ug/kg		7	U	ug/kg	7	7	U	ug/kg	7
1,2-Dichloroethene (total)		6	U	ug/kg	6	6	R	ug/kg		7	U	ug/kg	7	7	U	ug/kg	7
Chloroform		6	U	ug/kg	6	6	R	ug/kg		7	U	ug/kg	7	7	U	ug/kg	7
1,2-Dichloroethane		6	U	ug/kg	6	6	R	ug/kg		7	U	ug/kg	7	7	U	ug/kg	7
2-Butanone		12	U	ug/kg	12	12	R	ug/kg		13	R	ug/kg		14	R	ug/kg	
1,1,1-Trichloroethane		6	U	ug/kg	6	6	R	ug/kg		7	UJ	ug/kg		7	U	ug/kg	7
Carbon tetrachloride		6	U	ug/kg	6	6	R	ug/kg		7	UJ	ug/kg		7	U	ug/kg	7
Bromodichloromethane		6	U	ug/kg	6	6	R	ug/kg		7	UJ	ug/kg		7	U	ug/kg	7
1,2-Dichloropropane		6	U	ug/kg	6	6	R	ug/kg		7	UJ	ug/kg		7	U	ug/kg	7
cis-1,3-Dichloropropene		6	U	ug/kg	6	6	R	ug/kg		7	UJ	ug/kg		7	U	ug/kg	7
Trichloroethene		6	U	ug/kg	6	6	R	ug/kg		7	UJ	ug/kg		7	U	ug/kg	7
Dibromochloromethane		6	U	ug/kg	6	6	R	ug/kg		7	UJ	ug/kg		7	U	ug/kg	7
1,1,2-Trichloroethane		6	U	ug/kg	6	6	R	ug/kg		7	UJ	ug/kg		7	U	ug/kg	7
Benzene		6	U	ug/kg	6	6	R	ug/kg		7	UJ	ug/kg		7	U	ug/kg	7
trans-1,3-Dichloropropene		6	U	ug/kg	6	6	R	ug/kg		7	UJ	ug/kg		7	U	ug/kg	7
Bromoform		6	U	ug/kg	6	6	R	ug/kg		7	UJ	ug/kg		7	U	ug/kg	7
4-Methyl-2-pentanone		12	UJ	ug/kg		12	R	ug/kg		13	UJ	ug/kg		14	U	ug/kg	14
2-Hexanone		12	UJ	ug/kg		12	R	ug/kg		13	UJ	ug/kg		14	U	ug/kg	14
Tetrachloroethene		6	UJ	ug/kg		6	R	ug/kg		7	UJ	ug/kg		7	U	ug/kg	7
1,1,2,2-Tetrachloroethane		6	UJ	ug/kg		6	R	ug/kg		7	UJ	ug/kg		7	U	ug/kg	7
Toluene		6	UJ	ug/kg		6	R	ug/kg		7	UJ	ug/kg		7	U	ug/kg	7
Chlorobenzene		6	UJ	ug/kg		6	R	ug/kg		7	UJ	ug/kg		7	U	ug/kg	7
Ethylbenzene		6	UJ	ug/kg		6	R	ug/kg		7	UJ	ug/kg		7	U	ug/kg	7
Styrene		6	UJ	ug/kg		6	R	ug/kg		7	UJ	ug/kg		7	U	ug/kg	7
Xylenes (total)		6	UJ	ug/kg		6	R	ug/kg		7	UJ	ug/kg		7	U	ug/kg	7
Dichlorodifluoromethane		12	U	ug/kg	12	12	R	ug/kg		13	U	ug/kg	13	14	U	ug/kg	14
Trichlorofluoromethane		6	U	ug/kg	6	6	R	ug/kg		7	U	ug/kg	7	7	U	ug/kg	7
1,3-Dichlorobenzene		770	U	ug/kg	770	6	R	ug/kg		7	UJ	ug/kg		7	U	ug/kg	7
Acrolein		120	U	ug/kg	120	120	R	ug/kg		130	U	ug/kg	130	140	U	ug/kg	140
Iodomethane		12	U	ug/kg	12	12	R	ug/kg		13	U	ug/kg	13	14	U	ug/kg	14
1,4-Dichlorobenzene		6	UJ	ug/kg		6	R	ug/kg		7	UJ	ug/kg		7	U	ug/kg	7
Acrylonitrile		120	U	ug/kg	120	120	R	ug/kg		130	U	ug/kg	130	140	U	ug/kg	140

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:	34923005				34923005RE				R8977001				R8977002			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT8SL3				MPT8SL3				08SL00401				08SL00401D			
Collect Date:	19-JAN-93				19-JAN-93				27-OCT-94				27-OCT-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	6	U	ug/kg	6	6	R	ug/kg		7	UJ	ug/kg		7	U	ug/kg	7
1,2-Dichlorobenzene	770	U	ug/kg	770	6	R	ug/kg		7	UJ	ug/kg		7	U	ug/kg	7
2-Chloroethylvinylether	12	R	ug/kg		12	R	ug/kg		13	UJ	ug/kg		14	U	ug/kg	14
Ethyl methacrylate	6	U	ug/kg	6	6	R	ug/kg		7	UJ	ug/kg		7	U	ug/kg	7
1,2,3-Trichloropropane	6	U	ug/kg	6	6	R	ug/kg		7	UJ	ug/kg		7	U	ug/kg	7
trans-1,4-Dichloro-2-butene	6	U	ug/kg	6	6	R	ug/kg		7	UJ	ug/kg		7	U	ug/kg	7
Isobutyl alcohol	230	U	ug/kg	230	230	R	ug/kg		260	R	ug/kg		270	R	ug/kg	
1,1,1,2-Tetrachloroethane	6	UJ	ug/kg		6	R	ug/kg		7	UJ	ug/kg		7	U	ug/kg	7
1,2-Dibromo-3-chloropropane	12	UJ	ug/kg		12	R	ug/kg		13	UJ	ug/kg		14	UJ	ug/kg	
1,2-Dibromoethane	6	U	ug/kg	6	6	R	ug/kg		7	UJ	ug/kg		7	UJ	ug/kg	
1,4-Dioxane	230	R	ug/kg		230	R	ug/kg		260	R	ug/kg		270	R	ug/kg	
3-Chloropropene	6	U	ug/kg	6	6	R	ug/kg		7	U	ug/kg	7	7	U	ug/kg	7
Acetonitrile	120	U	ug/kg	120	120	R	ug/kg		130	U	ug/kg	130	140	U	ug/kg	140
Chloroprene	230	UJ	ug/kg		230	R	ug/kg		260	UJ	ug/kg		270	UJ	ug/kg	
Methacrylonitrile	6	U	ug/kg	6	6	R	ug/kg		7	U	ug/kg	7	7	U	ug/kg	7
Methyl methacrylate	12	U	ug/kg	12	12	R	ug/kg		13	UJ	ug/kg		14	UJ	ug/kg	
Pentachloroethane	12	UJ	ug/kg		12	R	ug/kg		13	UJ	ug/kg		14	UJ	ug/kg	
Propionitrile	120	U	ug/kg	120	120	R	ug/kg		130	UJ	ug/kg		140	UJ	ug/kg	
Vinyl acetate	12	U	ug/kg	12	12	R	ug/kg		13	UJ	ug/kg		14	U	ug/kg	14

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		M7688008				M7688009				M7688010				M7688011			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08SL00501				08SL00505				08SL00601				08SL00605			
Collect Date:		09-AUG-94				09-AUG-94				09-AUG-94				09-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/kg																
Chloromethane		11	U	ug/kg	11	12	U	ug/kg	12	55	U	ug/kg	55	12	U	ug/kg	12
Bromomethane		11	U	ug/kg	11	12	U	ug/kg	12	55	U	ug/kg	55	12	UJ	ug/kg	
Vinyl chloride		11	U	ug/kg	11	12	U	ug/kg	12	55	U	ug/kg	55	12	U	ug/kg	12
Chloroethane		11	U	ug/kg	11	12	U	ug/kg	12	55	U	ug/kg	55	12	U	ug/kg	12
Methylene chloride		21		ug/kg		30		ug/kg		9	J	ug/kg		9	U	ug/kg	9
Acetone		10	UJ	ug/kg		180	J	ug/kg		120	J	ug/kg		64	U	ug/kg	64
Carbon disulfide		6	U	ug/kg	6	19		ug/kg		6	J	ug/kg		2	J	ug/kg	
1,1-Dichloroethane		6	U	ug/kg	6	6	U	ug/kg	6	27	U	ug/kg	27	6	U	ug/kg	6
1,1-Dichloroethene		6	U	ug/kg	6	6	U	ug/kg	6	27	U	ug/kg	27	6	U	ug/kg	6
1,2-Dichloroethene (total)		6	U	ug/kg	6	6	U	ug/kg	6	27	U	ug/kg	27	6	U	ug/kg	6
Chloroform		6	U	ug/kg	6	6	U	ug/kg	6	27	U	ug/kg	27	6	U	ug/kg	6
1,2-Dichloroethane		6	U	ug/kg	6	6	U	ug/kg	6	27	U	ug/kg	27	6	U	ug/kg	6
2-Butanone		11	U	ug/kg	11	35		ug/kg		30	J	ug/kg		2	J	ug/kg	
1,1,1-Trichloroethane		6	UJ	ug/kg		6	U	ug/kg	6	27	U	ug/kg	27	6	U	ug/kg	6
Carbon tetrachloride		6	UJ	ug/kg		6	U	ug/kg	6	27	U	ug/kg	27	6	U	ug/kg	6
Bromodichloromethane		6	UJ	ug/kg		6	U	ug/kg	6	27	U	ug/kg	27	6	U	ug/kg	6
1,2-Dichloropropane		6	UJ	ug/kg		6	U	ug/kg	6	27	U	ug/kg	27	6	U	ug/kg	6
cis-1,3-Dichloropropene		6	UJ	ug/kg		6	U	ug/kg	6	27	U	ug/kg	27	6	U	ug/kg	6
Trichloroethene		6	UJ	ug/kg		6	U	ug/kg	6	27	U	ug/kg	27	6	U	ug/kg	6
Dibromochloromethane		6	UJ	ug/kg		6	U	ug/kg	6	27	U	ug/kg	27	6	U	ug/kg	6
1,1,2-Trichloroethane		6	UJ	ug/kg		6	U	ug/kg	6	27	U	ug/kg	27	6	U	ug/kg	6
Benzene		6	UJ	ug/kg		6	U	ug/kg	6	27	U	ug/kg	27	6	U	ug/kg	6
trans-1,3-Dichloropropene		6	UJ	ug/kg		6	U	ug/kg	6	27	U	ug/kg	27	6	U	ug/kg	6
Bromoform		6	UJ	ug/kg		6	U	ug/kg	6	27	U	ug/kg	27	6	U	ug/kg	6
4-Methyl-2-pentanone		11	UJ	ug/kg		12	UJ	ug/kg		55	U	ug/kg	55	12	U	ug/kg	12
2-Hexanone		11	UJ	ug/kg		12	UJ	ug/kg		55	U	ug/kg	55	12	U	ug/kg	12
Tetrachloroethene		6	UJ	ug/kg		6	UJ	ug/kg		27	U	ug/kg	27	6	U	ug/kg	6
1,1,2,2-Tetrachloroethane		6	UJ	ug/kg		6	UJ	ug/kg		27	U	ug/kg	27	6	U	ug/kg	6
Toluene		4	J	ug/kg		6	UJ	ug/kg		27	U	ug/kg	27	6	U	ug/kg	6
Chlorobenzene		6	UJ	ug/kg		6	UJ	ug/kg		27	U	ug/kg	27	6	U	ug/kg	6
Ethylbenzene		6	UJ	ug/kg		950	J	ug/kg		590	J	ug/kg		56	J	ug/kg	
Styrene		6	UJ	ug/kg		6	UJ	ug/kg		27	U	ug/kg	27	6	U	ug/kg	6
Xylenes (total)		2	J	ug/kg		6	UJ	ug/kg		2900	J	ug/kg		19	J	ug/kg	
Dichlorodifluoromethane		11	UJ	ug/kg		12	UJ	ug/kg		55	U	ug/kg	55	12	UJ	ug/kg	
Trichlorofluoromethane		6	U	ug/kg	6	2	J	ug/kg		27	U	ug/kg	27	6	U	ug/kg	6
1,3-Dichlorobenzene		3600	U	ug/kg	3600	8000	U	ug/kg	8000	27	U	ug/kg	27	3900	U	ug/kg	3900
Acrolein		110	UJ	ug/kg		120	UJ	ug/kg		550	U	ug/kg	550	120	U	ug/kg	120
Iodomethane		11	UJ	ug/kg		12	UJ	ug/kg		55	U	ug/kg	55	12	U	ug/kg	12
1,4-Dichlorobenzene		3600	U	ug/kg	3600	8000	U	ug/kg	8000	18000	U	ug/kg	18000	3900	U	ug/kg	3900
Acrylonitrile		110	UJ	ug/kg		120	UJ	ug/kg		550	U	ug/kg	550	120	U	ug/kg	120

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:	M7688008				M7688009				M7688010				M7688011			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08SL00501				08SL00505				08SL00601				08SL00605			
Collect Date:	09-AUG-94				09-AUG-94				09-AUG-94				09-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	6	UJ	ug/kg		6	UJ	ug/kg		27	U	ug/kg	27	6	U	ug/kg	6
1,2-Dichlorobenzene	6	UJ	ug/kg		8000	U	ug/kg	8000	27	U	ug/kg	27	3900	U	ug/kg	3900
2-Chloroethylvinylether	11	UJ	ug/kg		12	U	ug/kg	12	55	U	ug/kg	55	12	U	ug/kg	12
Ethyl methacrylate	6	UJ	ug/kg		6	UJ	ug/kg		27	U	ug/kg	27	6	U	ug/kg	6
1,2,3-Trichloropropane	6	UJ	ug/kg		6	UJ	ug/kg		27	U	ug/kg	27	6	U	ug/kg	6
trans-1,4-Dichloro-2-butene	6	UJ	ug/kg		6	UJ	ug/kg		27	U	ug/kg	27	6	U	ug/kg	6
Isobutyl alcohol	220	U	ug/kg	220	610		ug/kg		320	J	ug/kg		170	J	ug/kg	
1,1,1,2-Tetrachloroethane	6	UJ	ug/kg		6	UJ	ug/kg		27	U	ug/kg	27	6	U	ug/kg	6
1,2-Dibromo-3-chloropropane	11	UJ	ug/kg		12	UJ	ug/kg		55	U	ug/kg	55	12	U	ug/kg	12
1,2-Dibromoethane	6	UJ	ug/kg		6	UJ	ug/kg		27	U	ug/kg	27	6	U	ug/kg	6
1,4-Dioxane	220	R	ug/kg		250	R	ug/kg		1100	R	ug/kg		240	R	ug/kg	
3-Chloropropene	6	UJ	ug/kg		6	UJ	ug/kg		27	UJ	ug/kg		6	U	ug/kg	6
Acetonitrile	110	UJ	ug/kg		120	UJ	ug/kg		550	UJ	ug/kg		120	U	ug/kg	120
Chloroprene	220	UJ	ug/kg		250	UJ	ug/kg		1100	U	ug/kg	1100	240	UJ	ug/kg	
Methacrylonitrile	6	UJ	ug/kg		6	UJ	ug/kg		27	U	ug/kg	27	6	U	ug/kg	6
Methyl methacrylate	11	UJ	ug/kg		12	UJ	ug/kg		55	U	ug/kg	55	12	U	ug/kg	12
Pentachloroethane	11	UJ	ug/kg		12	UJ	ug/kg		55	U	ug/kg	55	12	U	ug/kg	12
Propionitrile	110	UJ	ug/kg		120	UJ	ug/kg		550	U	ug/kg	550	120	UJ	ug/kg	
Vinyl acetate	11	UJ	ug/kg		12	U	ug/kg	12	55	U	ug/kg	55	12	U	ug/kg	12

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		M7688012				M7688013				M7688014				M7688001			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08SL00701				08SL00701D				08SL00705				08SL00801			
Collect Date:		09-AUG-94				09-AUG-94				09-AUG-94				09-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/kg																
Chloromethane		13	U	ug/kg	13	15	UJ	ug/kg		58	U	ug/kg	58	12	U	ug/kg	12
Bromomethane		13	UJ	ug/kg		15	UJ	ug/kg		58	U	ug/kg	58	12	U	ug/kg	12
Vinyl chloride		13	U	ug/kg	13	15	UJ	ug/kg		58	U	ug/kg	58	12	U	ug/kg	12
Chloroethane		13	U	ug/kg	13	15	UJ	ug/kg		58	U	ug/kg	58	12	U	ug/kg	12
Methylene chloride		6	U	ug/kg	6	18	UJ	ug/kg		11	J	ug/kg		42		ug/kg	
Acetone		150	J	ug/kg		15	UJ	ug/kg		190	J	ug/kg		22	U	ug/kg	22
Carbon disulfide		6	U	ug/kg	6	7	UJ	ug/kg		16	J	ug/kg		5	J	ug/kg	
1,1-Dichloroethane		6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	U	ug/kg	6
1,1-Dichloroethene		6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	U	ug/kg	6
1,2-Dichloroethene (total)		6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	U	ug/kg	6
Chloroform		6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	U	ug/kg	6
1,2-Dichloroethane		6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	U	ug/kg	6
2-Butanone		13	R	ug/kg		15	UJ	ug/kg		87	J	ug/kg		12	U	ug/kg	12
1,1,1-Trichloroethane		6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	U	ug/kg	6
Carbon tetrachloride		6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	U	ug/kg	6
Bromodichloromethane		6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	U	ug/kg	6
1,2-Dichloropropane		6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	U	ug/kg	6
cis-1,3-Dichloropropene		6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	U	ug/kg	6
Trichloroethene		6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	U	ug/kg	6
Dibromochloromethane		6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	U	ug/kg	6
1,1,2-Trichloroethane		6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	U	ug/kg	6
Benzene		6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	U	ug/kg	6
trans-1,3-Dichloropropene		6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	U	ug/kg	6
Bromoform		6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	U	ug/kg	6
4-Methyl-2-pentanone		13	U	ug/kg	13	15	UJ	ug/kg		58	U	ug/kg	58	12	UJ	ug/kg	
2-Hexanone		13	U	ug/kg	13	15	UJ	ug/kg		58	U	ug/kg	58	12	UJ	ug/kg	
Tetrachloroethene		6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	UJ	ug/kg	
1,1,2,2-Tetrachloroethane		6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	UJ	ug/kg	
Toluene		13	J	ug/kg		11	J	ug/kg		29	U	ug/kg	29	6	UJ	ug/kg	
Chlorobenzene		6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	UJ	ug/kg	
Ethylbenzene		6	U	ug/kg	6	7	UJ	ug/kg		1800	J	ug/kg		6	UJ	ug/kg	
Styrene		6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	UJ	ug/kg	
Xylenes (total)		4	J	ug/kg		4	J	ug/kg		890	J	ug/kg		19	J	ug/kg	
Dichlorodifluoromethane		13	UJ	ug/kg		15	UJ	ug/kg		58	U	ug/kg	58	12	UJ	ug/kg	
Trichlorofluoromethane		6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	U	ug/kg	6
1,3-Dichlorobenzene		6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	UJ	ug/kg	
Acrolein		130	U	ug/kg	130	150	UJ	ug/kg		580	U	ug/kg	580	120	UJ	ug/kg	
Iodomethane		13	U	ug/kg	13	15	UJ	ug/kg		58	U	ug/kg	58	12	UJ	ug/kg	
1,4-Dichlorobenzene		6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	3800	U	ug/kg	3800
Acrylonitrile		130	U	ug/kg	130	150	UJ	ug/kg		580	U	ug/kg	580	120	UJ	ug/kg	

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:	M7688012				M7688013				M7688014				M7688001			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08SL00701				08SL00701D				08SL00705				08SL00801			
Collect Date:	09-AUG-94				09-AUG-94				09-AUG-94				09-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	UJ	ug/kg	
1,2-Dichlorobenzene	6	U	ug/kg	6	7100	U	ug/kg	7100	29	U	ug/kg	29	3800	U	ug/kg	3800
2-Chloroethylvinylether	13	U	ug/kg	13	15	UJ	ug/kg		58	U	ug/kg	58	12	U	ug/kg	12
Ethyl methacrylate	6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	UJ	ug/kg	
1,2,3-Trichloropropane	6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	UJ	ug/kg	
trans-1,4-Dichloro-2-butene	6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	UJ	ug/kg	
Isobutyl alcohol	260	U	ug/kg	260	290	UJ	ug/kg		2700	J	ug/kg		240	UJ	ug/kg	
1,1,1,2-Tetrachloroethane	6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	UJ	ug/kg	
1,2-Dibromo-3-chloropropane	13	U	ug/kg	13	15	UJ	ug/kg		58	U	ug/kg	58	120	UJ	ug/kg	
1,2-Dibromoethane	6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	UJ	ug/kg	
1,4-Dioxane	260	R	ug/kg		290	R	ug/kg		1200	R	ug/kg		240	R	ug/kg	
3-Chloropropene	6	U	ug/kg	6	7	UJ	ug/kg		29	UJ	ug/kg		6	UJ	ug/kg	
Acetonitrile	130	U	ug/kg	130	150	UJ	ug/kg		580	UJ	ug/kg		120	UJ	ug/kg	
Chloroprene	260	UJ	ug/kg		290	UJ	ug/kg		1200	U	ug/kg	1200	240	UJ	ug/kg	
Methacrylonitrile	6	U	ug/kg	6	7	UJ	ug/kg		29	U	ug/kg	29	6	UJ	ug/kg	
Methyl methacrylate	13	U	ug/kg	13	15	UJ	ug/kg		58	U	ug/kg	58	12	UJ	ug/kg	
Pentachloroethane	13	U	ug/kg	13	15	UJ	ug/kg		58	U	ug/kg	58	12	UJ	ug/kg	
Propionitrile	130	UJ	ug/kg		150	UJ	ug/kg		580	U	ug/kg	580	120	UJ	ug/kg	
Vinyl acetate	13	U	ug/kg	13	15	UJ	ug/kg		58	U	ug/kg	58	12	U	ug/kg	12

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		M7688007				M7688002				M7688006				M7688003			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08SL00806				08SL00901				08SL00906				08SL01001			
Collect Date:		09-AUG-94				09-AUG-94				09-AUG-94				09-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/kg																
Chloromethane		54	U	ug/kg	54	12	U	ug/kg	12	56	U	ug/kg	56	12	U	ug/kg	12
Bromomethane		54	U	ug/kg	54	12	UJ	ug/kg		56	U	ug/kg	56	12	U	ug/kg	12
Vinyl chloride		54	U	ug/kg	54	12	U	ug/kg	12	56	U	ug/kg	56	12	U	ug/kg	12
Chloroethane		54	U	ug/kg	54	12	U	ug/kg	12	56	U	ug/kg	56	12	U	ug/kg	12
Methylene chloride		11	J	ug/kg		10	U	ug/kg	10	9	J	ug/kg		22		ug/kg	
Acetone		140	J	ug/kg		10	U	ug/kg	10	160	J	ug/kg		18	U	ug/kg	18
Carbon disulfide		13	J	ug/kg		1	J	ug/kg		6	J	ug/kg		5	J	ug/kg	
1,1-Dichloroethane		27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	U	ug/kg	6
1,1-Dichloroethene		27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	U	ug/kg	6
1,2-Dichloroethene (total)		27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	U	ug/kg	6
Chloroform		27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	U	ug/kg	6
1,2-Dichloroethane		27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	U	ug/kg	6
2-Butanone		50	J	ug/kg		12	R	ug/kg		45	J	ug/kg		4	J	ug/kg	
1,1,1-Trichloroethane		27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	U	ug/kg	6
Carbon tetrachloride		27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	U	ug/kg	6
Bromodichloromethane		27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	U	ug/kg	6
1,2-Dichloropropane		27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	U	ug/kg	6
cis-1,3-Dichloropropene		27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	U	ug/kg	6
Trichloroethene		27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	U	ug/kg	6
Dibromochloromethane		27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	U	ug/kg	6
1,1,2-Trichloroethane		27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	U	ug/kg	6
Benzene		27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	U	ug/kg	6
trans-1,3-Dichloropropene		27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	U	ug/kg	6
Bromoform		27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	U	ug/kg	6
4-Methyl-2-pentanone		54	U	ug/kg	54	12	U	ug/kg	12	56	U	ug/kg	56	12	UJ	ug/kg	
2-Hexanone		560	J	ug/kg		12	U	ug/kg	12	650	J	ug/kg		12	UJ	ug/kg	
Tetrachloroethene		27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	UJ	ug/kg	
1,1,2,2-Tetrachloroethane		27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	UJ	ug/kg	
Toluene		31	J	ug/kg		6	U	ug/kg	6	59	J	ug/kg		6	UJ	ug/kg	
Chlorobenzene		27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	UJ	ug/kg	
Ethylbenzene		840	J	ug/kg		2	J	ug/kg		960	J	ug/kg		6	UJ	ug/kg	
Styrene		27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	UJ	ug/kg	
Xylenes (total)		2800	J	ug/kg		3	J	ug/kg		4200	J	ug/kg		8	J	ug/kg	
Dichlorodifluoromethane		54	U	ug/kg	54	12	UJ	ug/kg		56	U	ug/kg	56	12	UJ	ug/kg	
Trichlorofluoromethane		27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	U	ug/kg	6
1,3-Dichlorobenzene		27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	UJ	ug/kg	
Acrolein		540	U	ug/kg	540	120	U	ug/kg	120	560	U	ug/kg	560	120	UJ	ug/kg	
Iodomethane		54	U	ug/kg	54	12	U	ug/kg	12	56	U	ug/kg	56	12	UJ	ug/kg	
1,4-Dichlorobenzene		27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	UJ	ug/kg	
Acrylonitrile		540	U	ug/kg	540	120	U	ug/kg	120	560	U	ug/kg	560	120	UJ	ug/kg	

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:	M7688007				M7688002				M7688006				M7688003			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08SL00806				08SL00901				08SL00906				08SL01001			
Collect Date:	09-AUG-94				09-AUG-94				09-AUG-94				09-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	UJ	ug/kg	
1,2-Dichlorobenzene	27	U	ug/kg	27	91000	U	ug/kg	91000	28	U	ug/kg	28	7000	U	ug/kg	7000
2-Chloroethylvinylether	54	U	ug/kg	54	12	U	ug/kg	12	56	U	ug/kg	56	12	U	ug/kg	12
Ethyl methacrylate	27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	UJ	ug/kg	
1,2,3-Trichloropropane	27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	UJ	ug/kg	
trans-1,4-Dichloro-2-butene	27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	UJ	ug/kg	
Isobutyl alcohol	1200	J	ug/kg		240	U	ug/kg	240	910	J	ug/kg		250	UJ	ug/kg	
1,1,1,2-Tetrachloroethane	27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	UJ	ug/kg	
1,2-Dibromo-3-chloropropane	54	U	ug/kg	54	12	U	ug/kg	12	56	U	ug/kg	56	130	UJ	ug/kg	
1,2-Dibromoethane	27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	UJ	ug/kg	
1,4-Dioxane	1100	R	ug/kg		240	R	ug/kg		1100	R	ug/kg		250	R	ug/kg	
3-Chloropropene	27	UJ	ug/kg		6	U	ug/kg	6	28	UJ	ug/kg		6	UJ	ug/kg	
Acetonitrile	540	UJ	ug/kg		120	U	ug/kg	120	560	UJ	ug/kg		120	UJ	ug/kg	
Chloroprene	1100	U	ug/kg	1100	240	UJ	ug/kg		1100	U	ug/kg	1100	250	UJ	ug/kg	
Methacrylonitrile	27	U	ug/kg	27	6	U	ug/kg	6	28	U	ug/kg	28	6	UJ	ug/kg	
Methyl methacrylate	54	U	ug/kg	54	12	U	ug/kg	12	56	U	ug/kg	56	12	UJ	ug/kg	
Pentachloroethane	54	U	ug/kg	54	12	U	ug/kg	12	56	U	ug/kg	56	12	UJ	ug/kg	
Propionitrile	540	U	ug/kg	540	120	UJ	ug/kg		560	U	ug/kg	560	120	UJ	ug/kg	
Vinyl acetate	54	U	ug/kg	54	12	U	ug/kg	12	56	U	ug/kg	56	12	U	ug/kg	12

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		M7688004			M7688004			M7688005			M7682001		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		08SL01001			08SL01001D			08SL01006			08SL01101		
Collect Date:		09-AUG-94			09-AUG-94			09-AUG-94			08-AUG-94		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
VOLATILES	ug/kg												
Chloromethane		-	ug/kg		12 U	ug/kg	12	11 U	ug/kg	11	33 U	ug/kg	33
Bromomethane		-	ug/kg		12 U	ug/kg	12	11 U	ug/kg	11	33 UJ	ug/kg	
Vinyl chloride		-	ug/kg		12 U	ug/kg	12	11 U	ug/kg	11	33 U	ug/kg	33
Chloroethane		-	ug/kg		12 U	ug/kg	12	11 U	ug/kg	11	33 U	ug/kg	33
Methylene chloride		-	ug/kg		24	ug/kg		37	ug/kg		17 U	ug/kg	17
Acetone		-	ug/kg		13 U	ug/kg	13	16 U	ug/kg	16	240 J	ug/kg	
Carbon disulfide		-	ug/kg		2 J	ug/kg		15	ug/kg		5 J	ug/kg	
1,1-Dichloroethane		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	17 U	ug/kg	17
1,1-Dichloroethene		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	17 U	ug/kg	17
1,2-Dichloroethene (total)		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	17 U	ug/kg	17
Chloroform		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	17 U	ug/kg	17
1,2-Dichloroethane		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	17 U	ug/kg	17
2-Butanone		-	ug/kg		3 J	ug/kg		11 U	ug/kg	11	41 J	ug/kg	
1,1,1-Trichloroethane		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	17 U	ug/kg	17
Carbon tetrachloride		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	17 U	ug/kg	17
Bromodichloromethane		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	17 U	ug/kg	17
1,2-Dichloropropane		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	17 U	ug/kg	17
cis-1,3-Dichloropropene		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	17 U	ug/kg	17
Trichloroethene		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	17 U	ug/kg	17
Dibromochloromethane		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	17 U	ug/kg	17
1,1,2-Trichloroethane		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	17 U	ug/kg	17
Benzene		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	17 U	ug/kg	17
trans-1,3-Dichloropropene		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	17 U	ug/kg	17
Bromoform		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	17 U	ug/kg	17
4-Methyl-2-pentanone		-	ug/kg		12 U	ug/kg	12	11 UJ	ug/kg		33 U	ug/kg	33
2-Hexanone		-	ug/kg		12 U	ug/kg	12	11 UJ	ug/kg		33 U	ug/kg	33
Tetrachloroethene		-	ug/kg		6 U	ug/kg	6	6 UJ	ug/kg		17 U	ug/kg	17
1,1,2,2-Tetrachloroethane		-	ug/kg		6 U	ug/kg	6	6 UJ	ug/kg		17 U	ug/kg	17
Toluene		-	ug/kg		6 U	ug/kg	6	23 J	ug/kg		17 U	ug/kg	17
Chlorobenzene		-	ug/kg		6 U	ug/kg	6	6 UJ	ug/kg		17 U	ug/kg	17
Ethylbenzene		6 U	ug/kg	6	-	ug/kg		110 J	ug/kg		17 U	ug/kg	17
Styrene		-	ug/kg		6 U	ug/kg	6	6 UJ	ug/kg		17 U	ug/kg	17
Xylenes (total)		-	ug/kg		5 J	ug/kg		350 J	ug/kg		17 U	ug/kg	17
Dichlorodifluoromethane		-	ug/kg		12 U	ug/kg	12	11 UJ	ug/kg		33 UJ	ug/kg	
Trichlorofluoromethane		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	17 U	ug/kg	17
1,3-Dichlorobenzene		-	ug/kg		6 U	ug/kg	6	3700 U	ug/kg	3700	17 U	ug/kg	17
Acrolein		-	ug/kg		120 U	ug/kg	120	110 UJ	ug/kg		330 U	ug/kg	330
Iodomethane		-	ug/kg		12 U	ug/kg	12	11 UJ	ug/kg		33 U	ug/kg	33
1,4-Dichlorobenzene		-	ug/kg		6 U	ug/kg	6	6 UJ	ug/kg		17 U	ug/kg	17
Acrylonitrile		-	ug/kg		120 U	ug/kg	120	110 UJ	ug/kg		330 U	ug/kg	330

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:	M7688004				M7688004				M7688005				M7682001			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08SL01001				08SL01001D				08SL01006				08SL01101			
Collect Date:	09-AUG-94				09-AUG-94				09-AUG-94				08-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	-		ug/kg		6	U	ug/kg	6	6	UJ	ug/kg		17	U	ug/kg	17
1,2-Dichlorobenzene	-		ug/kg		6900	U	ug/kg	6900	3700	U	ug/kg	3700	30000	U	ug/kg	30000
2-Chloroethylvinylether	-		ug/kg		12	U	ug/kg	12	11	U	ug/kg	11	33	U	ug/kg	33
Ethyl methacrylate	-		ug/kg		6	U	ug/kg	6	6	UJ	ug/kg		17	U	ug/kg	17
1,2,3-Trichloropropene	-		ug/kg		6	U	ug/kg	6	6	UJ	ug/kg		17	U	ug/kg	17
trans-1,4-Dichloro-2-butene	-		ug/kg		6	U	ug/kg	6	6	UJ	ug/kg		17	U	ug/kg	17
Isobutyl alcohol	-		ug/kg		240	UJ	ug/kg		130	J	ug/kg		670	U	ug/kg	670
1,1,1,2-Tetrachloroethane	-		ug/kg		6	U	ug/kg	6	6	UJ	ug/kg		17	U	ug/kg	17
1,2-Dibromo-3-chloropropane	-		ug/kg		120	U	ug/kg	120	120	UJ	ug/kg		33	U	ug/kg	33
1,2-Dibromoethane	-		ug/kg		6	U	ug/kg	6	6	UJ	ug/kg		17	U	ug/kg	17
1,4-Dioxane	-		ug/kg		240	R	ug/kg		220	R	ug/kg		670	R	ug/kg	
3-Chloropropene	-		ug/kg		6	U	ug/kg	6	6	UJ	ug/kg		17	U	ug/kg	17
Acetonitrile	-		ug/kg		120	U	ug/kg	120	110	UJ	ug/kg		330	U	ug/kg	330
Chloroprene	-		ug/kg		240	U	ug/kg	240	220	UJ	ug/kg		670	R	ug/kg	
Methacrylonitrile	-		ug/kg		6	U	ug/kg	6	6	UJ	ug/kg		17	U	ug/kg	17
Methyl methacrylate	-		ug/kg		12	U	ug/kg	12	11	UJ	ug/kg		33	U	ug/kg	33
Pentachloroethane	-		ug/kg		12	U	ug/kg	12	11	UJ	ug/kg		33	U	ug/kg	33
Propionitrile	-		ug/kg		120	U	ug/kg	120	110	UJ	ug/kg		330	UJ	ug/kg	
Vinyl acetate	-		ug/kg		12	U	ug/kg	12	11	U	ug/kg	11	33	U	ug/kg	33

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		M7682002				M7682003				M7682004				M7682005			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08SL01102				08SL01201				08SL01202				08SL01301			
Collect Date:		08-AUG-94				08-AUG-94				08-AUG-94				08-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/kg																
Chloromethane		12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11
Bromomethane		12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11
Vinyl chloride		12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11
Chloroethane		12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11
Methylene chloride		27	U	ug/kg	27	27	U	ug/kg	27	30	U	ug/kg	30	10	U	ug/kg	10
Acetone		110	U	ug/kg	110	120	J	ug/kg		36	U	ug/kg	36	86	J	ug/kg	
Carbon disulfide		10		ug/kg		5	J	ug/kg		8		ug/kg		4	J	ug/kg	
1,1-Dichloroethane		6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
1,1-Dichloroethene		6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
1,2-Dichloroethene (total)		6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
Chloroform		6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
1,2-Dichloroethane		6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
2-Butanone		36	J	ug/kg		12	J	ug/kg		11	R	ug/kg		13	J	ug/kg	
1,1,1-Trichloroethane		6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
Carbon tetrachloride		6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
Bromodichloromethane		6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
1,2-Dichloropropane		6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
cis-1,3-Dichloropropene		6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
Trichloroethene		6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
Dibromochloromethane		6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
1,1,2-Trichloroethane		6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
Benzene		7		ug/kg		6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
trans-1,3-Dichloropropene		6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
Bromoform		6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
4-Methyl-2-pentanone		12	UJ	ug/kg		12	U	ug/kg	12	11	UJ	ug/kg		11	U	ug/kg	11
2-Hexanone		12	UJ	ug/kg		12	U	ug/kg	12	11	UJ	ug/kg		11	U	ug/kg	11
Tetrachloroethene		2	J	ug/kg		6	U	ug/kg	6	6	UJ	ug/kg		6	U	ug/kg	6
1,1,2,2-Tetrachloroethane		6	UJ	ug/kg		6	U	ug/kg	6	6	UJ	ug/kg		6	U	ug/kg	6
Toluene		7	J	ug/kg		1	J	ug/kg		6	UJ	ug/kg		6	U	ug/kg	6
Chlorobenzene		6	UJ	ug/kg		6	U	ug/kg	6	6	UJ	ug/kg		6	U	ug/kg	6
Ethylbenzene		69	J	ug/kg		6	U	ug/kg	6	43	J	ug/kg		26		ug/kg	
Styrene		6	UJ	ug/kg		6	U	ug/kg	6	6	UJ	ug/kg		6	U	ug/kg	6
Xylenes (total)		300	J	ug/kg		5	J	ug/kg		32	J	ug/kg		24		ug/kg	
Dichlorodifluoromethane		12	UJ	ug/kg		12	UJ	ug/kg		11	UJ	ug/kg		11	UJ	ug/kg	
Trichlorofluoromethane		6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
1,3-Dichlorobenzene		10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700	3700	U	ug/kg	3700
Acrolein		120	UJ	ug/kg		120	U	ug/kg	120	110	UJ	ug/kg		110	U	ug/kg	110
Iodomethane		12	UJ	ug/kg		12	U	ug/kg	12	11	UJ	ug/kg		11	U	ug/kg	11
1,4-Dichlorobenzene		10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700	3700	U	ug/kg	3700
Acrylonitrile		120	UJ	ug/kg		120	U	ug/kg	120	110	UJ	ug/kg		110	U	ug/kg	110

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:	M7682002				M7682003				M7682004				M7682005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08SL01102				08SL01201				08SL01202				08SL01301			
Collect Date:	08-AUG-94				08-AUG-94				08-AUG-94				08-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	6	UJ	ug/kg		6	U	ug/kg	6	6	UJ	ug/kg		6	U	ug/kg	6
1,2-Dichlorobenzene	10000	U	ug/kg	10000	4000	U	ug/kg	4000	6	UJ	ug/kg		3700	U	ug/kg	3700
2-Chloroethylvinylether	12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11
Ethyl methacrylate	6	UJ	ug/kg		6	U	ug/kg	6	6	UJ	ug/kg		6	U	ug/kg	6
1,2,3-Trichloropropane	6	UJ	ug/kg		6	U	ug/kg	6	6	UJ	ug/kg		6	U	ug/kg	6
trans-1,4-Dichloro-2-butene	6	UJ	ug/kg		6	U	ug/kg	6	6	UJ	ug/kg		6	U	ug/kg	6
Isobutyl alcohol	240	U	ug/kg	240	240	U	ug/kg	240	220	U	ug/kg	220	230	U	ug/kg	230
1,1,1,2-Tetrachloroethane	6	UJ	ug/kg		6	U	ug/kg	6	6	UJ	ug/kg		6	U	ug/kg	6
1,2-Dibromo-3-chloropropane	12	UJ	ug/kg		12	U	ug/kg	12	11	UJ	ug/kg		11	U	ug/kg	11
1,2-Dibromoethane	6	UJ	ug/kg		6	U	ug/kg	6	6	UJ	ug/kg		6	U	ug/kg	6
1,4-Dioxane	240	R	ug/kg		240	R	ug/kg		220	R	ug/kg		230	R	ug/kg	
3-Chloropropene	6	UJ	ug/kg		6	U	ug/kg	6	6	UJ	ug/kg		6	U	ug/kg	6
Acetonitrile	120	UJ	ug/kg		120	U	ug/kg	120	110	UJ	ug/kg		110	U	ug/kg	110
Chloroprene	240	UJ	ug/kg		240	U	ug/kg	240	220	UJ	ug/kg		230	U	ug/kg	230
Methacrylonitrile	6	UJ	ug/kg		6	U	ug/kg	6	6	UJ	ug/kg		6	U	ug/kg	6
Methyl methacrylate	12	UJ	ug/kg		12	U	ug/kg	12	11	UJ	ug/kg		11	U	ug/kg	11
Pentachloroethane	12	UJ	ug/kg		12	U	ug/kg	12	11	UJ	ug/kg		11	U	ug/kg	11
Propionitrile	120	UJ	ug/kg		120	U	ug/kg	120	110	UJ	ug/kg		110	U	ug/kg	110
Vinyl acetate	12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		M7682006				R8977001RE				R8977002RE				M7688008R			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08SL01302				08SL00401RE				08SL00401DRE				08SL00501RE			
Collect Date:		08-AUG-94				27-OCT-94				27-OCT-94				09-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/kg																
Chloromethane		13	U	ug/kg	13	13	UJ	ug/kg		14	UJ	ug/kg		11	U	ug/kg	11
Bromomethane		13	U	ug/kg	13	13	UJ	ug/kg		14	UJ	ug/kg		11	U	ug/kg	11
Vinyl chloride		13	U	ug/kg	13	13	UJ	ug/kg		14	UJ	ug/kg		11	U	ug/kg	11
Chloroethane		13	U	ug/kg	13	13	UJ	ug/kg		14	UJ	ug/kg		11	U	ug/kg	11
Methylene chloride		51	J	ug/kg		7	UJ	ug/kg		7	UJ	ug/kg		4	J	ug/kg	
Acetone		140	J	ug/kg		14	UJ	ug/kg		13	UJ	ug/kg		18	B	ug/kg	
Carbon disulfide		32		ug/kg		1	J	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
1,1-Dichloroethane		6	U	ug/kg	6	7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
1,1-Dichloroethene		6	U	ug/kg	6	7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
1,2-Dichloroethene (total)		6	U	ug/kg	6	7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
Chloroform		6	U	ug/kg	6	7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
1,2-Dichloroethane		6	U	ug/kg	6	7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
2-Butanone		13	R	ug/kg		13	UJ	ug/kg		14	UJ	ug/kg		11	U	ug/kg	11
1,1,1-Trichloroethane		6	U	ug/kg	6	7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
Carbon tetrachloride		6	U	ug/kg	6	7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
Bromodichloromethane		6	U	ug/kg	6	7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
1,2-Dichloropropane		6	U	ug/kg	6	7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
cis-1,3-Dichloropropene		6	U	ug/kg	6	7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
Trichloroethene		6	U	ug/kg	6	7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
Dibromochloromethane		6	U	ug/kg	6	7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
1,1,2-Trichloroethane		6	U	ug/kg	6	7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
Benzene		6	U	ug/kg	6	7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
trans-1,3-Dichloropropene		6	U	ug/kg	6	7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
Bromoform		6	U	ug/kg	6	7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
4-Methyl-2-pentanone		13	UJ	ug/kg		13	UJ	ug/kg		14	UJ	ug/kg		11	U	ug/kg	11
2-Hexanone		13	UJ	ug/kg		13	UJ	ug/kg		14	UJ	ug/kg		11	U	ug/kg	11
Tetrachloroethene		3	J	ug/kg		7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
1,1,2,2-Tetrachloroethane		6	UJ	ug/kg		7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
Toluene		15	J	ug/kg		7	UJ	ug/kg		7	UJ	ug/kg		10		ug/kg	
Chlorobenzene		6	UJ	ug/kg		7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
Ethylbenzene		260	J	ug/kg		7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
Styrene		6	UJ	ug/kg		7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
Xylenes (total)		230	J	ug/kg		7	UJ	ug/kg		7	UJ	ug/kg		4	J	ug/kg	
Dichlorodifluoromethane		13	UJ	ug/kg		13	UJ	ug/kg		14	UJ	ug/kg		11	U	ug/kg	11
Trichlorofluoromethane		5	J	ug/kg		7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
1,3-Dichlorobenzene		3700	U	ug/kg	3700	7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
Acrolein		130	UJ	ug/kg		130	UJ	ug/kg		140	UJ	ug/kg		110	U	ug/kg	110
Iodomethane		13	UJ	ug/kg		13	UJ	ug/kg		14	UJ	ug/kg		11	U	ug/kg	11
1,4-Dichlorobenzene		3700	U	ug/kg	3700	7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
Acrylonitrile		130	UJ	ug/kg		130	UJ	ug/kg		140	UJ	ug/kg		110	U	ug/kg	110

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Group2 Sludge Data

Lab Sample Number:	M7682006				R8977001RE				R8977002RE				M7688008R			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08SL01302				08SL00401RE				08SL00401DRE				08SL00501RE			
Collect Date:	08-AUG-94				27-OCT-94				27-OCT-94				09-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	6	UJ	ug/kg		7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
1,2-Dichlorobenzene	6	UJ	ug/kg		7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
2-Chloroethylvinylether	13	U	ug/kg	13	13	UJ	ug/kg		14	UJ	ug/kg		11	U	ug/kg	11
Ethyl methacrylate	6	UJ	ug/kg		7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
1,2,3-Trichloropropane	6	UJ	ug/kg		7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
trans-1,4-Dichloro-2-butene	6	UJ	ug/kg		7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
Isobutyl alcohol	260	U	ug/kg	260	260	R	ug/kg		270	R	ug/kg		220	U	ug/kg	220
1,1,1,2-Tetrachloroethane	6	UJ	ug/kg		7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
1,2-Dibromo-3-chloropropane	13	UJ	ug/kg		13	UJ	ug/kg		14	UJ	ug/kg		11	U	ug/kg	11
1,2-Dibromoethane	6	UJ	ug/kg		7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
1,4-Dioxane	260	R	ug/kg		260	R	ug/kg		270	R	ug/kg		220	U	ug/kg	220
3-Chloropropene	6	UJ	ug/kg		7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
Acetonitrile	130	UJ	ug/kg		130	UJ	ug/kg		140	UJ	ug/kg		110	U	ug/kg	110
Chloroprene	260	UJ	ug/kg		260	UJ	ug/kg		270	UJ	ug/kg		220	U	ug/kg	220
Methacrylonitrile	6	UJ	ug/kg		7	UJ	ug/kg		7	UJ	ug/kg		6	U	ug/kg	6
Methyl methacrylate	13	UJ	ug/kg		13	UJ	ug/kg		14	UJ	ug/kg		11	U	ug/kg	11
Pentachloroethane	13	UJ	ug/kg		13	UJ	ug/kg		14	UJ	ug/kg		11	U	ug/kg	11
Propionitrile	130	UJ	ug/kg		130	UJ	ug/kg		140	UJ	ug/kg		110	U	ug/kg	110
Vinyl acetate	13	U	ug/kg	13	13	UJ	ug/kg		14	UJ	ug/kg		11	U	ug/kg	11

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		M7688008DL			M7688009DL			M7688010DL			M7688011DL		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		08SL00501DL			08SL00505DL			08SL00601DL			08SL00605DL		
Collect Date:		09-AUG-94			09-AUG-94			09-AUG-94			09-AUG-94		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
VOLATILES	ug/kg												
Chloromethane		-	ug/kg		62 U	ug/kg	62	1400 U	ug/kg	1400	60 U	ug/kg	60
Bromomethane		-	ug/kg		62 U	ug/kg	62	1400 U	ug/kg	1400	60 U	ug/kg	60
Vinyl chloride		-	ug/kg		62 U	ug/kg	62	1400 U	ug/kg	1400	60 U	ug/kg	60
Chloroethane		-	ug/kg		62 U	ug/kg	62	1400 U	ug/kg	1400	60 U	ug/kg	60
Methylene chloride		-	ug/kg		15 J	ug/kg		690 U	ug/kg	690	8 J	ug/kg	
Acetone		-	ug/kg		160 J	ug/kg		1400 U	ug/kg	1400	120 J	ug/kg	
Carbon disulfide		-	ug/kg		21 J	ug/kg		690 U	ug/kg	690	8 J	ug/kg	
1,1-Dichloroethane		-	ug/kg		31 U	ug/kg	31	690 U	ug/kg	690	30 U	ug/kg	30
1,1-Dichloroethene		-	ug/kg		31 U	ug/kg	31	690 U	ug/kg	690	30 U	ug/kg	30
1,2-Dichloroethene (total)		-	ug/kg		31 U	ug/kg	31	690 U	ug/kg	690	30 U	ug/kg	30
Chloroform		-	ug/kg		31 U	ug/kg	31	690 U	ug/kg	690	30 U	ug/kg	30
1,2-Dichloroethane		-	ug/kg		31 U	ug/kg	31	690 U	ug/kg	690	30 U	ug/kg	30
2-Butanone		-	ug/kg		44 J	ug/kg		1400 U	ug/kg	1400	9 J	ug/kg	
1,1,1-Trichloroethane		-	ug/kg		31 U	ug/kg	31	690 U	ug/kg	690	30 U	ug/kg	30
Carbon tetrachloride		-	ug/kg		31 U	ug/kg	31	690 U	ug/kg	690	30 U	ug/kg	30
Bromodichloromethane		-	ug/kg		31 U	ug/kg	31	690 U	ug/kg	690	30 U	ug/kg	30
1,2-Dichloropropane		-	ug/kg		31 U	ug/kg	31	690 U	ug/kg	690	30 U	ug/kg	30
cis-1,3-Dichloropropene		-	ug/kg		31 U	ug/kg	31	690 U	ug/kg	690	30 U	ug/kg	30
Trichloroethene		-	ug/kg		31 U	ug/kg	31	690 U	ug/kg	690	30 U	ug/kg	30
Dibromochloromethane		-	ug/kg		31 U	ug/kg	31	690 U	ug/kg	690	30 U	ug/kg	30
1,1,2-Trichloroethane		-	ug/kg		31 U	ug/kg	31	690 U	ug/kg	690	30 U	ug/kg	30
Benzene		-	ug/kg		31 U	ug/kg	31	690 U	ug/kg	690	30 U	ug/kg	30
trans-1,3-Dichloropropene		-	ug/kg		31 U	ug/kg	31	690 U	ug/kg	690	30 U	ug/kg	30
Bromoform		-	ug/kg		31 U	ug/kg	31	690 U	ug/kg	690	30 U	ug/kg	30
4-Methyl-2-pentanone		-	ug/kg		62 U	ug/kg	62	1400 U	ug/kg	1400	60 U	ug/kg	60
2-Hexanone		-	ug/kg		62 U	ug/kg	62	1400 U	ug/kg	1400	60 U	ug/kg	60
Tetrachloroethene		-	ug/kg		31 U	ug/kg	31	690 U	ug/kg	690	30 U	ug/kg	30
1,1,2,2-Tetrachloroethane		-	ug/kg		31 U	ug/kg	31	690 U	ug/kg	690	30 U	ug/kg	30
Toluene		-	ug/kg		31 U	ug/kg	31	1400 U	ug/kg	1400	21 J	ug/kg	
Chlorobenzene		-	ug/kg		31 U	ug/kg	31	690 U	ug/kg	690	30 U	ug/kg	30
Ethylbenzene		-	ug/kg		810	ug/kg		500 J	ug/kg		120	ug/kg	
Styrene		-	ug/kg		31 U	ug/kg	31	690 U	ug/kg	690	30 U	ug/kg	30
Xylenes (total)		-	ug/kg		31 U	ug/kg	31	2600	ug/kg		30 U	ug/kg	30
Dichlorodifluoromethane		-	ug/kg		62 U	ug/kg	62	1400 U	ug/kg	1400	60 U	ug/kg	60
Trichlorofluoromethane		-	ug/kg		31 U	ug/kg	31	690 U	ug/kg	690	30 U	ug/kg	30
1,3-Dichlorobenzene		7200 U	ug/kg	7200	31 U	ug/kg	31	690 U	ug/kg	690	30 U	ug/kg	30
Acrolein		-	ug/kg		620 U	ug/kg	620	14000 U	ug/kg	14000	600 U	ug/kg	600
Iodomethane		-	ug/kg		62 U	ug/kg	62	1400 U	ug/kg	1400	60 U	ug/kg	60
1,4-Dichlorobenzene		7200 U	ug/kg	7200	31 U	ug/kg	31	690 U	ug/kg	690	30 U	ug/kg	30
Acrylonitrile		-	ug/kg		620 U	ug/kg	620	14000 U	ug/kg	14000	600 U	ug/kg	600

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Group2 Sludge Data

Lab Sample Number:	M7688008DL				M7688009DL				M7688010DL				M7688011DL			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08SL00501DL				08SL00505DL				08SL00601DL				08SL00605DL			
Collect Date:	09-AUG-94				09-AUG-94				09-AUG-94				09-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	-		ug/kg		31	U	ug/kg	31	690	U	ug/kg	690	30	U	ug/kg	30
1,2-Dichlorobenzene	7200	U	ug/kg	7200	31	U	ug/kg	31	690	U	ug/kg	690	30	U	ug/kg	30
2-Chloroethylvinylether	-		ug/kg		62	U	ug/kg	62	1400	U	ug/kg	1400	60	U	ug/kg	60
Ethyl methacrylate	-		ug/kg		31	U	ug/kg	31	690	U	ug/kg	690	30	U	ug/kg	30
1,2,3-Trichloropropane	-		ug/kg		31	U	ug/kg	31	690	U	ug/kg	690	30	U	ug/kg	30
trans-1,4-Dichloro-2-butene	-		ug/kg		31	U	ug/kg	31	690	U	ug/kg	690	30	U	ug/kg	30
Isobutyl alcohol	-		ug/kg		820	J	ug/kg		27000	U	ug/kg	27000	430	J	ug/kg	
1,1,1,2-Tetrachloroethane	-		ug/kg		31	U	ug/kg	31	690	U	ug/kg	690	30	U	ug/kg	30
1,2-Dibromo-3-chloropropane	-		ug/kg		62	U	ug/kg	62	690	U	ug/kg	690	60	U	ug/kg	60
1,2-Dibromoethane	-		ug/kg		31	U	ug/kg	31	690	U	ug/kg	690	30	U	ug/kg	30
1,4-Dioxane	-		ug/kg		1200	R	ug/kg		690	R	ug/kg		1200	R	ug/kg	
3-Chloropropene	-		ug/kg		31	UJ	ug/kg		690	U	ug/kg	690	30	UJ	ug/kg	
Acetonitrile	-		ug/kg		620	UJ	ug/kg		690	U	ug/kg	690	600	UJ	ug/kg	
Chloroprene	-		ug/kg		1200	U	ug/kg	1200	690	U	ug/kg	690	1200	U	ug/kg	1200
Methacrylonitrile	-		ug/kg		31	U	ug/kg	31	690	U	ug/kg	690	30	U	ug/kg	30
Methyl methacrylate	-		ug/kg		62	U	ug/kg	62	690	U	ug/kg	690	60	U	ug/kg	60
Pentachloroethane	-		ug/kg		62	U	ug/kg	62	690	U	ug/kg	690	60	U	ug/kg	60
Propionitrile	-		ug/kg		620	U	ug/kg	620	690	U	ug/kg	690	600	U	ug/kg	600
Vinyl acetate	-		ug/kg		62	U	ug/kg	62	1400	U	ug/kg	1400	60	U	ug/kg	60

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		M7688014DL			M7688001R			M7688007DL			M7688006DL		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		08SL00705DL			08SL00801RE			08SL00806DL			08SL00906DL		
Collect Date:		09-AUG-94			09-AUG-94			09-AUG-94			09-AUG-94		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
VOLATILES	ug/kg												
Chloromethane		1400 U	ug/kg	1400	12 U	ug/kg	12	1400 U	ug/kg	1400	1400 U	ug/kg	1400
Bromomethane		1400 U	ug/kg	1400	12 U	ug/kg	12	1400 U	ug/kg	1400	1400 U	ug/kg	1400
Vinyl chloride		1400 U	ug/kg	1400	12 U	ug/kg	12	1400 U	ug/kg	1400	1400 U	ug/kg	1400
Chloroethane		1400 U	ug/kg	1400	12 U	ug/kg	12	1400 U	ug/kg	1400	1400 U	ug/kg	1400
Methylene chloride		730 U	ug/kg	730	27 B	ug/kg		170 J	ug/kg		160 J	ug/kg	
Acetone		1400 U	ug/kg	1400	16 B	ug/kg		450 J	ug/kg		400 J	ug/kg	
Carbon disulfide		730 U	ug/kg	730	2 J	ug/kg		680 U	ug/kg	680	690 U	ug/kg	690
1,1-Dichloroethane		730 U	ug/kg	730	6 U	ug/kg	6	680 U	ug/kg	680	690 U	ug/kg	690
1,1-Dichloroethene		730 U	ug/kg	730	6 U	ug/kg	6	680 U	ug/kg	680	690 U	ug/kg	690
1,2-Dichloroethene (total)		730 U	ug/kg	730	6 U	ug/kg	6	680 U	ug/kg	680	690 U	ug/kg	690
Chloroform		730 U	ug/kg	730	6 U	ug/kg	6	680 U	ug/kg	680	690 U	ug/kg	690
1,2-Dichloroethane		730 U	ug/kg	730	6 U	ug/kg	6	680 U	ug/kg	680	690 U	ug/kg	690
2-Butanone		1400 U	ug/kg	1400	12 U	ug/kg	12	1400 U	ug/kg	1400	1400 U	ug/kg	1400
1,1,1-Trichloroethane		730 U	ug/kg	730	6 U	ug/kg	6	680 U	ug/kg	680	690 U	ug/kg	690
Carbon tetrachloride		730 U	ug/kg	730	6 U	ug/kg	6	680 U	ug/kg	680	690 U	ug/kg	690
Bromodichloromethane		730 U	ug/kg	730	6 U	ug/kg	6	680 U	ug/kg	680	690 U	ug/kg	690
1,2-Dichloropropane		730 U	ug/kg	730	6 U	ug/kg	6	680 U	ug/kg	680	690 U	ug/kg	690
cis-1,3-Dichloropropene		730 U	ug/kg	730	6 U	ug/kg	6	680 U	ug/kg	680	690 U	ug/kg	690
Trichloroethene		730 U	ug/kg	730	6 U	ug/kg	6	680 U	ug/kg	680	690 U	ug/kg	690
Dibromochloromethane		730 U	ug/kg	730	6 U	ug/kg	6	680 U	ug/kg	680	690 U	ug/kg	690
1,1,2-Trichloroethane		730 U	ug/kg	730	6 U	ug/kg	6	680 U	ug/kg	680	690 U	ug/kg	690
Benzene		730 U	ug/kg	730	6 U	ug/kg	6	680 U	ug/kg	680	690 U	ug/kg	690
trans-1,3-Dichloropropene		730 U	ug/kg	730	6 U	ug/kg	6	680 U	ug/kg	680	690 U	ug/kg	690
Bromoform		730 U	ug/kg	730	6 U	ug/kg	6	680 U	ug/kg	680	690 U	ug/kg	690
4-Methyl-2-pentanone		1400 U	ug/kg	1400	12 U	ug/kg	12	1400 U	ug/kg	1400	1400 U	ug/kg	1400
2-Hexanone		1400 U	ug/kg	1400	12 U	ug/kg	12	1400 U	ug/kg	1400	1400 U	ug/kg	1400
Tetrachloroethene		730 U	ug/kg	730	6 U	ug/kg	6	680 U	ug/kg	680	690 U	ug/kg	690
1,1,2,2-Tetrachloroethane		730 U	ug/kg	730	6 U	ug/kg	6	680 U	ug/kg	680	690 U	ug/kg	690
Toluene		1400 U	ug/kg	1400	6 U	ug/kg	6	680 U	ug/kg	680	690 U	ug/kg	690
Chlorobenzene		730 U	ug/kg	730	6 U	ug/kg	6	680 U	ug/kg	680	690 U	ug/kg	690
Ethylbenzene		1300	ug/kg		6 U	ug/kg	6	1100	ug/kg		950	ug/kg	
Styrene		730 U	ug/kg	730	6 U	ug/kg	6	680 U	ug/kg	680	690 U	ug/kg	690
Xylenes (total)		690 J	ug/kg		12	ug/kg		3700	ug/kg		4300	ug/kg	
Dichlorodifluoromethane		1400 U	ug/kg	1400	12 U	ug/kg	12	1400 U	ug/kg	1400	1400 U	ug/kg	1400
Trichlorofluoromethane		730 U	ug/kg	730	6 U	ug/kg	6	680 U	ug/kg	680	690 U	ug/kg	690
1,3-Dichlorobenzene		730 U	ug/kg	730	6 U	ug/kg	6	14000 U	ug/kg	14000	690 U	ug/kg	690
Acrolein		14000 U	ug/kg	14000	120 U	ug/kg	120	14000 U	ug/kg	14000	14000 U	ug/kg	14000
Iodomethane		1400 U	ug/kg	1400	12 U	ug/kg	12	1400 U	ug/kg	1400	1400 U	ug/kg	1400
1,4-Dichlorobenzene		730 U	ug/kg	730	6 U	ug/kg	6	680 U	ug/kg	680	15000 U	ug/kg	15000
Acrylonitrile		14000 U	ug/kg	14000	120 U	ug/kg	120	14000 U	ug/kg	14000	14000 U	ug/kg	14000

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:	M7688014DL				M7688001R				M7688007DL				M7688006DL			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08SL00705DL				08SL00801RE				08SL00806DL				08SL00906DL			
Collect Date:	09-AUG-94				09-AUG-94				09-AUG-94				09-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	730	U	ug/kg	730	6	U	ug/kg	6	680	U	ug/kg	680	690	U	ug/kg	690
1,2-Dichlorobenzene	730	U	ug/kg	730	6	U	ug/kg	6	14000	U	ug/kg	14000	690	U	ug/kg	690
2-Chloroethylvinylether	1400	U	ug/kg	1400	12	U	ug/kg	12	1400	U	ug/kg	1400	1400	U	ug/kg	1400
Ethyl methacrylate	730	U	ug/kg	730	6	U	ug/kg	6	680	U	ug/kg	680	690	U	ug/kg	690
1,2,3-Trichloropropane	730	U	ug/kg	730	6	U	ug/kg	6	680	U	ug/kg	680	690	U	ug/kg	690
trans-1,4-Dichloro-2-butene	730	U	ug/kg	730	6	U	ug/kg	6	680	U	ug/kg	680	690	U	ug/kg	690
Isobutyl alcohol	29000	U	ug/kg	29000	240	U	ug/kg	240	27000	U	ug/kg	27000	28000	U	ug/kg	28000
1,1,1,2-Tetrachloroethane	730	U	ug/kg	730	6	U	ug/kg	6	680	U	ug/kg	680	690	U	ug/kg	690
1,2-Dibromo-3-chloropropane	730	U	ug/kg	730	12	U	ug/kg	12	680	U	ug/kg	680	690	U	ug/kg	690
1,2-Dibromoethane	730	U	ug/kg	730	6	U	ug/kg	6	680	U	ug/kg	680	690	U	ug/kg	690
1,4-Dioxane	730	R	ug/kg		240	U	ug/kg	240	680	R	ug/kg		690	R	ug/kg	
3-Chloropropene	730	U	ug/kg	730	6	U	ug/kg	6	680	U	ug/kg	680	690	U	ug/kg	690
Acetonitrile	730	U	ug/kg	730	120	U	ug/kg	120	680	U	ug/kg	680	690	U	ug/kg	690
Chloroprene	730	U	ug/kg	730	240	U	ug/kg	240	680	U	ug/kg	680	690	U	ug/kg	690
Methacrylonitrile	730	U	ug/kg	730	6	U	ug/kg	6	680	U	ug/kg	680	690	U	ug/kg	690
Methyl methacrylate	730	U	ug/kg	730	12	U	ug/kg	12	680	U	ug/kg	680	690	U	ug/kg	690
Pentachloroethane	730	U	ug/kg	730	12	U	ug/kg	12	680	U	ug/kg	680	690	U	ug/kg	690
Propionitrile	730	U	ug/kg	730	120	U	ug/kg	120	680	U	ug/kg	680	690	U	ug/kg	690
Vinyl acetate	1400	U	ug/kg	1400	12	U	ug/kg	12	1400	U	ug/kg	1400	1400	U	ug/kg	1400

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		M7688005DL			M7682002R			M7682004R			M7682006R		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		08SL01006DL			08SL01102RE			08SL01202RE			08SL01302RE		
Collect Date:		09-AUG-94			08-AUG-94			08-AUG-94			08-AUG-94		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
VOLATILES	ug/kg												
Chloromethane		-	ug/kg		12 U	ug/kg	12	11 U	ug/kg	11	13 U	ug/kg	13
Bromomethane		-	ug/kg		12 U	ug/kg	12	11 U	ug/kg	11	13 U	ug/kg	13
Vinyl chloride		-	ug/kg		12 U	ug/kg	12	11 U	ug/kg	11	13 U	ug/kg	13
Chloroethane		-	ug/kg		12 U	ug/kg	12	11 U	ug/kg	11	13 U	ug/kg	13
Methylene chloride		-	ug/kg		16 B	ug/kg		18 B	ug/kg		12 B	ug/kg	
Acetone		-	ug/kg		110 B	ug/kg		16 B	ug/kg		57 B	ug/kg	
Carbon disulfide		-	ug/kg		6 J	ug/kg		5 J	ug/kg		5 J	ug/kg	
1,1-Dichloroethane		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,1-Dichloroethene		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,2-Dichloroethene (total)		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Chloroform		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,2-Dichloroethane		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
2-Butanone		-	ug/kg		32	ug/kg		11 U	ug/kg	11	13 U	ug/kg	13
1,1,1-Trichloroethane		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Carbon tetrachloride		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Bromodichloromethane		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,2-Dichloropropane		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
cis-1,3-Dichloropropene		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Trichloroethene		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Dibromochloromethane		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,1,2-Trichloroethane		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Benzene		-	ug/kg		4 J	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6
trans-1,3-Dichloropropene		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Bromoform		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
4-Methyl-2-pentanone		-	ug/kg		12 U	ug/kg	12	11 U	ug/kg	11	13 U	ug/kg	13
2-Hexanone		-	ug/kg		12 U	ug/kg	12	11 U	ug/kg	11	13 U	ug/kg	13
Tetrachloroethene		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	2 J	ug/kg	
1,1,2,2-Tetrachloroethane		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Toluene		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	8 B	ug/kg	
Chlorobenzene		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Ethylbenzene		-	ug/kg		55	ug/kg		30	ug/kg		120	ug/kg	
Styrene		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Xylenes (total)		-	ug/kg		240	ug/kg		27	ug/kg		98	ug/kg	
Dichlorodifluoromethane		-	ug/kg		12 U	ug/kg	12	11 U	ug/kg	11	13 U	ug/kg	13
Trichlorofluoromethane		-	ug/kg		6 U	ug/kg	6	6 U	ug/kg	6	2 J	ug/kg	
1,3-Dichlorobenzene		11000 U	ug/kg	11000	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Acrolein		-	ug/kg		120 U	ug/kg	120	110 U	ug/kg	110	130 U	ug/kg	130
Iodomethane		-	ug/kg		12 U	ug/kg	12	11 U	ug/kg	11	13 U	ug/kg	13
1,4-Dichlorobenzene		11000 U	ug/kg	11000	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Acrylonitrile		-	ug/kg		120 U	ug/kg	120	110 U	ug/kg	110	130 U	ug/kg	130

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:	M7688005DL				M7682002R				M7682004R				M7682006R			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08SL01006DL				08SL01102RE				08SL01202RE				08SL01302RE			
Collect Date:	09-AUG-94				08-AUG-94				08-AUG-94				08-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	-		ug/kg		6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
1,2-Dichlorobenzene	11000	U	ug/kg	11000	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
2-Chloroethylvinylether	-		ug/kg		12	U	ug/kg	12	11	U	ug/kg	11	13	U	ug/kg	13
Ethyl methacrylate	-		ug/kg		6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
1,2,3-Trichloropropane	-		ug/kg		6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
trans-1,4-Dichloro-2-butene	-		ug/kg		6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
Isobutyl alcohol	-		ug/kg		240	U	ug/kg	240	220	U	ug/kg	220	260	U	ug/kg	260
1,1,1,2-Tetrachloroethane	-		ug/kg		6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
1,2-Dibromo-3-chloropropane	-		ug/kg		12	U	ug/kg	12	11	U	ug/kg	11	13	U	ug/kg	13
1,2-Dibromoethane	-		ug/kg		6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
1,4-Dioxane	-		ug/kg		240	U	ug/kg	240	220	U	ug/kg	220	260	U	ug/kg	260
3-Chloropropene	-		ug/kg		6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
Acetonitrile	-		ug/kg		120	U	ug/kg	120	110	U	ug/kg	110	130	U	ug/kg	130
Chloroprene	-		ug/kg		240	U	ug/kg	240	220	U	ug/kg	220	260	U	ug/kg	260
Methacrylonitrile	-		ug/kg		6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
Methyl methacrylate	-		ug/kg		12	U	ug/kg	12	11	U	ug/kg	11	13	U	ug/kg	13
Pentachloroethane	-		ug/kg		12	U	ug/kg	12	11	U	ug/kg	11	13	U	ug/kg	13
Propionitrile	-		ug/kg		120	U	ug/kg	120	110	U	ug/kg	110	130	U	ug/kg	130
Vinyl acetate	-		ug/kg		12	U	ug/kg	12	11	U	ug/kg	11	13	U	ug/kg	13

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		23883004				23884004RE				34923004			
Site		GROUP2				GROUP2				GROUP2			
Locator		MPT8SL2				MPT8SL2				MPT8SL2			
Collect Date:		19-JAN-93				19-JAN-93				19-JAN-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/kg												
Chloromethane		1700	UJ	ug/kg		1700	R	ug/kg		-		ug/kg	
Bromomethane		1700	UJ	ug/kg		1700	R	ug/kg		-		ug/kg	
Vinyl chloride		1700	UJ	ug/kg		1700	R	ug/kg		-		ug/kg	
Chloroethane		1700	UJ	ug/kg		1700	R	ug/kg		-		ug/kg	
Methylene chloride		840	UJ	ug/kg		550	R	ug/kg		-		ug/kg	
Acetone		2000	UJ	ug/kg		2000	R	ug/kg		-		ug/kg	
Carbon disulfide		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
1,1-Dichloroethane		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
1,1-Dichloroethene		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
1,2-Dichloroethene (total)		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
Chloroform		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
1,2-Dichloroethane		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
2-Butanone		1700	UJ	ug/kg		1700	R	ug/kg		-		ug/kg	
1,1,1-Trichloroethane		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
Carbon tetrachloride		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
Bromodichloromethane		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
1,2-Dichloropropane		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
cis-1,3-Dichloropropene		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
Trichloroethene		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
Dibromochloromethane		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
1,1,2-Trichloroethane		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
Benzene		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
trans-1,3-Dichloropropene		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
Bromoform		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
4-Methyl-2-pentanone		1700	UJ	ug/kg		1700	R	ug/kg		-		ug/kg	
2-Hexanone		1700	UJ	ug/kg		1700	R	ug/kg		-		ug/kg	
Tetrachloroethene		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
1,1,2,2-Tetrachloroethane		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
Toluene		210	J	ug/kg		250	R	ug/kg		-		ug/kg	
Chlorobenzene		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
Ethylbenzene		430	J	ug/kg		580	R	ug/kg		-		ug/kg	
Styrene		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
Xylenes (total)		2400	J	ug/kg		3600	R	ug/kg		-		ug/kg	
Dichlorodifluoromethane		1700	UJ	ug/kg		1700	R	ug/kg		-		ug/kg	
Trichlorofluoromethane		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
1,3-Dichlorobenzene		840	UJ	ug/kg		840	R	ug/kg		53000	U	ug/kg	53000
Acrolein		17000	UJ	ug/kg		17000	R	ug/kg		-		ug/kg	
Iodomethane		1700	UJ	ug/kg		1700	R	ug/kg		-		ug/kg	
1,4-Dichlorobenzene		840	UJ	ug/kg		840	R	ug/kg		53000	U	ug/kg	53000
Acrylonitrile		17000	UJ	ug/kg		17000	R	ug/kg		-		ug/kg	
Dibromomethane		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
1,2-Dichlorobenzene		840	UJ	ug/kg		840	R	ug/kg		53000	U	ug/kg	53000
2-Chloroethylvinyl ether		1700	R	ug/kg		1700	R	ug/kg		-		ug/kg	
Ethyl methacrylate		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
1,2,3-Trichloropropane		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
trans-1,4-Dichloro-2-butene		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
Isobutyl alcohol		14000	R	ug/kg		16000	R	ug/kg		-		ug/kg	
1,1,1,2-Tetrachloroethane		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
1,2-Dibromo-3-chloropropane		1700	UJ	ug/kg		1700	R	ug/kg		-		ug/kg	
1,2-Dibromoethane		840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:	23883004				23884004RE				34923004			
Site	GROUP2				GROUP2				GROUP2			
Locator	MPT8SL2				MPT8SL2				MPT8SL2			
Collect Date:	19-JAN-93				19-JAN-93				19-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	34000	R	ug/kg		34000	R	ug/kg		-		ug/kg	
3-Chloropropene	840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
Acetonitrile	17000	UJ	ug/kg		17000	R	ug/kg		-		ug/kg	
Chloroprene	34000	UJ	ug/kg		34000	R	ug/kg		-		ug/kg	
Methacrylonitrile	840	UJ	ug/kg		840	R	ug/kg		-		ug/kg	
Methyl methacrylate	1700	UJ	ug/kg		1700	R	ug/kg		-		ug/kg	
Pentachloroethane	1700	UJ	ug/kg		1700	R	ug/kg		-		ug/kg	
Propionitrile	17000	UJ	ug/kg		17000	R	ug/kg		-		ug/kg	
Vinyl acetate	1700	UJ	ug/kg		1700	R	ug/kg		-		ug/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		34923003			35074001			35074002			34923005		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		MPT8SL1			8SL1A			8SL1AD			MPT8SL3		
Collect Date:		19-JAN-93			02-FEB-93			02-FEB-93			19-JAN-93		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES	ug/kg												
N-Nitrosodimethylamine		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
Phenol		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
Aniline		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
bis (2-Chloroethyl) ether		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
Benzyl Alcohol		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
2-Methylphenol		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
bis(2-Chloroisopropyl)ether		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
N-Nitroso-di-n-propylamine		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
Hexachloroethane		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
Nitrobenzene		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
Isophorone		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
2-Nitrophenol		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
2,4-Dimethylphenol		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
Benzoic acid		38000 U	ug/kg	38000	3400 U	ug/kg	3400	3400 U	ug/kg	3400	3700 U	ug/kg	3700
bis(2-Chloroethoxy)methane		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
2,4-Dichlorophenol		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
1,2,4-Trichlorobenzene		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
Naphthalene		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
4-Chloroaniline		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
Hexachlorobutadiene		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
4-Chloro-3-methylphenol		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
2-Methylnaphthalene		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
Hexachlorocyclopentadiene		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
2,4,6-Trichlorophenol		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
Dimethylphthalate		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
2,4,5-Trichlorophenol		38000 U	ug/kg	38000	3400 U	ug/kg	3400	3400 U	ug/kg	3400	3700 U	ug/kg	3700
2-Chloronaphthalene		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
2-Nitroaniline		38000 U	ug/kg	38000	3400 U	ug/kg	3400	3400 U	ug/kg	3400	3700 U	ug/kg	3700
Acenaphthylene		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
2,6-Dinitrotoluene		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
3-Nitroaniline		38000 U	ug/kg	38000	3400 U	ug/kg	3400	3400 U	ug/kg	3400	3700 U	ug/kg	3700
Acenaphthene		1700 J	ug/kg		710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
2,4-Dinitrophenol		38000 U	ug/kg	38000	3400 U	ug/kg	3400	3400 U	ug/kg	3400	3700 U	ug/kg	3700
4-Nitrophenol		38000 U	ug/kg	38000	3400 U	ug/kg	3400	3400 U	ug/kg	3400	3700 U	ug/kg	3700
Dibenzofuran		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
2,4-Dinitrotoluene		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
Diethylphthalate		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
4-Chlorophenyl-phenylether		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
Fluorene		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
4-Nitroaniline		38000 U	ug/kg	38000	3400 U	ug/kg	3400	3400 U	ug/kg	3400	3700 U	ug/kg	3700
4,6-Dinitro-2-methylphenol		38000 U	ug/kg	38000	3400 U	ug/kg	3400	3400 U	ug/kg	3400	3700 U	ug/kg	3700
N-Nitrosodiphenylamine (1)		50000	ug/kg		710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
1,2-Diphenylhydrazine		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
4-Bromophenyl-phenylether		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
Hexachlorobenzene		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
Pentachlorophenol		38000 U	ug/kg	38000	3400 U	ug/kg	3400	3400 U	ug/kg	3400	3700 U	ug/kg	3700
Phenanthrene		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
Anthracene		7800 U	ug/kg	7800	100 J	ug/kg		91 J	ug/kg		79 J	ug/kg	
Di-n-Butylphthalate		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770
Fluoranthene		7800 U	ug/kg	7800	710 U	ug/kg	710	710 U	ug/kg	710	770 U	ug/kg	770

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:	34923003				35074001				35074002				34923005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT8SL1				8SL1A				8SL1AD				MPT8SL3			
Collect Date:	19-JAN-93				02-FEB-93				02-FEB-93				19-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Pyrene	3400	J	ug/kg		710	U	ug/kg	710	170	J	ug/kg		770	U	ug/kg	770
Butylbenzylphthalate	7800	U	ug/kg	7800	710	U	ug/kg	710	85	J	ug/kg		770	U	ug/kg	770
3,3'-Dichlorobenzidine	16000	U	ug/kg	16000	1400	U	ug/kg	1400	1400	U	ug/kg	1400	1500	U	ug/kg	1500
Benzo(a)anthracene	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
Chrysene	7800	U	ug/kg	7800	220	J	ug/kg		170	J	ug/kg		91	J	ug/kg	
bis(2-Ethylhexyl)phthalate	3800	J	ug/kg		710	U	ug/kg	710	1200		ug/kg		770	U	ug/kg	770
Di-n-octylphthalate	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
Benzo(b)fluoranthene	7800	U	ug/kg	7800	710	U	ug/kg	710	76	J	ug/kg		770	U	ug/kg	770
Benzo(k)fluoranthene	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
Benzo(a)pyrene	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
Indeno(1,2,3-cd)pyrene	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
Dibenz(a,h)anthracene	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
Benzo(g,h,i)perylene	7800	U	ug/kg	7800	710	U	ug/kg	710	85	J	ug/kg		770	U	ug/kg	770
2-Picoline	38000	U	ug/kg	38000	3400	U	ug/kg	3400	3400	U	ug/kg	3400	3700	U	ug/kg	3700
Methyl methanesulfonate	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
Ethyl methanesulfonate	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
Acetophenone	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
N-Nitrosopiperidine	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
Phenyl-tert-butylamine	38000	UJ	ug/kg		3400	U	ug/kg	3400	3400	U	ug/kg	3400	3700	U	ug/kg	3700
2,6-Dichlorophenol	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
N-Nitroso-di-n-butylamine	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
N-Nitrosodiethylamine	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
N-Nitrosopyrrolidine	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
Benzidine	38000	U	ug/kg	38000	3400	U	ug/kg	3400	3400	U	ug/kg	3400	3700	U	ug/kg	3700
1,2,4,5-Tetrachlorobenzene	38000	U	ug/kg	38000	3400	U	ug/kg	3400	3400	U	ug/kg	3400	3700	U	ug/kg	3700
Pentachlorobenzene	38000	U	ug/kg	38000	3400	U	ug/kg	3400	3400	U	ug/kg	3400	3700	U	ug/kg	3700
1-Naphthylamine	38000	UJ	ug/kg		3400	U	ug/kg	3400	3400	U	ug/kg	3400	3700	U	ug/kg	3700
2-Naphthylamine	38000	U	ug/kg	38000	3400	U	ug/kg	3400	3400	U	ug/kg	3400	3700	UJ	ug/kg	
2,3,4,6-Tetrachlorophenol	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
Phenacetin	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
4-Aminobiphenyl	38000	U	ug/kg	38000	3400	U	ug/kg	3400	3400	U	ug/kg	3400	3700	U	ug/kg	3700
Pentachloronitrobenzene	38000	U	ug/kg	38000	3400	U	ug/kg	3400	3400	U	ug/kg	3400	3700	U	ug/kg	3700
Pronamide	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
p-(Dimethylamino)azobenzene	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
7,12-Dimethylbenz(A)Anthracene	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
3-Methylcholanthrene	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
Pyridine	38000	U	ug/kg	38000	3400	U	ug/kg	3400	3400	U	ug/kg	3400	3700	U	ug/kg	3700
N-Nitrosomethylethylamine	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
N-Nitrosomorpholine	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
o-Toluidine	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
Hexachloropropene	38000	U	ug/kg	38000	3400	U	ug/kg	3400	3400	U	ug/kg	3400	3700	U	ug/kg	3700
p-Phenylenediamine	380000	R	ug/kg		34000	U	ug/kg	34000	34000	U	ug/kg	34000	37000	R	ug/kg	
Safrole	38000	U	ug/kg	38000	3400	U	ug/kg	3400	3400	U	ug/kg	3400	3700	U	ug/kg	3700
Isosafrole	38000	U	ug/kg	38000	3400	U	ug/kg	3400	3400	U	ug/kg	3400	3700	U	ug/kg	3700
1,4-Naphthoquinone	780000	U	ug/kg	780000	71000	U	ug/kg	71000	71000	U	ug/kg	71000	77000	U	ug/kg	77000
1,3-Dinitrobenzene	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
5-Nitro-o-toluidine	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
1,3,5-Trinitrobenzene	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
4-Nitroquinoline-1-oxide	380000	R	ug/kg		34000	U	ug/kg	34000	34000	U	ug/kg	34000	37000	R	ug/kg	
Methapyrilene	38000	U	ug/kg	38000	3400	U	ug/kg	3400	3400	U	ug/kg	3400	3700	UJ	ug/kg	
3,3'-Dimethylbenzidine	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
Hexachlorophene	380000	U	ug/kg	380000	34000	U	ug/kg	34000	34000	U	ug/kg	34000	37000	UJ	ug/kg	

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:	34923003				35074001				35074002				34923005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT8SL1				8SL1A				8SL1AD				MPT8SL3			
Collect Date:	19-JAN-93				02-FEB-93				02-FEB-93				19-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Aramite	38000	R	ug/kg		3400	U	ug/kg	3400	3400	U	ug/kg	3400	3700	R	ug/kg	
2-Chlorophenol	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770
3- & 4-Methylphenol (2)	-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Hexachloropropene	38000	U	ug/kg	38000	3400	U	ug/kg	3400	3400	U	ug/kg	3400	3700	U	ug/kg	3700
2-Acetylaminofluorene	7800	U	ug/kg	7800	710	U	ug/kg	710	710	U	ug/kg	710	770	U	ug/kg	770

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		R8977001				R8977002				M7688008				M7688009			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08SL00401				08SL00401D				08SL00501				08SL00505			
Collect Date:		27-OCT-94				27-OCT-94				09-AUG-94				09-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg																
N-Nitrosodimethylamine		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Phenol		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Aniline		870	UJ	ug/kg		900	UJ	ug/kg		3600	U	ug/kg	3600	8000	U	ug/kg	8000
bis (2-Chloroethyl) ether		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Benzyl Alcohol		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
2-Methylphenol		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
bis(2-Chloroisopropyl)ether		870	U	ug/kg	870	900	U	ug/kg	900	3600	UJ	ug/kg		8000	UJ	ug/kg	
N-Nitroso-di-n-propylamine		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Hexachloroethane		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Nitrobenzene		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Isophorone		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
2-Nitrophenol		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
2,4-Dimethylphenol		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Benzoic acid		4200	U	ug/kg	4200	4400	U	ug/kg	4400	18000	UJ	ug/kg		40000	UJ	ug/kg	
bis(2-Chloroethoxy)methane		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
2,4-Dichlorophenol		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
1,2,4-Trichlorobenzene		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Naphthalene		870	U	ug/kg	870	900	U	ug/kg	900	2400	J	ug/kg		19000		ug/kg	
4-Chloroaniline		870	UJ	ug/kg		900	UJ	ug/kg		3600	U	ug/kg	3600	8000	U	ug/kg	8000
Hexachlorobutadiene		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
4-Chloro-3-methylphenol		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
2-Methylnaphthalene		870	U	ug/kg	870	900	U	ug/kg	900	7100		ug/kg		61000		ug/kg	
Hexachlorocyclopentadiene		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
2,4,6-Trichlorophenol		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Dimethylphthalate		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
2,4,5-Trichlorophenol		4200	U	ug/kg	4200	4400	U	ug/kg	4400	18000	U	ug/kg	18000	40000	U	ug/kg	40000
2-Chloronaphthalene		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
2-Nitroaniline		4200	U	ug/kg	4200	4400	U	ug/kg	4400	18000	U	ug/kg	18000	40000	U	ug/kg	40000
Acenaphthylene		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
2,6-Dinitrotoluene		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
3-Nitroaniline		4200	U	ug/kg	4200	4400	U	ug/kg	4400	18000	U	ug/kg	18000	40000	U	ug/kg	40000
Acenaphthene		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
2,4-Dinitrophenol		4200	U	ug/kg	4200	4400	U	ug/kg	4400	18000	U	ug/kg	18000	40000	U	ug/kg	40000
4-Nitrophenol		4200	U	ug/kg	4200	4400	U	ug/kg	4400	18000	U	ug/kg	18000	40000	U	ug/kg	40000
Dibenzofuran		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
2,4-Dinitrotoluene		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Diethylphthalate		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
4-Chlorophenyl-phenylether		870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Fluorene		870	U	ug/kg	870	900	U	ug/kg	900	1300	J	ug/kg		7200	J	ug/kg	
4-Nitroaniline		4200	U	ug/kg	4200	4400	U	ug/kg	4400	18000	U	ug/kg	18000	40000	U	ug/kg	40000

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:	R8977001				R8977002				M7688008				M7688009			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08SL00401				08SL00401D				08SL00501				08SL00505			
Collect Date:	27-OCT-94				27-OCT-94				09-AUG-94				09-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	4200	U	ug/kg	4200	4400	U	ug/kg	4400	18000	U	ug/kg	18000	40000	U	ug/kg	40000
N-Nitrosodiphenylamine (1)	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
1,2-Diphenylhydrazine	870	U	ug/kg	870	900	U	ug/kg	900	3600	UJ	ug/kg		8000	UJ	ug/kg	
4-Bromophenyl-phenylether	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Hexachlorobenzene	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Pentachlorophenol	4200	U	ug/kg	4200	4400	U	ug/kg	4400	18000	U	ug/kg	18000	40000	U	ug/kg	40000
Phenanthrene	870	U	ug/kg	870	900	U	ug/kg	900	1400	J	ug/kg		12000		ug/kg	
Anthracene	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Di-n-Butylphthalate	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Fluoranthene	220	J	ug/kg		900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Pyrene	320	J	ug/kg		140	J	ug/kg		660	J	ug/kg		1300	J	ug/kg	
Butylbenzylphthalate	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
3,3'-Dichlorobenzidine	1700	U	ug/kg	1700	1800	U	ug/kg	1800	7200	U	ug/kg	7200	16000	U	ug/kg	16000
Benzo(a)anthracene	100	J	ug/kg		900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Chrysene	110	J	ug/kg		900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
bis(2-Ethylhexyl)phthalate	170	J	ug/kg		230	J	ug/kg		3600	U	ug/kg	3600	670	J	ug/kg	
Di-n-octylphthalate	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Benzo(b)fluoranthene	140	J	ug/kg		900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Benzo(k)fluoranthene	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Benzo(a)pyrene	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Indeno(1,2,3-cd)pyrene	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Dibenz(a,h)anthracene	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Benzo(g,h,i)perylene	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
2-Picoline	4200	U	ug/kg	4200	4400	U	ug/kg	4400	18000	U	ug/kg	18000	40000	U	ug/kg	40000
Methyl methanesulfonate	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Ethyl methanesulfonate	870	U	ug/kg	870	900	U	ug/kg	900	3600	UJ	ug/kg		8000	UJ	ug/kg	
Acetophenone	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
N-Nitrosopiperidine	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Phenyl-tert-butylamine	4200	U	ug/kg	4200	4400	U	ug/kg	4400	18000	UJ	ug/kg		40000	UJ	ug/kg	
2,6-Dichlorophenol	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
N-Nitroso-di-n-butylamine	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
N-Nitrosodiethylamine	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
N-Nitrosopyrrolidine	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Benzidine	4200	U	ug/kg	4200	4400	U	ug/kg	4400	18000	U	ug/kg	18000	40000	U	ug/kg	40000
1,2,4,5-Tetrachlorobenzene	4200	U	ug/kg	4200	4400	U	ug/kg	4400	18000	U	ug/kg	18000	40000	U	ug/kg	40000
Pentachlorobenzene	4200	U	ug/kg	4200	4400	U	ug/kg	4400	18000	U	ug/kg	18000	40000	U	ug/kg	40000
1-Naphthylamine	4200	U	ug/kg	4200	4400	U	ug/kg	4400	18000	U	ug/kg	18000	40000	U	ug/kg	40000
2-Naphthylamine	4200	U	ug/kg	4200	4400	U	ug/kg	4400	18000	U	ug/kg	18000	40000	U	ug/kg	40000
2,3,4,6-Tetrachlorophenol	870	U	ug/kg	870	900	U	ug/kg	900	3600	UJ	ug/kg		8000	UJ	ug/kg	
Phenacetin	870	UJ	ug/kg		900	UJ	ug/kg		3600	U	ug/kg	3600	8000	U	ug/kg	8000
4-Aminobiphenyl	4200	U	ug/kg	4200	4400	U	ug/kg	4400	18000	U	ug/kg	18000	40000	U	ug/kg	40000
Pentachloronitrobenzene	4200	U	ug/kg	4200	4400	U	ug/kg	4400	18000	U	ug/kg	18000	40000	U	ug/kg	40000
Pronamide	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
p-(Dimethylamino)azobenzene	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
7,12-Dimethylbenz(A)Anthracene	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
3-Methylcholanthrene	870	UJ	ug/kg		900	UJ	ug/kg		3600	U	ug/kg	3600	8000	U	ug/kg	8000
Pyridine	4200	UJ	ug/kg		4400	UJ	ug/kg		18000	U	ug/kg	18000	40000	U	ug/kg	40000
N-Nitrosomethylethylamine	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
N-Nitrosomorpholine	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
o-Toluidine	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Hexachloropropene	4200	U	ug/kg	4200	4400	U	ug/kg	4400	18000	U	ug/kg	18000	40000	U	ug/kg	40000
p-Phenylenediamine	42000	U	ug/kg	42000	44000	U	ug/kg	44000	180000	U	ug/kg	180000	400000	U	ug/kg	400000

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:	R8977001				R8977002				M7688008				M7688009			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08SL00401				08SL00401D				08SL00501				08SL00505			
Collect Date:	27-OCT-94				27-OCT-94				09-AUG-94				09-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	4200	U	ug/kg	4200	4400	U	ug/kg	4400	18000	U	ug/kg	18000	40000	U	ug/kg	40000
Isosafrole	4200	U	ug/kg	4200	4400	U	ug/kg	4400	18000	U	ug/kg	18000	40000	U	ug/kg	40000
1,4-Naphthoquinone	87000	U	ug/kg	87000	90000	U	ug/kg	90000	360000	U	ug/kg	360000	800000	U	ug/kg	800000
1,3-Dinitrobenzene	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
5-Nitro-o-toluidine	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
1,3,5-Trinitrobenzene	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
4-Nitroquinoline-1-oxide	42000	U	ug/kg	42000	44000	U	ug/kg	44000	180000	U	ug/kg	180000	400000	U	ug/kg	400000
Methapyrilene	4200	UJ	ug/kg		4400	UJ	ug/kg		18000	UJ	ug/kg		40000	UJ	ug/kg	
3,3'-Dimethylbenzidine	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Hexachlorophene	42000	UJ	ug/kg		44000	UJ	ug/kg		180000	R	ug/kg		400000	R	ug/kg	
Aramite	4200	U	ug/kg	4200	4400	U	ug/kg	4400	18000	U	ug/kg	18000	40000	U	ug/kg	40000
2-Chlorophenol	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
3- & 4-Methylphenol (2)	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000
Hexachloropropene	4200	U	ug/kg	4200	4400	U	ug/kg	4400	18000	U	ug/kg	18000	40000	U	ug/kg	40000
2-Acetylaminofluorene	870	U	ug/kg	870	900	U	ug/kg	900	3600	U	ug/kg	3600	8000	U	ug/kg	8000

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		M7688010			M7688011			M7688012			M7688013		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		08SL00601			08SL00605			08SL00701			08SL00701D		
Collect Date:		09-AUG-94			09-AUG-94			09-AUG-94			09-AUG-94		
		VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL
SEMIVOLATILES	ug/kg												
N-Nitrosodimethylamine		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
Phenol		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
Aniline		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
bis (2-Chloroethyl) ether		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
Benzyl Alcohol		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
2-Methylphenol		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
bis(2-Chloroisopropyl)ether		18000 UJ	ug/kg		3900 UJ	ug/kg		7500 UJ	ug/kg		7100 UJ	ug/kg	
N-Nitroso-di-n-propylamine		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
Hexachloroethane		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
Nitrobenzene		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
Isophorone		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
2-Nitrophenol		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
2,4-Dimethylphenol		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
Benzoic acid		92000 UJ	ug/kg		19000 UJ	ug/kg		37000 UJ	ug/kg		35000 UJ	ug/kg	
bis(2-Chloroethoxy)methane		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
2,4-Dichlorophenol		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
1,2,4-Trichlorobenzene		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
Naphthalene		6100 J	ug/kg		6800	ug/kg		7500 U	ug/kg	7500	7100 U	ug/kg	7100
4-Chloroaniline		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
Hexachlorobutadiene		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
4-Chloro-3-methylphenol		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
2-Methylnaphthalene		25000	ug/kg		28000	ug/kg		7500 U	ug/kg	7500	7100 U	ug/kg	7100
Hexachlorocyclopentadiene		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
2,4,6-Trichlorophenol		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
Dimethylphthalate		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
2,4,5-Trichlorophenol		92000 U	ug/kg	92000	19000 U	ug/kg	19000	37000 U	ug/kg	37000	35000 U	ug/kg	35000
2-Chloronaphthalene		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
2-Nitroaniline		92000 U	ug/kg	92000	19000 U	ug/kg	19000	37000 U	ug/kg	37000	35000 U	ug/kg	35000
Acenaphthylene		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
2,6-Dinitrotoluene		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
3-Nitroaniline		92000 U	ug/kg	92000	19000 U	ug/kg	19000	37000 U	ug/kg	37000	35000 U	ug/kg	35000
Acenaphthene		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
2,4-Dinitrophenol		92000 U	ug/kg	92000	19000 U	ug/kg	19000	37000 U	ug/kg	37000	35000 U	ug/kg	35000
4-Nitrophenol		92000 U	ug/kg	92000	19000 U	ug/kg	19000	37000 U	ug/kg	37000	35000 U	ug/kg	35000
Dibenzofuran		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
2,4-Dinitrotoluene		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
Diethylphthalate		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
4-Chlorophenyl-phenylether		18000 U	ug/kg	18000	3900 U	ug/kg	3900	7500 U	ug/kg	7500	7100 U	ug/kg	7100
Fluorene		2900 J	ug/kg		2400 J	ug/kg		7500 U	ug/kg	7500	7100 U	ug/kg	7100
4-Nitroaniline		92000 U	ug/kg	92000	19000 U	ug/kg	19000	37000 U	ug/kg	37000	35000 U	ug/kg	35000

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Group2 Sludge Data

Lab Sample Number:	M7688010				M7688011				M7688012				M7688013			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08SL00601				08SL00605				08SL00701				08SL00701D			
Collect Date:	09-AUG-94				09-AUG-94				09-AUG-94				09-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	92000	U	ug/kg	92000	19000	U	ug/kg	19000	37000	U	ug/kg	37000	35000	U	ug/kg	35000
N-Nitrosodiphenylamine (1)	18000	U	ug/kg	18000	1500	J	ug/kg		7500	U	ug/kg	7500	7100	U	ug/kg	7100
1,2-Diphenylhydrazine	18000	UJ	ug/kg		3900	UJ	ug/kg		7500	UJ	ug/kg		7100	UJ	ug/kg	
4-Bromophenyl-phenylether	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
Hexachlorobenzene	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
Pentachlorophenol	92000	U	ug/kg	92000	19000	U	ug/kg	19000	37000	U	ug/kg	37000	35000	U	ug/kg	35000
Phenanthrene	3400	J	ug/kg		3900	J	ug/kg		7500	U	ug/kg	7500	7100	U	ug/kg	7100
Anthracene	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
Di-n-Butylphthalate	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
Fluoranthene	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
Pyrene	18000	U	ug/kg	18000	390	J	ug/kg		7500	U	ug/kg	7500	7100	U	ug/kg	7100
Butylbenzylphthalate	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
3,3'-Dichlorobenzidine	37000	U	ug/kg	37000	7800	U	ug/kg	7800	15000	U	ug/kg	15000	14000	U	ug/kg	14000
Benzo(a)anthracene	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
Chrysene	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
bis(2-Ethylhexyl)phthalate	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
Di-n-octylphthalate	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
Benzo(b)fluoranthene	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
Benzo(k)fluoranthene	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
Benzo(a)pyrene	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
Indeno(1,2,3-cd)pyrene	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
Dibenz(a,h)anthracene	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
Benzo(g,h,i)perylene	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
2-Picoline	92000	U	ug/kg	92000	19000	U	ug/kg	19000	37000	U	ug/kg	37000	35000	U	ug/kg	35000
Methyl methanesulfonate	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
Ethyl methanesulfonate	18000	UJ	ug/kg		3900	UJ	ug/kg		7500	UJ	ug/kg		7100	UJ	ug/kg	
Acetophenone	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
N-Nitrosopiperidine	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
Phenyl-tert-butylamine	92000	UJ	ug/kg		19000	UJ	ug/kg		37000	UJ	ug/kg		35000	UJ	ug/kg	
2,6-Dichlorophenol	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
N-Nitroso-di-n-butylamine	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
N-Nitrosodiethylamine	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
N-Nitrosopyrrolidine	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
Benzidine	92000	U	ug/kg	92000	19000	U	ug/kg	19000	37000	U	ug/kg	37000	35000	U	ug/kg	35000
1,2,4,5-Tetrachlorobenzene	92000	U	ug/kg	92000	19000	U	ug/kg	19000	37000	U	ug/kg	37000	35000	U	ug/kg	35000
Pentachlorobenzene	92000	U	ug/kg	92000	19000	U	ug/kg	19000	37000	U	ug/kg	37000	35000	U	ug/kg	35000
1-Naphthylamine	92000	U	ug/kg	92000	19000	U	ug/kg	19000	37000	U	ug/kg	37000	35000	U	ug/kg	35000
2-Naphthylamine	92000	U	ug/kg	92000	19000	U	ug/kg	19000	37000	U	ug/kg	37000	35000	U	ug/kg	35000
2,3,4,6-Tetrachlorophenol	18000	UJ	ug/kg		3900	UJ	ug/kg		7500	UJ	ug/kg		7100	UJ	ug/kg	
Phenacetin	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
4-Aminobiphenyl	92000	U	ug/kg	92000	19000	U	ug/kg	19000	37000	U	ug/kg	37000	35000	U	ug/kg	35000
Pentachloronitrobenzene	92000	U	ug/kg	92000	19000	U	ug/kg	19000	37000	U	ug/kg	37000	35000	U	ug/kg	35000
Pronamide	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
p-(Dimethylamino)azobenzene	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
7,12-Dimethylbenz(A)Anthracene	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
3-Methylcholanthrene	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
Pyridine	92000	U	ug/kg	92000	19000	U	ug/kg	19000	37000	U	ug/kg	37000	35000	U	ug/kg	35000
N-Nitrosomethylethylamine	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
N-Nitrosomorpholine	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
o-Toluidine	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
Hexachloropropene	92000	U	ug/kg	92000	19000	U	ug/kg	19000	37000	U	ug/kg	37000	35000	U	ug/kg	35000
p-Phenylenediamine	920000	U	ug/kg	920000	190000	U	ug/kg	190000	370000	U	ug/kg	370000	350000	U	ug/kg	350000

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:	M7688010				M7688011				M7688012				M7688013			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08SL00601				08SL00605				08SL00701				08SL00701D			
Collect Date:	09-AUG-94				09-AUG-94				09-AUG-94				09-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	92000	U	ug/kg	92000	19000	U	ug/kg	19000	37000	U	ug/kg	37000	35000	U	ug/kg	35000
Isosafrole	92000	U	ug/kg	92000	19000	U	ug/kg	19000	37000	U	ug/kg	37000	35000	U	ug/kg	35000
1,4-Naphthoquinone	1800000	U	ug/kg	1800000	390000	U	ug/kg	390000	740000	U	ug/kg	740000	700000	U	ug/kg	700000
1,3-Dinitrobenzene	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
5-Nitro-o-toluidine	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
1,3,5-Trinitrobenzene	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
4-Nitroquinoline-1-oxide	920000	U	ug/kg	920000	190000	U	ug/kg	190000	370000	U	ug/kg	370000	350000	U	ug/kg	350000
Methapyrilene	92000	UJ	ug/kg		19000	UJ	ug/kg		37000	UJ	ug/kg		35000	UJ	ug/kg	
3,3'-Dimethylbenzidine	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
Hexachlorophene	920000	R	ug/kg		190000	R	ug/kg		370000	R	ug/kg		350000	R	ug/kg	
Aramite	92000	U	ug/kg	92000	19000	U	ug/kg	19000	37000	U	ug/kg	37000	35000	U	ug/kg	35000
2-Chlorophenol	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
3- & 4-Methylphenol (2)	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100
Hexachloropropene	92000	U	ug/kg	92000	19000	U	ug/kg	19000	37000	U	ug/kg	37000	35000	U	ug/kg	35000
2-Acetylaminofluorene	18000	U	ug/kg	18000	3900	U	ug/kg	3900	7500	U	ug/kg	7500	7100	U	ug/kg	7100

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		M7688014				M7688001				M7688007				M7688002			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08SL00705				08SL00801				08SL00806				08SL00901			
Collect Date:		09-AUG-94				09-AUG-94				09-AUG-94				09-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg																
N-Nitrosodimethylamine		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Phenol		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	U	ug/kg	3600	91000	U	ug/kg	91000
Aniline		3900	U	ug/kg	3900	3800	UJ	ug/kg		3600	R	ug/kg		91000	UJ	ug/kg	
bis (2-Chloroethyl) ether		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Benzyl Alcohol		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	U	ug/kg	3600	91000	U	ug/kg	91000
2-Methylphenol		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	U	ug/kg	3600	91000	U	ug/kg	91000
bis(2-Chloroisopropyl)ether		3900	UJ	ug/kg		3800	UJ	ug/kg		3600	R	ug/kg		91000	UJ	ug/kg	
N-Nitroso-di-n-propylamine		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Hexachloroethane		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Nitrobenzene		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Isophorone		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
2-Nitrophenol		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	U	ug/kg	3600	91000	U	ug/kg	91000
2,4-Dimethylphenol		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	U	ug/kg	3600	91000	U	ug/kg	91000
Benzoic acid		19000	UJ	ug/kg		19000	UJ	ug/kg		18000	UJ	ug/kg		450000	UJ	ug/kg	
bis(2-Chloroethoxy)methane		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
2,4-Dichlorophenol		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	U	ug/kg	3600	91000	U	ug/kg	91000
1,2,4-Trichlorobenzene		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Naphthalene		15000		ug/kg		3800	U	ug/kg	3800	16000	J	ug/kg		91000	U	ug/kg	91000
4-Chloroaniline		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Hexachlorobutadiene		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
4-Chloro-3-methylphenol		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	U	ug/kg	3600	91000	U	ug/kg	91000
2-Methylnaphthalene		8400		ug/kg		3800	U	ug/kg	3800	58000	J	ug/kg		91000	U	ug/kg	91000
Hexachlorocyclopentadiene		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
2,4,6-Trichlorophenol		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	U	ug/kg	3600	91000	U	ug/kg	91000
Dimethylphthalate		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
2,4,5-Trichlorophenol		19000	U	ug/kg	19000	19000	U	ug/kg	19000	18000	U	ug/kg	18000	450000	U	ug/kg	450000
2-Chloronaphthalene		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
2-Nitroaniline		19000	U	ug/kg	19000	19000	UJ	ug/kg		18000	R	ug/kg		450000	UJ	ug/kg	
Acenaphthylene		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
2,6-Dinitrotoluene		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
3-Nitroaniline		19000	U	ug/kg	19000	19000	U	ug/kg	19000	18000	R	ug/kg		450000	U	ug/kg	450000
Acenaphthene		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
2,4-Dinitrophenol		19000	U	ug/kg	19000	19000	U	ug/kg	19000	18000	U	ug/kg	18000	450000	U	ug/kg	450000
4-Nitrophenol		19000	U	ug/kg	19000	19000	U	ug/kg	19000	18000	U	ug/kg	18000	450000	U	ug/kg	450000
Dibenzofuran		2000	J	ug/kg		3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
2,4-Dinitrotoluene		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Diethylphthalate		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
4-Chlorophenyl-phenylether		3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Fluorene		4600		ug/kg		3800	U	ug/kg	3800	6000	J	ug/kg		91000	U	ug/kg	91000
4-Nitroaniline		19000	U	ug/kg	19000	19000	U	ug/kg	19000	18000	R	ug/kg		450000	U	ug/kg	450000

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Group2 Sludge Data

Lab Sample Number:	M7688014				M7688001				M7688007				M7688002			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08SL00705				08SL00801				08SL00806				08SL00901			
Collect Date:	09-AUG-94				09-AUG-94				09-AUG-94				09-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	19000	U	ug/kg	19000	19000	U	ug/kg	19000	18000	U	ug/kg	18000	450000	U	ug/kg	450000
N-Nitrosodiphenylamine (1)	2900	J	ug/kg		3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
1,2-Diphenylhydrazine	3900	UJ	ug/kg		3800	UJ	ug/kg		3600	R	ug/kg		91000	UJ	ug/kg	
4-Bromophenyl-phenylether	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Hexachlorobenzene	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Pentachlorophenol	19000	U	ug/kg	19000	19000	U	ug/kg	19000	18000	U	ug/kg	18000	450000	U	ug/kg	450000
Phenanthrene	7300		ug/kg		3800	U	ug/kg	3800	11000	J	ug/kg		91000	U	ug/kg	91000
Anthracene	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Di-n-Butylphthalate	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Fluoranthene	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Pyrene	950	J	ug/kg		3800	U	ug/kg	3800	1100	J	ug/kg		91000	U	ug/kg	91000
Butylbenzylphthalate	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
3,3'-Dichlorobenzidine	7800	U	ug/kg	7800	7600	U	ug/kg	7600	7200	R	ug/kg		180000	U	ug/kg	180000
Benzo(a)anthracene	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Chrysene	270	J	ug/kg		3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
bis(2-Ethylhexyl)phthalate	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Di-n-octylphthalate	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Benzo(b)fluoranthene	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Benzo(k)fluoranthene	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Benzo(a)pyrene	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Indeno(1,2,3-cd)pyrene	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Dibenz(a,h)anthracene	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Benzo(g,h,i)perylene	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
2-Picoline	19000	U	ug/kg	19000	19000	U	ug/kg	19000	18000	R	ug/kg		450000	U	ug/kg	450000
Methyl methanesulfonate	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Ethyl methanesulfonate	3900	UJ	ug/kg		3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Acetophenone	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
N-Nitrosopiperidine	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Phenyl-tert-butylamine	19000	UJ	ug/kg		19000	UJ	ug/kg		18000	R	ug/kg		450000	UJ	ug/kg	
2,6-Dichlorophenol	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	U	ug/kg	3600	91000	U	ug/kg	91000
N-Nitroso-di-n-butylamine	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
N-Nitrosodiethylamine	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
N-Nitrosopyrrolidine	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Benzidine	19000	U	ug/kg	19000	19000	U	ug/kg	19000	18000	R	ug/kg		450000	U	ug/kg	450000
1,2,4,5-Tetrachlorobenzene	19000	U	ug/kg	19000	19000	U	ug/kg	19000	18000	R	ug/kg		450000	U	ug/kg	450000
Pentachlorobenzene	19000	U	ug/kg	19000	19000	U	ug/kg	19000	18000	R	ug/kg		450000	U	ug/kg	450000
1-Naphthylamine	19000	U	ug/kg	19000	19000	U	ug/kg	19000	18000	R	ug/kg		450000	U	ug/kg	450000
2-Naphthylamine	19000	U	ug/kg	19000	19000	U	ug/kg	19000	18000	R	ug/kg		450000	U	ug/kg	450000
2,3,4,6-Tetrachlorophenol	3900	UJ	ug/kg		3800	U	ug/kg	3800	3600	UJ	ug/kg		91000	U	ug/kg	91000
Phenacetin	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
4-Aminobiphenyl	19000	U	ug/kg	19000	19000	U	ug/kg	19000	18000	R	ug/kg		450000	U	ug/kg	450000
Pentachloronitrobenzene	19000	U	ug/kg	19000	19000	U	ug/kg	19000	18000	R	ug/kg		450000	U	ug/kg	450000
Pronamide	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
p-(Dimethylamino)azobenzene	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
7,12-Dimethylbenz(A)Anthracene	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
3-Methylcholanthrene	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Pyridine	19000	U	ug/kg	19000	19000	U	ug/kg	19000	18000	R	ug/kg		450000	U	ug/kg	450000
N-Nitrosomethylethylamine	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
N-Nitrosomorpholine	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
o-Toluidine	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Hexachloropropene	19000	U	ug/kg	19000	19000	U	ug/kg	19000	18000	R	ug/kg		450000	U	ug/kg	450000
p-Phenylenediamine	190000	U	ug/kg	190000	190000	UJ	ug/kg		180000	R	ug/kg		4500000	UJ	ug/kg	

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Group2 Sludge Data

Lab Sample Number:	M7688014				M7688001				M7688007				M7688002			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08SL00705				08SL00801				08SL00806				08SL00901			
Collect Date:	09-AUG-94				09-AUG-94				09-AUG-94				09-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	19000	U	ug/kg	19000	19000	U	ug/kg	19000	18000	R	ug/kg		450000	U	ug/kg	450000
Isosafrole	19000	U	ug/kg	19000	19000	U	ug/kg	19000	18000	R	ug/kg		450000	U	ug/kg	450000
1,4-Naphthoquinone	390000	U	ug/kg	390000	380000	U	ug/kg	380000	360000	R	ug/kg		9000000	U	ug/kg	9000000
1,3-Dinitrobenzene	3900	U	ug/kg	3900	3800	UJ	ug/kg		3600	R	ug/kg		91000	UJ	ug/kg	
5-Nitro-o-toluidine	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
1,3,5-Trinitrobenzene	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
4-Nitroquinoline-1-oxide	190000	U	ug/kg	190000	190000	U	ug/kg	190000	180000	R	ug/kg		4500000	U	ug/kg	4500000
Methapyrilene	19000	UJ	ug/kg		19000	U	ug/kg	19000	18000	R	ug/kg		450000	U	ug/kg	450000
3,3'-Dimethylbenzidine	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000
Hexachlorophene	190000	R	ug/kg		190000	U	ug/kg	190000	180000	R	ug/kg		4500000	U	ug/kg	4500000
Aramite	19000	U	ug/kg	19000	19000	U	ug/kg	19000	18000	R	ug/kg		450000	U	ug/kg	450000
2-Chlorophenol	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	U	ug/kg	3600	91000	U	ug/kg	91000
3- & 4-Methylphenol (2)	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	U	ug/kg	3600	91000	U	ug/kg	91000
Hexachloropropene	19000	U	ug/kg	19000	19000	U	ug/kg	19000	18000	R	ug/kg		450000	U	ug/kg	450000
2-Acetylaminofluorene	3900	U	ug/kg	3900	3800	U	ug/kg	3800	3600	R	ug/kg		91000	U	ug/kg	91000

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		M7688006			M7688003			M7688004			M7688005		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		08SL00906			08SL01001			08SL01001D			08SL01006		
Collect Date:		09-AUG-94			09-AUG-94			09-AUG-94			09-AUG-94		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES	ug/kg												
N-Nitrosodimethylamine		3700 R	ug/kg		7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
Phenol		3700 U	ug/kg	3700	7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
Aniline		3700 R	ug/kg		7000 UJ	ug/kg		6900 UJ	ug/kg		3700 UJ	ug/kg	
bis (2-Chloroethyl) ether		3700 R	ug/kg		7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
Benzyl Alcohol		3700 U	ug/kg	3700	7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
2-Methylphenol		3700 U	ug/kg	3700	7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
bis(2-Chloroisopropyl)ether		3700 R	ug/kg		7000 UJ	ug/kg		6900 UJ	ug/kg		3700 UJ	ug/kg	
N-Nitroso-di-n-propylamine		3700 R	ug/kg		7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
Hexachloroethane		3700 R	ug/kg		7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
Nitrobenzene		3700 R	ug/kg		7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
Isophorone		3700 R	ug/kg		7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
2-Nitrophenol		3700 U	ug/kg	3700	7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
2,4-Dimethylphenol		3700 U	ug/kg	3700	7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
Benzoic acid		18000 UJ	ug/kg		35000 UJ	ug/kg		34000 UJ	ug/kg		18000 UJ	ug/kg	
bis(2-Chloroethoxy)methane		3700 R	ug/kg		7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
2,4-Dichlorophenol		3700 U	ug/kg	3700	7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
1,2,4-Trichlorobenzene		3700 R	ug/kg		7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
Naphthalene		10000 J	ug/kg		7000 U	ug/kg	7000	6900 U	ug/kg	6900	8600	ug/kg	
4-Chloroaniline		3700 R	ug/kg		7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
Hexachlorobutadiene		3700 R	ug/kg		7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
4-Chloro-3-methylphenol		3700 U	ug/kg	3700	7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
2-Methylnaphthalene		35000 J	ug/kg		7000 U	ug/kg	7000	6900 U	ug/kg	6900	53000 J	ug/kg	
Hexachlorocyclopentadiene		3700 R	ug/kg		7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
2,4,6-Trichlorophenol		3700 U	ug/kg	3700	7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
Dimethylphthalate		3700 R	ug/kg		7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
2,4,5-Trichlorophenol		18000 U	ug/kg	18000	35000 U	ug/kg	35000	34000 U	ug/kg	34000	18000 U	ug/kg	18000
2-Chloronaphthalene		3700 R	ug/kg		7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
2-Nitroaniline		18000 R	ug/kg		35000 UJ	ug/kg		34000 UJ	ug/kg		18000 UJ	ug/kg	
Acenaphthylene		3700 R	ug/kg		7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
2,6-Dinitrotoluene		3700 R	ug/kg		7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
3-Nitroaniline		18000 R	ug/kg		35000 U	ug/kg	35000	34000 U	ug/kg	34000	18000 U	ug/kg	18000
Acenaphthene		3700 R	ug/kg		7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
2,4-Dinitrophenol		18000 U	ug/kg	18000	35000 U	ug/kg	35000	34000 U	ug/kg	34000	18000 U	ug/kg	18000
4-Nitrophenol		18000 U	ug/kg	18000	35000 U	ug/kg	35000	34000 U	ug/kg	34000	18000 U	ug/kg	18000
Dibenzofuran		3700 R	ug/kg		7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
2,4-Dinitrotoluene		3700 R	ug/kg		7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
Diethylphthalate		3700 R	ug/kg		7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
4-Chlorophenyl-phenylether		3700 R	ug/kg		7000 U	ug/kg	7000	6900 U	ug/kg	6900	3700 U	ug/kg	3700
Fluorene		3100 J	ug/kg		7000 U	ug/kg	7000	6900 U	ug/kg	6900	8500	ug/kg	
4-Nitroaniline		18000 R	ug/kg		35000 U	ug/kg	35000	34000 U	ug/kg	34000	18000 U	ug/kg	18000

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Group2 Sludge Data

Lab Sample Number:	M7688006				M7688003				M7688004				M7688005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08SL00906				08SL01001				08SL01001D				08SL01006			
Collect Date:	09-AUG-94				09-AUG-94				09-AUG-94				09-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	18000	U	ug/kg	18000	35000	U	ug/kg	35000	34000	U	ug/kg	34000	18000	U	ug/kg	18000
N-Nitrosodiphenylamine (1)	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	4400		ug/kg	
1,2-Diphenylhydrazine	3700	R	ug/kg		7000	UJ	ug/kg		6900	UJ	ug/kg		3700	UJ	ug/kg	
4-Bromophenyl-phenylether	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
Hexachlorobenzene	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
Pentachlorophenol	18000	U	ug/kg	18000	35000	U	ug/kg	35000	34000	U	ug/kg	34000	18000	U	ug/kg	18000
Phenanthrene	5200	J	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	16000		ug/kg	
Anthracene	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
Di-n-Butylphthalate	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
Fluoranthene	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
Pyrene	520	J	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	1500	J	ug/kg	
Butylbenzylphthalate	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
3,3'-Dichlorobenzidine	7400	R	ug/kg		14000	U	ug/kg	14000	14000	U	ug/kg	14000	7300	U	ug/kg	7300
Benzo(a)anthracene	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
Chrysene	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	470	J	ug/kg	
bis(2-Ethylhexyl)phthalate	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
Di-n-octylphthalate	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
Benzo(b)fluoranthene	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
Benzo(k)fluoranthene	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
Benzo(a)pyrene	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
Indeno(1,2,3-cd)pyrene	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
Dibenz(a,h)anthracene	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
Benzo(g,h,i)perylene	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
2-Picoline	18000	R	ug/kg		35000	U	ug/kg	35000	34000	U	ug/kg	34000	18000	U	ug/kg	18000
Methyl methanesulfonate	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
Ethyl methanesulfonate	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
Acetophenone	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
N-Nitrosopiperidine	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
Phenyl-tert-butylamine	18000	R	ug/kg		35000	UJ	ug/kg		34000	UJ	ug/kg		18000	UJ	ug/kg	
2,6-Dichlorophenol	3700	U	ug/kg	3700	7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
N-Nitroso-di-n-butylamine	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
N-Nitrosodiethylamine	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
N-Nitrosopyrrolidine	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
Benzidine	18000	R	ug/kg		35000	U	ug/kg	35000	34000	U	ug/kg	34000	18000	U	ug/kg	18000
1,2,4,5-Tetrachlorobenzene	18000	R	ug/kg		35000	U	ug/kg	35000	34000	U	ug/kg	34000	18000	U	ug/kg	18000
Pentachlorobenzene	18000	R	ug/kg		35000	U	ug/kg	35000	34000	U	ug/kg	34000	18000	U	ug/kg	18000
1-Naphthylamine	18000	R	ug/kg		35000	U	ug/kg	35000	34000	U	ug/kg	34000	18000	U	ug/kg	18000
2-Naphthylamine	18000	R	ug/kg		35000	U	ug/kg	35000	34000	U	ug/kg	34000	18000	U	ug/kg	18000
2,3,4,6-Tetrachlorophenol	3700	UJ	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
Phenacetin	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
4-Aminobiphenyl	18000	R	ug/kg		35000	U	ug/kg	35000	34000	U	ug/kg	34000	18000	U	ug/kg	18000
Pentachloronitrobenzene	18000	R	ug/kg		35000	U	ug/kg	35000	34000	U	ug/kg	34000	18000	U	ug/kg	18000
Pronamide	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
p-(Dimethylamino)azobenzene	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
7,12-Dimethylbenz(A)Anthracene	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
3-Methylcholanthrene	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
Pyridine	18000	R	ug/kg		35000	U	ug/kg	35000	34000	U	ug/kg	34000	18000	U	ug/kg	18000
N-Nitrosomethylethylamine	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
N-Nitrosomorpholine	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
o-Toluidine	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
Hexachloropropene	18000	R	ug/kg		35000	U	ug/kg	35000	34000	U	ug/kg	34000	18000	U	ug/kg	18000
p-Phenylenediamine	180000	R	ug/kg		350000	UJ	ug/kg		340000	UJ	ug/kg		180000	UJ	ug/kg	

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Group2 Sludge Data

Lab Sample Number:	M7688006				M7688003				M7688004				M7688005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08SL00906				08SL01001				08SL01001D				08SL01006			
Collect Date:	09-AUG-94				09-AUG-94				09-AUG-94				09-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	18000	R	ug/kg		35000	U	ug/kg	35000	34000	U	ug/kg	34000	18000	U	ug/kg	18000
Isosafrole	18000	R	ug/kg		35000	U	ug/kg	35000	34000	U	ug/kg	34000	18000	U	ug/kg	18000
1,4-Naphthoquinone	370000	R	ug/kg		690000	U	ug/kg	690000	690000	U	ug/kg	690000	360000	U	ug/kg	360000
1,3-Dinitrobenzene	3700	R	ug/kg		7000	UJ	ug/kg		6900	UJ	ug/kg		3700	UJ	ug/kg	
5-Nitro-o-toluidine	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
1,3,5-Trinitrobenzene	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
4-Nitroquinoline-1-oxide	180000	R	ug/kg		350000	U	ug/kg	350000	340000	U	ug/kg	340000	180000	U	ug/kg	180000
Methapyrilene	18000	R	ug/kg		35000	U	ug/kg	35000	34000	U	ug/kg	34000	18000	U	ug/kg	18000
3,3'-Dimethylbenzidine	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
Hexachlorophene	180000	R	ug/kg		350000	U	ug/kg	350000	340000	U	ug/kg	340000	180000	U	ug/kg	180000
Aramite	18000	R	ug/kg		35000	U	ug/kg	35000	34000	U	ug/kg	34000	18000	U	ug/kg	18000
2-Chlorophenol	3700	U	ug/kg	3700	7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
3- & 4-Methylphenol (2)	3700	U	ug/kg	3700	7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700
Hexachloropropene	18000	R	ug/kg		35000	U	ug/kg	35000	34000	U	ug/kg	34000	18000	U	ug/kg	18000
2-Acetylaminofluorene	3700	R	ug/kg		7000	U	ug/kg	7000	6900	U	ug/kg	6900	3700	U	ug/kg	3700

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		M7682001				M7682002				M7682003				M7682004			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08SL01101				08SL01102				08SL01201				08SL01202			
Collect Date:		08-AUG-94				08-AUG-94				08-AUG-94				08-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg																
N-Nitrosodimethylamine		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Phenol		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Aniline		30000	UJ	ug/kg		10000	UJ	ug/kg		4000	UJ	ug/kg		3700	UJ	ug/kg	
bis (2-Chloroethyl) ether		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Benzyl Alcohol		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
2-Methylphenol		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
bis(2-Chloroisopropyl)ether		30000	UJ	ug/kg		10000	UJ	ug/kg		4000	UJ	ug/kg		3700	UJ	ug/kg	
N-Nitroso-di-n-propylamine		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Hexachloroethane		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Nitrobenzene		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Isophorone		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
2-Nitrophenol		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
2,4-Dimethylphenol		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Benzoic acid		150000	UJ	ug/kg		52000	UJ	ug/kg		20000	UJ	ug/kg		18000	UJ	ug/kg	
bis(2-Chloroethoxy)methane		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
2,4-Dichlorophenol		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
1,2,4-Trichlorobenzene		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Naphthalene		30000	U	ug/kg	30000	4400	J	ug/kg		4000	U	ug/kg	4000	3700	U	ug/kg	3700
4-Chloroaniline		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Hexachlorobutadiene		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
4-Chloro-3-methylphenol		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
2-Methylnaphthalene		30000	U	ug/kg	30000	24000		ug/kg		4000	U	ug/kg	4000	3700	U	ug/kg	3700
Hexachlorocyclopentadiene		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
2,4,6-Trichlorophenol		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Dimethylphthalate		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
2,4,5-Trichlorophenol		150000	U	ug/kg	150000	52000	U	ug/kg	52000	20000	U	ug/kg	20000	18000	U	ug/kg	18000
2-Chloronaphthalene		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
2-Nitroaniline		150000	U	ug/kg	150000	52000	U	ug/kg	52000	20000	U	ug/kg	20000	18000	U	ug/kg	18000
Acenaphthylene		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
2,6-Dinitrotoluene		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
3-Nitroaniline		150000	U	ug/kg	150000	52000	U	ug/kg	52000	20000	U	ug/kg	20000	18000	U	ug/kg	18000
Acenaphthene		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	1200	J	ug/kg	
2,4-Dinitrophenol		150000	U	ug/kg	150000	52000	U	ug/kg	52000	20000	U	ug/kg	20000	18000	U	ug/kg	18000
4-Nitrophenol		150000	U	ug/kg	150000	52000	U	ug/kg	52000	20000	U	ug/kg	20000	18000	U	ug/kg	18000
Dibenzofuran		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
2,4-Dinitrotoluene		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Diethylphthalate		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
4-Chlorophenyl-phenylether		30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Fluorene		30000	U	ug/kg	30000	3700	J	ug/kg		4000	U	ug/kg	4000	2800	J	ug/kg	
4-Nitroaniline		150000	U	ug/kg	150000	52000	U	ug/kg	52000	20000	U	ug/kg	20000	18000	U	ug/kg	18000

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:	M7682001				M7682002				M7682003				M7682004			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08SL01101				08SL01102				08SL01201				08SL01202			
Collect Date:	08-AUG-94				08-AUG-94				08-AUG-94				08-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	150000	U	ug/kg	150000	52000	U	ug/kg	52000	20000	U	ug/kg	20000	18000	U	ug/kg	18000
N-Nitrosodiphenylamine (1)	30000	U	ug/kg	30000	3600	J	ug/kg		4000	U	ug/kg	4000	2100	J	ug/kg	
1,2-Diphenylhydrazine	30000	UJ	ug/kg		10000	UJ	ug/kg		4000	UJ	ug/kg		3700	UJ	ug/kg	
4-Bromophenyl-phenylether	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Hexachlorobenzene	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Pentachlorophenol	150000	U	ug/kg	150000	52000	U	ug/kg	52000	20000	U	ug/kg	20000	18000	U	ug/kg	18000
Phenanthrene	2600	J	ug/kg		7200	J	ug/kg		4000	U	ug/kg	4000	4800		ug/kg	
Anthracene	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Di-n-Butylphthalate	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Fluoranthene	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Pyrene	3100	J	ug/kg		1700	J	ug/kg		210	J	ug/kg		530	J	ug/kg	
Butylbenzylphthalate	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
3,3'-Dichlorobenzidine	59000	U	ug/kg	59000	21000	U	ug/kg	21000	8000	U	ug/kg	8000	7500	U	ug/kg	7500
Benzo(a)anthracene	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Chrysene	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
bis(2-Ethylhexyl)phthalate	11000	J	ug/kg		1700	J	ug/kg		4000	U	ug/kg	4000	3700	U	ug/kg	3700
Di-n-octylphthalate	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Benzo(b)fluoranthene	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Benzo(k)fluoranthene	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Benzo(a)pyrene	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Indeno(1,2,3-cd)pyrene	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Dibenz(a,h)anthracene	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Benzo(g,h,i)perylene	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
2-Picoline	150000	U	ug/kg	150000	52000	U	ug/kg	52000	20000	U	ug/kg	20000	18000	U	ug/kg	18000
Methyl methanesulfonate	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Ethyl methanesulfonate	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Acetophenone	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
N-Nitrosopiperidine	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Phenyl-tert-butylamine	150000	UJ	ug/kg		52000	UJ	ug/kg		20000	UJ	ug/kg		18000	UJ	ug/kg	
2,6-Dichlorophenol	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
N-Nitroso-di-n-butylamine	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
N-Nitrosodiethylamine	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
N-Nitrosopyrrolidine	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Benzidine	150000	U	ug/kg	150000	52000	U	ug/kg	52000	20000	U	ug/kg	20000	18000	U	ug/kg	18000
1,2,4,5-Tetrachlorobenzene	150000	U	ug/kg	150000	52000	U	ug/kg	52000	20000	U	ug/kg	20000	18000	U	ug/kg	18000
Pentachlorobenzene	150000	U	ug/kg	150000	52000	U	ug/kg	52000	20000	U	ug/kg	20000	18000	U	ug/kg	18000
1-Naphthylamine	150000	U	ug/kg	150000	52000	U	ug/kg	52000	20000	U	ug/kg	20000	18000	U	ug/kg	18000
2-Naphthylamine	150000	U	ug/kg	150000	52000	U	ug/kg	52000	20000	U	ug/kg	20000	18000	U	ug/kg	18000
2,3,4,6-Tetrachlorophenol	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Phenacetin	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
4-Aminobiphenyl	150000	U	ug/kg	150000	52000	U	ug/kg	52000	20000	U	ug/kg	20000	18000	U	ug/kg	18000
Pentachloronitrobenzene	150000	U	ug/kg	150000	52000	U	ug/kg	52000	20000	U	ug/kg	20000	18000	U	ug/kg	18000
Pronamide	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
p-(Dimethylamino)azobenzene	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
7,12-Dimethylbenz(A)Anthracene	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
3-Methylcholanthrene	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Pyridine	150000	U	ug/kg	150000	52000	U	ug/kg	52000	20000	U	ug/kg	20000	18000	U	ug/kg	18000
N-Nitrosomethylethylamine	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
N-Nitrosomorpholine	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
o-Toluidine	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Hexachloropropene	150000	U	ug/kg	150000	52000	U	ug/kg	52000	20000	U	ug/kg	20000	18000	U	ug/kg	18000
p-Phenylenediamine	1500000	U	ug/kg	1500000	520000	U	ug/kg	520000	200000	U	ug/kg	200000	180000	U	ug/kg	180000

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:	M7682001				M7682002				M7682003				M7682004			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08SL01101				08SL01102				08SL01201				08SL01202			
Collect Date:	08-AUG-94				08-AUG-94				08-AUG-94				08-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	150000	U	ug/kg	150000	52000	U	ug/kg	52000	20000	U	ug/kg	20000	18000	U	ug/kg	18000
Isosafrole	150000	U	ug/kg	150000	52000	U	ug/kg	52000	20000	U	ug/kg	20000	18000	U	ug/kg	18000
1,4-Naphthoquinone	2900000	U	ug/kg	2900000	1000000	U	ug/kg	1000000	400000	U	ug/kg	400000	370000	U	ug/kg	370000
1,3-Dinitrobenzene	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
5-Nitro-o-toluidine	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
1,3,5-Trinitrobenzene	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
4-Nitroquinoline-1-oxide	1500000	U	ug/kg	1500000	520000	U	ug/kg	520000	200000	U	ug/kg	200000	180000	U	ug/kg	180000
Methapyrilene	150000	UJ	ug/kg		52000	UJ	ug/kg		20000	UJ	ug/kg		18000	UJ	ug/kg	
3,3'-Dimethylbenzidine	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Hexachlorophene	1500000	R	ug/kg		520000	R	ug/kg		200000	R	ug/kg		180000	R	ug/kg	
Aramite	150000	U	ug/kg	150000	52000	U	ug/kg	52000	20000	U	ug/kg	20000	18000	U	ug/kg	18000
2-Chlorophenol	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
3- & 4-Methylphenol (2)	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Hexachloropropene	150000	U	ug/kg	150000	52000	U	ug/kg	52000	20000	U	ug/kg	20000	18000	U	ug/kg	18000
2-Acetylaminofluorene	30000	U	ug/kg	30000	10000	U	ug/kg	10000	4000	U	ug/kg	4000	3700	U	ug/kg	3700

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		M7682005				M7682006				M7688008DL				M7688007DL			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08SL01301				08SL01302				08SL00501DL				08SL00806DL			
Collect Date:		08-AUG-94				08-AUG-94				09-AUG-94				09-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg																
N-Nitrosodimethylamine		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Phenol		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Aniline		3700	UJ	ug/kg		3700	UJ	ug/kg		7200	U	ug/kg	7200	14000	U	ug/kg	14000
bis (2-Chloroethyl) ether		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Benzyl Alcohol		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
2-Methylphenol		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
bis(2-Chloroisopropyl)ether		3700	UJ	ug/kg		3700	UJ	ug/kg		7200	UJ	ug/kg		14000	UJ	ug/kg	
N-Nitroso-di-n-propylamine		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Hexachloroethane		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Nitrobenzene		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Isophorone		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
2-Nitrophenol		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
2,4-Dimethylphenol		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Benzoic acid		18000	UJ	ug/kg		18000	UJ	ug/kg		36000	UJ	ug/kg		72000	R	ug/kg	
bis(2-Chloroethoxy)methane		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
2,4-Dichlorophenol		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
1,2,4-Trichlorobenzene		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Naphthalene		3700	U	ug/kg	3700	3700	U	ug/kg	3700	2000	J	ug/kg		17000		ug/kg	
4-Chloroaniline		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Hexachlorobutadiene		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
4-Chloro-3-methylphenol		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
2-Methylnaphthalene		3700	U	ug/kg	3700	3700	U	ug/kg	3700	8400		ug/kg		69000		ug/kg	
Hexachlorocyclopentadiene		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
2,4,6-Trichlorophenol		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Dimethylphthalate		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
2,4,5-Trichlorophenol		18000	U	ug/kg	18000	18000	U	ug/kg	18000	36000	U	ug/kg	36000	72000	U	ug/kg	72000
2-Chloronaphthalene		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
2-Nitroaniline		18000	U	ug/kg	18000	18000	U	ug/kg	18000	36000	U	ug/kg	36000	72000	UJ	ug/kg	
Acenaphthylene		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
2,6-Dinitrotoluene		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
3-Nitroaniline		18000	U	ug/kg	18000	18000	U	ug/kg	18000	36000	U	ug/kg	36000	72000	U	ug/kg	72000
Acenaphthene		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
2,4-Dinitrophenol		18000	U	ug/kg	18000	18000	U	ug/kg	18000	36000	U	ug/kg	36000	72000	U	ug/kg	72000
4-Nitrophenol		18000	U	ug/kg	18000	18000	U	ug/kg	18000	36000	U	ug/kg	36000	72000	U	ug/kg	72000
Dibenzofuran		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
2,4-Dinitrotoluene		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Diethylphthalate		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
4-Chlorophenyl-phenylether		3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Fluorene		2000	J	ug/kg		3700	U	ug/kg	3700	1600	J	ug/kg		7400	J	ug/kg	
4-Nitroaniline		18000	U	ug/kg	18000	18000	U	ug/kg	18000	36000	U	ug/kg	36000	72000	UJ	ug/kg	

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Group2 Sludge Data

Lab Sample Number:	M7682005				M7682006				M7688008DL				M7688007DL			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08SL01301				08SL01302				08SL00501DL				08SL008060L			
Collect Date:	08-AUG-94				08-AUG-94				09-AUG-94				09-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	18000	U	ug/kg	18000	18000	U	ug/kg	18000	36000	U	ug/kg	36000	72000	U	ug/kg	72000
N-Nitrosodiphenylamine (1)	1700	J	ug/kg		2200	J	ug/kg		7200	U	ug/kg	7200	14000	U	ug/kg	14000
1,2-Diphenylhydrazine	3700	UJ	ug/kg		3700	UJ	ug/kg		7200	UJ	ug/kg		14000	UJ	ug/kg	
4-Bromophenyl-phenylether	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Hexachlorobenzene	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	UJ	ug/kg	
Pentachlorophenol	18000	U	ug/kg	18000	18000	U	ug/kg	18000	36000	U	ug/kg	36000	72000	U	ug/kg	72000
Phenanthrene	4600		ug/kg		6500		ug/kg		1700	J	ug/kg		12000	J	ug/kg	
Anthracene	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Di-n-Butylphthalate	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Fluoranthene	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	UJ	ug/kg	
Pyrene	580	J	ug/kg		610	J	ug/kg		1200	J	ug/kg		1500	J	ug/kg	
Butylbenzylphthalate	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
3,3'-Dichlorobenzidine	7500	U	ug/kg	7500	7400	U	ug/kg	7400	14000	U	ug/kg	14000	29000	U	ug/kg	29000
Benzo(a)anthracene	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Chrysene	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
bis(2-Ethylhexyl)phthalate	3700	U	ug/kg	3700	3700	U	ug/kg	3700	690	J	ug/kg		14000	U	ug/kg	14000
Di-n-octylphthalate	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Benzo(b)fluoranthene	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Benzo(k)fluoranthene	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Benzo(a)pyrene	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Indeno(1,2,3-cd)pyrene	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Dibenz(a,h)anthracene	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Benzo(g,h,i)perylene	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
2-Picoline	18000	U	ug/kg	18000	18000	U	ug/kg	18000	36000	U	ug/kg	36000	72000	U	ug/kg	72000
Methyl methanesulfonate	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Ethyl methanesulfonate	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	UJ	ug/kg		14000	U	ug/kg	14000
Acetophenone	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
N-Nitrosopiperidine	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Phenyl-tert-butylamine	18000	UJ	ug/kg		18000	UJ	ug/kg		36000	UJ	ug/kg		72000	UJ	ug/kg	
2,6-Dichlorophenol	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
N-Nitroso-di-n-butylamine	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
N-Nitrosodiethylamine	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
N-Nitrosopyrrolidine	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Benzidine	18000	U	ug/kg	18000	18000	U	ug/kg	18000	36000	U	ug/kg	36000	72000	U	ug/kg	72000
1,2,4,5-Tetrachlorobenzene	18000	U	ug/kg	18000	18000	U	ug/kg	18000	36000	U	ug/kg	36000	72000	U	ug/kg	72000
Pentachlorobenzene	18000	U	ug/kg	18000	18000	U	ug/kg	18000	36000	U	ug/kg	36000	72000	U	ug/kg	72000
1-Naphthylamine	18000	U	ug/kg	18000	18000	U	ug/kg	18000	36000	U	ug/kg	36000	72000	U	ug/kg	72000
2-Naphthylamine	18000	U	ug/kg	18000	18000	U	ug/kg	18000	36000	U	ug/kg	36000	72000	U	ug/kg	72000
2,3,4,6-Tetrachlorophenol	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	UJ	ug/kg		14000	U	ug/kg	14000
Phenacetin	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	UJ	ug/kg	
4-Aminobiphenyl	18000	U	ug/kg	18000	18000	U	ug/kg	18000	36000	U	ug/kg	36000	72000	U	ug/kg	72000
Pentachloronitrobenzene	18000	U	ug/kg	18000	18000	U	ug/kg	18000	36000	U	ug/kg	36000	72000	U	ug/kg	72000
Pronamide	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
p-(Dimethylamino)azobenzene	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
7,12-Dimethylbenz(A)Anthracene	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
3-Methylcholanthrene	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Pyridine	18000	U	ug/kg	18000	18000	U	ug/kg	18000	36000	U	ug/kg	36000	72000	U	ug/kg	72000
N-Nitrosomethylethylamine	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
N-Nitrosomorpholine	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
o-Toluidine	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Hexachloropropene	18000	U	ug/kg	18000	18000	U	ug/kg	18000	36000	U	ug/kg	36000	72000	U	ug/kg	72000
p-Phenylenediamine	180000	U	ug/kg	180000	180000	U	ug/kg	180000	360000	U	ug/kg	360000	720000	UJ	ug/kg	

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Group2 Sludge Data

Lab Sample Number:	M7682005				M7682006				M76880080L				M7688007DL			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08SL01301				08SL01302				08SL00501DL				08SL00806DL			
Collect Date:	08-AUG-94				08-AUG-94				09-AUG-94				09-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	18000	U	ug/kg	18000	18000	U	ug/kg	18000	36000	U	ug/kg	36000	72000	U	ug/kg	72000
Isosafrole	18000	U	ug/kg	18000	18000	U	ug/kg	18000	36000	U	ug/kg	36000	72000	U	ug/kg	72000
1,4-Naphthoquinone	370000	U	ug/kg	370000	370000	U	ug/kg	370000	720000	U	ug/kg	720000	1400000	U	ug/kg	1400000
1,3-Dinitrobenzene	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
5-Nitro-o-toluidine	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
1,3,5-Trinitrobenzene	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
4-Nitroquinoline-1-oxide	180000	U	ug/kg	180000	180000	U	ug/kg	180000	360000	U	ug/kg	360000	720000	U	ug/kg	720000
Methapyrilene	18000	UJ	ug/kg		18000	UJ	ug/kg		36000	UJ	ug/kg		72000	UJ	ug/kg	
3,3'-Dimethylbenzidine	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Hexachlorophene	180000	R	ug/kg		180000	R	ug/kg		360000	R	ug/kg		720000	R	ug/kg	
Aramite	18000	U	ug/kg	18000	18000	U	ug/kg	18000	36000	U	ug/kg	36000	72000	U	ug/kg	72000
2-Chlorophenol	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
3- & 4-Methylphenol (2)	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000
Hexachloropropene	18000	U	ug/kg	18000	18000	U	ug/kg	18000	36000	U	ug/kg	36000	72000	U	ug/kg	72000
2-Acetylaminofluorene	3700	U	ug/kg	3700	3700	U	ug/kg	3700	7200	U	ug/kg	7200	14000	U	ug/kg	14000

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		M7688006DL				M7688005DL			
Site		GROUP2				GROUP2			
Locator		08SL00906DL				08SL01006DL			
Collect Date:		09-AUG-94				09-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg								
N-Nitrosodimethylamine		15000	U	ug/kg	15000	11000	U	ug/kg	11000
Phenol		15000	U	ug/kg	15000	11000	U	ug/kg	11000
Aniline		15000	U	ug/kg	15000	11000	U	ug/kg	11000
bis (2-Chloroethyl) ether		15000	U	ug/kg	15000	11000	U	ug/kg	11000
Benzyl Alcohol		15000	U	ug/kg	15000	11000	U	ug/kg	11000
2-Methylphenol		15000	U	ug/kg	15000	11000	U	ug/kg	11000
bis(2-Chloroisopropyl)ether		15000	UJ	ug/kg		11000	UJ	ug/kg	
N-Nitroso-di-n-propylamine		15000	U	ug/kg	15000	11000	U	ug/kg	11000
Hexachloroethane		15000	U	ug/kg	15000	11000	U	ug/kg	11000
Nitrobenzene		15000	U	ug/kg	15000	11000	U	ug/kg	11000
Isophorone		15000	U	ug/kg	15000	11000	U	ug/kg	11000
2-Nitrophenol		15000	U	ug/kg	15000	11000	U	ug/kg	11000
2,4-Dimethylphenol		15000	U	ug/kg	15000	11000	U	ug/kg	11000
Benzoic acid		73000	UJ	ug/kg		54000	UJ	ug/kg	
bis(2-Chloroethoxy)methane		15000	U	ug/kg	15000	11000	U	ug/kg	11000
2,4-Dichlorophenol		15000	U	ug/kg	15000	11000	U	ug/kg	11000
1,2,4-Trichlorobenzene		15000	U	ug/kg	15000	11000	U	ug/kg	11000
Naphthalene		8400	J	ug/kg		7400	J	ug/kg	
4-Chloroaniline		15000	U	ug/kg	15000	11000	U	ug/kg	11000
Hexachlorobutadiene		15000	U	ug/kg	15000	11000	U	ug/kg	11000
4-Chloro-3-methylphenol		15000	U	ug/kg	15000	11000	U	ug/kg	11000
2-Methylnaphthalene		33000		ug/kg		54000		ug/kg	
Hexachlorocyclopentadiene		15000	U	ug/kg	15000	11000	U	ug/kg	11000
2,4,6-Trichlorophenol		15000	U	ug/kg	15000	11000	U	ug/kg	11000
Dimethylphthalate		15000	U	ug/kg	15000	11000	U	ug/kg	11000
2,4,5-Trichlorophenol		73000	U	ug/kg	73000	54000	U	ug/kg	54000
2-Chloronaphthalene		15000	U	ug/kg	15000	11000	U	ug/kg	11000
2-Nitroaniline		73000	U	ug/kg	73000	54000	U	ug/kg	54000
Acenaphthylene		15000	U	ug/kg	15000	11000	U	ug/kg	11000
2,6-Dinitrotoluene		15000	U	ug/kg	15000	11000	U	ug/kg	11000
3-Nitroaniline		73000	U	ug/kg	73000	54000	U	ug/kg	54000
Acenaphthene		15000	U	ug/kg	15000	11000	U	ug/kg	11000
2,4-Dinitrophenol		73000	U	ug/kg	73000	54000	U	ug/kg	54000
4-Nitrophenol		73000	U	ug/kg	73000	54000	U	ug/kg	54000
Dibenzofuran		15000	U	ug/kg	15000	11000	U	ug/kg	11000
2,4-Dinitrotoluene		15000	U	ug/kg	15000	11000	U	ug/kg	11000
Diethylphthalate		15000	U	ug/kg	15000	11000	U	ug/kg	11000
4-Chlorophenyl-phenylether		15000	U	ug/kg	15000	11000	U	ug/kg	11000
Fluorene		2900	J	ug/kg		8000	J	ug/kg	
4-Nitroaniline		73000	U	ug/kg	73000	54000	U	ug/kg	54000

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Group2 Sludge Data

Lab Sample Number:	M76880060L				M7688005DL			
Site	GROUP2				GROUP2			
Locator	08SL00906DL				08SL010060L			
Collect Date:	09-AUG-94				09-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	73000	U	ug/kg	73000	54000	U	ug/kg	54000
N-Nitrosodiphenylamine (1)	15000	U	ug/kg	15000	11000	U	ug/kg	11000
1,2-Diphenylhydrazine	15000	UJ	ug/kg		11000	UJ	ug/kg	
4-Bromophenyl-phenylether	15000	U	ug/kg	15000	11000	U	ug/kg	11000
Hexachlorobenzene	15000	U	ug/kg	15000	11000	U	ug/kg	11000
Pentachlorophenol	73000	U	ug/kg	73000	54000	U	ug/kg	54000
Phenanthrene	4800	J	ug/kg		14000		ug/kg	
Anthracene	15000	U	ug/kg	15000	11000	U	ug/kg	11000
Di-n-Butylphthalate	15000	U	ug/kg	15000	11000	U	ug/kg	11000
Fluoranthene	15000	U	ug/kg	15000	11000	U	ug/kg	11000
Pyrene	15000	U	ug/kg	15000	1600	J	ug/kg	
Butylbenzylphthalate	15000	U	ug/kg	15000	11000	U	ug/kg	11000
3,3'-Dichlorobenzidine	30000	U	ug/kg	30000	22000	U	ug/kg	22000
Benzo(a)anthracene	15000	U	ug/kg	15000	11000	U	ug/kg	11000
Chrysene	15000	U	ug/kg	15000	11000	U	ug/kg	11000
bis(2-Ethylhexyl)phthalate	15000	U	ug/kg	15000	11000	U	ug/kg	11000
Di-n-octylphthalate	15000	U	ug/kg	15000	11000	U	ug/kg	11000
Benzo(b)fluoranthene	15000	U	ug/kg	15000	11000	U	ug/kg	11000
Benzo(k)fluoranthene	15000	U	ug/kg	15000	11000	U	ug/kg	11000
Benzo(a)pyrene	15000	U	ug/kg	15000	11000	U	ug/kg	11000
Indeno(1,2,3-cd)pyrene	15000	U	ug/kg	15000	11000	U	ug/kg	11000
Dibenz(a,h)anthracene	15000	U	ug/kg	15000	11000	U	ug/kg	11000
Benzo(g,h,i)perylene	15000	U	ug/kg	15000	11000	U	ug/kg	11000
2-Picoline	73000	U	ug/kg	73000	54000	U	ug/kg	54000
Methyl methanesulfonate	15000	U	ug/kg	15000	11000	U	ug/kg	11000
Ethyl methanesulfonate	15000	UJ	ug/kg		11000	UJ	ug/kg	
Acetophenone	15000	U	ug/kg	15000	11000	U	ug/kg	11000
N-Nitrosopiperidine	15000	U	ug/kg	15000	11000	U	ug/kg	11000
Phenyl-tert-butylamine	73000	UJ	ug/kg		54000	UJ	ug/kg	
2,6-Dichlorophenol	15000	U	ug/kg	15000	11000	U	ug/kg	11000
N-Nitroso-di-n-butylamine	15000	U	ug/kg	15000	11000	U	ug/kg	11000
N-Nitrosodiethylamine	15000	U	ug/kg	15000	11000	U	ug/kg	11000
N-Nitrosopyrrolidine	15000	U	ug/kg	15000	11000	U	ug/kg	11000
Benzidine	73000	U	ug/kg	73000	54000	U	ug/kg	54000
1,2,4,5-Tetrachlorobenzene	73000	U	ug/kg	73000	54000	U	ug/kg	54000
Pentachlorobenzene	73000	U	ug/kg	73000	54000	U	ug/kg	54000
1-Naphthylamine	73000	U	ug/kg	73000	54000	U	ug/kg	54000
2-Naphthylamine	73000	U	ug/kg	73000	54000	U	ug/kg	54000
2,3,4,6-Tetrachlorophenol	15000	UJ	ug/kg		11000	UJ	ug/kg	
Phenacetin	15000	U	ug/kg	15000	11000	U	ug/kg	11000
4-Aminobiphenyl	73000	U	ug/kg	73000	54000	U	ug/kg	54000
Pentachloronitrobenzene	73000	U	ug/kg	73000	54000	U	ug/kg	54000
Pronamide	15000	U	ug/kg	15000	11000	U	ug/kg	11000
p-(Dimethylamino)azobenzene	15000	U	ug/kg	15000	11000	U	ug/kg	11000
7,12-Dimethylbenz(A)Anthracene	15000	U	ug/kg	15000	11000	U	ug/kg	11000
3-Methylcholanthrene	15000	U	ug/kg	15000	11000	U	ug/kg	11000
Pyridine	73000	U	ug/kg	73000	54000	U	ug/kg	54000
N-Nitrosomethylethylamine	15000	U	ug/kg	15000	11000	U	ug/kg	11000
N-Nitrosomorpholine	15000	U	ug/kg	15000	11000	U	ug/kg	11000
o-Toluidine	15000	U	ug/kg	15000	11000	U	ug/kg	11000
Hexachloropropene	73000	U	ug/kg	73000	54000	U	ug/kg	54000
p-Phenylenediamine	730000	U	ug/kg	730000	540000	U	ug/kg	540000

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:	M7688006DL				M7688005DL			
Site	GROUP2				GROUP2			
Locator	08SL009060L				08SL01006DL			
Collect Date:	09-AUG-94				09-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	73000	U	ug/kg	73000	54000	U	ug/kg	54000
Isosafrole	73000	U	ug/kg	73000	54000	U	ug/kg	54000
1,4-Naphthoquinone	1500000	U	ug/kg	1500000	1100000	U	ug/kg	1100000
1,3-Dinitrobenzene	15000	U	ug/kg	15000	11000	U	ug/kg	11000
5-Nitro-o-toluidine	15000	U	ug/kg	15000	11000	U	ug/kg	11000
1,3,5-Trinitrobenzene	15000	U	ug/kg	15000	11000	U	ug/kg	11000
4-Nitroquinoline-1-oxide	730000	U	ug/kg	730000	540000	U	ug/kg	540000
Methapyrilene	73000	UJ	ug/kg		54000	UJ	ug/kg	
3,3'-Dimethylbenzidine	15000	U	ug/kg	15000	11000	U	ug/kg	11000
Hexachlorophene	730000	R	ug/kg		540000	R	ug/kg	
Aramite	73000	U	ug/kg	73000	54000	U	ug/kg	54000
2-Chlorophenol	15000	U	ug/kg	15000	11000	U	ug/kg	11000
3- & 4-Methylphenol (2)	15000	U	ug/kg	15000	11000	U	ug/kg	11000
Hexachloropropene	73000	U	ug/kg	73000	54000	U	ug/kg	54000
2-Acetylaminofluorene	15000	U	ug/kg	15000	11000	U	ug/kg	11000

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:	34923004
Site	GROUP2
Locator	MPT8SL2
Collect Date:	19-JAN-93

		VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg				
N-Nitrosodimethylamine		53000	U	ug/kg	53000
Phenol		53000	U	ug/kg	53000
Aniline		53000	U	ug/kg	53000
bis(2-Chloroethyl) ether		53000	U	ug/kg	53000
Benzyl Alcohol		53000	U	ug/kg	53000
2-Methylphenol		53000	U	ug/kg	53000
bis(2-Chloroisopropyl) ether		53000	U	ug/kg	53000
N-Nitroso-di-n-propylamine		53000	U	ug/kg	53000
Hexachloroethane		53000	U	ug/kg	53000
Nitrobenzene		53000	U	ug/kg	53000
Isophorone		53000	U	ug/kg	53000
2-Nitrophenol		53000	U	ug/kg	53000
2,4-Dimethylphenol		53000	U	ug/kg	53000
Benzoic acid		260000	U	ug/kg	260000
bis(2-Chloroethoxy) methane		53000	U	ug/kg	53000
2,4-Dichlorophenol		53000	U	ug/kg	53000
1,2,4-Trichlorobenzene		53000	U	ug/kg	53000
Naphthalene		12000	J	ug/kg	
4-Chloroaniline		53000	U	ug/kg	53000
Hexachlorobutadiene		53000	U	ug/kg	53000
4-Chloro-3-methylphenol		53000	U	ug/kg	53000
2-Methylnaphthalene		22000	J	ug/kg	
Hexachlorocyclopentadiene		53000	U	ug/kg	53000
2,4,6-Trichlorophenol		53000	U	ug/kg	53000
Dimethylphthalate		53000	U	ug/kg	53000
2,4,5-Trichlorophenol		260000	U	ug/kg	260000
2-Chloronaphthalene		53000	U	ug/kg	53000
2-Nitroaniline		260000	U	ug/kg	260000
Acenaphthylene		53000	U	ug/kg	53000
2,6-Dinitrotoluene		53000	U	ug/kg	53000
3-Nitroaniline		260000	U	ug/kg	260000
Acenaphthene		53000	U	ug/kg	53000
2,4-Dinitrophenol		260000	U	ug/kg	260000
4-Nitrophenol		260000	U	ug/kg	260000
Dibenzofuran		53000	U	ug/kg	53000
2,4-Dinitrotoluene		53000	U	ug/kg	53000
Diethylphthalate		53000	U	ug/kg	53000
4-Chlorophenyl-phenylether		53000	U	ug/kg	53000
Fluorene		53000	U	ug/kg	53000
4-Nitroaniline		260000	U	ug/kg	260000
4,6-Dinitro-2-methylphenol		260000	U	ug/kg	260000
N-Nitrosodiphenylamine (1)		7300	J	ug/kg	
1,2-Diphenylhydrazine		53000	U	ug/kg	53000
4-Bromophenyl-phenylether		53000	U	ug/kg	53000
Hexachlorobenzene		53000	U	ug/kg	53000
Pentachlorophenol		260000	U	ug/kg	260000
Phenanthrene		13000	J	ug/kg	
Anthracene		53000	U	ug/kg	53000
Di-n-Butylphthalate		53000	U	ug/kg	53000
Fluoranthene		5800	J	ug/kg	

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number: 34923004
Site GROUP2
Locator MPT8SL2
Collect Date: 19-JAN-93

	VALUE	QUAL	UNITS	DL
Pyrene	37000	J	ug/kg	
Butylbenzylphthalate	53000	U	ug/kg	53000
3,3-Dichlorobenzidine	110000	U	ug/kg	110000
Benzo (a) anthracene	6600	J	ug/kg	
Chrysene	53000	U	ug/kg	53000
bis(2-Ethylhexyl) phthalate	51000	J	ug/kg	
Di-n-octylphthalate	53000	U	ug/kg	53000
Benzo (b) fluoranthene	53000	U	ug/kg	53000
Benzo (k) fluoranthene	53000	U	ug/kg	53000
Benzo (a) pyrene	53000	U	ug/kg	53000
Indeno (1,2,3-cd) pyrene	53000	U	ug/kg	53000
Dibenz (a,h) anthracene	53000	U	ug/kg	53000
Benzo (g,h,i) perylene	53000	U	ug/kg	53000
2-Picoline	260000	U	ug/kg	260000
Methyl methanesulfonate	53000	U	ug/kg	53000
Ethyl methanesulfonate	53000	U	ug/kg	53000
Acetophenone	53000	U	ug/kg	53000
N-Nitrosopiperidine	53000	U	ug/kg	53000
Phenyl-tert-butylamine	260000	UJ	ug/kg	
2,6-Dichlorophenol	53000	U	ug/kg	53000
N-Nitroso-di-n-butylamine	53000	U	ug/kg	53000
N-Nitrosodiethylamine	53000	U	ug/kg	53000
N-Nitrosopyrrolidine	53000	U	ug/kg	53000
Benzidine	260000	U	ug/kg	260000
1,2,4,5-Tetrachlorobenzene	260000	U	ug/kg	260000
Pentachlorobenzene	260000	U	ug/kg	260000
1-Naphthylamine	260000	UJ	ug/kg	
2-Naphthylamine	260000	U	ug/kg	260000
2,3,4,6-Tetrachlorophenol	53000	U	ug/kg	53000
Phenacetin	53000	U	ug/kg	53000
4-Aminobiphenyl	260000	U	ug/kg	260000
Pentachloronitrobenzene	260000	U	ug/kg	260000
Pronamide	53000	U	ug/kg	53000
p-(Dimethylamino)azobenzene	53000	U	ug/kg	53000
7,12-Dimethylbenz(A)Anthracene	53000	U	ug/kg	53000
3-Methylcholanthrene	53000	U	ug/kg	53000
Pyridine	260000	U	ug/kg	260000
N-Nitrosomethylethylamine	53000	U	ug/kg	53000
N-Nitrosomorpholine	53000	U	ug/kg	53000
o-Toluidine	53000	U	ug/kg	53000
Hexachloropropene	260000	U	ug/kg	260000
p-Phenylenediamine	2600000	R	ug/kg	
Safrole	260000	U	ug/kg	260000
Isosafrole	260000	U	ug/kg	260000
1,4-Naphthoquinone	5400000	U	ug/kg	5400000
1,3-Dinitrobenzene	53000	U	ug/kg	53000
5-Nitro-o-toluidine	53000	U	ug/kg	53000
1,3,5-Trinitrobenzene	53000	U	ug/kg	53000
4-Nitroquinoline-1-oxide	2600000	R	ug/kg	
Methapyrilene	260000	U	ug/kg	260000
3,3-Dimethylbenzidine	53000	U	ug/kg	53000
Hexachlorophene	2600000	U	ug/kg	2600000

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:	34923004
Site	GROUP2
Locator	MPT8SL2
Collect Date:	19-JAN-93

	VALUE	QUAL	UNITS	DL
Aramite	260000	R	ug/kg	
2-Chlorophenol	53000	U	ug/kg	53000
3- & 4-Methylphenol (2)	-		ug/kg	
Hexachloropropene	260000	U	ug/kg	260000
2-Acetylaminofluorene	53000	U	ug/kg	53000

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		23790003				23967001				23967002				23790005			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		MPT8SL1				8SL1A				8SL1AD				MPT8SL3			
Collect Date:		19-JAN-93				02-FEB-93				02-FEB-93				19-JAN-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg																
alpha-BHC		81	UJ	ug/kg		7.1	U	ug/kg	7.1	7.1	U	ug/kg	7.1	77	UJ	ug/kg	
beta-BHC		160	UJ	ug/kg		14	U	ug/kg	14	14	U	ug/kg	14	150	UJ	ug/kg	
delta-BHC		81	UJ	ug/kg		7.1	U	ug/kg	7.1	7.1	U	ug/kg	7.1	77	UJ	ug/kg	
gamma-BHC (Lindane)		81	UJ	ug/kg		7.1	U	ug/kg	7.1	7.1	U	ug/kg	7.1	77	UJ	ug/kg	
Heptachlor		81	UJ	ug/kg		7.1	U	ug/kg	7.1	7.1	U	ug/kg	7.1	77	UJ	ug/kg	
Aldrin		81	UJ	ug/kg		7.1	U	ug/kg	7.1	7.1	U	ug/kg	7.1	77	UJ	ug/kg	
Heptachlor epoxide		81	U	ug/kg	81	7.1	U	ug/kg	7.1	7.1	U	ug/kg	7.1	77	U	ug/kg	77
Endosulfan I		81	U	ug/kg	81	7.1	U	ug/kg	7.1	7.1	U	ug/kg	7.1	77	U	ug/kg	77
Dieldrin		81	U	ug/kg	81	7.1	UJ	ug/kg		7.1	UJ	ug/kg		77	U	ug/kg	77
4,4-DDE		81	U	ug/kg	81	7.1		ug/kg		7.1		ug/kg		77	U	ug/kg	77
Endrin		160	U	ug/kg	160	14	UJ	ug/kg		14	UJ	ug/kg		150	U	ug/kg	150
Endosulfan II		160	U	ug/kg	160	14	UJ	ug/kg		14	UJ	ug/kg		150	U	ug/kg	150
4,4-DDD		160	U	ug/kg	160	14	UJ	ug/kg		14	UJ	ug/kg		150	U	ug/kg	150
Endosulfan sulfate		160	U	ug/kg	160	14	UJ	ug/kg		14	UJ	ug/kg		150	U	ug/kg	150
4,4-DDT		160	U	ug/kg	160	14	UJ	ug/kg		14	UJ	ug/kg		150	U	ug/kg	150
Methoxychlor		320	U	ug/kg	320	29	UJ	ug/kg		29	UJ	ug/kg		310	U	ug/kg	310
Endrin aldehyde		160	U	ug/kg	160	14	UJ	ug/kg		14	UJ	ug/kg		150	U	ug/kg	150
Endrin ketone		160	U	ug/kg	160	14	UJ	ug/kg		14	UJ	ug/kg		150	U	ug/kg	150
Chlordane		810	U	ug/kg	810	71	UJ	ug/kg		71	UJ	ug/kg		770	U	ug/kg	770
Chlorobenzilate		2400	U	ug/kg	2400	210	UJ	ug/kg		210	UJ	ug/kg		2300	U	ug/kg	2300
Diallate		4800	U	ug/kg	4800	420	U	ug/kg	420	410	U	ug/kg	410	4600	U	ug/kg	4600
Toxaphene		4000	U	ug/kg	4000	350	UJ	ug/kg		350	UJ	ug/kg		3800	U	ug/kg	3800
Isodrin		96	U	ug/kg	96	8.5	U	ug/kg	8.5	8.5	U	ug/kg	8.5	92	U	ug/kg	92
Kepone		4800	U	ug/kg	4800	420	U	ug/kg	420	420	U	ug/kg	420	4600	U	ug/kg	4600
Aroclor-1016		4000	U	ug/kg	4000	350	UJ	ug/kg		350	UJ	ug/kg		3800	U	ug/kg	3800
Aroclor-1221		8100	U	ug/kg	8100	710	UJ	ug/kg		710	UJ	ug/kg		7700	U	ug/kg	7700
Aroclor-1232		8100	U	ug/kg	8100	710	UJ	ug/kg		710	UJ	ug/kg		7700	U	ug/kg	7700
Aroclor-1242		4000	U	ug/kg	4000	350	UJ	ug/kg		350	UJ	ug/kg		3800	U	ug/kg	3800
Aroclor-1248		4000	U	ug/kg	4000	350	UJ	ug/kg		350	UJ	ug/kg		3800	U	ug/kg	3800
Aroclor-1254		2000	U	ug/kg	2000	180	UJ	ug/kg		180	UJ	ug/kg		2000	U	ug/kg	2000
Aroclor-1260		2000	U	ug/kg	2000	180	UJ	ug/kg		180	UJ	ug/kg		2000	U	ug/kg	2000

U = NOT DETECTED R = RESULT IS REJECTED
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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:	R8977001				R8977002				M7688008				M7688009			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08SL00401				08SL00401D				08SL00501				08SL00505			
Collect Date:	27-OCT-94				27-OCT-94				09-AUG-94				09-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs ug/kg																
alpha-BHC	.88	U	ug/kg	.88	.92	U	ug/kg	.92	7.3	U	ug/kg	7.3	16	U	ug/kg	16
beta-BHC	1.7	U	ug/kg	1.7	1.8	U	ug/kg	1.8	14	U	ug/kg	14	31	U	ug/kg	31
delta-BHC	.88	U	ug/kg	.88	.92	U	ug/kg	.92	7.3	U	ug/kg	7.3	16	U	ug/kg	16
gamma-BHC (Lindane)	.88	U	ug/kg	.88	.92	U	ug/kg	.92	7.3	U	ug/kg	7.3	16	U	ug/kg	16
Heptachlor	.88	U	ug/kg	.88	.92	U	ug/kg	.92	7.3	U	ug/kg	7.3	16	U	ug/kg	16
Aldrin	.88	U	ug/kg	.88	.92	U	ug/kg	.92	7.3	U	ug/kg	7.3	16	U	ug/kg	16
Heptachlor epoxide	.88	U	ug/kg	.88	.92	U	ug/kg	.92	7.3	U	ug/kg	7.3	16	U	ug/kg	16
Endosulfan I	.88	U	ug/kg	.88	.92	U	ug/kg	.92	7.3	U	ug/kg	7.3	16	U	ug/kg	16
Dieldrin	.88	U	ug/kg	.88	.92	U	ug/kg	.92	7.3	U	ug/kg	7.3	16	U	ug/kg	16
4,4-DDE	.88	U	ug/kg	.88	.92	U	ug/kg	.92	7.3	U	ug/kg	7.3	16	U	ug/kg	16
Endrin	1.7	U	ug/kg	1.7	1.8	U	ug/kg	1.8	14	U	ug/kg	14	31	U	ug/kg	31
Endosulfan II	1.7	U	ug/kg	1.7	1.8	U	ug/kg	1.8	14	U	ug/kg	14	31	U	ug/kg	31
4,4-DDD	6.2		ug/kg		5.3		ug/kg		14	U	ug/kg	14	31	U	ug/kg	31
Endosulfan sulfate	1.7	U	ug/kg	1.7	1.8	U	ug/kg	1.8	14	U	ug/kg	14	31	U	ug/kg	31
4,4-DDT	2.2	J	ug/kg		2.1	J	ug/kg		14	U	ug/kg	14	31	U	ug/kg	31
Methoxychlor	3.6	U	ug/kg	3.6	3.7	U	ug/kg	3.7	29	U	ug/kg	29	65	U	ug/kg	65
Endrin aldehyde	1.7	U	ug/kg	1.7	1.8	U	ug/kg	1.8	14	U	ug/kg	14	31	U	ug/kg	31
Endrin ketone	1.7	U	ug/kg	1.7	1.8	U	ug/kg	1.8	14	U	ug/kg	14	31	U	ug/kg	31
Chlordane	-		ug/kg		-		ug/kg		730	U	ug/kg	730	160	U	ug/kg	160
Chlorobenzilate	26	U	ug/kg	26	27	U	ug/kg	27	220	U	ug/kg	220	480	U	ug/kg	480
Diallate	53	U	ug/kg	53	55	U	ug/kg	55	430	U	ug/kg	430	960	U	ug/kg	960
Toxaphene	43	U	ug/kg	43	45	U	ug/kg	45	360	U	ug/kg	360	780	U	ug/kg	780
Isodrin	.88	U	ug/kg	.88	.92	U	ug/kg	.92	7.3	U	ug/kg	7.3	16	U	ug/kg	16
Kepone	53	U	ug/kg	53	55	U	ug/kg	55	430	UJ	ug/kg		960	UJ	ug/kg	
Aroclor-1016	43	U	ug/kg	43	45	U	ug/kg	45	360	U	ug/kg	360	780	U	ug/kg	780
Aroclor-1221	88	U	ug/kg	88	92	U	ug/kg	92	730	U	ug/kg	730	160	U	ug/kg	160
Aroclor-1232	88	U	ug/kg	88	92	U	ug/kg	92	730	U	ug/kg	730	160	U	ug/kg	160
Aroclor-1242	43	U	ug/kg	43	45	U	ug/kg	45	360	U	ug/kg	360	780	U	ug/kg	780
Aroclor-1248	43	U	ug/kg	43	45	U	ug/kg	45	360	U	ug/kg	360	780	U	ug/kg	780
Aroclor-1254	21	U	ug/kg	21	22	U	ug/kg	22	180	U	ug/kg	180	410	U	ug/kg	410
Aroclor-1260	21	U	ug/kg	21	22	U	ug/kg	22	180	U	ug/kg	180	410	U	ug/kg	410

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J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		M7688010				M7688011				M7688012				M7688013			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08SL00601				08SL00605				08SL00701				08SL00701D			
Collect Date:		09-AUG-94				09-AUG-94				09-AUG-94				09-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg																
alpha-BHC		7.4	U	ug/kg	7.4	16	U	ug/kg	16	7.5	U	ug/kg	7.5	14	U	ug/kg	14
beta-BHC		14	U	ug/kg	14	31	U	ug/kg	31	15	U	ug/kg	15	28	U	ug/kg	28
delta-BHC		7.4	U	ug/kg	7.4	16	U	ug/kg	16	7.5	U	ug/kg	7.5	14	U	ug/kg	14
gamma-BHC (Lindane)		7.4	U	ug/kg	7.4	16	U	ug/kg	16	7.5	U	ug/kg	7.5	14	U	ug/kg	14
Heptachlor		7.4	U	ug/kg	7.4	16	U	ug/kg	16	7.5	U	ug/kg	7.5	14	U	ug/kg	14
Aldrin		7.4	U	ug/kg	7.4	16	U	ug/kg	16	7.5	U	ug/kg	7.5	14	U	ug/kg	14
Heptachlor epoxide		7.4	U	ug/kg	7.4	16	U	ug/kg	16	7.5	U	ug/kg	7.5	14	U	ug/kg	14
Endosulfan I		7.4	U	ug/kg	7.4	16	U	ug/kg	16	7.5	U	ug/kg	7.5	14	U	ug/kg	14
Dieldrin		7.4	U	ug/kg	7.4	16	U	ug/kg	16	7.5	U	ug/kg	7.5	14	U	ug/kg	14
4,4-DDE		7.4	U	ug/kg	7.4	16	U	ug/kg	16	7.5	U	ug/kg	7.5	14	U	ug/kg	14
Endrin		14	U	ug/kg	14	31	U	ug/kg	31	15	U	ug/kg	15	28	U	ug/kg	28
Endosulfan II		14	U	ug/kg	14	31	U	ug/kg	31	15	U	ug/kg	15	28	U	ug/kg	28
4,4-DDD		14	U	ug/kg	14	31	U	ug/kg	31	15	U	ug/kg	15	28	U	ug/kg	28
Endosulfan sulfate		14	U	ug/kg	14	31	U	ug/kg	31	15	U	ug/kg	15	28	U	ug/kg	28
4,4-DDT		14	U	ug/kg	14	31	U	ug/kg	31	15	U	ug/kg	15	28	U	ug/kg	28
Methoxychlor		30	U	ug/kg	30	64	U	ug/kg	64	30	U	ug/kg	30	57	U	ug/kg	57
Endrin aldehyde		14	U	ug/kg	14	31	U	ug/kg	31	15	U	ug/kg	15	28	U	ug/kg	28
Endrin ketone		14	U	ug/kg	14	31	U	ug/kg	31	15	U	ug/kg	15	28	U	ug/kg	28
Chlordane		740	U	ug/kg	740	160	U	ug/kg	160	750	U	ug/kg	750	140	U	ug/kg	140
Chlorobenzilate		220	U	ug/kg	220	470	U	ug/kg	470	220	U	ug/kg	220	430	U	ug/kg	430
Diallate		440	U	ug/kg	440	940	U	ug/kg	940	450	U	ug/kg	450	850	U	ug/kg	850
Toxaphene		370	U	ug/kg	370	780	U	ug/kg	780	370	U	ug/kg	370	700	U	ug/kg	700
Isodrin		7.4	U	ug/kg	7.4	16	U	ug/kg	16	7.5	U	ug/kg	7.5	14	U	ug/kg	14
Kepone		440	UJ	ug/kg		940	UJ	ug/kg		490	UJ	ug/kg		850	UJ	ug/kg	
Aroclor-1016		370	U	ug/kg	370	780	U	ug/kg	780	370	U	ug/kg	370	700	U	ug/kg	700
Aroclor-1221		740	U	ug/kg	740	160	U	ug/kg	160	750	U	ug/kg	750	140	U	ug/kg	140
Aroclor-1232		740	U	ug/kg	740	160	U	ug/kg	160	750	U	ug/kg	750	140	U	ug/kg	140
Aroclor-1242		370	U	ug/kg	370	780	U	ug/kg	780	370	U	ug/kg	370	700	U	ug/kg	700
Aroclor-1248		370	U	ug/kg	370	780	U	ug/kg	780	370	U	ug/kg	370	700	U	ug/kg	700
Aroclor-1254		190	U	ug/kg	190	400	U	ug/kg	400	190	U	ug/kg	190	360	U	ug/kg	360
Aroclor-1260		190	U	ug/kg	190	400	U	ug/kg	400	190	U	ug/kg	190	360	U	ug/kg	360

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		M7688014				M7688001				M7688007				M7688002			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08SL00705				08SL00801				08SL00806				08SL00901			
Collect Date:		09-AUG-94				09-AUG-94				09-AUG-94				09-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg																
alpha-BHC		3.9	U	ug/kg	3.9	15	U	ug/kg	15	15	U	ug/kg	15	92	U	ug/kg	92
beta-BHC		7.6	U	ug/kg	7.6	30	U	ug/kg	30	28	U	ug/kg	28	178	U	ug/kg	178
delta-BHC		3.9	U	ug/kg	3.9	15	U	ug/kg	15	15	U	ug/kg	15	92	U	ug/kg	92
gamma-BHC (Lindane)		3.9	U	ug/kg	3.9	15	U	ug/kg	15	15	U	ug/kg	15	92	U	ug/kg	92
Heptachlor		3.9	U	ug/kg	3.9	15	U	ug/kg	15	15	U	ug/kg	15	92	U	ug/kg	92
Aldrin		3.9	U	ug/kg	3.9	15	U	ug/kg	15	15	U	ug/kg	15	92	U	ug/kg	92
Heptachlor epoxide		3.9	U	ug/kg	3.9	15	U	ug/kg	15	15	U	ug/kg	15	92	U	ug/kg	92
Endosulfan I		3.9	U	ug/kg	3.9	15	U	ug/kg	15	15	U	ug/kg	15	92	U	ug/kg	92
Dieldrin		3.9	U	ug/kg	3.9	15	U	ug/kg	15	15	U	ug/kg	15	92	U	ug/kg	92
4,4-DDE		3.9	U	ug/kg	3.9	15	U	ug/kg	15	15	U	ug/kg	15	92	U	ug/kg	92
Endrin		7.6	U	ug/kg	7.6	30	U	ug/kg	30	28	U	ug/kg	28	178	U	ug/kg	178
Endosulfan II		7.6	U	ug/kg	7.6	30	U	ug/kg	30	28	U	ug/kg	28	178	U	ug/kg	178
4,4-DDD		7.6	U	ug/kg	7.6	30	U	ug/kg	30	28	U	ug/kg	28	178	U	ug/kg	178
Endosulfan sulfate		7.6	U	ug/kg	7.6	30	U	ug/kg	30	28	U	ug/kg	28	178	U	ug/kg	178
4,4-DDT		7.6	U	ug/kg	7.6	30	U	ug/kg	30	28	U	ug/kg	28	178	U	ug/kg	178
Methoxychlor		16	U	ug/kg	16	61	U	ug/kg	61	59	U	ug/kg	59	370	U	ug/kg	370
Endrin aldehyde		7.6	U	ug/kg	7.6	30	U	ug/kg	30	28	U	ug/kg	28	178	U	ug/kg	178
Endrin ketone		7.6	U	ug/kg	7.6	30	U	ug/kg	30	28	U	ug/kg	28	178	U	ug/kg	178
Chlordane		39	U	ug/kg	39	150	U	ug/kg	150	150	U	ug/kg	150	920	U	ug/kg	920
Chlorobenzilate		120	U	ug/kg	120	450	U	ug/kg	450	430	U	ug/kg	430	2740	U	ug/kg	2740
Diallate		240	U	ug/kg	240	910	U	ug/kg	910	870	U	ug/kg	870	5400	U	ug/kg	5400
Toxaphene		190	U	ug/kg	190	750	U	ug/kg	750	720	U	ug/kg	720	4500	U	ug/kg	4500
Isodrin		3.9	U	ug/kg	3.9	15	U	ug/kg	15	15	U	ug/kg	15	92	U	ug/kg	92
Kepone		240	UJ	ug/kg		900	UJ	ug/kg		870	UJ	ug/kg		5500	UJ	ug/kg	
Aroclor-1016		190	U	ug/kg	190	750	U	ug/kg	750	720	U	ug/kg	720	4500	U	ug/kg	4500
Aroclor-1221		390	U	ug/kg	390	150	U	ug/kg	150	150	U	ug/kg	150	9200	U	ug/kg	9200
Aroclor-1232		390	U	ug/kg	390	150	U	ug/kg	150	150	U	ug/kg	150	9200	U	ug/kg	9200
Aroclor-1242		190	U	ug/kg	190	750	U	ug/kg	750	720	U	ug/kg	720	4500	U	ug/kg	4500
Aroclor-1248		190	U	ug/kg	190	750	U	ug/kg	750	720	U	ug/kg	720	4500	U	ug/kg	4500
Aroclor-1254		100	U	ug/kg	100	390	U	ug/kg	390	370	U	ug/kg	370	2300	U	ug/kg	2300
Aroclor-1260		100	U	ug/kg	100	390	U	ug/kg	390	370	U	ug/kg	370	2300	U	ug/kg	2300

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		M7688006				M7688003				M7688004				M7688005			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08SL00906				08SL01001				08SL01001D				08SL01006			
Collect Date:		09-AUG-94				09-AUG-94				09-AUG-94				09-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg																
alpha-BHC		15	U	ug/kg	15	14	U	ug/kg	14	28	U	ug/kg	28	37	U	ug/kg	37
beta-BHC		29	U	ug/kg	29	27	U	ug/kg	27	54	U	ug/kg	54	71	U	ug/kg	71
delta-BHC		15	U	ug/kg	15	14	U	ug/kg	14	28	U	ug/kg	28	37	U	ug/kg	37
gamma-BHC (Lindane)		15	U	ug/kg	15	14	U	ug/kg	14	28	U	ug/kg	28	37	U	ug/kg	37
Heptachlor		15	U	ug/kg	15	14	U	ug/kg	14	28	U	ug/kg	28	37	U	ug/kg	37
Aldrin		15	U	ug/kg	15	14	U	ug/kg	14	28	U	ug/kg	28	37	U	ug/kg	37
Heptachlor epoxide		15	U	ug/kg	15	14	U	ug/kg	14	28	U	ug/kg	28	37	U	ug/kg	37
Endosulfan I		15	U	ug/kg	15	14	U	ug/kg	14	28	U	ug/kg	28	37	U	ug/kg	37
Dieldrin		15	U	ug/kg	15	14	U	ug/kg	14	28	U	ug/kg	28	37	U	ug/kg	37
4,4-DDE		15	U	ug/kg	15	14	U	ug/kg	14	28	U	ug/kg	28	37	U	ug/kg	37
Endrin		29	U	ug/kg	29	27	U	ug/kg	27	54	U	ug/kg	54	71	U	ug/kg	71
Endosulfan II		29	U	ug/kg	29	27	U	ug/kg	27	54	U	ug/kg	54	71	U	ug/kg	71
4,4-DDD		29	U	ug/kg	29	27	U	ug/kg	27	54	U	ug/kg	54	71	U	ug/kg	71
Endosulfan sulfate		29	U	ug/kg	29	27	U	ug/kg	27	54	U	ug/kg	54	71	U	ug/kg	71
4,4-DDT		29	U	ug/kg	29	27	U	ug/kg	27	54	U	ug/kg	54	71	U	ug/kg	71
Methoxychlor		60	U	ug/kg	60	57	U	ug/kg	57	110	U	ug/kg	110	150	U	ug/kg	150
Endrin aldehyde		29	U	ug/kg	29	27	U	ug/kg	27	54	U	ug/kg	54	71	U	ug/kg	71
Endrin ketone		29	U	ug/kg	29	27	U	ug/kg	27	54	U	ug/kg	54	71	U	ug/kg	71
Chlordane		150	U	ug/kg	150	140	U	ug/kg	140	280	U	ug/kg	280	370	U	ug/kg	370
Chlorobenzilate		440	U	ug/kg	440	420	U	ug/kg	420	830	U	ug/kg	830	1100	U	ug/kg	1100
Diallate		890	U	ug/kg	890	840	U	ug/kg	840	1700	U	ug/kg	1700	2000	U	ug/kg	2000
Toxaphene		730	U	ug/kg	730	690	U	ug/kg	690	1400	U	ug/kg	1400	1800	U	ug/kg	1800
Isodrin		15	U	ug/kg	15	14	U	ug/kg	14	28	U	ug/kg	28	37	U	ug/kg	37
Kepone		890	UJ	ug/kg		840	UJ	ug/kg		1700	UJ	ug/kg		2200	UJ	ug/kg	
Aroclor-1016		730	U	ug/kg	730	690	U	ug/kg	690	1400	U	ug/kg	1400	1800	U	ug/kg	1800
Aroclor-1221		150	U	ug/kg	150	140	U	ug/kg	140	2800	U	ug/kg	2800	3700	U	ug/kg	3700
Aroclor-1232		150	U	ug/kg	150	140	U	ug/kg	140	2800	U	ug/kg	2800	3700	U	ug/kg	3700
Aroclor-1242		730	U	ug/kg	730	690	U	ug/kg	690	1400	U	ug/kg	1400	1800	U	ug/kg	1800
Aroclor-1248		730	U	ug/kg	730	690	U	ug/kg	690	1400	U	ug/kg	1400	1800	U	ug/kg	1800
Aroclor-1254		380	U	ug/kg	380	360	U	ug/kg	360	710	U	ug/kg	710	930	U	ug/kg	930
Aroclor-1260		380	U	ug/kg	380	360	U	ug/kg	360	710	U	ug/kg	710	930	U	ug/kg	930

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

ARO1 - Trend Report
Group2 Sludge Data

Lab Sample Number:		M7682001				M7682002				M7682003				M7682004			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08SL01101				08SL01102				08SL01201				08SL01202			
Collect Date:		08-AUG-94				08-AUG-94				08-AUG-94				08-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg																
alpha-BHC		15	U	ug/kg	15	16	U	ug/kg	16	4	U	ug/kg	4	3.8	U	ug/kg	3.8
beta-BHC		29	U	ug/kg	29	31	U	ug/kg	31	7.8	U	ug/kg	7.8	7.3	U	ug/kg	7.3
delta-BHC		15	U	ug/kg	15	16	U	ug/kg	16	4	U	ug/kg	4	3.8	U	ug/kg	3.8
gamma-BHC (Lindane)		15	U	ug/kg	15	16	U	ug/kg	16	4	U	ug/kg	4	3.8	U	ug/kg	3.8
Heptachlor		15	U	ug/kg	15	16	U	ug/kg	16	4	U	ug/kg	4	3.8	U	ug/kg	3.8
Aldrin		15	U	ug/kg	15	16	U	ug/kg	16	4	U	ug/kg	4	3.8	U	ug/kg	3.8
Heptachlor epoxide		15	U	ug/kg	15	16	U	ug/kg	16	4	U	ug/kg	4	3.8	U	ug/kg	3.8
Endosulfan I		15	U	ug/kg	15	16	U	ug/kg	16	4	U	ug/kg	4	3.8	U	ug/kg	3.8
Dieldrin		15	U	ug/kg	15	16	U	ug/kg	16	4	U	ug/kg	4	3.8	U	ug/kg	3.8
4,4-DDE		15	U	ug/kg	15	16	U	ug/kg	16	4	U	ug/kg	4	3.8	U	ug/kg	3.8
Endrin		29	U	ug/kg	29	31	U	ug/kg	31	7.8	U	ug/kg	7.8	7.3	U	ug/kg	7.3
Endosulfan II		29	U	ug/kg	29	31	U	ug/kg	31	7.8	U	ug/kg	7.8	7.3	U	ug/kg	7.3
4,4-DDD		29	U	ug/kg	29	31	U	ug/kg	31	7.8	U	ug/kg	7.8	7.3	U	ug/kg	7.3
Endosulfan sulfate		36	U	ug/kg	36	31	U	ug/kg	31	7.8	U	ug/kg	7.8	7.3	U	ug/kg	7.3
4,4-DDT		29	U	ug/kg	29	31	U	ug/kg	31	7.8	U	ug/kg	7.8	7.3	U	ug/kg	7.3
Methoxychlor		60	U	ug/kg	60	64	U	ug/kg	64	16	U	ug/kg	16	15	U	ug/kg	15
Endrin aldehyde		29	U	ug/kg	29	31	U	ug/kg	31	7.8	U	ug/kg	7.8	7.3	U	ug/kg	7.3
Endrin ketone		29	U	ug/kg	29	31	U	ug/kg	31	7.8	U	ug/kg	7.8	7.3	U	ug/kg	7.3
Chlordane		750	U	ug/kg	750	800	U	ug/kg	800	200	U	ug/kg	200	190	U	ug/kg	190
Chlorobenzilate		440	U	ug/kg	440	480	U	ug/kg	480	120	U	ug/kg	120	110	U	ug/kg	110
Diallate		890	U	ug/kg	890	950	U	ug/kg	950	240	U	ug/kg	240	220	U	ug/kg	220
Toxaphene		3600	U	ug/kg	3600	4000	U	ug/kg	4000	1000	U	ug/kg	1000	900	U	ug/kg	900
Isodrin		15	U	ug/kg	15	16	U	ug/kg	16	4	U	ug/kg	4	3.8	U	ug/kg	3.8
Kepone		890	UJ	ug/kg		950	UJ	ug/kg		240	UJ	ug/kg		220	UJ	ug/kg	
Aroclor-1016		3600	U	ug/kg	3600	4000	U	ug/kg	4000	1000	U	ug/kg	1000	900	U	ug/kg	900
Aroclor-1221		7500	U	ug/kg	7500	8000	U	ug/kg	8000	2000	U	ug/kg	2000	1900	U	ug/kg	1900
Aroclor-1232		7500	U	ug/kg	7500	8000	U	ug/kg	8000	2000	U	ug/kg	2000	1900	U	ug/kg	1900
Aroclor-1242		3600	U	ug/kg	3600	4000	U	ug/kg	4000	1000	U	ug/kg	1000	900	U	ug/kg	900
Aroclor-1248		3600	U	ug/kg	3600	4000	U	ug/kg	4000	1000	U	ug/kg	1000	900	U	ug/kg	900
Aroclor-1254		760	U	ug/kg	760	800	U	ug/kg	800	200	U	ug/kg	200	190	U	ug/kg	190
Aroclor-1260		760	U	ug/kg	760	800	U	ug/kg	800	200	U	ug/kg	200	190	U	ug/kg	190

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		M7682005				M7682006				R8977001R				R8977002R		
Site		GROUP2				GROUP2				GROUP2				GROUP2		
Locator		08SL01301				08SL01302				08SL00401RE				08SL00401DRE		
Collect Date:		08-AUG-94				08-AUG-94				27-OCT-94				27-OCT-94		
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg																
alpha-BHC		7.5	U	ug/kg	7.5	7.4	U	ug/kg	7.4	-		ug/kg		-		ug/kg	
beta-BHC		15	U	ug/kg	15	14	U	ug/kg	14	-		ug/kg		-		ug/kg	
delta-BHC		7.5	U	ug/kg	7.5	7.4	U	ug/kg	7.4	-		ug/kg		-		ug/kg	
gamma-BHC (Lindane)		7.5	U	ug/kg	7.5	7.4	U	ug/kg	7.4	-		ug/kg		-		ug/kg	
Heptachlor		7.5	U	ug/kg	7.5	7.4	U	ug/kg	7.4	-		ug/kg		-		ug/kg	
Aldrin		7.5	U	ug/kg	7.5	7.4	U	ug/kg	7.4	-		ug/kg		-		ug/kg	
Heptachlor epoxide		7.5	U	ug/kg	7.5	7.4	U	ug/kg	7.4	-		ug/kg		-		ug/kg	
Endosulfan I		7.5	U	ug/kg	7.5	7.4	U	ug/kg	7.4	-		ug/kg		-		ug/kg	
Dieldrin		7.5	U	ug/kg	7.5	7.4	U	ug/kg	7.4	-		ug/kg		-		ug/kg	
4,4-DDE		7.5	U	ug/kg	7.5	7.4	U	ug/kg	7.4	-		ug/kg		-		ug/kg	
Endrin		15	U	ug/kg	15	14	U	ug/kg	14	-		ug/kg		-		ug/kg	
Endosulfan II		15	U	ug/kg	15	14	U	ug/kg	14	-		ug/kg		-		ug/kg	
4,4-DDD		15	U	ug/kg	15	14	U	ug/kg	14	-		ug/kg		-		ug/kg	
Endosulfan sulfate		15	U	ug/kg	15	14	U	ug/kg	14	-		ug/kg		-		ug/kg	
4,4-DDT		15	U	ug/kg	15	14	U	ug/kg	14	-		ug/kg		-		ug/kg	
Methoxychlor		30	U	ug/kg	30	40	U	ug/kg	40	-		ug/kg		-		ug/kg	
Endrin aldehyde		15	U	ug/kg	15	14	U	ug/kg	14	-		ug/kg		-		ug/kg	
Endrin ketone		15	U	ug/kg	15	14	U	ug/kg	14	-		ug/kg		-		ug/kg	
Chlordane		380	U	ug/kg	380	370	U	ug/kg	370	68		ug/kg		72	J	ug/kg	
Chlorobenzilate		220	U	ug/kg	220	220	U	ug/kg	220	-		ug/kg		-		ug/kg	
Diallate		450	U	ug/kg	450	440	U	ug/kg	440	-		ug/kg		-		ug/kg	
Toxaphene		1800	U	ug/kg	1800	1800	U	ug/kg	1800	-		ug/kg		-		ug/kg	
Isodrin		7.5	U	ug/kg	7.5	.67	U	ug/kg	.67	-		ug/kg		-		ug/kg	
Kepone		450	UJ	ug/kg		440	UJ	ug/kg		-		ug/kg		-		ug/kg	
Aroclor-1016		1800	U	ug/kg	1800	1800	U	ug/kg	1800	-		ug/kg		-		ug/kg	
Aroclor-1221		3800	U	ug/kg	3800	3700	U	ug/kg	3700	-		ug/kg		-		ug/kg	
Aroclor-1232		3800	U	ug/kg	3800	3700	U	ug/kg	3700	-		ug/kg		-		ug/kg	
Aroclor-1242		1800	U	ug/kg	1800	1800	U	ug/kg	1800	-		ug/kg		-		ug/kg	
Aroclor-1248		1800	U	ug/kg	1800	1800	U	ug/kg	1800	-		ug/kg		-		ug/kg	
Aroclor-1254		380	U	ug/kg	380	380	U	ug/kg	380	-		ug/kg		-		ug/kg	
Aroclor-1260		380	U	ug/kg	380	380	U	ug/kg	380	-		ug/kg		-		ug/kg	

U = NOT DETECTED R = RESULT IS REJECTED
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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:	23790004
Site	GROUP2
Locator	MPT8SL2
Collect Date:	19-JAN-93

		VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg				
alpha-BHC		98	U	ug/kg	98
beta-BHC		190	U	ug/kg	190
delta-BHC		98	U	ug/kg	98
gamma-BHC (Lindane)		98	U	ug/kg	98
Heptachlor		98	U	ug/kg	98
Aldrin		98	U	ug/kg	98
Heptachlor epoxide		98	U	ug/kg	98
Endosulfan I		98	U	ug/kg	98
Dieldrin		98	U	ug/kg	98
4,4-DDE		98	U	ug/kg	98
Endrin		190	U	ug/kg	190
Endosulfan II		190	U	ug/kg	190
4,4-DDD		190	U	ug/kg	190
Endosulfan sulfate		190	U	ug/kg	190
4,4-DDT		190	U	ug/kg	190
Methoxychlor		400	U	ug/kg	400
Endrin aldehyde		190	U	ug/kg	190
Endrin ketone		190	U	ug/kg	190
Chlordane		980	U	ug/kg	980
Chlorobenzilate		2900	U	ug/kg	2900
Diallate		5900	U	ug/kg	5900
Toxaphene		4800	U	ug/kg	4800
Isodrin		120	U	ug/kg	120
Kepone		5900	U	ug/kg	5900
Aroclor-1016		4800	U	ug/kg	4800
Aroclor-1221		9800	U	ug/kg	9800
Aroclor-1232		9800	U	ug/kg	9800
Aroclor-1242		4800	U	ug/kg	4800
Aroclor-1248		4800	U	ug/kg	4800
Aroclor-1254		2500	U	ug/kg	2500
Aroclor-1260		2500	U	ug/kg	2500

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:	34923003				35074001				35074002				34923005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT8SL1				8SL1A				8SL1AD				MPT8SL3			
Collect Date:	19-JAN-93				02-FEB-93				02-FEB-93				19-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	4.5	J	mg/kg		4	J	mg/kg		2.6	U	mg/kg	2.6	5.9	J	mg/kg	
Arsenic	1.2	J	mg/kg		.15	U	mg/kg	.15	.15	U	mg/kg	.15	.49	J	mg/kg	
Barium	32.7	J	mg/kg		8	J	mg/kg		7.1	J	mg/kg		27.6	J	mg/kg	
Beryllium	.12	U	mg/kg	.12	.11	U	mg/kg	.11	.11	U	mg/kg	.11	.13	J	mg/kg	
Cadmium	6.6	J	mg/kg		.26	U	mg/kg	.26	.26	U	mg/kg	.26	1.4	J	mg/kg	
Chromium	75.1	J	mg/kg		1.1	J	mg/kg		1.5	J	mg/kg		26.5	J	mg/kg	
Cobalt	1.4	U	mg/kg	1.4	1.2	U	mg/kg	1.2	1.3	U	mg/kg	1.3	1.3	U	mg/kg	1.3
Copper	510		mg/kg		6		mg/kg		5.7		mg/kg		72.4		mg/kg	
Cyanide	.18	U	mg/kg	.18	.21	J	mg/kg		.16	U	mg/kg	.16	.17	U	mg/kg	.17
Lead	91.3	J	mg/kg		3.1	J	mg/kg		2.9	J	mg/kg		43.4	J	mg/kg	
Mercury	6	J	mg/kg		.03	U	mg/kg	.03	.03	U	mg/kg	.03	.77	J	mg/kg	
Nickel	295	J	mg/kg		2.2	J	mg/kg		4.3	J	mg/kg		38.7	J	mg/kg	
Selenium	.12	U	mg/kg	.12	.11	UJ	mg/kg		.11	J	mg/kg		.12	UJ	mg/kg	
Silver	19.4		mg/kg		.45	U	mg/kg	.45	.45	U	mg/kg	.45	.49	U	mg/kg	.49
Thallium	.17	UJ	mg/kg		.15	U	mg/kg	.15	.15	U	mg/kg	.15	.16	UJ	mg/kg	
Tin	235		mg/kg		2.5	U	mg/kg	2.5	2.5	U	mg/kg	2.5	3.5		mg/kg	
Vanadium	80.4	J	mg/kg		3.2	J	mg/kg		3.3	J	mg/kg		34.1	J	mg/kg	
Zinc	421	J	mg/kg		14.7	J	mg/kg		20.6	J	mg/kg		203	J	mg/kg	

U = NOT DETECTED R = RESULT IS REJECTED
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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		R8977001				R8977002				M7688008				M7688009			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08SL00401				08SL00401D				08SL00501				08SL00505			
Collect Date:		27-OCT-94				27-OCT-94				09-AUG-94				09-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg																
Antimony		1.3	UJ	mg/kg		1.4	U	mg/kg	1.4	.48	UJ	mg/kg		.57	UJ	mg/kg	
Arsenic		.66	J	mg/kg		.46	J	mg/kg		.95	J	mg/kg		.68	J	mg/kg	
Barium		7.8	J	mg/kg		5.4	J	mg/kg		6.9	J	mg/kg		4.6	J	mg/kg	
Beryllium		.12	J	mg/kg		.08	U	mg/kg	.08	.1	U	mg/kg	.1	.06	U	mg/kg	.06
Cadmium		1	U	mg/kg	1	.41	U	mg/kg	.41	.65	U	mg/kg	.65	.78	U	mg/kg	.78
Chromium		5.4		mg/kg		4		mg/kg		2	J	mg/kg		3.1	J	mg/kg	
Cobalt		.82	U	mg/kg	.82	.85	U	mg/kg	.85	.58	U	mg/kg	.58	.69	U	mg/kg	.69
Copper		15		mg/kg		6.4		mg/kg		.86	UJ	mg/kg		1	UJ	mg/kg	
Cyanide		.18	U	mg/kg	.18	.18	U	mg/kg	.18	.12	J	mg/kg		.08	J	mg/kg	
Lead		26		mg/kg		20		mg/kg		.91	J	mg/kg		1.5	J	mg/kg	
Mercury		.05	J	mg/kg		.08		mg/kg		.08	UJ	mg/kg		.1	UJ	mg/kg	
Nickel		2.9	J	mg/kg		1.6	U	mg/kg	1.6	1.7	J	mg/kg		2.5	J	mg/kg	
Selenium		.24	J	mg/kg		.16	U	mg/kg	.16	.41	U	mg/kg	.41	.86	U	mg/kg	.86
Silver		.55	U	mg/kg	.55	.57	U	mg/kg	.57	.45	U	mg/kg	.45	.53	U	mg/kg	.53
Thallium		.16	U	mg/kg	.16	.16	U	mg/kg	.16	.28	U	mg/kg	.28	.35	J	mg/kg	
Tin		5.4	J	mg/kg		3.2	J	mg/kg		2	U	mg/kg	2	2.5	J	mg/kg	
Vanadium		6.2	J	mg/kg		4.9	J	mg/kg		2	J	mg/kg		2.7	J	mg/kg	
Zinc		27	J	mg/kg		26.2	J	mg/kg		4.1	U	mg/kg	4.1	6.9	J	mg/kg	

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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		M7688010				M7688011				M7688012				M7688013			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08SL00601				08SL00605				08SL00701				08SL00701D			
Collect Date:		09-AUG-94				09-AUG-94				09-AUG-94				09-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg																
Antimony		.49	UJ	mg/kg		.55	UJ	mg/kg		.49	UJ	mg/kg		.49	UJ	mg/kg	
Arsenic		.43	J	mg/kg		.62	J	mg/kg		.39	J	mg/kg		.27	J	mg/kg	
Barium		5.1	J	mg/kg		5.6	J	mg/kg		7	J	mg/kg		5.6	J	mg/kg	
Beryllium		.06	U	mg/kg	.06	.06	U	mg/kg	.06	.06	U	mg/kg	.06	.06	U	mg/kg	.06
Cadmium		.66	U	mg/kg	.66	.75	U	mg/kg	.75	.67	U	mg/kg	.67	.67	U	mg/kg	.67
Chromium		2.5	J	mg/kg		1.5	J	mg/kg		3.2	J	mg/kg		3.9	J	mg/kg	
Cobalt		.59	U	mg/kg	.59	.66	U	mg/kg	.66	.59	U	mg/kg	.59	.59	U	mg/kg	.59
Copper		5.7	J	mg/kg		1.1	U	mg/kg	1.1	6.5	J	mg/kg		7	J	mg/kg	
Cyanide		.03	U	mg/kg	.03	.23	J	mg/kg		.04	U	mg/kg	.04	.03	U	mg/kg	.03
Lead		2.3	J	mg/kg		1.1	J	mg/kg		4.1	J	mg/kg		2.8	J	mg/kg	
Mercury		.1	J	mg/kg		.1	J	mg/kg		.1	J	mg/kg		.09	J	mg/kg	
Nickel		7	J	mg/kg		1.8	U	mg/kg	1.8	4.6	J	mg/kg		3.8	J	mg/kg	
Selenium		.3	U	mg/kg	.3	.65	U	mg/kg	.65	.29	U	mg/kg	.29	.29	U	mg/kg	.29
Silver		.45	U	mg/kg	.45	.51	U	mg/kg	.51	.46	U	mg/kg	.46	.46	U	mg/kg	.46
Thallium		.28	U	mg/kg	.28	.32	U	mg/kg	.32	.29	U	mg/kg	.29	.29	U	mg/kg	.29
Tin		2.1	U	mg/kg	2.1	2.3	U	mg/kg	2.3	2.1	J	mg/kg		2.7	J	mg/kg	
Vanadium		9.8	J	mg/kg		1.8	J	mg/kg		2.4	J	mg/kg		2.9	J	mg/kg	
Zinc		24.4	J	mg/kg		8.5	J	mg/kg		15.2	J	mg/kg		17.7	J	mg/kg	

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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:	M7688014				M7688001				M7688007				M7688002			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08SL00705				08SL00801				08SL00806				08SL00901			
Collect Date:	09-AUG-94				09-AUG-94				09-AUG-94				09-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	.56	UJ	mg/kg		1.3	J	mg/kg		.48	UJ	mg/kg		3.8	J	mg/kg	
Arsenic	1.4	J	mg/kg		1	J	mg/kg		.91	J	mg/kg		2.8	J	mg/kg	
Barium	8.3	J	mg/kg		27.6	J	mg/kg		9.7	J	mg/kg		81.2		mg/kg	
Beryllium	.06	U	mg/kg	.06	.07	U	mg/kg	.07	.06	U	mg/kg	.06	.06	U	mg/kg	.06
Cadmium	.76	U	mg/kg	.76	1.1	J	mg/kg		.66	U	mg/kg	.66	4.8		mg/kg	
Chromium	6.2	J	mg/kg		34.3	J	mg/kg		3.4	J	mg/kg		95.6	J	mg/kg	
Cobalt	.67	U	mg/kg	.67	1.2	J	mg/kg		.58	U	mg/kg	.58	2.5	J	mg/kg	
Copper	10.8	J	mg/kg		66.9	J	mg/kg		6.3	J	mg/kg		319	J	mg/kg	
Cyanide	.1	J	mg/kg		.04	U	mg/kg	.04	.08	J	mg/kg		.05	U	mg/kg	.05
Lead	4.8	J	mg/kg		37.5	J	mg/kg		5.5	J	mg/kg		281	J	mg/kg	
Mercury	.08	UJ	mg/kg		.7	J	mg/kg		.08	UJ	mg/kg		3.3	J	mg/kg	
Nickel	5.3	J	mg/kg		59.9		mg/kg		6.4	J	mg/kg		119		mg/kg	
Selenium	.33	U	mg/kg	.33	.54	U	mg/kg	.54	.44	U	mg/kg	.44	.73	U	mg/kg	.73
Silver	.52	U	mg/kg	.52	.59	J	mg/kg		.45	U	mg/kg	.45	1.4	J	mg/kg	
Thallium	.33	U	mg/kg	.33	.29	U	mg/kg	.29	.28	U	mg/kg	.28	.41	U	mg/kg	.41
Tin	2.5	J	mg/kg		4.1	J	mg/kg		2	U	mg/kg	2	11.3	J	mg/kg	
Vanadium	1.9	U	mg/kg	1.9	42		mg/kg		4.3	J	mg/kg		104		mg/kg	
Zinc	25.6	J	mg/kg		207	J	mg/kg		23.3	J	mg/kg		1040	J	mg/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		M7688006				M7688003				M7688004				M7688005			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08SL00906				08SL01001				08SL01001D				08SL01006			
Collect Date:		09-AUG-94				09-AUG-94				09-AUG-94				09-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg																
Antimony		.49	UJ	mg/kg		.61	J	mg/kg		.71	J	mg/kg		.78	J	mg/kg	
Arsenic		.44	J	mg/kg		.48	J	mg/kg		.31	J	mg/kg		.49	J	mg/kg	
Barium		5.7	J	mg/kg		14.6	J	mg/kg		11.5	J	mg/kg		5.9	J	mg/kg	
Beryllium		.06	U	mg/kg	.06	.06	U	mg/kg	.06	.05	U	mg/kg	.05	.06	U	mg/kg	.06
Cadmium		.67	U	mg/kg	.67	.64	U	mg/kg	.64	.74	J	mg/kg		.66	U	mg/kg	.66
Chromium		5.9	J	mg/kg		19.9	J	mg/kg		13.5	J	mg/kg		3.9	J	mg/kg	
Cobalt		.59	U	mg/kg	.59	1.1	J	mg/kg		.83	J	mg/kg		.59	U	mg/kg	.59
Copper		9.4	J	mg/kg		44.8	J	mg/kg		29.8	J	mg/kg		5.5	J	mg/kg	
Cyanide		.04	U	mg/kg	.04	.03	U	mg/kg	.03	.03	U	mg/kg	.03	.08	J	mg/kg	
Lead		5.3	J	mg/kg		13.3	J	mg/kg		39.4	J	mg/kg		5.5	J	mg/kg	
Mercury		.31	J	mg/kg		.75	J	mg/kg		.42	J	mg/kg		.08	UJ	mg/kg	
Nickel		6.6	J	mg/kg		32.5		mg/kg		23.5		mg/kg		6	J	mg/kg	
Selenium		.48	U	mg/kg	.48	.28	U	mg/kg	.28	.51	U	mg/kg	.51	.61	U	mg/kg	.61
Silver		.46	U	mg/kg	.46	.43	U	mg/kg	.43	.43	U	mg/kg	.43	.45	U	mg/kg	.45
Thallium		.29	U	mg/kg	.29	.27	U	mg/kg	.27	.27	U	mg/kg	.27	.28	U	mg/kg	.28
Tin		2.3	J	mg/kg		3.8	J	mg/kg		3.5	J	mg/kg		2.7	J	mg/kg	
Vanadium		5.9	J	mg/kg		26.5		mg/kg		20.7		mg/kg		4.5	J	mg/kg	
Zinc		33.6	J	mg/kg		127	J	mg/kg		87.8	J	mg/kg		19.6	J	mg/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		M7682001				M7682002				M7682003				M7682004			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08SL01101				08SL01102				08SL01201				08SL01202			
Collect Date:		08-AUG-94				08-AUG-94				08-AUG-94				08-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg																
Antimony		3.9	J	mg/kg		.48	UJ	mg/kg		.51	UJ	mg/kg		.49	UJ	mg/kg	
Arsenic		1.8	J	mg/kg		.59	J	mg/kg		.46	J	mg/kg		.22	J	mg/kg	
Barium		209		mg/kg		7.4	J	mg/kg		9	J	mg/kg		7.3	J	mg/kg	
Beryllium		.15	U	mg/kg	.15	.07	U	mg/kg	.07	.1	U	mg/kg	.1	.09	U	mg/kg	.09
Cadmium		3.1		mg/kg		.65	U	mg/kg	.65	.69	U	mg/kg	.69	.66	U	mg/kg	.66
Chromium		78.1	J	mg/kg		3	J	mg/kg		3.5	J	mg/kg		2.7	J	mg/kg	
Cobalt		2.9	J	mg/kg		.58	U	mg/kg	.58	.61	U	mg/kg	.61	.59	U	mg/kg	.59
Copper		377	J	mg/kg		.93	U	mg/kg	.93	6.5	J	mg/kg		2.5	U	mg/kg	2.5
Cyanide		.07	U	mg/kg	.07	.03	U	mg/kg	.03	.04	U	mg/kg	.04	.03	U	mg/kg	.03
Lead		92	J	mg/kg		1.1	J	mg/kg		8.1	J	mg/kg		1.5	J	mg/kg	
Mercury		.74	J	mg/kg		.18	J	mg/kg		.09	UJ	mg/kg		.1	J	mg/kg	
Nickel		103		mg/kg		1.6	U	mg/kg	1.6	6	J	mg/kg		2.6	J	mg/kg	
Selenium		.56	U	mg/kg	.56	.43	U	mg/kg	.43	.43	U	mg/kg	.43	.43	U	mg/kg	.43
Silver		1.4	J	mg/kg		.44	U	mg/kg	.44	.51	J	mg/kg		.45	U	mg/kg	.45
Thallium		.55	U	mg/kg	.55	.28	U	mg/kg	.28	.3	U	mg/kg	.3	.28	U	mg/kg	.28
Tin		12.5	J	mg/kg		8	J	mg/kg		4.1	J	mg/kg		4.8	J	mg/kg	
Vanadium		16.8	J	mg/kg		2.2	J	mg/kg		5.2	J	mg/kg		2.3	J	mg/kg	
Zinc		885	J	mg/kg		3.1	U	mg/kg	3.1	19.2	J	mg/kg		12.1	J	mg/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:		M7682005				M7682006			
Site		GROUP2				GROUP2			
Locator		08SL01301				08SL01302			
Collect Date:		08-AUG-94				08-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg								
Antimony		.5	UJ	mg/kg		.5	UJ	mg/kg	
Arsenic		.3	J	mg/kg		.24	J	mg/kg	
Barium		12.4	J	mg/kg		11.2	J	mg/kg	
Beryllium		.08	U	mg/kg	.08	.12	U	mg/kg	.12
Cadmium		.68	U	mg/kg	.68	.68	U	mg/kg	.68
Chromium		5.4	J	mg/kg		4.1	J	mg/kg	
Cobalt		.6	U	mg/kg	.6	.6	U	mg/kg	.6
Copper		12.7	J	mg/kg		3.2	U	mg/kg	3.2
Cyanide		.04	U	mg/kg	.04	.06	J	mg/kg	
Lead		9.4	J	mg/kg		6.7	J	mg/kg	
Mercury		.09	UJ	mg/kg		.08	UJ	mg/kg	
Nickel		4.6	J	mg/kg		4.8	J	mg/kg	
Selenium		.43	U	mg/kg	.43	.43	U	mg/kg	.43
Silver		.47	U	mg/kg	.47	.46	U	mg/kg	.46
Thallium		.29	U	mg/kg	.29	.29	U	mg/kg	.29
Tin		3.9	J	mg/kg		4.1	J	mg/kg	
Vanadium		3.8	J	mg/kg		3.1	J	mg/kg	
Zinc		31.7	J	mg/kg		21.5	J	mg/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sludge Data

Lab Sample Number:	34923004
Site	GROUP2
Locator	MPT8SL2
Collect Date:	19-JAN-93

		VALUE	QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg				
Antimony		19.7	J	mg/kg	
Arsenic		10.6		mg/kg	
Barium		344	J	mg/kg	
Beryllium		.33	U	mg/kg	.33
Cadmium		10.3	J	mg/kg	
Chromium		127	J	mg/kg	
Cobalt		3.8	U	mg/kg	3.8
Copper		859		mg/kg	
Cyanide		.5	U	mg/kg	.5
Lead		171	J	mg/kg	
Mercury		.17	J	mg/kg	
Nickel		198	J	mg/kg	
Selenium		.86	J	mg/kg	
Silver		1.5	J	mg/kg	
Thallium		.46	UJ	mg/kg	
Tin		17.3		mg/kg	
Vanadium		31.8	J	mg/kg	
Zinc		1700	J	mg/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

APPENDIX A-4

GROUNDWATER ANALYSES, SWMUs 6, 7, 8, 9, 10, AND 11

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23918003				23918003RE				M7503004				23918005			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		8MW1				8MW1				08MW001S				8MW4			
Collect Date:		01-FEB-93				01-FEB-93				11-JUL-94				01-FEB-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/l																
Chloromethane		10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Bromomethane		10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Vinyl chloride		10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Chloroethane		10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Methylene chloride		5	BJ	ug/l		-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Acetone		10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Carbon disulfide		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,1-Dichloroethane		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,1-Dichloroethene		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloroethene (total)		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Chloroform		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloroethane		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
2-Butanone		10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
1,1,1-Trichloroethane		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Carbon tetrachloride		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Bromodichloromethane		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloropropane		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
cis-1,3-Dichloropropene		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Trichloroethene		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Dibromochloromethane		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,1,2-Trichloroethane		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Benzene		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
trans-1,3-Dichloropropene		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Bromoform		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
4-Methyl-2-pentanone		10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
2-Hexanone		10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Tetrachloroethene		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,1,2,2-Tetrachloroethane		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Toluene		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Chlorobenzene		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Ethylbenzene		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Styrene		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Xylenes (total)		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Dichlorodifluoromethane		10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Trichlorofluoromethane		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,3-Dichlorobenzene		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
Acrolein		100	U	ug/l	100	-		ug/l		100	U	ug/l	100	100	U	ug/l	100
Iodomethane		10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
1,4-Dichlorobenzene		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
Acrylonitrile		100	U	ug/l	100	-		ug/l		100	U	ug/l	100	100	U	ug/l	100
Dibromomethane		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,2-Dichlorobenzene		10	U	ug/l	10	10	R	ug/l		5	U	ug/l	5	10	U	ug/l	10
2-Chloroethylvinylether		10	R	ug/l		-		ug/l		10	U	ug/l	10	10	R	ug/l	
Ethyl methacrylate		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,2,3-Trichloropropane		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
trans-1,4-Dichloro-2-butene		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Isobutyl alcohol		200	R	ug/l		-		ug/l		200	R	ug/l		200	R	ug/l	
1,1,1,2-Tetrachloroethane		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,2-Dibromo-3-chloropropane		10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
1,2-Dibromoethane		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23918003				23918003RE				M7503004				23918005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	8MW1				8MW1				08MW001S				8MW4			
Collect Date:	01-FEB-93				01-FEB-93				11-JUL-94				01-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	200	R	ug/l		-		ug/l		200	R	ug/l		200	R	ug/l	
3-Chloropropene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Acetonitrile	100	U	ug/l	100	-		ug/l		100	U	ug/l	100	100	U	ug/l	100
Chloroprene	200	U	ug/l	200	-		ug/l		200	U	ug/l	200	200	U	ug/l	200
Methacrylonitrile	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Methyl methacrylate	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Pentachloroethane	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Propionitrile	100	U	ug/l	100	-		ug/l		100	U	ug/l	100	100	U	ug/l	100
Vinyl acetate	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23918005RE				R8627004				23886004				23886005		
Site		GROUP2				GROUP2				GROUP2				GROUP2		
Locator		8MW4				08MW004S				8MW6				8MW6D		
Collect Date:		01-FEB-93				26-AUG-94				28-JAN-93				28-JAN-93		
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/l																
Chloromethane		-		ug/l		20	U	ug/l	20	10	U	ug/l	10	-		ug/l	
Bromomethane		-		ug/l		20	U	ug/l	20	10	U	ug/l	10	-		ug/l	
Vinyl chloride		-		ug/l		20	U	ug/l	20	10	U	ug/l	10	-		ug/l	
Chloroethane		-		ug/l		20	U	ug/l	20	10	U	ug/l	10	-		ug/l	
Methylene chloride		-		ug/l		10	U	ug/l	10	5	B	ug/l		-		ug/l	
Acetone		-		ug/l		10	U	ug/l	10	6	J	ug/l		-		ug/l	
Carbon disulfide		-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
1,1-Dichloroethane		-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
1,1-Dichloroethene		-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
1,2-Dichloroethene (total)		-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
Chloroform		-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
1,2-Dichloroethane		-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
2-Butanone		-		ug/l		20	U	ug/l	20	10	U	ug/l	10	-		ug/l	
1,1,1-Trichloroethane		-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
Carbon tetrachloride		-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
Bromodichloromethane		-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
1,2-Dichloropropane		-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
cis-1,3-Dichloropropene		-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
Trichloroethene		-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
Dibromochloromethane		-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
1,1,2-Trichloroethane		-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
Benzene		-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
trans-1,3-Dichloropropene		-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
Bromoform		-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
4-Methyl-2-pentanone		-		ug/l		20	U	ug/l	20	10	U	ug/l	10	-		ug/l	
2-Hexanone		-		ug/l		20	U	ug/l	20	10	U	ug/l	10	-		ug/l	
Tetrachloroethene		-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
1,1,2,2-Tetrachloroethane		-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
Toluene		-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
Chlorobenzene		-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
Ethylbenzene		-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
Styrene		-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
Xylenes (total)		-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
Dichlorodifluoromethane		-		ug/l		20	U	ug/l	20	10	U	ug/l	10	-		ug/l	
Trichlorofluoromethane		-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
1,3-Dichlorobenzene		10	R	ug/l		10	U	ug/l	10	5	U	ug/l	5	10	U	ug/l	10
Acrolein		-		ug/l		200	U	ug/l	200	100	U	ug/l	100	-		ug/l	
Iodomethane		-		ug/l		20	U	ug/l	20	10	U	ug/l	10	-		ug/l	
1,4-Dichlorobenzene		10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Acrylonitrile		-		ug/l		200	U	ug/l	200	100	U	ug/l	100	-		ug/l	

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23918005RE				R8627004				23886004				23886005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	8MW4				08MW004S				8MW6				8MW6D			
Collect Date:	01-FEB-93				26-AUG-94				28-JAN-93				28-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
1,2-Dichlorobenzene	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Chloroethylvinylether	-		ug/l		20	UJ	ug/l		10	R	ug/l		-		ug/l	
Ethyl methacrylate	-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
1,2,3-Trichloropropene	-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
trans-1,4-Dichloro-2-butene	-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
Isobutyl alcohol	-		ug/l		400	R	ug/l		200	R	ug/l		-		ug/l	
1,1,1,2-Tetrachloroethane	-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
1,2-Dibromo-3-chloropropane	-		ug/l		20	UJ	ug/l		10	U	ug/l	10	-		ug/l	
1,2-Dibromoethane	-		ug/l		10	UJ	ug/l		5	U	ug/l	5	-		ug/l	
1,4-Dioxane	-		ug/l		400	R	ug/l		200	R	ug/l		-		ug/l	
3-Chloropropene	-		ug/l		10	U	ug/l	10	5	U	ug/l	5	-		ug/l	
Acetonitrile	-		ug/l		200	U	ug/l	200	100	U	ug/l	100	-		ug/l	
Chloroprene	-		ug/l		400	U	ug/l	400	200	U	ug/l	200	-		ug/l	
Methacrylonitrile	-		ug/l		10	UJ	ug/l		5	U	ug/l	5	-		ug/l	
Methyl methacrylate	-		ug/l		20	UJ	ug/l		10	U	ug/l	10	-		ug/l	
Pentachloroethane	-		ug/l		20	UJ	ug/l		10	U	ug/l	10	-		ug/l	
Propionitrile	-		ug/l		200	UJ	ug/l		100	U	ug/l	100	-		ug/l	
Vinyl acetate	-		ug/l		20	U	ug/l	20	10	U	ug/l	10	-		ug/l	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		35070004				M7490006				M7490007				23918006			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		8MW6D				08MW006S				08MW006SD				8MW7			
Collect Date:		28-JAN-93				10-JUL-94				10-JUL-94				01-FEB-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/l																
Chloromethane		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Bromomethane		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Vinyl chloride		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Chloroethane		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Methylene chloride		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	6	U	ug/l	6
Acetone		1	UJ	ug/l		10	UJ	ug/l		9	J	ug/l		10	U	ug/l	10
Carbon disulfide		5	U	ug/l	5	5	UJ	ug/l		5	UJ	ug/l		2	J	ug/l	
1,1-Dichloroethane		5	U	ug/l	5	5	UJ	ug/l		5	UJ	ug/l		5	U	ug/l	5
1,1-Dichloroethene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloroethene (total)		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Chloroform		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloroethane		5	U	ug/l	5	5	UJ	ug/l		5	UJ	ug/l		5	U	ug/l	5
2-Butanone		1	J	ug/l		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,1,1-Trichloroethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Carbon tetrachloride		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Bromodichloromethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloropropane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
cis-1,3-Dichloropropene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Trichloroethene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Dibromochloromethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,1,2-Trichloroethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Benzene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	2	J	ug/l	
trans-1,3-Dichloropropene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Bromoform		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
4-Methyl-2-pentanone		10	U	ug/l	10	10	UJ	ug/l		10	UJ	ug/l		10	U	ug/l	10
2-Hexanone		10	U	ug/l	10	10	UJ	ug/l		10	UJ	ug/l		10	U	ug/l	10
Tetrachloroethene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,1,2,2-Tetrachloroethane		1	J	ug/l		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Toluene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Chlorobenzene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Ethylbenzene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	21		ug/l	
Styrene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Xylenes (total)		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Dichlorodifluoromethane		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Trichlorofluoromethane		5	U	ug/l	5	5	UJ	ug/l		5	UJ	ug/l		5	U	ug/l	5
1,3-Dichlorobenzene		5	U	ug/l	5	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Acrolein		100	U	ug/l	100	100	U	ug/l	100	100	U	ug/l	100	100	U	ug/l	100
Iodomethane		10	U	ug/l	10	10	UJ	ug/l		10	UJ	ug/l		10	U	ug/l	10
1,4-Dichlorobenzene		5	U	ug/l	5	10	U	ug/l	10	5	U	ug/l	5	5	U	ug/l	5
Acrylonitrile		100	U	ug/l	100	100	U	ug/l	100	100	U	ug/l	100	100	U	ug/l	100

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	35070004				M7490006				M7490007				23918006			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	8MW6D				08MW006S				08MW006SD				8MW7			
Collect Date:	28-JAN-93				10-JUL-94				10-JUL-94				01-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dichlorobenzene	5	U	ug/l	5	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Chloroethylvinylether	10	U	ug/l	10	10	UJ	ug/l		10	UJ	ug/l		10	R	ug/l	
Ethyl methacrylate	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2,3-Trichloropropene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
trans-1,4-Dichloro-2-butene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Isobutyl alcohol	200	U	ug/l	200	200	R	ug/l		200	R	ug/l		200	R	ug/l	
1,1,1,2-Tetrachloroethane	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dibromo-3-chloropropane	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,2-Dibromoethane	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,4-Dioxane	200	R	ug/l		200	R	ug/l		200	R	ug/l		200	R	ug/l	
3-Chloropropene	5	U	ug/l	5	5	UJ	ug/l		5	UJ	ug/l		5	U	ug/l	5
Acetonitrile	100	U	ug/l	100	100	UJ	ug/l		100	UJ	ug/l		100	U	ug/l	100
Chloroprene	200	U	ug/l	200	200	UJ	ug/l		200	UJ	ug/l		200	U	ug/l	200
Methacrylonitrile	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Methyl methacrylate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pentachloroethane	10	U	ug/l	10	10	UJ	ug/l		10	UJ	ug/l		10	U	ug/l	10
Propionitrile	100	U	ug/l	100	100	U	ug/l	100	100	U	ug/l	100	100	U	ug/l	100
Vinyl acetate	10	U	ug/l	10	10	UJ	ug/l		10	UJ	ug/l		10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23918006RE				23918004				23918004RE				M7490005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	8MW7				8MW8				8MW8				08MW008S			
Collect Date:	01-FEB-93				01-FEB-93				01-FEB-93				09-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES ug/l																
Chloromethane	-		ug/l		10	U	ug/l	10	-		ug/l		10	UJ	ug/l	
Bromomethane	-		ug/l		10	U	ug/l	10	-		ug/l		10	U	ug/l	10
Vinyl chloride	-		ug/l		10	U	ug/l	10	-		ug/l		10	U	ug/l	10
Chloroethane	-		ug/l		10	U	ug/l	10	-		ug/l		10	U	ug/l	10
Methylene chloride	-		ug/l		4	J	ug/l		-		ug/l		5	U	ug/l	5
Acetone	-		ug/l		10	U	ug/l	10	-		ug/l		10	UJ	ug/l	
Carbon disulfide	-		ug/l		5	U	ug/l	5	-		ug/l		5	UJ	ug/l	
1,1-Dichloroethane	-		ug/l		5	U	ug/l	5	-		ug/l		5	UJ	ug/l	
1,1-Dichloroethene	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
1,2-Dichloroethene (total)	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Chloroform	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
1,2-Dichloroethane	-		ug/l		5	U	ug/l	5	-		ug/l		5	UJ	ug/l	
2-Butanone	-		ug/l		10	U	ug/l	10	-		ug/l		10	U	ug/l	10
1,1,1-Trichloroethane	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Carbon tetrachloride	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Bromodichloromethane	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
1,2-Dichloropropane	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
cis-1,3-Dichloropropene	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Trichloroethene	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Dibromochloromethane	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
1,1,2-Trichloroethane	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Benzene	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
trans-1,3-Dichloropropene	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Bromoform	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
4-Methyl-2-pentanone	-		ug/l		10	U	ug/l	10	-		ug/l		10	UJ	ug/l	
2-Hexanone	-		ug/l		10	U	ug/l	10	-		ug/l		10	UJ	ug/l	
Tetrachloroethene	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
1,1,2,2-Tetrachloroethane	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Toluene	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Chlorobenzene	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Ethylbenzene	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Styrene	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Xylenes (total)	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Dichlorodifluoromethane	-		ug/l		10	U	ug/l	10	-		ug/l		10	U	ug/l	10
Trichlorofluoromethane	-		ug/l		5	U	ug/l	5	-		ug/l		5	UJ	ug/l	
1,3-Dichlorobenzene	10	R	ug/l		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10
Acrolein	-		ug/l		100	U	ug/l	100	-		ug/l		100	U	ug/l	100
Iodomethane	-		ug/l		10	U	ug/l	10	-		ug/l		10	UJ	ug/l	
1,4-Dichlorobenzene	10	R	ug/l		5	U	ug/l	5	10	R	ug/l		10	U	ug/l	10
Acrylonitrile	-		ug/l		100	U	ug/l	100	-		ug/l		100	U	ug/l	100

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23918006RE				23918004				23918004RE				M7490005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	BMW7				BMW8				BMW8				08MW008S			
Collect Date:	01-FEB-93				01-FEB-93				01-FEB-93				09-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
1,2-Dichlorobenzene	10	R	ug/l		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10
2-Chloroethylvinylether	-		ug/l		10	U	ug/l	10	-		ug/l		10	UJ	ug/l	
Ethyl methacrylate	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
1,2,3-Trichloropropane	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
trans-1,4-Dichloro-2-butene	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Isobutyl alcohol	-		ug/l		200	R	ug/l		-		ug/l		200	R	ug/l	
1,1,1,2-Tetrachloroethane	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
1,2-Dibromo-3-chloropropane	-		ug/l		10	U	ug/l	10	-		ug/l		10	U	ug/l	10
1,2-Dibromoethane	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
1,4-Dioxane	-		ug/l		200	R	ug/l		-		ug/l		200	R	ug/l	
3-Chloropropene	-		ug/l		5	U	ug/l	5	-		ug/l		5	UJ	ug/l	
Acetonitrile	-		ug/l		100	U	ug/l	100	-		ug/l		100	UJ	ug/l	
Chloroprene	-		ug/l		200	U	ug/l	200	-		ug/l		200	UJ	ug/l	
Methacrylonitrile	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Methyl methacrylate	-		ug/l		10	U	ug/l	10	-		ug/l		10	U	ug/l	10
Pentachloroethane	-		ug/l		10	U	ug/l	10	-		ug/l		10	UJ	ug/l	
Propionitrile	-		ug/l		100	U	ug/l	100	-		ug/l		100	U	ug/l	100
Vinyl acetate	-		ug/l		10	U	ug/l	10	-		ug/l		10	UJ	ug/l	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8627003				R8627003				R8709001				R8709001		
Site		GROUP2				GROUP2				GROUP2				GROUP2		
Locator		08MW009S				08MW009S				08MW010S				08MW010S		
Collect Date:		26-AUG-94				26-AUG-94				09-SEP-94				09-SEP-94		
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/l																
Chloromethane		20	U	ug/l	20	1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1
Bromomethane		20	U	ug/l	20	1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1
Vinyl chloride		20	U	ug/l	20	1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1
Chloroethane		20	U	ug/l	20	1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1
Methylene chloride		10	U	ug/l	10	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Acetone		330	J	ug/l		-		ug/l		10	UJ	ug/l		-		ug/l	
Carbon disulfide		4	J	ug/l		-		ug/l		5	U	ug/l	5	-		ug/l	
1,1-Dichloroethane		10	U	ug/l	10	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
1,1-Dichloroethene		10	U	ug/l	10	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
1,2-Dichloroethene (total)		10	U	ug/l	10	-		ug/l		5	U	ug/l	5	-		ug/l	
Chloroform		10	U	ug/l	10	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
1,2-Dichloroethane		10	U	ug/l	10	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
2-Butanone		230	J	ug/l		-		ug/l		10	R	ug/l		-		ug/l	
1,1,1-Trichloroethane		10	U	ug/l	10	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Carbon tetrachloride		10	U	ug/l	10	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Bromodichloromethane		10	U	ug/l	10	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
1,2-Dichloropropane		10	U	ug/l	10	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
cis-1,3-Dichloropropene		10	U	ug/l	10	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Trichloroethene		10	U	ug/l	10	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Dibromochloromethane		10	U	ug/l	10	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
1,1,2-Trichloroethane		10	U	ug/l	10	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Benzene		10	U	ug/l	10	-		ug/l		5	U	ug/l	5	-		ug/l	
trans-1,3-Dichloropropene		10	U	ug/l	10	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Bromoform		10	U	ug/l	10	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
4-Methyl-2-pentanone		20	U	ug/l	20	-		ug/l		10	U	ug/l	10	-		ug/l	
2-Hexanone		20	U	ug/l	20	-		ug/l		10	U	ug/l	10	-		ug/l	
Tetrachloroethene		10	U	ug/l	10	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
1,1,2,2-Tetrachloroethane		10	U	ug/l	10	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Toluene		3	J	ug/l		-		ug/l		5	U	ug/l	5	-		ug/l	
Chlorobenzene		10	U	ug/l	10	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Ethylbenzene		10	U	ug/l	10	-		ug/l		5	U	ug/l	5	-		ug/l	
Styrene		10	U	ug/l	10	-		ug/l		5	U	ug/l	5	-		ug/l	
Xylenes (total)		10	U	ug/l	10	-		ug/l		5	U	ug/l	5	-		ug/l	
Dichlorodifluoromethane		20	U	ug/l	20	1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1
Trichlorofluoromethane		10	U	ug/l	10	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
1,3-Dichlorobenzene		10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1
Acrolein		200	U	ug/l	200	-		ug/l		100	U	ug/l	100	-		ug/l	
Iodomethane		20	U	ug/l	20	-		ug/l		10	U	ug/l	10	-		ug/l	
1,4-Dichlorobenzene		10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1
Acrylonitrile		200	U	ug/l	200	-		ug/l		100	U	ug/l	100	-		ug/l	

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	R8627003				R8627003				R8709001				R8709001			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08MW009S				08MW009S				08MW010S				08MW010S			
Collect Date:	26-AUG-94				26-AUG-94				09-SEP-94				09-SEP-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	10	U	ug/l	10	-		ug/l		5	U	ug/l	5	-		ug/l	
1,2-Dichlorobenzene	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1
2-Chloroethylvinylether	20	U	ug/l	20	1	U	ug/l	1	10	UJ	ug/l		1	U	ug/l	1
Ethyl methacrylate	10	U	ug/l	10	-		ug/l		5	U	ug/l	5	-		ug/l	
1,2,3-Trichloropropene	10	U	ug/l	10	-		ug/l		5	U	ug/l	5	-		ug/l	
trans-1,4-Dichloro-2-butene	10	U	ug/l	10	-		ug/l		5	U	ug/l	5	-		ug/l	
Isobutyl alcohol	400	R	ug/l		-		ug/l		200	R	ug/l		-		ug/l	
1,1,1,2-Tetrachloroethane	10	U	ug/l	10	-		ug/l		5	U	ug/l	5	-		ug/l	
1,2-Dibromo-3-chloropropane	20	UJ	ug/l		-		ug/l		10	UJ	ug/l		-		ug/l	
1,2-Dibromoethane	10	UJ	ug/l		-		ug/l		5	UJ	ug/l		-		ug/l	
1,4-Dioxane	400	R	ug/l		-		ug/l		200	R	ug/l		-		ug/l	
3-Chloropropene	10	U	ug/l	10	-		ug/l		5	UJ	ug/l		-		ug/l	
Acetonitrile	200	UJ	ug/l		-		ug/l		100	U	ug/l	100	-		ug/l	
Chloroprene	400	U	ug/l	400	-		ug/l		200	U	ug/l	200	-		ug/l	
Methacrylonitrile	10	UJ	ug/l		-		ug/l		5	UJ	ug/l		-		ug/l	
Methyl methacrylate	20	UJ	ug/l		-		ug/l		10	UJ	ug/l		-		ug/l	
Pentachloroethane	20	UJ	ug/l		-		ug/l		10	UJ	ug/l		-		ug/l	
Propionitrile	200	UJ	ug/l		-		ug/l		100	UJ	ug/l		-		ug/l	
Vinyl acetate	20	U	ug/l	20	-		ug/l		10	U	ug/l	10	-		ug/l	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8709002				R8709002				R8618004				R8618004			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08MW010SD				08MW010SD				08MW012S				08MW012S			
Collect Date:		09-SEP-94				09-SEP-94				25-AUG-94				25-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/l																
Chloromethane		10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1
Bromomethane		10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1
Vinyl chloride		10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1
Chloroethane		10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1
Methylene chloride		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Acetone		10	UJ	ug/l		-		ug/l		10	UJ	ug/l		-		ug/l	
Carbon disulfide		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
1,1-Dichloroethane		5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
1,1-Dichloroethene		5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
1,2-Dichloroethene (total)		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Chloroform		5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
1,2-Dichloroethane		5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
2-Butanone		10	R	ug/l		-		ug/l		10	R	ug/l		-		ug/l	
1,1,1-Trichloroethane		5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Carbon tetrachloride		5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Bromodichloromethane		5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
1,2-Dichloropropane		5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
cis-1,3-Dichloropropene		5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Trichloroethene		5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Dibromochloromethane		5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
1,1,2-Trichloroethane		5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Benzene		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
trans-1,3-Dichloropropene		5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Bromoform		5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
4-Methyl-2-pentanone		10	U	ug/l	10	-		ug/l		10	U	ug/l	10	-		ug/l	
2-Hexanone		10	U	ug/l	10	-		ug/l		10	U	ug/l	10	-		ug/l	
Tetrachloroethene		5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
1,1,2,2-Tetrachloroethane		5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Toluene		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Chlorobenzene		5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Ethylbenzene		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Styrene		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Xylenes (total)		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Dichlorodifluoromethane		10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1
Trichlorofluoromethane		5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
1,3-Dichlorobenzene		10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1
Acrolein		100	U	ug/l	100	-		ug/l		100	U	ug/l	100	-		ug/l	
Iodomethane		10	U	ug/l	10	-		ug/l		10	U	ug/l	10	-		ug/l	
1,4-Dichlorobenzene		5	U	ug/l	5	1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1
Acrylonitrile		100	U	ug/l	100	-		ug/l		100	U	ug/l	100	-		ug/l	

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Group2 Ground Water Data

Lab Sample Number:	R8709002				R8709002				R8618004				R8618004			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08MW010SD				08MW010SD				08MW012S				08MW012S			
Collect Date:	09-SEP-94				09-SEP-94				25-AUG-94				25-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
1,2-Dichlorobenzene	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1
2-Chloroethylvinylether	10	UJ	ug/l		1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1
Ethyl methacrylate	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
1,2,3-Trichloropropene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
trans-1,4-Dichloro-2-butene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Isobutyl alcohol	200	R	ug/l		-		ug/l		200	R	ug/l		-		ug/l	
1,1,1,2-Tetrachloroethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
1,2-Dibromo-3-chloropropane	10	UJ	ug/l		-		ug/l		10	UJ	ug/l		-		ug/l	
1,2-Dibromoethane	5	UJ	ug/l		-		ug/l		5	UJ	ug/l		-		ug/l	
1,4-Dioxane	200	R	ug/l		-		ug/l		200	R	ug/l		-		ug/l	
3-Chloropropene	5	UJ	ug/l		-		ug/l		5	U	ug/l	5	-		ug/l	
Acetonitrile	100	U	ug/l	100	-		ug/l		100	UJ	ug/l		-		ug/l	
Chloroprene	200	U	ug/l	200	-		ug/l		200	U	ug/l	200	-		ug/l	
Methacrylonitrile	5	UJ	ug/l		-		ug/l		5	UJ	ug/l		-		ug/l	
Methyl methacrylate	10	UJ	ug/l		-		ug/l		10	UJ	ug/l		-		ug/l	
Pentachloroethane	10	UJ	ug/l		-		ug/l		10	UJ	ug/l		-		ug/l	
Propionitrile	100	UJ	ug/l		-		ug/l		100	UJ	ug/l		-		ug/l	
Vinyl acetate	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	-		ug/l	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	R8618003				R8618003				R8783001				R8783001			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08MW013S				08MW013S				08MW013I				08MW013I			
Collect Date:	25-AUG-94				25-AUG-94				22-SEP-94				22-SEP-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES ug/l																
Chloromethane	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1
Bromomethane	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1
Vinyl chloride	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1
Chloroethane	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1
Methylene chloride	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Acetone	10	UJ	ug/l		-		ug/l		16		ug/l		-		ug/l	
Carbon disulfide	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
1,1-Dichloroethane	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
1,1-Dichloroethene	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
1,2-Dichloroethene (total)	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Chloroform	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
1,2-Dichloroethane	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
2-Butanone	10	R	ug/l		-		ug/l		10	U	ug/l	10	-		ug/l	
1,1,1-Trichloroethane	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Carbon tetrachloride	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Bromodichloromethane	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
1,2-Dichloropropane	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
cis-1,3-Dichloropropene	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Trichloroethene	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Dibromochloromethane	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
1,1,2-Trichloroethane	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Benzene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
trans-1,3-Dichloropropene	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Bromoform	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
4-Methyl-2-pentanone	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	-		ug/l	
2-Hexanone	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	-		ug/l	
Tetrachloroethene	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
1,1,2,2-Tetrachloroethane	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Toluene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Chlorobenzene	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Ethylbenzene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Styrene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Xylenes (total)	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Dichlorodifluoromethane	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1
Trichlorofluoromethane	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
1,3-Dichlorobenzene	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1
Acrolein	100	U	ug/l	100	-		ug/l		100	U	ug/l	100	-		ug/l	
Iodomethane	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	-		ug/l	
1,4-Dichlorobenzene	10	U	ug/l	10	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Acrylonitrile	100	U	ug/l	100	-		ug/l		100	U	ug/l	100	-		ug/l	

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Group2 Ground Water Data

Lab Sample Number:	R8618003				R8618003				R8783001				R8783001			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08MW013S				08MW013S				08MW013I				08MW013I			
Collect Date:	25-AUG-94				25-AUG-94				22-SEP-94				22-SEP-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
1,2-Dichlorobenzene	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
2-Chloroethylvinylether	10	U	ug/l	10	1	U	ug/l	1	10	UJ	ug/l		1	U	ug/l	1
Ethyl methacrylate	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
1,2,3-Trichloropropane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
trans-1,4-Dichloro-2-butene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Isobutyl alcohol	200	R	ug/l		-		ug/l		200	R	ug/l		-		ug/l	
1,1,1,2-Tetrachloroethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
1,2-Dibromo-3-chloropropane	10	UJ	ug/l		-		ug/l		10	UJ	ug/l		-		ug/l	
1,2-Dibromoethane	5	UJ	ug/l		-		ug/l		5	UJ	ug/l		-		ug/l	
1,4-Dioxane	200	R	ug/l		-		ug/l		200	R	ug/l		-		ug/l	
3-Chloropropene	5	U	ug/l	5	-		ug/l		5	UJ	ug/l		-		ug/l	
Acetonitrile	100	UJ	ug/l		-		ug/l		100	U	ug/l	100	-		ug/l	
Chloroprene	200	U	ug/l	200	-		ug/l		200	U	ug/l	200	-		ug/l	
Methacrylonitrile	5	UJ	ug/l		-		ug/l		5	UJ	ug/l		-		ug/l	
Methyl methacrylate	10	UJ	ug/l		-		ug/l		10	UJ	ug/l		-		ug/l	
Pentachloroethane	10	UJ	ug/l		-		ug/l		10	UJ	ug/l		-		ug/l	
Propionitrile	100	UJ	ug/l		-		ug/l		100	UJ	ug/l		-		ug/l	
Vinyl acetate	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	-		ug/l	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8618002				R8618002				23904004				35072004			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08MW014S				08MW014S				9MW1				9MW1			
Collect Date:		25-AUG-94				25-AUG-94				29-JAN-93				29-JAN-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/l																
Chloromethane		10	U	ug/l	10	1	U	ug/l	1	-		ug/l		10	U	ug/l	10
Bromomethane		10	U	ug/l	10	1	U	ug/l	1	-		ug/l		10	U	ug/l	10
Vinyl chloride		10	U	ug/l	10	1	U	ug/l	1	-		ug/l		10	U	ug/l	10
Chloroethane		10	U	ug/l	10	1	U	ug/l	1	-		ug/l		10	U	ug/l	10
Methylene chloride		5	U	ug/l	5	5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Acetone		10	UJ	ug/l		-		ug/l		-		ug/l		10	U	ug/l	10
Carbon disulfide		5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
1,1-Dichloroethane		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
1,1-Dichloroethene		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
1,2-Dichloroethene (total)		5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
Chloroform		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
1,2-Dichloroethane		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
2-Butanone		10	R	ug/l		-		ug/l		-		ug/l		10	U	ug/l	10
1,1,1-Trichloroethane		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
Carbon tetrachloride		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
Bromodichloromethane		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
1,2-Dichloropropane		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
cis-1,3-Dichloropropene		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
Trichloroethene		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
Dibromochloromethane		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
1,1,2-Trichloroethane		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
Benzene		5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
trans-1,3-Dichloropropene		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
Bromoform		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
4-Methyl-2-pentanone		10	U	ug/l	10	-		ug/l		-		ug/l		10	U	ug/l	10
2-Hexanone		10	U	ug/l	10	-		ug/l		-		ug/l		10	U	ug/l	10
Tetrachloroethene		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
1,1,2,2-Tetrachloroethane		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
Toluene		5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
Chlorobenzene		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
Ethylbenzene		5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
Styrene		5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
Xylenes (total)		5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
Dichlorodifluoromethane		10	U	ug/l	10	1	U	ug/l	1	-		ug/l		10	U	ug/l	10
Trichlorofluoromethane		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
1,3-Dichlorobenzene		10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10	5	U	ug/l	5
Acrolein		100	U	ug/l	100	-		ug/l		-		ug/l		100	U	ug/l	100
Iodomethane		10	U	ug/l	10	-		ug/l		-		ug/l		10	U	ug/l	10
1,4-Dichlorobenzene		5	U	ug/l	5	1	U	ug/l	1	10	U	ug/l	10	5	U	ug/l	5
Acrylonitrile		100	U	ug/l	100	-		ug/l		-		ug/l		100	U	ug/l	100

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	R8618002				R8618002				23904004				35072004			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08MW014S				08MW014S				9MW1				9MW1			
Collect Date:	25-AUG-94				25-AUG-94				29-JAN-93				29-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
1,2-Dichlorobenzene	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10	5	U	ug/l	5
2-Chloroethylvinylether	10	U	ug/l	10	1	U	ug/l	1	-		ug/l		10	U	ug/l	10
Ethyl methacrylate	5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
1,2,3-Trichloropropane	5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
trans-1,4-Dichloro-2-butene	5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
Isobutyl alcohol	200	R	ug/l		-		ug/l		-		ug/l		200	U	ug/l	200
1,1,1,2-Tetrachloroethane	5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
1,2-Dibromo-3-chloropropane	10	UJ	ug/l		-		ug/l		-		ug/l		10	U	ug/l	10
1,2-Dibromoethane	5	UJ	ug/l		-		ug/l		-		ug/l		5	U	ug/l	5
1,4-Dioxane	200	R	ug/l		-		ug/l		-		ug/l		200	R	ug/l	
3-Chloropropene	5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
Acetonitrile	100	UJ	ug/l		-		ug/l		-		ug/l		100	U	ug/l	100
Chloroprene	200	U	ug/l	200	-		ug/l		-		ug/l		200	U	ug/l	200
Methacrylonitrile	5	UJ	ug/l		-		ug/l		-		ug/l		5	U	ug/l	5
Methyl methacrylate	10	UJ	ug/l		-		ug/l		-		ug/l		10	U	ug/l	10
Pentachloroethane	10	UJ	ug/l		-		ug/l		-		ug/l		10	U	ug/l	10
Propionitrile	100	UJ	ug/l		-		ug/l		-		ug/l		100	U	ug/l	100
Vinyl acetate	10	U	ug/l	10	-		ug/l		-		ug/l		10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		M7490004				23904005				M7503002				23904006			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		09MW001S				9MW2				09MW002S				9MW3			
Collect Date:		09-JUL-94				29-JAN-93				11-JUL-94				29-JAN-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/l																
Chloromethane		10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Bromomethane		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Vinyl chloride		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Chloroethane		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Methylene chloride		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	2	J	ug/l	
Acetone		10	UJ	ug/l		5	J	ug/l		12	U	ug/l	12	5	J	ug/l	
Carbon disulfide		5	UJ	ug/l		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,1-Dichloroethane		5	UJ	ug/l		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,1-Dichloroethene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloroethene (total)		5	UJ	ug/l		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Chloroform		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloroethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
2-Butanone		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,1,1-Trichloroethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Carbon tetrachloride		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Bromodichloromethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloropropane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
cis-1,3-Dichloropropene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Trichloroethene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Dibromochloromethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,1,2-Trichloroethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Benzene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
trans-1,3-Dichloropropene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Bromoform		5	UJ	ug/l		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
4-Methyl-2-pentanone		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Hexanone		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Tetrachloroethene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,1,2,2-Tetrachloroethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Toluene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Chlorobenzene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Ethylbenzene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Styrene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Xylenes (total)		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Dichlorodifluoromethane		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Trichlorofluoromethane		5	UJ	ug/l		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,3-Dichlorobenzene		10	U	ug/l	10	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10
Acrolein		100	R	ug/l		100	U	ug/l	100	100	U	ug/l	100	100	U	ug/l	100
Iodomethane		10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,4-Dichlorobenzene		10	U	ug/l	10	10	U	ug/l	10	20	U	ug/l	20	5	U	ug/l	5
Acrylonitrile		100	UJ	ug/l		100	U	ug/l	100	100	U	ug/l	100	100	U	ug/l	100

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	M7490004				23904005				M7503002				23904006			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	09MW001S				9MW2				09MW002S				9MW3			
Collect Date:	09-JUL-94				29-JAN-93				11-JUL-94				29-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dichlorobenzene	10	U	ug/l	10	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10
2-Chloroethylvinylether	10	UJ	ug/l		10	R	ug/l		10	U	ug/l	10	10	R	ug/l	
Ethyl methacrylate	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2,3-Trichloropropane	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
trans-1,4-Dichloro-2-butene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Isobutyl alcohol	200	R	ug/l		200	R	ug/l		200	R	ug/l		200	R	ug/l	
1,1,1,2-Tetrachloroethane	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dibromo-3-chloropropane	10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,2-Dibromoethane	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,4-Dioxane	200	R	ug/l		200	R	ug/l		200	R	ug/l		200	R	ug/l	
3-Chloropropene	5	UJ	ug/l		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Acetonitrile	100	UJ	ug/l		100	U	ug/l	100	100	U	ug/l	100	100	U	ug/l	100
Chloroprene	200	UJ	ug/l		200	U	ug/l	200	200	U	ug/l	200	200	U	ug/l	200
Methacrylonitrile	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Methyl methacrylate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pentachloroethane	10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Propionitrile	100	UJ	ug/l		100	U	ug/l	100	100	U	ug/l	100	100	U	ug/l	100
Vinyl acetate	10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		M7503001				23904003				35072003				M7490003			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		09MW003S				S-2				S-2				0SMW002S			
Collect Date:		11-JUL-94				29-JAN-93				29-JAN-93				09-JUL-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/l																
Chloromethane		10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	UJ	ug/l	
Bromomethane		10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Vinyl chloride		10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Chloroethane		10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Methylene chloride		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Acetone		12	U	ug/l	12	-		ug/l		10	U	ug/l	10	10	UJ	ug/l	
Carbon disulfide		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	UJ	ug/l	
1,1-Dichloroethane		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	UJ	ug/l	
1,1-Dichloroethene		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloroethene (total)		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	UJ	ug/l	
Chloroform		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloroethane		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
2-Butanone		10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
1,1,1-Trichloroethane		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Carbon tetrachloride		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Bromodichloromethane		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloropropane		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
cis-1,3-Dichloropropene		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Trichloroethene		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Dibromochloromethane		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,1,2-Trichloroethane		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Benzene		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
trans-1,3-Dichloropropene		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Bromoform		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	UJ	ug/l	
4-Methyl-2-pentanone		10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
2-Hexanone		10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Tetrachloroethene		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,1,2,2-Tetrachloroethane		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Toluene		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Chlorobenzene		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Ethylbenzene		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Styrene		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Xylenes (total)		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Dichlorodifluoromethane		10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Trichlorofluoromethane		5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	UJ	ug/l	
1,3-Dichlorobenzene		5	U	ug/l	5	10	U	ug/l	10	5	U	ug/l	5	10	U	ug/l	10
Acrolein		100	U	ug/l	100	-		ug/l		100	U	ug/l	100	100	R	ug/l	
Iodomethane		10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	UJ	ug/l	
1,4-Dichlorobenzene		5	U	ug/l	5	10	U	ug/l	10	5	U	ug/l	5	10	U	ug/l	10
Acrylonitrile		100	U	ug/l	100	-		ug/l		100	U	ug/l	100	100	UJ	ug/l	

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	M7503001				23904003				35072003				M7490003			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	09MW003S				S-2				S-2				0SMW002S			
Collect Date:	11-JUL-94				29-JAN-93				29-JAN-93				09-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,2-Dichlorobenzene	10	UJ	ug/l		10	U	ug/l	10	5	U	ug/l	5	10	U	ug/l	10
2-Chloroethylvinylether	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	UJ	ug/l	
Ethyl methacrylate	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,2,3-Trichloropropane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
trans-1,4-Dichloro-2-butene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Isobutyl alcohol	200	R	ug/l		-		ug/l		200	U	ug/l	200	200	R	ug/l	
1,1,1,2-Tetrachloroethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,2-Dibromo-3-chloropropane	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	UJ	ug/l	
1,2-Dibromoethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,4-Dioxane	200	R	ug/l		-		ug/l		200	R	ug/l		200	R	ug/l	
3-Chloropropene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	UJ	ug/l	
Acetonitrile	100	U	ug/l	100	-		ug/l		100	U	ug/l	100	100	UJ	ug/l	
Chloroprene	200	U	ug/l	200	-		ug/l		200	U	ug/l	200	200	UJ	ug/l	
Methacrylonitrile	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Methyl methacrylate	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Pentachloroethane	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	UJ	ug/l	
Propionitrile	100	U	ug/l	100	-		ug/l		100	U	ug/l	100	100	UJ	ug/l	
Vinyl acetate	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	UJ	ug/l	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23904002			35072002			M7503003			R8608001		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		S-3			S-3			OSMW003S			100P001		
Collect Date:		28-JAN-93			28-JAN-93			11-JUL-94			24-AUG-94		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
VOLATILES	ug/l												
Chloromethane		-	ug/l		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Bromomethane		-	ug/l		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Vinyl chloride		-	ug/l		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Chloroethane		-	ug/l		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Methylene chloride		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Acetone		-	ug/l		10 U	ug/l	10	10 U	ug/l	10	10 UJ	ug/l	
Carbon disulfide		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
1,1-Dichloroethane		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
1,1-Dichloroethene		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
1,2-Dichloroethene (total)		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Chloroform		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
1,2-Dichloroethane		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
2-Butanone		-	ug/l		10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
1,1,1-Trichloroethane		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Carbon tetrachloride		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Bromodichloromethane		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
1,2-Dichloropropane		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
cis-1,3-Dichloropropene		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Trichloroethene		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Dibromochloromethane		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
1,1,2-Trichloroethane		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Benzene		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
trans-1,3-Dichloropropene		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Bromoform		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
4-Methyl-2-pentanone		-	ug/l		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Hexanone		-	ug/l		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Tetrachloroethene		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
1,1,2,2-Tetrachloroethane		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Toluene		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Chlorobenzene		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Ethylbenzene		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Styrene		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Xylenes (total)		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Dichlorodifluoromethane		-	ug/l		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Trichlorofluoromethane		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
1,3-Dichlorobenzene		10 U	ug/l	10	5 U	ug/l	5	10 U	ug/l	10	10 U	ug/l	10
Acrolein		-	ug/l		100 U	ug/l	100	100 U	ug/l	100	100 U	ug/l	100
Iodomethane		-	ug/l		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
1,4-Dichlorobenzene		10 U	ug/l	10	5 U	ug/l	5	10 U	ug/l	10	10 U	ug/l	10
Acrylonitrile		-	ug/l		100 U	ug/l	100	100 U	ug/l	100	100 U	ug/l	100

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23904002				35072002				M7503003				R8608001			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	S-3				S-3				OSMW003S				100P001			
Collect Date:	28-JAN-93				28-JAN-93				11-JUL-94				24-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	-		ug/l		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dichlorobenzene	10	U	ug/l	10	5	U	ug/l	5	5	U	ug/l	5	10	U	ug/l	10
2-Chloroethylvinylether	-		ug/l		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Ethyl methacrylate	-		ug/l		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2,3-Trichloropropane	-		ug/l		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
trans-1,4-Dichloro-2-butene	-		ug/l		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Isobutyl alcohol	-		ug/l		200	U	ug/l	200	200	R	ug/l		200	R	ug/l	
1,1,1,2-Tetrachloroethane	-		ug/l		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dibromo-3-chloropropane	-		ug/l		10	U	ug/l	10	10	U	ug/l	10	10	UJ	ug/l	
1,2-Dibromoethane	-		ug/l		5	U	ug/l	5	5	U	ug/l	5	5	UJ	ug/l	
1,4-Dioxane	-		ug/l		200	R	ug/l		200	R	ug/l		200	R	ug/l	
3-Chloropropene	-		ug/l		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Acetonitrile	-		ug/l		100	U	ug/l	100	100	U	ug/l	100	100	UJ	ug/l	
Chloroprene	-		ug/l		200	U	ug/l	200	200	U	ug/l	200	200	U	ug/l	200
Methacrylonitrile	-		ug/l		5	U	ug/l	5	5	U	ug/l	5	5	UJ	ug/l	
Methyl methacrylate	-		ug/l		10	U	ug/l	10	10	U	ug/l	10	10	UJ	ug/l	
Pentachloroethane	-		ug/l		10	U	ug/l	10	10	U	ug/l	10	10	UJ	ug/l	
Propionitrile	-		ug/l		100	U	ug/l	100	100	U	ug/l	100	100	UJ	ug/l	
Vinyl acetate	-		ug/l		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8783002				R8627001				R8627001				R8627002			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08MW015I				08MW016S				08MW016S				08MW016SD			
Collect Date:		22-SEP-94				26-AUG-94				26-AUG-94				26-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/l																
Chloromethane		10	U	ug/l	10	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10
Bromomethane		10	U	ug/l	10	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10
Vinyl chloride		10	U	ug/l	10	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10
Chloroethane		10	U	ug/l	10	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10
Methylene chloride		2	J	ug/l		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Acetone		26		ug/l		10	U	ug/l	10	-		ug/l		10	U	ug/l	10
Carbon disulfide		2	J	ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
1,1-Dichloroethane		5	U	ug/l	5	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
1,1-Dichloroethene		5	U	ug/l	5	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
1,2-Dichloroethene (total)		5	U	ug/l	5	5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Chloroform		7		ug/l		5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
1,2-Dichloroethane		5	U	ug/l	5	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
2-Butanone		10	U	ug/l	10	10	U	ug/l	10	-		ug/l		10	U	ug/l	10
1,1,1-Trichloroethane		5	U	ug/l	5	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
Carbon tetrachloride		5	U	ug/l	5	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
Bromodichloromethane		5	U	ug/l	5	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
1,2-Dichloropropane		5	U	ug/l	5	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
cis-1,3-Dichloropropene		5	U	ug/l	5	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
Trichloroethene		5	U	ug/l	5	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
Dibromochloromethane		5	U	ug/l	5	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
1,1,2-Trichloroethane		5	U	ug/l	5	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
Benzene		5	U	ug/l	5	5	U	ug/l	5	-		ug/l		5	U	ug/l	5
trans-1,3-Dichloropropene		5	U	ug/l	5	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
Bromoform		5	U	ug/l	5	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
4-Methyl-2-pentanone		10	U	ug/l	10	10	U	ug/l	10	-		ug/l		10	U	ug/l	10
2-Hexanone		10	U	ug/l	10	10	U	ug/l	10	-		ug/l		10	U	ug/l	10
Tetrachloroethene		5	U	ug/l	5	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
1,1,2,2-Tetrachloroethane		5	U	ug/l	5	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
Toluene		5	U	ug/l	5	5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Chlorobenzene		5	U	ug/l	5	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
Ethylbenzene		5	U	ug/l	5	5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Styrene		5	U	ug/l	5	5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Xylenes (total)		5	U	ug/l	5	5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Dichlorodifluoromethane		10	U	ug/l	10	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10
Trichlorofluoromethane		5	U	ug/l	5	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
1,3-Dichlorobenzene		10	U	ug/l	10	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10
Acrolein		100	U	ug/l	100	100	U	ug/l	100	-		ug/l		100	U	ug/l	100
Iodomethane		10	U	ug/l	10	10	U	ug/l	10	-		ug/l		10	U	ug/l	10
1,4-Dichlorobenzene		10	U	ug/l	10	10	U	ug/l	10	1	U	ug/l	1	5	U	ug/l	5
Acrylonitrile		100	U	ug/l	100	100	U	ug/l	100	-		ug/l		100	U	ug/l	100
Dibromomethane		5	U	ug/l	5	5	U	ug/l	5	-		ug/l		5	U	ug/l	5
1,2-Dichlorobenzene		10	U	ug/l	10	10	U	ug/l	10	1	U	ug/l	1	5	U	ug/l	5
2-Chloroethylvinyl ether		10	UJ	ug/l		10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10
Ethyl methacrylate		5	U	ug/l	5	5	U	ug/l	5	-		ug/l		5	U	ug/l	5
1,2,3-Trichloropropane		5	U	ug/l	5	5	U	ug/l	5	-		ug/l		5	U	ug/l	5
trans-1,4-Dichloro-2-butene		5	U	ug/l	5	5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Isobutyl alcohol		200	R	ug/l		200	R	ug/l		-		ug/l		200	R	ug/l	
1,1,1,2-Tetrachloroethane		5	U	ug/l	5	5	U	ug/l	5	-		ug/l		5	U	ug/l	5
1,2-Dibromo-3-chloropropane		10	UJ	ug/l		10	UJ	ug/l		-		ug/l		10	UJ	ug/l	
1,2-Dibromoethane		5	UJ	ug/l		5	UJ	ug/l		-		ug/l		5	UJ	ug/l	

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	R8783002				R8627001				R8627001				R8627002			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08MW015I				08MW016S				08MW016S				08MW016SD			
Collect Date:	22-SEP-94				26-AUG-94				26-AUG-94				26-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	200	R	ug/l		200	R	ug/l		-		ug/l		200	R	ug/l	
3-Chloropropene	5	UJ	ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Acetonitrile	100	U	ug/l	100	100	UJ	ug/l		-		ug/l		100	UJ	ug/l	
Chloroprene	200	U	ug/l	200	200	U	ug/l	200	-		ug/l		200	U	ug/l	200
Methacrylonitrile	5	UJ	ug/l		5	UJ	ug/l		-		ug/l		5	UJ	ug/l	
Methyl methacrylate	10	UJ	ug/l		10	UJ	ug/l		-		ug/l		10	UJ	ug/l	
Pentachloroethane	10	UJ	ug/l		10	UJ	ug/l		-		ug/l		10	UJ	ug/l	
Propionitrile	100	UJ	ug/l		100	UJ	ug/l		-		ug/l		100	UJ	ug/l	
Vinyl acetate	10	U	ug/l	10	10	U	ug/l	10	-		ug/l		10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8627002				R8627005				R8627005				R8627006			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08MW016SD				08MW017S				08MW017S				08MW018S			
Collect Date:		26-AUG-94				26-AUG-94				26-AUG-94				26-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/l																
Chloromethane		1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10
Bromomethane		1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10
Vinyl chloride		1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10
Chloroethane		1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10
Methylene chloride		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Acetone		-		ug/l		10	U	ug/l	10	-		ug/l		11	U	ug/l	11
Carbon disulfide		-		ug/l		3	J	ug/l		-		ug/l		5	U	ug/l	5
1,1-Dichloroethane		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
1,1-Dichloroethene		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
1,2-Dichloroethene (total)		-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Chloroform		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
1,2-Dichloroethane		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
2-Butanone		-		ug/l		10	U	ug/l	10	-		ug/l		10	U	ug/l	10
1,1,1-Trichloroethane		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
Carbon tetrachloride		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
Bromodichloromethane		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
1,2-Dichloropropane		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
cis-1,3-Dichloropropene		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
Trichloroethene		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
Dibromochloromethane		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
1,1,2-Trichloroethane		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
Benzene		-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
trans-1,3-Dichloropropene		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
Bromoform		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
4-Methyl-2-pentanone		-		ug/l		10	U	ug/l	10	-		ug/l		10	U	ug/l	10
2-Hexanone		-		ug/l		10	U	ug/l	10	-		ug/l		10	U	ug/l	10
Tetrachloroethene		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
1,1,2,2-Tetrachloroethane		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
Toluene		-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Chlorobenzene		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
Ethylbenzene		-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Styrene		-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Xylenes (total)		-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Dichlorodifluoromethane		1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10
Trichlorofluoromethane		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
1,3-Dichlorobenzene		1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10
Acrolein		-		ug/l		100	U	ug/l	100	-		ug/l		100	U	ug/l	100
Iodomethane		-		ug/l		10	U	ug/l	10	-		ug/l		10	U	ug/l	10
1,4-Dichlorobenzene		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
Acrylonitrile		-		ug/l		100	U	ug/l	100	-		ug/l		100	U	ug/l	100

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Group2 Ground Water Data

Lab Sample Number:	R8627002				R8627005				R8627005				R8627006			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08MW016SD				08MW017S				08MW017S				08MW018S			
Collect Date:	26-AUG-94				26-AUG-94				26-AUG-94				26-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
1,2-Dichlorobenzene	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	10	U	ug/l	10
2-Chloroethylvinyl ether	1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10
Ethyl methacrylate	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
1,2,3-Trichloropropane	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
trans-1,4-Dichloro-2-butene	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Isobutyl alcohol	-		ug/l		200	R	ug/l		-		ug/l		200	R	ug/l	
1,1,1,2-Tetrachloroethane	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
1,2-Dibromo-3-chloropropane	-		ug/l		10	UJ	ug/l		-		ug/l		10	UJ	ug/l	
1,2-Dibromoethane	-		ug/l		5	UJ	ug/l		-		ug/l		5	UJ	ug/l	
1,4-Dioxane	-		ug/l		200	R	ug/l		-		ug/l		200	R	ug/l	
3-Chloropropene	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Acetonitrile	-		ug/l		100	UJ	ug/l		-		ug/l		100	UJ	ug/l	
Chloroprene	-		ug/l		200	U	ug/l	200	-		ug/l		200	U	ug/l	200
Methacrylonitrile	-		ug/l		5	UJ	ug/l		-		ug/l		5	UJ	ug/l	
Methyl methacrylate	-		ug/l		10	UJ	ug/l		-		ug/l		10	UJ	ug/l	
Pentachloroethane	-		ug/l		10	UJ	ug/l		-		ug/l		10	UJ	ug/l	
Propionitrile	-		ug/l		100	UJ	ug/l		-		ug/l		100	UJ	ug/l	
Vinyl acetate	-		ug/l		10	U	ug/l	10	-		ug/l		10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

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Group2 Ground Water Data

Lab Sample Number:		R8627006				R8783003				R8783003				R8783004			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08MW018S				08MW019S				08MW019S				08MW019SD			
Collect Date:		26-AUG-94				22-SEP-94				22-SEP-94				22-SEP-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/l																
Chloromethane		1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10
Bromomethane		1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10
Vinyl chloride		1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10
Chloroethane		1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10
Methylene chloride		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Acetone		-		ug/l		11		ug/l		-		ug/l		23		ug/l	
Carbon disulfide		-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
1,1-Dichloroethane		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
1,1-Dichloroethene		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
1,2-Dichloroethene (total)		-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Chloroform		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
1,2-Dichloroethane		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
2-Butanone		-		ug/l		10	U	ug/l	10	-		ug/l		10	U	ug/l	10
1,1,1-Trichloroethane		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
Carbon tetrachloride		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
Bromodichloromethane		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
1,2-Dichloropropane		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
cis-1,3-Dichloropropene		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
Trichloroethene		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
Dibromochloromethane		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
1,1,2-Trichloroethane		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
Benzene		-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
trans-1,3-Dichloropropene		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
Bromoform		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
4-Methyl-2-pentanone		-		ug/l		10	U	ug/l	10	-		ug/l		10	U	ug/l	10
2-Hexanone		-		ug/l		10	U	ug/l	10	-		ug/l		10	U	ug/l	10
Tetrachloroethene		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
1,1,2,2-Tetrachloroethane		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
Toluene		-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Chlorobenzene		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
Ethylbenzene		-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Styrene		-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Xylenes (total)		-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Dichlorodifluoromethane		1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10
Trichlorofluoromethane		1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5
1,3-Dichlorobenzene		1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10
Acrolein		-		ug/l		100	U	ug/l	100	-		ug/l		100	U	ug/l	100
Iodomethane		-		ug/l		10	U	ug/l	10	-		ug/l		10	U	ug/l	10
1,4-Dichlorobenzene		1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10
Acrylonitrile		-		ug/l		100	U	ug/l	100	-		ug/l		100	U	ug/l	100

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Group2 Ground Water Data

Lab Sample Number:	R8627006				R8783003				R8783003				R8783004			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08MW018S				08MW019S				08MW019S				08MW019SD			
Collect Date:	26-AUG-94				22-SEP-94				22-SEP-94				22-SEP-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
1,2-Dichlorobenzene	1	U	ug/l	1	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10
2-Chloroethylvinyl ether	1	U	ug/l	1	10	UJ	ug/l		1	U	ug/l	1	10	UJ	ug/l	
Ethyl methacrylate	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
1,2,3-Trichloropropane	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
trans-1,4-Dichloro-2-butene	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Isobutyl alcohol	-		ug/l		200	R	ug/l		-		ug/l		200	R	ug/l	
1,1,1,2-Tetrachloroethane	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
1,2-Dibromo-3-chloropropane	-		ug/l		10	UJ	ug/l		-		ug/l		10	UJ	ug/l	
1,2-Dibromoethane	-		ug/l		5	UJ	ug/l		-		ug/l		5	UJ	ug/l	
1,4-Dioxane	-		ug/l		200	R	ug/l		-		ug/l		200	R	ug/l	
3-Chloropropene	-		ug/l		5	UJ	ug/l		-		ug/l		5	UJ	ug/l	
Acetonitrile	-		ug/l		100	U	ug/l	100	-		ug/l		100	U	ug/l	100
Chloroprene	-		ug/l		200	U	ug/l	200	-		ug/l		200	U	ug/l	200
Methacrylonitrile	-		ug/l		5	UJ	ug/l		-		ug/l		5	UJ	ug/l	
Methyl methacrylate	-		ug/l		10	UJ	ug/l		-		ug/l		10	UJ	ug/l	
Pentachloroethane	-		ug/l		10	UJ	ug/l		-		ug/l		10	UJ	ug/l	
Propionitrile	-		ug/l		100	UJ	ug/l		-		ug/l		100	UJ	ug/l	
Vinyl acetate	-		ug/l		10	U	ug/l	10	-		ug/l		10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8783004				R9036001				R9036002			
Site		GROUP2				GROUP2				GROUP2			
Locator		08MW019SD				08MW020S				08MW020SD			
Collect Date:		22-SEP-94				08-NOV-94				08-NOV-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/l												
Chloromethane		1	U	ug/l	1	10	U	ug/l	10	10	U	ug/l	10
Bromomethane		1	U	ug/l	1	10	U	ug/l	10	10	U	ug/l	10
Vinyl chloride		1	U	ug/l	1	10	U	ug/l	10	10	U	ug/l	10
Chloroethane		1	U	ug/l	1	10	U	ug/l	10	10	U	ug/l	10
Methylene chloride		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Acetone		-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Carbon disulfide		-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,1-Dichloroethane		1	U	ug/l	1	5	U	ug/l	5	5	U	ug/l	5
1,1-Dichloroethene		1	U	ug/l	1	5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloroethene (total)		-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Chloroform		1	U	ug/l	1	5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloroethane		1	U	ug/l	1	5	U	ug/l	5	5	U	ug/l	5
2-Butanone		-		ug/l		10	U	ug/l	10	10	U	ug/l	10
1,1,1-Trichloroethane		1	U	ug/l	1	5	U	ug/l	5	5	U	ug/l	5
Carbon tetrachloride		1	U	ug/l	1	5	U	ug/l	5	5	U	ug/l	5
Bromodichloromethane		1	U	ug/l	1	5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloropropane		1	U	ug/l	1	5	U	ug/l	5	5	U	ug/l	5
cis-1,3-Dichloropropene		1	U	ug/l	1	5	U	ug/l	5	5	U	ug/l	5
Trichloroethene		1	U	ug/l	1	5	U	ug/l	5	5	U	ug/l	5
Dibromochloromethane		1	U	ug/l	1	5	U	ug/l	5	5	U	ug/l	5
1,1,2-Trichloroethane		1	U	ug/l	1	5	U	ug/l	5	5	U	ug/l	5
Benzene		-		ug/l		5	U	ug/l	5	5	U	ug/l	5
trans-1,3-Dichloropropene		1	U	ug/l	1	5	U	ug/l	5	5	U	ug/l	5
Bromoform		1	U	ug/l	1	5	U	ug/l	5	5	U	ug/l	5
4-Methyl-2-pentanone		-		ug/l		10	U	ug/l	10	10	U	ug/l	10
2-Hexanone		-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Tetrachloroethene		1	U	ug/l	1	5	U	ug/l	5	5	U	ug/l	5
1,1,2,2-Tetrachloroethane		1	U	ug/l	1	5	U	ug/l	5	5	U	ug/l	5
Toluene		-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Chlorobenzene		1	U	ug/l	1	5	U	ug/l	5	5	U	ug/l	5
Ethylbenzene		-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Styrene		-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Xylenes (total)		-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Dichlorodifluoromethane		1	U	ug/l	1	10	U	ug/l	10	10	U	ug/l	10
Trichlorofluoromethane		1	U	ug/l	1	5	U	ug/l	5	5	U	ug/l	5
1,3-Dichlorobenzene		1	U	ug/l	1	10	U	ug/l	10	10	U	ug/l	10
Acrolein		-		ug/l		100	U	ug/l	100	100	U	ug/l	100
Iodomethane		-		ug/l		10	U	ug/l	10	10	U	ug/l	10
1,4-Dichlorobenzene		1	U	ug/l	1	10	U	ug/l	10	5	U	ug/l	5
Acrylonitrile		-		ug/l		100	U	ug/l	100	100	U	ug/l	100

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Group2 Ground Water Data

Lab Sample Number:	R8783004				R9036001				R9036002			
Site	GROUP2				GROUP2				GROUP2			
Locator	08MW019SD				08MW020S				08MW020SD			
Collect Date:	22-SEP-94				08-NOV-94				08-NOV-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,2-Dichlorobenzene	1	U	ug/l	1	10	U	ug/l	10	5	U	ug/l	5
2-Chloroethylvinyl ether	1	U	ug/l	1	10	UJ	ug/l		10	UJ	ug/l	
Ethyl methacrylate	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,2,3-Trichloropropane	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
trans-1,4-Dichloro-2-butene	-		ug/l		5	UJ	ug/l		5	UJ	ug/l	
Isobutyl alcohol	-		ug/l		200	R	ug/l		200	R	ug/l	
1,1,1,2-Tetrachloroethane	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,2-Dibromo-3-chloropropane	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
1,2-Dibromoethane	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,4-Dioxane	-		ug/l		200	R	ug/l		200	R	ug/l	
3-Chloropropene	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Acetonitrile	-		ug/l		100	U	ug/l	100	100	U	ug/l	100
Chloroprene	-		ug/l		200	U	ug/l	200	200	U	ug/l	200
Methacrylonitrile	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Methyl methacrylate	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Pentachloroethane	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Propionitrile	-		ug/l		100	U	ug/l	100	100	U	ug/l	100
Vinyl acetate	-		ug/l		10	U	ug/l	10	10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23918003			23918003RE			M7503004			23918005		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		8MW1			8MW1			08MW001S			8MW4		
Collect Date:		01-FEB-93			01-FEB-93			11-JUL-94			01-FEB-93		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES	ug/l												
N-Nitrosodimethylamine		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
Phenol		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
Aniline		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
bis (2-Chloroethyl) ether		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
Benzyl Alcohol		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
2-Methylphenol		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
bis(2-Chloroisopropyl)ether		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
N-Nitroso-di-n-propylamine		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
Hexachloroethane		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
Nitrobenzene		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
Isophorone		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
2-Nitrophenol		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
2,4-Dimethylphenol		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
Benzoic acid		50 U	ug/l	50	50 R	ug/l		50 R	ug/l		50 U	ug/l	50
bis(2-Chloroethoxy)methane		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
2,4-Dichlorophenol		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
1,2,4-Trichlorobenzene		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
Naphthalene		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	85	ug/l	
4-Chloroaniline		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
Hexachlorobutadiene		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
4-Chloro-3-methylphenol		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
2-Methylnaphthalene		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	56	ug/l	
Hexachlorocyclopentadiene		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
2,4,6-Trichlorophenol		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
Dimethylphthalate		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
2,4,5-Trichlorophenol		50 U	ug/l	50	50 R	ug/l		50 U	ug/l	50	50 U	ug/l	50
2-Chloronaphthalene		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
2-Nitroaniline		50 U	ug/l	50	50 R	ug/l		50 U	ug/l	50	50 U	ug/l	50
Acenaphthylene		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
2,6-Dinitrotoluene		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
3-Nitroaniline		10 U	ug/l	10	50 R	ug/l		50 U	ug/l	50	50 U	ug/l	50
Acenaphthene		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
2,4-Dinitrophenol		50 U	ug/l	50	50 R	ug/l		50 U	ug/l	50	50 U	ug/l	50
4-Nitrophenol		50 U	ug/l	50	50 R	ug/l		50 U	ug/l	50	50 U	ug/l	50
Dibenzofuran		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
2,4-Dinitrotoluene		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
Diethylphthalate		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
4-Chlorophenyl-phenylether		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
Fluorene		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	3 J	ug/l	
4-Nitroaniline		50 U	ug/l	50	50 R	ug/l		50 U	ug/l	50	50 U	ug/l	50
4,6-Dinitro-2-methylphenol		50 U	ug/l	50	50 R	ug/l		50 U	ug/l	50	50 U	ug/l	50
N-Nitrosodiphenylamine (1)		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
1,2-Diphenylhydrazine		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
4-Bromophenyl-phenylether		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
Hexachlorobenzene		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
Pentachlorophenol		50 U	ug/l	50	50 R	ug/l		50 U	ug/l	50	50 U	ug/l	50
Phenanthrene		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
Anthracene		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
Di-n-Butylphthalate		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10
Fluoranthene		10 U	ug/l	10	10 R	ug/l		10 U	ug/l	10	10 U	ug/l	10

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23918003				23918003RE				M7503004				23918005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	8MW1				8MW1				08MW001S				8MW4			
Collect Date:	01-FEB-93				01-FEB-93				11-JUL-94				01-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Pyrene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
Butylbenzylphthalate	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
3,3'-Dichlorobenzidine	20	U	ug/l	20	20	R	ug/l		20	U	ug/l	20	20	U	ug/l	20
Benzo(a)anthracene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
Chrysene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
bis(2-Ethylhexyl)phthalate	5	J	ug/l		7	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
Di-n-octylphthalate	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
Benzo(b)fluoranthene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
Benzo(k)fluoranthene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
Benzo(a)pyrene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
Indeno(1,2,3-cd)pyrene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
Dibenz(a,h)anthracene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
Benzo(g,h,i)perylene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
2-Picoline	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	50	U	ug/l	50
Methyl methanesulfonate	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
Ethyl methanesulfonate	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
Acetophenone	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopiperidine	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
Phenyl-tert-butylamine	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	50	U	ug/l	50
2,6-Dichlorophenol	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
N-Nitroso-di-n-butylamine	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
N-Nitrosodiethylamine	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopyrrolidine	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
Benzidine	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	50	U	ug/l	50
1,2,4,5-Tetrachlorobenzene	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	50	U	ug/l	50
Pentachlorobenzene	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	50	U	ug/l	50
1-Naphthylamine	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	50	U	ug/l	50
2-Naphthylamine	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	50	U	ug/l	50
2,3,4,6-Tetrachlorophenol	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
Phenacetin	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
4-Aminobiphenyl	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	50	U	ug/l	50
Pentachloronitrobenzene	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	50	U	ug/l	50
Pronamide	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
p-(Dimethylamino)azobenzene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
7,12-Dimethylbenz(A)Anthracene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
3-Methylcholanthrene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
Pyridine	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	50	U	ug/l	50
N-Nitrosomethylethylamine	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
N-Nitrosomorpholine	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
o-Toluidine	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
Hexachloropropene	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	50	U	ug/l	50
p-Phenylenediamine	50	U	ug/l	50	50	R	ug/l		500	U	ug/l	500	50	U	ug/l	50
Safrole	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	50	U	ug/l	50
Isosafrole	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	50	U	ug/l	50
1,4-Naphthoquinone	50	U	ug/l	50	50	R	ug/l		1000	U	ug/l	1000	50	U	ug/l	50
1,3-Dinitrobenzene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
5-Nitro-o-toluidine	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
1,3,5-Trinitrobenzene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
4-Nitroquinoline-1-oxide	10	U	ug/l	10	10	R	ug/l		500	U	ug/l	500	10	U	ug/l	10
Methapyrilene	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	50	U	ug/l	50
3,3'-Dimethylbenzidine	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
Hexachlorophene	50	U	ug/l	50	50	R	ug/l		500	U	ug/l	500	50	U	ug/l	50

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23918003				23918003RE				M7503004				23918005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	8MW1				8MW1				08MW001S				8MW4			
Collect Date:	01-FEB-93				01-FEB-93				11-JUL-94				01-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Aramite	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	50	U	ug/l	50
2-Chlorophenol	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10
3- & 4-Methylphenol (2)	-		ug/l		-		ug/l		10	U	ug/l	10	-		ug/l	
Hexachloropropene	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	50	U	ug/l	50
2-Acetylaminofluorene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23918005RE			R8627004			23886004			23886005		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		8MW4			08MW004S			8MW6			8MW6D		
Collect Date:		01-FEB-93			26-AUG-94			28-JAN-93			28-JAN-93		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES	ug/l												
N-Nitrosodimethylamine		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
Phenol		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
Aniline		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
bis (2-Chloroethyl) ether		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
Benzyl Alcohol		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
2-Methylphenol		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
bis(2-Chloroisopropyl)ether		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
N-Nitroso-di-n-propylamine		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
Hexachloroethane		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
Nitrobenzene		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
Isophorone		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
2-Nitrophenol		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
2,4-Dimethylphenol		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
Benzoic acid		50 R	ug/l		100 U	ug/l	100	50 U	ug/l	50	50 U	ug/l	50
bis(2-Chloroethoxy)methane		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
2,4-Dichlorophenol		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
1,2,4-Trichlorobenzene		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
Naphthalene		10 R	ug/l		94	ug/l		10 U	ug/l	10	10 U	ug/l	10
4-Chloroaniline		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
Hexachlorobutadiene		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
4-Chloro-3-methylphenol		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
2-Methylnaphthalene		10 R	ug/l		140	ug/l		10 U	ug/l	10	10 U	ug/l	10
Hexachlorocyclopentadiene		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
2,4,6-Trichlorophenol		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
Dimethylphthalate		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
2,4,5-Trichlorophenol		50 R	ug/l		100 U	ug/l	100	50 U	ug/l	50	50 U	ug/l	50
2-Chloronaphthalene		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
2-Nitroaniline		50 R	ug/l		100 U	ug/l	100	50 U	ug/l	50	50 U	ug/l	50
Acenaphthylene		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
2,6-Dinitrotoluene		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
3-Nitroaniline		50 R	ug/l		100 U	ug/l	100	50 U	ug/l	50	50 U	ug/l	50
Acenaphthene		10 R	ug/l		9 J	ug/l		10 U	ug/l	10	10 U	ug/l	10
2,4-Dinitrophenol		50 R	ug/l		100 U	ug/l	100	50 U	ug/l	50	50 U	ug/l	50
4-Nitrophenol		50 R	ug/l		100 U	ug/l	100	50 U	ug/l	50	50 U	ug/l	50
Dibenzofuran		10 R	ug/l		5 J	ug/l		10 U	ug/l	10	10 U	ug/l	10
2,4-Dinitrotoluene		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
Diethylphthalate		10 R	ug/l		4 J	ug/l		10 U	ug/l	10	10 U	ug/l	10
4-Chlorophenyl-phenylether		10 R	ug/l		20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
Fluorene		10 R	ug/l		14 J	ug/l		10 U	ug/l	10	10 U	ug/l	10
4-Nitroaniline		50 R	ug/l		100 U	ug/l	100	50 U	ug/l	50	50 U	ug/l	50

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23918005RE				R8627004				23886004				23886005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	8MW4				08MW004S				8MW6				8MW6D			
Collect Date:	01-FEB-93				26-AUG-94				28-JAN-93				28-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	50	R	ug/l		100	U	ug/l	100	50	U	ug/l	50	50	U	ug/l	50
N-Nitrosodiphenylamine (1)	50	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
1,2-Diphenylhydrazine	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
4-Bromophenyl-phenylether	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
Hexachlorobenzene	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
Pentachlorophenol	50	R	ug/l		100	U	ug/l	100	50	U	ug/l	50	50	U	ug/l	50
Phenanthrene	10	R	ug/l		12	J	ug/l		10	U	ug/l	10	10	U	ug/l	10
Anthracene	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
Di-n-Butylphthalate	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
Fluoranthene	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
Pyrene	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
Butylbenzylphthalate	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
3,3'-Dichlorobenzidine	20	R	ug/l		40	U	ug/l	40	20	U	ug/l	20	20	U	ug/l	20
Benzo(a)anthracene	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
Chrysene	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
bis(2-Ethylhexyl)phthalate	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
Di-n-octylphthalate	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
Benzo(b)fluoranthene	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
Benzo(k)fluoranthene	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
Benzo(a)pyrene	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
Indeno(1,2,3-cd)pyrene	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
Dibenz(a,h)anthracene	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
Benzo(g,h,i)perylene	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
2-Picoline	50	R	ug/l		100	U	ug/l	100	50	U	ug/l	50	50	U	ug/l	50
Methyl methanesulfonate	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
Ethyl methanesulfonate	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
Acetophenone	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopiperidine	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
Phenyl-tert-butylamine	50	R	ug/l		100	U	ug/l	100	50	U	ug/l	50	50	U	ug/l	50
2,6-Dichlorophenol	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
N-Nitroso-di-n-butylamine	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosodiethylamine	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopyrrolidine	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
Benzidine	50	R	ug/l		100	U	ug/l	100	50	U	ug/l	50	50	U	ug/l	50
1,2,4,5-Tetrachlorobenzene	50	R	ug/l		100	U	ug/l	100	50	U	ug/l	50	50	U	ug/l	50
Pentachlorobenzene	50	R	ug/l		100	U	ug/l	100	50	U	ug/l	50	50	U	ug/l	50
1-Naphthylamine	50	R	ug/l		100	U	ug/l	100	50	U	ug/l	50	50	U	ug/l	50
2-Naphthylamine	50	R	ug/l		100	U	ug/l	100	50	U	ug/l	50	50	U	ug/l	50
2,3,4,6-Tetrachlorophenol	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
Phenacetin	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
4-Aminobiphenyl	50	R	ug/l		100	U	ug/l	100	50	U	ug/l	50	50	U	ug/l	50
Pentachloronitrobenzene	50	R	ug/l		100	U	ug/l	100	50	U	ug/l	50	50	U	ug/l	50
Pronamide	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
p-(Dimethylamino)azobenzene	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
7,12-Dimethylbenz(A)Anthracene	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
3-Methylcholanthrene	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
Pyridine	50	R	ug/l		100	U	ug/l	100	50	U	ug/l	50	50	U	ug/l	50
N-Nitrosomethylethylamine	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosomorpholine	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
o-Toluidine	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
Hexachloropropene	50	R	ug/l		100	U	ug/l	100	50	U	ug/l	50	50	U	ug/l	50
p-Phenylenediamine	50	R	ug/l		1000	U	ug/l	1000	50	U	ug/l	50	50	U	ug/l	50

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Group2 Ground Water Data

Lab Sample Number:	23918005RE				R8627004				23886004				23886005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	8MW4				08MW004S				8MW6				8MW6D			
Collect Date:	01-FEB-93				26-AUG-94				28-JAN-93				28-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	50	R	ug/l		100	U	ug/l	100	50	U	ug/l	50	50	U	ug/l	50
Isosafrole	50	R	ug/l		100	U	ug/l	100	50	U	ug/l	50	50	U	ug/l	50
1,4-Naphthoquinone	50	R	ug/l		2000	U	ug/l	2000	50	U	ug/l	50	50	U	ug/l	50
1,3-Dinitrobenzene	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
5-Nitro-o-toluidine	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
1,3,5-Trinitrobenzene	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
4-Nitroquinoline-1-oxide	10	R	ug/l		1000	U	ug/l	1000	10	U	ug/l	10	10	U	ug/l	10
Methapyrilene	50	R	ug/l		100	U	ug/l	100	50	U	ug/l	50	50	U	ug/l	50
3,3'-Dimethylbenzidine	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
Hexachlorophene	50	R	ug/l		1000	UJ	ug/l		50	U	ug/l	50	50	U	ug/l	50
Aramite	50	R	ug/l		100	U	ug/l	100	50	U	ug/l	50	50	U	ug/l	50
2-Chlorophenol	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
3- & 4-Methylphenol (2)	-		ug/l		20	U	ug/l	20	-		ug/l		-		ug/l	
Hexachloropropene	50	R	ug/l		100	U	ug/l	100	50	U	ug/l	50	50	U	ug/l	50
2-Acetylaminofluorene	10	R	ug/l		20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		M7490006			M7490007			23918006			23918006RE		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		08MW006S			08MW006SD			8MW7			8MW7		
Collect Date:		10-JUL-94			10-JUL-94			01-FEB-93			01-FEB-93		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES	ug/l												
N-Nitrosodimethylamine		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Phenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Aniline		10 UJ	ug/l		10 UJ	ug/l		10 U	ug/l	10	10 R	ug/l	
bis (2-Chloroethyl) ether		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Benzyl Alcohol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
2-Methylphenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
bis(2-Chloroisopropyl)ether		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
N-Nitroso-di-n-propylamine		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Hexachloroethane		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Nitrobenzene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Isophorone		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
2-Nitrophenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
2,4-Dimethylphenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Benzoic acid		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 R	ug/l	
bis(2-Chloroethoxy)methane		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
2,4-Dichlorophenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
1,2,4-Trichlorobenzene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Naphthalene		10 U	ug/l	10	10 U	ug/l	10	130	ug/l		14 R	ug/l	
4-Chloroaniline		10 UJ	ug/l		10 UJ	ug/l		10 U	ug/l	10	10 R	ug/l	
Hexachlorobutadiene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
4-Chloro-3-methylphenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
2-Methylnaphthalene		10 U	ug/l	10	10 U	ug/l	10	120	ug/l		11 R	ug/l	
Hexachlorocyclopentadiene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
2,4,6-Trichlorophenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Dimethylphthalate		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
2,4,5-Trichlorophenol		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 R	ug/l	
2-Chloronaphthalene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
2-Nitroaniline		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 R	ug/l	
Acenaphthylene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
2,6-Dinitrotoluene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
3-Nitroaniline		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 R	ug/l	
Acenaphthene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
2,4-Dinitrophenol		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 R	ug/l	
4-Nitrophenol		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 R	ug/l	
Dibenzofuran		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
2,4-Dinitrotoluene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Diethylphthalate		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
4-Chlorophenyl-phenylether		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Fluorene		10 U	ug/l	10	10 U	ug/l	10	5 J	ug/l		10 R	ug/l	
4-Nitroaniline		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 R	ug/l	

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	M7490006				M7490007				23918006				23918006RE			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08MW006S				08MW006SD				8MW7				8MW7			
Collect Date:	10-JUL-94				10-JUL-94				01-FEB-93				01-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
N-Nitrosodiphenylamine (1)	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
1,2-Diphenylhydrazine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
4-Bromophenyl-phenylether	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Hexachlorobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Pentachlorophenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
Phenanthrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Di-n-Butylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Butylbenzylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
3,3'-Dichlorobenzidine	20	U	ug/l	20	20	U	ug/l	20	20	U	ug/l	20	20	R	ug/l	
Benzo(a)anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Chrysene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
bis(2-Ethylhexyl)phthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	7	R	ug/l	
Di-n-octylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Benzo(b)fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Benzo(k)fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Benzo(a)pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Indeno(1,2,3-cd)pyrene	10	UJ	ug/l		10	UJ	ug/l		10	U	ug/l	10	10	R	ug/l	
Dibenz(a,h)anthracene	10	UJ	ug/l		10	UJ	ug/l		10	U	ug/l	10	10	R	ug/l	
Benzo(g,h,i)perylene	10	UJ	ug/l		10	UJ	ug/l		10	U	ug/l	10	10	R	ug/l	
2-Picoline	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
Methyl methanesulfonate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Ethyl methanesulfonate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Acetophenone	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
N-Nitrosopiperidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Phenyl-tert-butylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
2,6-Dichlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
N-Nitroso-di-n-butylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
N-Nitrosodiethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
N-Nitrosopyrrolidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Benzidine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
1,2,4,5-Tetrachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
Pentachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
1-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
2-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
2,3,4,6-Tetrachlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Phenacetin	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
4-Aminobiphenyl	50	UJ	ug/l		50	UJ	ug/l		50	U	ug/l	50	50	R	ug/l	
Pentachloronitrobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
Pronamide	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
p-(Dimethylamino)azobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
7,12-Dimethylbenz(A)Anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
3-Methylcholanthrene	10	UJ	ug/l		10	UJ	ug/l		10	U	ug/l	10	10	R	ug/l	
Pyridine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
N-Nitrosomethylethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
N-Nitrosomorpholine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
o-Toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Hexachloropropene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
p-Phenylenediamine	500	U	ug/l	500	500	U	ug/l	500	50	U	ug/l	50	50	R	ug/l	

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	M7490006				M7490007				23918006				23918006RE			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08MW006S				08MW006SD				8MW7				8MW7			
Collect Date:	10-JUL-94				10-JUL-94				01-FEB-93				01-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
Isosafrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
1,4-Naphthoquinone	1000	UJ	ug/l		1000	UJ	ug/l		50	U	ug/l	50	50	R	ug/l	
1,3-Dinitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
5-Nitro-o-toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
1,3,5-Trinitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
4-Nitroquinoline-1-oxide	500	UJ	ug/l		500	UJ	ug/l		10	U	ug/l	10	10	R	ug/l	
Methapyrilene	50	UJ	ug/l		50	UJ	ug/l		50	U	ug/l	50	50	R	ug/l	
3,3'-Dimethylbenzidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Hexachlorophene	500	R	ug/l		500	R	ug/l		50	U	ug/l	50	50	R	ug/l	
Aramite	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
2-Chlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
3- & 4-Methylphenol (2)	10	U	ug/l	10	10	U	ug/l	10	-		ug/l		-		ug/l	
Hexachloropropene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
2-Acetylaminofluorene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23918004				23918004RE				M7490005				R8627003		
Site		GROUP2				GROUP2				GROUP2				GROUP2		
Locator		8MW8				8MW8				08MW008S				08MW009S		
Collect Date:		01-FEB-93				01-FEB-93				09-JUL-94				26-AUG-94		
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/l																
N-Nitrosodimethylamine		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Phenol		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Aniline		10	U	ug/l	10	10	R	ug/l		10	UJ	ug/l		80	U	ug/l	80
bis (2-Chloroethyl) ether		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Benzyl Alcohol		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
2-Methylphenol		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	180		ug/l	
bis(2-Chloroisopropyl)ether		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
N-Nitroso-di-n-propylamine		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Hexachloroethane		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Nitrobenzene		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Isophorone		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
2-Nitrophenol		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
2,4-Dimethylphenol		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	180		ug/l	
Benzoic acid		50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	400	U	ug/l	400
bis(2-Chloroethoxy)methane		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
2,4-Dichlorophenol		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
1,2,4-Trichlorobenzene		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Naphthalene		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
4-Chloroaniline		10	U	ug/l	10	10	R	ug/l		10	UJ	ug/l		80	U	ug/l	80
Hexachlorobutadiene		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
4-Chloro-3-methylphenol		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
2-Methylnaphthalene		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Hexachlorocyclopentadiene		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
2,4,6-Trichlorophenol		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Dimethylphthalate		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
2,4,5-Trichlorophenol		50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	400	U	ug/l	400
2-Chloronaphthalene		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
2-Nitroaniline		50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	400	U	ug/l	400
Acenaphthylene		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
2,6-Dinitrotoluene		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
3-Nitroaniline		50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	400	U	ug/l	400
Acenaphthene		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
2,4-Dinitrophenol		50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	400	U	ug/l	400
4-Nitrophenol		50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	400	U	ug/l	400
Dibenzofuran		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
2,4-Dinitrotoluene		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Diethylphthalate		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	20	J	ug/l	
4-Chlorophenyl-phenylether		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Fluorene		10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
4-Nitroaniline		50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	400	U	ug/l	400

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23918004				23918004RE				M7490005				R8627003			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	8MW8				8MW8				08MW008S				08MW009S			
Collect Date:	01-FEB-93				01-FEB-93				09-JUL-94				26-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	400	U	ug/l	400
N-Nitrosodiphenylamine (1)	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
1,2-Diphenylhydrazine	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
4-Bromophenyl-phenylether	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Hexachlorobenzene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Pentachlorophenol	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	400	U	ug/l	400
Phenanthrene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Anthracene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Di-n-Butylphthalate	10	U	ug/l	10	2	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Fluoranthene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Pyrene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Butylbenzylphthalate	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
3,3'-Dichlorobenzidine	20	U	ug/l	20	20	R	ug/l		20	U	ug/l	20	160	U	ug/l	160
Benzo(a)anthracene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Chrysene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
bis(2-Ethylhexyl)phthalate	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Di-n-octylphthalate	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Benzo(b)fluoranthene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Benzo(k)fluoranthene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Benzo(a)pyrene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Indeno(1,2,3-cd)pyrene	10	U	ug/l	10	10	R	ug/l		10	UJ	ug/l		80	U	ug/l	80
Dibenz(a,h)anthracene	10	U	ug/l	10	10	R	ug/l		10	UJ	ug/l		80	U	ug/l	80
Benzo(g,h,i)perylene	10	U	ug/l	10	10	R	ug/l		10	UJ	ug/l		80	U	ug/l	80
2-Picoline	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	400	U	ug/l	400
Methyl methanesulfonate	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Ethyl methanesulfonate	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Acetophenone	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
N-Nitrosopiperidine	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Phenyl-tert-butylamine	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	400	U	ug/l	400
2,6-Dichlorophenol	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
N-Nitroso-di-n-butylamine	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
N-Nitrosodiethylamine	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
N-Nitrosopyrrolidine	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Benzidine	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	400	U	ug/l	400
1,2,4,5-Tetrachlorobenzene	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	400	U	ug/l	400
Pentachlorobenzene	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	400	U	ug/l	400
1-Naphthylamine	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	400	U	ug/l	400
2-Naphthylamine	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	400	U	ug/l	400
2,3,4,6-Tetrachlorophenol	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Phenacetin	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
4-Aminobiphenyl	50	U	ug/l	50	50	R	ug/l		50	UJ	ug/l		400	U	ug/l	400
Pentachloronitrobenzene	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	400	U	ug/l	400
Pronamide	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
p-(Dimethylamino)azobenzene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
7,12-Dimethylbenz(A)Anthracene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
3-Methylcholanthrene	10	U	ug/l	10	10	R	ug/l		10	UJ	ug/l		80	U	ug/l	80
Pyridine	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	400	U	ug/l	400
N-Nitrosomethylethylamine	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
N-Nitrosomorpholine	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
o-Toluidine	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Hexachloropropene	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	400	U	ug/l	400
p-Phenylenediamine	50	U	ug/l	50	50	R	ug/l		500	U	ug/l	500	4000	U	ug/l	4000

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Group2 Ground Water Data

Lab Sample Number:	23918004				23918004RE				M7490005				R8627003			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	8MW8				8MW8				08MW008S				08MW009S			
Collect Date:	01-FEB-93				01-FEB-93				09-JUL-94				26-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	400	U	ug/l	400
Isosafrole	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	400	U	ug/l	400
1,4-Naphthoquinone	50	U	ug/l	50	50	R	ug/l		1000	UJ	ug/l		8000	U	ug/l	8000
1,3-Dinitrobenzene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
5-Nitro-o-toluidine	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
1,3,5-Trinitrobenzene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
4-Nitroquinoline-1-oxide	10	U	ug/l	10	10	R	ug/l		500	UJ	ug/l		4000	U	ug/l	4000
Methapyrilene	50	U	ug/l	50	50	R	ug/l		50	UJ	ug/l		400	U	ug/l	400
3,3'-Dimethylbenzidine	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
Hexachlorophene	50	U	ug/l	50	50	R	ug/l		500	R	ug/l		4000	UJ	ug/l	
Aramite	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	400	U	ug/l	400
2-Chlorophenol	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80
3- & 4-Methylphenol (2)	-		ug/l		-		ug/l		10	U	ug/l	10	480		ug/l	
Hexachloropropene	50	U	ug/l	50	50	R	ug/l		50	U	ug/l	50	400	U	ug/l	400
2-Acetylaminofluorene	10	U	ug/l	10	10	R	ug/l		10	U	ug/l	10	80	U	ug/l	80

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8709001			R8709002			R8618004			R8618003		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		08MW010S			08MW010SD			08MW012S			08MW013S		
Collect Date:		09-SEP-94			09-SEP-94			25-AUG-94			25-AUG-94		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES	ug/l												
N-Nitrosodimethylamine		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Phenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Aniline		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
bis (2-Chloroethyl) ether		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Benzyl Alcohol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Methylphenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
bis(2-Chloroisopropyl)ether		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
N-Nitroso-di-n-propylamine		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Hexachloroethane		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Nitrobenzene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Isophorone		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Nitrophenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4-Dimethylphenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Benzoic acid		50 U	ug/l	50	50 U	ug/l	50	8 J	ug/l		50 U	ug/l	50
bis(2-Chloroethoxy)methane		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4-Dichlorophenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
1,2,4-Trichlorobenzene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Naphthalene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Chloroaniline		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Hexachlorobutadiene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Chloro-3-methylphenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Methylnaphthalene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Hexachlorocyclopentadiene		10 UJ	ug/l		10 UJ	ug/l		10 U	ug/l	10	10 U	ug/l	10
2,4,6-Trichlorophenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Dimethylphthalate		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4,5-Trichlorophenol		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
2-Chloronaphthalene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Nitroaniline		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
Acenaphthylene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,6-Dinitrotoluene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
3-Nitroaniline		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
Acenaphthene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4-Dinitrophenol		50 UJ	ug/l		50 UJ	ug/l		50 U	ug/l	50	50 U	ug/l	50
4-Nitrophenol		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
Dibenzofuran		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4-Dinitrotoluene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Diethylphthalate		10 U	ug/l	10	10 U	ug/l	10	3 J	ug/l		2 J	ug/l	
4-Chlorophenyl-phenylether		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Fluorene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Nitroaniline		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50

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Group2 Ground Water Data

Lab Sample Number:	R8709001				R8709002				R8618004				R8618003			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08MW010S				08MW010SD				08MW012S				08MW013S			
Collect Date:	09-SEP-94				09-SEP-94				25-AUG-94				25-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
N-Nitrosodiphenylamine (1)	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,2-Diphenylhydrazine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Bromophenyl-phenylether	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pentachlorophenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Phenanthrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Di-n-Butylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pyrene	10	UJ	ug/l		10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10
Butylbenzylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3,3'-Dichlorobenzidine	20	U	ug/l	20	20	U	ug/l	20	20	U	ug/l	20	20	U	ug/l	20
Benzo(a)anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Chrysene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
bis(2-Ethylhexyl)phthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Di-n-octylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(b)fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(k)fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(a)pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Indeno(1,2,3-cd)pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Dibenz(a,h)anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(g,h,i)perylene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Picoline	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Methyl methanesulfonate	10	UJ	ug/l		10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10
Ethyl methanesulfonate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Acetophenone	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopiperidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenyl-tert-butylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2,6-Dichlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitroso-di-n-butylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosodiethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopyrrolidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzidine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1,2,4,5-Tetrachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pentachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2,3,4,6-Tetrachlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenacetin	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Aminobiphenyl	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pentachloronitrobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pronamide	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
p-(Dimethylamino)azobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
7,12-Dimethylbenz(A)Anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3-Methylcholanthrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pyridine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
N-Nitrosomethylethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosomorpholine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
o-Toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachloropropene	50	UJ	ug/l		50	UJ	ug/l		50	U	ug/l	50	50	U	ug/l	50
p-Phenylenediamine	500	U	ug/l	500	500	U	ug/l	500	500	U	ug/l	500	500	U	ug/l	500

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Group2 Ground Water Data

Lab Sample Number:	R8709001				R8709002				R8618004				R8618003			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08MW010S				08MW010SD				08MW012S				08MW013S			
Collect Date:	09-SEP-94				09-SEP-94				25-AUG-94				25-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Isosafrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1,4-Naphthoquinone	1000	U	ug/l	1000	1000	U	ug/l	1000	1000	U	ug/l	1000	1000	U	ug/l	1000
1,3-Dinitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
5-Nitro-o-toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,3,5-Trinitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Nitroquinoline-1-oxide	500	R	ug/l		500	R	ug/l		500	U	ug/l	500	500	U	ug/l	500
Methapyrilene	50	UJ	ug/l		50	UJ	ug/l		50	U	ug/l	50	50	U	ug/l	50
3,3'-Dimethylbenzidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorophene	500	R	ug/l		500	R	ug/l		500	UJ	ug/l		500	UJ	ug/l	
Aramite	50	UJ	ug/l		50	UJ	ug/l		50	U	ug/l	50	50	U	ug/l	50
2-Chlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3- & 4-Methylphenol (2)	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachloropropene	50	UJ	ug/l		50	UJ	ug/l		50	U	ug/l	50	50	U	ug/l	50
2-Acetylaminofluorene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

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Group2 Ground Water Data

Lab Sample Number:		R8783001			R8618002			23904004			M7490004		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		08MW013I			08MW014S			9MW1			09MW001S		
Collect Date:		22-SEP-94			25-AUG-94			29-JAN-93			09-JUL-94		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES	ug/l												
N-Nitrosodimethylamine		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Phenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Aniline		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 UJ	ug/l	
bis (2-Chloroethyl) ether		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Benzyl Alcohol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Methylphenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
bis(2-Chloroisopropyl)ether		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
N-Nitroso-di-n-propylamine		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Hexachloroethane		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Nitrobenzene		10 U	ug/l	10	3 J	ug/l		10 U	ug/l	10	10 U	ug/l	10
Isophorone		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Nitrophenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4-Dimethylphenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Benzoic acid		50 U	ug/l	50	17 J	ug/l		50 U	ug/l	50	50 U	ug/l	50
bis(2-Chloroethoxy)methane		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4-Dichlorophenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
1,2,4-Trichlorobenzene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Naphthalene		10 U	ug/l	10	170	ug/l		10 U	ug/l	10	10 U	ug/l	10
4-Chloroaniline		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 UJ	ug/l	
Hexachlorobutadiene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Chloro-3-methylphenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Methylnaphthalene		10 U	ug/l	10	110	ug/l		10 U	ug/l	10	10 U	ug/l	10
Hexachlorocyclopentadiene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4,6-Trichlorophenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Dimethylphthalate		10 U	ug/l	10	17	ug/l		10 U	ug/l	10	10 U	ug/l	10
2,4,5-Trichlorophenol		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
2-Chloronaphthalene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Nitroaniline		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
Acenaphthylene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,6-Dinitrotoluene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
3-Nitroaniline		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
Acenaphthene		10 U	ug/l	10	5 J	ug/l		10 U	ug/l	10	10 U	ug/l	10
2,4-Dinitrophenol		50 UJ	ug/l		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
4-Nitrophenol		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
Dibenzofuran		10 U	ug/l	10	3 J	ug/l		10 U	ug/l	10	10 U	ug/l	10
2,4-Dinitrotoluene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Diethylphthalate		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Chlorophenyl-phenylether		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Fluorene		10 U	ug/l	10	7 J	ug/l		10 U	ug/l	10	10 U	ug/l	10
4-Nitroaniline		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50

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Group2 Ground Water Data

Lab Sample Number:	R8783001				R8618002				23904004				M7490004			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08MW013I				08MW014S				9MW1				09MW001S			
Collect Date:	22-SEP-94				25-AUG-94				29-JAN-93				09-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
N-Nitrosodiphenylamine (1)	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,2-Diphenylhydrazine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Bromophenyl-phenylether	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pentachlorophenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Phenanthrene	10	U	ug/l	10	5	J	ug/l		10	U	ug/l	10	10	U	ug/l	10
Anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Di-n-Butylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Butylbenzylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3,3'-Dichlorobenzidine	20	U	ug/l	20	20	U	ug/l	20	20	U	ug/l	20	20	U	ug/l	20
Benzo(a)anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Chrysene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
bis(2-Ethylhexyl)phthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Di-n-octylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(b)fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(k)fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(a)pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Indeno(1,2,3-cd)pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	UJ	ug/l	
Dibenz(a,h)anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	UJ	ug/l	
Benzo(g,h,i)perylene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	UJ	ug/l	
2-Picoline	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Methyl methanesulfonate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Ethyl methanesulfonate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Acetophenone	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopiperidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenyl-tert-butylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2,6-Dichlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitroso-di-n-butylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosodiethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopyrrolidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzidine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1,2,4,5-Tetrachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pentachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2,3,4,6-Tetrachlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenacetin	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Aminobiphenyl	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	UJ	ug/l	
Pentachloronitrobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pronamide	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
p-(Dimethylamino)azobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
7,12-Dimethylbenz(A)Anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3-Methylcholanthrene	10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10	10	UJ	ug/l	
Pyridine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
N-Nitrosomethylethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosomorpholine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
o-Toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachloropropene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
p-Phenylenediamine	500	U	ug/l	500	500	U	ug/l	500	50	U	ug/l	50	500	U	ug/l	500

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Group2 Ground Water Data

Lab Sample Number:	R8783001				R8618002				23904004				M7490004			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08MW0131				08MW014S				9MW1				09MW001S			
Collect Date:	22-SEP-94				25-AUG-94				29-JAN-93				09-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Isosafrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1,4-Naphthoquinone	1000	U	ug/l	1000	1000	U	ug/l	1000	50	U	ug/l	50	1000	UJ	ug/l	
1,3-Dinitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
5-Nitro-o-toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,3,5-Trinitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Nitroquinoline-1-oxide	500	UJ	ug/l		500	U	ug/l	500	10	U	ug/l	10	500	UJ	ug/l	
Methapyrilene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	UJ	ug/l	
3,3'-Dimethylbenzidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorophene	500	R	ug/l		500	UJ	ug/l		50	U	ug/l	50	500	R	ug/l	
Aramite	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Chlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3- & 4-Methylphenol (2)	10	U	ug/l	10	10	U	ug/l	10	-		ug/l		10	U	ug/l	10
Hexachloropropene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Acetylaminofluorene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23904005			M7503002			23904006			M7503001		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		9MW2			09MW002S			9MW3			09MW003S		
Collect Date:		29-JAN-93			11-JUL-94			29-JAN-93			11-JUL-94		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES	ug/l												
N-Nitrosodimethylamine		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 UJ	ug/l	
Phenol		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
Aniline		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 UJ	ug/l	
bis (2-Chloroethyl) ether		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 UJ	ug/l	
Benzyl Alcohol		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
2-Methylphenol		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
bis(2-Chloroisopropyl)ether		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 UJ	ug/l	
N-Nitroso-di-n-propylamine		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 UJ	ug/l	
Hexachloroethane		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 UJ	ug/l	
Nitrobenzene		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 UJ	ug/l	
Isophorone		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 UJ	ug/l	
2-Nitrophenol		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
2,4-Dimethylphenol		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
Benzoic acid		50 U	ug/l	50	100 R	ug/l		50 U	ug/l	50	50 R	ug/l	
bis(2-Chloroethoxy)methane		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 UJ	ug/l	
2,4-Dichlorophenol		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
1,2,4-Trichlorobenzene		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 UJ	ug/l	
Naphthalene		110	ug/l		140	ug/l		10 U	ug/l	10	10 UJ	ug/l	
4-Chloroaniline		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 UJ	ug/l	
Hexachlorobutadiene		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 UJ	ug/l	
4-Chloro-3-methylphenol		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
2-Methylnaphthalene		44	ug/l		53	ug/l		10 U	ug/l	10	10 UJ	ug/l	
Hexachlorocyclopentadiene		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 UJ	ug/l	
2,4,6-Trichlorophenol		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 U	ug/l	10
Dimethylphthalate		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 UJ	ug/l	
2,4,5-Trichlorophenol		50 U	ug/l	50	100 U	ug/l	100	50 U	ug/l	50	50 U	ug/l	50
2-Chloronaphthalene		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 UJ	ug/l	
2-Nitroaniline		50 U	ug/l	50	100 U	ug/l	100	50 U	ug/l	50	50 UJ	ug/l	
Acenaphthylene		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 UJ	ug/l	
2,6-Dinitrotoluene		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 UJ	ug/l	
3-Nitroaniline		50 U	ug/l	50	100 U	ug/l	100	50 U	ug/l	50	50 UJ	ug/l	
Acenaphthene		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 UJ	ug/l	
2,4-Dinitrophenol		50 U	ug/l	50	100 U	ug/l	100	50 U	ug/l	50	50 U	ug/l	50
4-Nitrophenol		50 U	ug/l	50	100 U	ug/l	100	50 U	ug/l	50	50 U	ug/l	50
Dibenzofuran		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 UJ	ug/l	
2,4-Dinitrotoluene		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 UJ	ug/l	
Diethylphthalate		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 UJ	ug/l	
4-Chlorophenyl-phenylether		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 UJ	ug/l	
Fluorene		10 U	ug/l	10	20 U	ug/l	20	10 U	ug/l	10	10 UJ	ug/l	
4-Nitroaniline		50 U	ug/l	50	100 U	ug/l	100	50 U	ug/l	50	50 UJ	ug/l	

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Group2 Ground Water Data

Lab Sample Number:	23904005				M7503002				23904006				M7503001			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	9MW2				09MW002S				9MW3				09MW003S			
Collect Date:	29-JAN-93				11-JUL-94				29-JAN-93				11-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	50	U	ug/l	50	100	U	ug/l	100	50	U	ug/l	50	50	U	ug/l	50
N-Nitrosodiphenylamine (1)	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
1,2-Diphenylhydrazine	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
4-Bromophenyl-phenylether	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
Hexachlorobenzene	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
Pentachlorophenol	50	U	ug/l	50	100	U	ug/l	100	50	U	ug/l	50	50	U	ug/l	50
Phenanthrene	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
Anthracene	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
Di-n-Butylphthalate	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
Fluoranthene	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
Pyrene	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
Butylbenzylphthalate	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
3,3'-Dichlorobenzidine	20	U	ug/l	20	40	U	ug/l	40	20	U	ug/l	20	20	UJ	ug/l	
Benzo(a)anthracene	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
Chrysene	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
bis(2-Ethylhexyl)phthalate	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
Di-n-octylphthalate	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
Benzo(b)fluoranthene	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
Benzo(k)fluoranthene	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
Benzo(a)pyrene	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
Indeno(1,2,3-cd)pyrene	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
Dibenz(a,h)anthracene	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
Benzo(g,h,i)perylene	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
2-Picoline	50	U	ug/l	50	100	U	ug/l	100	50	U	ug/l	50	50	UJ	ug/l	
Methyl methanesulfonate	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
Ethyl methanesulfonate	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
Acetophenone	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopiperidine	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
Phenyl-tert-butylamine	50	U	ug/l	50	100	U	ug/l	100	50	U	ug/l	50	50	UJ	ug/l	
2,6-Dichlorophenol	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
N-Nitroso-di-n-butylamine	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
N-Nitrosodiethylamine	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
N-Nitrosopyrrolidine	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
Benzidine	50	U	ug/l	50	100	U	ug/l	100	50	U	ug/l	50	50	UJ	ug/l	
1,2,4,5-Tetrachlorobenzene	50	U	ug/l	50	100	U	ug/l	100	50	U	ug/l	50	50	UJ	ug/l	
Pentachlorobenzene	50	U	ug/l	50	100	U	ug/l	100	50	U	ug/l	50	50	UJ	ug/l	
1-Naphthylamine	50	U	ug/l	50	100	U	ug/l	100	50	U	ug/l	50	50	UJ	ug/l	
2-Naphthylamine	50	U	ug/l	50	100	U	ug/l	100	50	U	ug/l	50	50	UJ	ug/l	
2,3,4,6-Tetrachlorophenol	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
Phenacetin	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
4-Aminobiphenyl	50	U	ug/l	50	100	U	ug/l	100	50	U	ug/l	50	50	UJ	ug/l	
Pentachloronitrobenzene	50	U	ug/l	50	100	U	ug/l	100	50	U	ug/l	50	50	UJ	ug/l	
Pronamide	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
p-(Dimethylamino)azobenzene	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
7,12-Dimethylbenz(A)Anthracene	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
3-Methylcholanthrene	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
Pyridine	50	U	ug/l	50	100	U	ug/l	100	50	U	ug/l	50	50	UJ	ug/l	
N-Nitrosomethylethylamine	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
N-Nitrosomorpholine	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
o-Toluidine	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
Hexachloropropene	50	U	ug/l	50	100	U	ug/l	100	50	U	ug/l	50	50	UJ	ug/l	
p-Phenylenediamine	50	U	ug/l	50	1000	U	ug/l	1000	50	U	ug/l	50	500	UJ	ug/l	

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Group2 Ground Water Data

Lab Sample Number:	23904005				M7503002				23904006				M7503001			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	9MW2				09MW002S				9MW3				09MW003S			
Collect Date:	29-JAN-93				11-JUL-94				29-JAN-93				11-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	50	U	ug/l	50	100	U	ug/l	100	50	U	ug/l	50	50	UJ	ug/l	
Isosafrole	50	U	ug/l	50	100	U	ug/l	100	50	U	ug/l	50	50	UJ	ug/l	
1,4-Naphthoquinone	50	U	ug/l	50	2000	U	ug/l	2000	50	U	ug/l	50	1000	UJ	ug/l	
1,3-Dinitrobenzene	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
5-Nitro-o-toluidine	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
1,3,5-Trinitrobenzene	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
4-Nitroquinoline-1-oxide	10	U	ug/l	10	1000	U	ug/l	1000	10	U	ug/l	10	500	UJ	ug/l	
Methapyrilene	50	U	ug/l	50	100	U	ug/l	100	50	U	ug/l	50	50	UJ	ug/l	
3,3'-Dimethylbenzidine	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	
Hexachlorophene	50	U	ug/l	50	1000	U	ug/l	1000	50	U	ug/l	50	500	UJ	ug/l	
Aramite	50	U	ug/l	50	100	U	ug/l	100	50	U	ug/l	50	50	UJ	ug/l	
2-Chlorophenol	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	U	ug/l	10
3- & 4-Methylphenol (2)	-		ug/l		20	U	ug/l	20	-		ug/l		10	U	ug/l	10
Hexachloropropene	50	U	ug/l	50	100	U	ug/l	100	50	U	ug/l	50	50	UJ	ug/l	
2-Acetylaminofluorene	10	U	ug/l	10	20	U	ug/l	20	10	U	ug/l	10	10	UJ	ug/l	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23904003				M7490003				23904002				M7503003			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		S-2				OSMW002S				S-3				OSMW003S			
Collect Date:		29-JAN-93				09-JUL-94				28-JAN-93				11-JUL-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/l																
N-Nitrosodimethylamine		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenol		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Aniline		10	U	ug/l	10	10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10
bis (2-Chloroethyl) ether		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzyl Alcohol		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Methylphenol		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
bis(2-Chloroisopropyl)ether		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitroso-di-n-propylamine		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachloroethane		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Nitrobenzene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Isophorone		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Nitrophenol		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4-Dimethylphenol		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzoic acid		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
bis(2-Chloroethoxy)methane		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4-Dichlorophenol		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,2,4-Trichlorobenzene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Naphthalene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Chloroaniline		10	U	ug/l	10	10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10
Hexachlorobutadiene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Chloro-3-methylphenol		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Methylnaphthalene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorocyclopentadiene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4,6-Trichlorophenol		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Dimethylphthalate		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4,5-Trichlorophenol		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Chloronaphthalene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Nitroaniline		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Acenaphthylene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,6-Dinitrotoluene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3-Nitroaniline		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Acenaphthene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4-Dinitrophenol		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
4-Nitrophenol		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Dibenzofuran		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4-Dinitrotoluene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Diethylphthalate		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Chlorophenyl-phenylether		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Fluorene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Nitroaniline		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23904003				M7490003				23904002				M7503003			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	S-2				OSMW002S				S-3				OSMW003S			
Collect Date:	29-JAN-93				09-JUL-94				28-JAN-93				11-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
N-Nitrosodiphenylamine (1)	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,2-Diphenylhydrazine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Bromophenyl-phenylether	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pentachlorophenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Phenanthrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Di-n-Butylphthalate	11	U	ug/l	11	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Butylbenzylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3,3'-Dichlorobenzidine	20	U	ug/l	20	20	U	ug/l	20	20	U	ug/l	20	20	U	ug/l	20
Benzo(a)anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Chrysene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
bis(2-Ethylhexyl)phthalate	10	U	ug/l	10	10	U	ug/l	10	2	J	ug/l		10	U	ug/l	10
Di-n-octylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(b)fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(k)fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(a)pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Indeno(1,2,3-cd)pyrene	10	U	ug/l	10	10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10
Dibenz(a,h)anthracene	10	U	ug/l	10	10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10
Benzo(g,h,i)perylene	10	U	ug/l	10	10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10
2-Picoline	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Methyl methanesulfonate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Ethyl methanesulfonate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Acetophenone	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopiperidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenyl-tert-butylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2,6-Dichlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitroso-di-n-butylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosodiethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopyrrolidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzidine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1,2,4,5-Tetrachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pentachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2,3,4,6-Tetrachlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenacetin	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Aminobiphenyl	50	U	ug/l	50	50	UJ	ug/l		50	U	ug/l	50	50	U	ug/l	50
Pentachloronitrobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pronamide	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
p-(Dimethylamino)azobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
7,12-Dimethylbenz(A)Anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3-Methylcholanthrene	10	U	ug/l	10	10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10
Pyridine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
N-Nitrosomethylethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosomorpholine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
o-Toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachloropropene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
p-Phenylenediamine	50	U	ug/l	50	500	U	ug/l	500	50	U	ug/l	50	500	U	ug/l	500

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23904003				M7490003				23904002				M7503003			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	S-2				OSMW002S				S-3				OSMW003S			
Collect Date:	29-JAN-93				09-JUL-94				28-JAN-93				11-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Isosafrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1,4-Naphthoquinone	50	U	ug/l	50	1000	UJ	ug/l		50	U	ug/l	50	1000	U	ug/l	1000
1,3-Dinitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
5-Nitro-o-toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,3,5-Trinitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Nitroquinoline-1-oxide	10	U	ug/l	10	500	UJ	ug/l		10	U	ug/l	10	500	U	ug/l	500
Methapyrilene	50	U	ug/l	50	50	UJ	ug/l		50	U	ug/l	50	50	U	ug/l	50
3,3'-Dimethylbenzidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorophene	50	U	ug/l	50	500	R	ug/l		50	U	ug/l	50	500	U	ug/l	500
Aramite	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Chlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3- & 4-Methylphenol (2)	-		ug/l		10	U	ug/l	10	-		ug/l		10	U	ug/l	10
Hexachloropropene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Acetylaminofluorene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8608001				R8709001RE		
Site		GROUP2				GROUP2		
Locator		100P001				D8MW010SRE		
Collect Date:		24-AUG-94				09-SEP-94		
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/l								
N-Nitrosodimethylamine		10	U	ug/l	10	10	UJ	ug/l	
Phenol		10	U	ug/l	10	10	UJ	ug/l	
Aniline		10	U	ug/l	10	10	UJ	ug/l	
bis (2-Chloroethyl) ether		10	U	ug/l	10	10	UJ	ug/l	
Benzyl Alcohol		10	U	ug/l	10	10	UJ	ug/l	
2-Methylphenol		10	U	ug/l	10	10	UJ	ug/l	
bis(2-Chloroisopropyl)ether		10	U	ug/l	10	10	UJ	ug/l	
N-Nitroso-di-n-propylamine		10	U	ug/l	10	10	UJ	ug/l	
Hexachloroethane		10	U	ug/l	10	10	UJ	ug/l	
Nitrobenzene		10	U	ug/l	10	10	UJ	ug/l	
Isophorone		10	U	ug/l	10	10	UJ	ug/l	
2-Nitrophenol		10	U	ug/l	10	10	UJ	ug/l	
2,4-Dimethylphenol		10	U	ug/l	10	10	UJ	ug/l	
Benzoic acid		50	U	ug/l	50	50	UJ	ug/l	
bis(2-Chloroethoxy)methane		10	U	ug/l	10	10	UJ	ug/l	
2,4-Dichlorophenol		10	U	ug/l	10	10	UJ	ug/l	
1,2,4-Trichlorobenzene		10	U	ug/l	10	10	UJ	ug/l	
Naphthalene		10	U	ug/l	10	10	UJ	ug/l	
4-Chloroaniline		10	U	ug/l	10	10	UJ	ug/l	
Hexachlorobutadiene		10	U	ug/l	10	10	UJ	ug/l	
4-Chloro-3-methylphenol		10	U	ug/l	10	10	UJ	ug/l	
2-Methylnaphthalene		10	U	ug/l	10	10	UJ	ug/l	
Hexachlorocyclopentadiene		10	U	ug/l	10	10	UJ	ug/l	
2,4,6-Trichlorophenol		10	U	ug/l	10	10	UJ	ug/l	
Dimethylphthalate		10	U	ug/l	10	10	UJ	ug/l	
2,4,5-Trichlorophenol		50	U	ug/l	50	50	UJ	ug/l	
2-Chloronaphthalene		10	U	ug/l	10	10	UJ	ug/l	
2-Nitroaniline		50	U	ug/l	50	50	UJ	ug/l	
Acenaphthylene		10	U	ug/l	10	10	UJ	ug/l	
2,6-Dinitrotoluene		10	U	ug/l	10	10	UJ	ug/l	
3-Nitroaniline		50	U	ug/l	50	50	UJ	ug/l	
Acenaphthene		10	U	ug/l	10	10	UJ	ug/l	
2,4-Dinitrophenol		50	U	ug/l	50	50	UJ	ug/l	
4-Nitrophenol		50	UJ	ug/l		50	UJ	ug/l	
Dibenzofuran		10	U	ug/l	10	10	UJ	ug/l	
2,4-Dinitrotoluene		10	U	ug/l	10	10	UJ	ug/l	
Diethylphthalate		10	U	ug/l	10	10	UJ	ug/l	
4-Chlorophenyl-phenylether		10	U	ug/l	10	10	UJ	ug/l	
Fluorene		10	U	ug/l	10	10	UJ	ug/l	
4-Nitroaniline		50	U	ug/l	50	50	UJ	ug/l	

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	R8608001				R8709001RE			
Site	GROUP2				GROUP2			
Locator	100P001				08MW010SRE			
Collect Date:	24-AUG-94				09-SEP-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	50	U	ug/l	50	50	UJ	ug/l	
N-Nitrosodiphenylamine (1)	10	U	ug/l	10	10	UJ	ug/l	
1,2-Diphenylhydrazine	10	U	ug/l	10	10	UJ	ug/l	
4-Bromophenyl-phenylether	10	U	ug/l	10	10	UJ	ug/l	
Hexachlorobenzene	10	U	ug/l	10	10	UJ	ug/l	
Pentachlorophenol	50	U	ug/l	50	50	UJ	ug/l	
Phenanthrene	10	U	ug/l	10	10	UJ	ug/l	
Anthracene	10	U	ug/l	10	10	UJ	ug/l	
Di-n-Butylphthalate	10	U	ug/l	10	10	UJ	ug/l	
Fluoranthene	10	U	ug/l	10	10	UJ	ug/l	
Pyrene	10	U	ug/l	10	10	UJ	ug/l	
Butylbenzylphthalate	10	U	ug/l	10	10	UJ	ug/l	
3,3'-Dichlorobenzidine	20	U	ug/l	20	20	UJ	ug/l	
Benzo(a)anthracene	10	U	ug/l	10	10	UJ	ug/l	
Chrysene	10	U	ug/l	10	10	UJ	ug/l	
bis(2-Ethylhexyl)phthalate	10	U	ug/l	10	10	UJ	ug/l	
Di-n-octylphthalate	10	U	ug/l	10	10	UJ	ug/l	
Benzo(b)fluoranthene	10	U	ug/l	10	10	UJ	ug/l	
Benzo(k)fluoranthene	10	U	ug/l	10	10	UJ	ug/l	
Benzo(a)pyrene	10	U	ug/l	10	10	UJ	ug/l	
Indeno(1,2,3-cd)pyrene	10	U	ug/l	10	10	UJ	ug/l	
Dibenz(a,h)anthracene	10	U	ug/l	10	10	UJ	ug/l	
Benzo(g,h,i)perylene	10	U	ug/l	10	10	UJ	ug/l	
2-Picoline	50	U	ug/l	50	50	UJ	ug/l	
Methyl methanesulfonate	10	U	ug/l	10	10	UJ	ug/l	
Ethyl methanesulfonate	10	U	ug/l	10	10	UJ	ug/l	
Acetophenone	10	U	ug/l	10	10	UJ	ug/l	
N-Nitrosopiperidine	10	U	ug/l	10	10	UJ	ug/l	
Phenyl-tert-butylamine	50	U	ug/l	50	50	UJ	ug/l	
2,6-Dichlorophenol	10	U	ug/l	10	10	UJ	ug/l	
N-Nitroso-di-n-butylamine	10	U	ug/l	10	10	UJ	ug/l	
N-Nitrosodiethylamine	10	U	ug/l	10	10	UJ	ug/l	
N-Nitrosopyrrolidine	10	U	ug/l	10	10	UJ	ug/l	
Benzidine	50	U	ug/l	50	50	UJ	ug/l	
1,2,4,5-Tetrachlorobenzene	50	U	ug/l	50	50	UJ	ug/l	
Pentachlorobenzene	50	U	ug/l	50	50	UJ	ug/l	
1-Naphthylamine	50	U	ug/l	50	50	UJ	ug/l	
2-Naphthylamine	50	U	ug/l	50	50	UJ	ug/l	
2,3,4,6-Tetrachlorophenol	10	U	ug/l	10	10	UJ	ug/l	
Phenacetin	10	U	ug/l	10	10	UJ	ug/l	
4-Aminobiphenyl	50	U	ug/l	50	50	UJ	ug/l	
Pentachloronitrobenzene	50	U	ug/l	50	50	UJ	ug/l	
Pronamide	10	U	ug/l	10	10	UJ	ug/l	
p-(Dimethylamino)azobenzene	10	U	ug/l	10	10	UJ	ug/l	
7,12-Dimethylbenz(A)Anthracene	10	U	ug/l	10	10	UJ	ug/l	
3-Methylcholanthrene	10	U	ug/l	10	10	UJ	ug/l	
Pyridine	50	U	ug/l	50	50	UJ	ug/l	
N-Nitrosomethylethylamine	10	U	ug/l	10	10	UJ	ug/l	
N-Nitrosomorpholine	10	U	ug/l	10	10	UJ	ug/l	
o-Toluidine	10	U	ug/l	10	10	UJ	ug/l	
Hexachloropropene	50	U	ug/l	50	50	UJ	ug/l	
p-Phenylenediamine	500	UJ	ug/l		500	UJ	ug/l	

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	R8608001				R8709001RE			
Site	GROUP2				GROUP2			
Locator	100P001				08MW010SRE			
Collect Date:	24-AUG-94				09-SEP-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	50	U	ug/l	50	50	UJ	ug/l	
Isosafrole	50	U	ug/l	50	50	UJ	ug/l	
1,4-Naphthoquinone	1000	U	ug/l	1000	1000	UJ	ug/l	
1,3-Dinitrobenzene	10	U	ug/l	10	10	UJ	ug/l	
5-Nitro-o-toluidine	10	U	ug/l	10	10	UJ	ug/l	
1,3,5-Trinitrobenzene	10	UJ	ug/l		10	UJ	ug/l	
4-Nitroquinoline-1-oxide	500	R	ug/l		500	UJ	ug/l	
Methapyrilene	50	U	ug/l	50	50	UJ	ug/l	
3,3'-Dimethylbenzidine	10	U	ug/l	10	10	UJ	ug/l	
Hexachlorophene	500	R	ug/l		500	R	ug/l	
Aramite	50	U	ug/l	50	50	UJ	ug/l	
2-Chlorophenol	10	U	ug/l	10	10	UJ	ug/l	
3- & 4-Methylphenol (2)	10	U	ug/l	10	10	UJ	ug/l	
Hexachloropropene	50	U	ug/l	50	50	UJ	ug/l	
2-Acetylaminofluorene	10	U	ug/l	10	10	UJ	ug/l	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8783002				R8627001				R8627002				R8627005			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08MW015I				08MW016S				08MW016SD				08MW017S			
Collect Date:		22-SEP-94				26-AUG-94				26-AUG-94				26-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/l																
N-Nitrosodimethylamine		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenol		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Aniline		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
bis(2-Chloroethyl) ether		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzyl Alcohol		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Methylphenol		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
bis(2-Chloroisopropyl) ether		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitroso-di-n-propylamine		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachloroethane		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Nitrobenzene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Isophorone		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Nitrophenol		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4-Dimethylphenol		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzoic acid		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
bis(2-Chloroethoxy) methane		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4-Dichlorophenol		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,2,4-Trichlorobenzene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Naphthalene		10	U	ug/l	10	81		ug/l		76		ug/l		10	U	ug/l	10
4-Chloroaniline		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorobutadiene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Chloro-3-methylphenol		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Methylnaphthalene		10	U	ug/l	10	44		ug/l		41		ug/l		10	U	ug/l	10
Hexachlorocyclopentadiene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4,6-Trichlorophenol		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Dimethylphthalate		10	U	ug/l	10	4	J	ug/l		4	J	ug/l		10	U	ug/l	10
2,4,5-Trichlorophenol		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Chloronaphthalene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Nitroaniline		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Acenaphthylene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,6-Dinitrotoluene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3-Nitroaniline		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Acenaphthene		10	U	ug/l	10	2	J	ug/l		2	J	ug/l		10	U	ug/l	10
2,4-Dinitrophenol		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
4-Nitrophenol		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Dibenzofuran		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4-Dinitrotoluene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Diethylphthalate		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Chlorophenyl-phenylether		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Fluorene		10	U	ug/l	10	4	J	ug/l		4	J	ug/l		10	U	ug/l	10
4-Nitroaniline		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
4,6-Dinitro-2-methylphenol		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
N-Nitrosodiphenylamine (1)		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,2-Diphenylhydrazine		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Bromophenyl-phenylether		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorobenzene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pentachlorophenol		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Phenanthrene		10	U	ug/l	10	10	U	ug/l	10	3	J	ug/l		10	U	ug/l	10
Anthracene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Di-n-Butylphthalate		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Fluoranthene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10

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Group2 Ground Water Data

Lab Sample Number:	R8783002				R8627001				R8627002				R8627005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08MW015I				08MW016S				08MW016SD				08MW017S			
Collect Date:	22-SEP-94				26-AUG-94				26-AUG-94				26-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Butylbenzylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3,3-Dichlorobenzidine	20	U	ug/l	20	20	U	ug/l	20	20	U	ug/l	20	20	U	ug/l	20
Benzo (a) anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Chrysene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
bis(2-Ethylhexyl) phthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Di-n-octylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo (b) fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo (k) fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo (a) pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Indeno (1,2,3-cd) pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Dibenz (a,h) anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo (g,h,i) perylene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Picoline	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Methyl methanesulfonate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Ethyl methanesulfonate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Acetophenone	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopiperidine	10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenyl-tert-butylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2,6-Dichlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitroso-di-n-butylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosodiethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopyrrolidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzidine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1,2,4,5-Tetrachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pentachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2,3,4,6-Tetrachlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenacetin	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Aminobiphenyl	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pentachloronitrobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pronamide	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
p-(Dimethylamino)azobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
7,12-Dimethylbenz(A)Anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3-Methylcholanthrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pyridine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
N-Nitrosomethylethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosomorpholine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
o-Toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachloropropene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
p-Phenylenediamine	500	U	ug/l	500	500	U	ug/l	500	500	U	ug/l	500	500	U	ug/l	500
Safrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Isosafrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1,4-Naphthoquinone	1000	U	ug/l	1000	1000	U	ug/l	1000	1000	U	ug/l	1000	1000	U	ug/l	1000
1,3-Dinitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
5-Nitro-o-toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,3,5-Trinitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Nitroquinoline-1-oxide	500	UJ	ug/l		500	U	ug/l	500	500	U	ug/l	500	500	U	ug/l	500
Methapyrilene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
3,3-Dimethylbenzidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorophene	500	R	ug/l		500	UJ	ug/l		500	UJ	ug/l		500	UJ	ug/l	

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Group2 Ground Water Data

Lab Sample Number:	R8783002				R8627001				R8627002				R8627005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08MW015I				08MW016S				08MW016SD				08MW017S			
Collect Date:	22-SEP-94				26-AUG-94				26-AUG-94				26-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Aramite	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Chlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3- & 4-Methylphenol (2)	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachloropropene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Acetylaminofluorene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	R8627006				R8783003				R8783004				R9036001			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08MW018S				08MW019S				08MW019SD				08MW020S			
Collect Date:	26-AUG-94				22-SEP-94				22-SEP-94				08-NOV-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/l																
N-Nitrosodimethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Aniline	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
bis(2-Chloroethyl) ether	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzyl Alcohol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Methylphenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
bis(2-Chloroisopropyl) ether	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitroso-di-n-propylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachloroethane	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Nitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Isophorone	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Nitrophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4-Dimethylphenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzoic acid	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
bis(2-Chloroethoxy) methane	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4-Dichlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,2,4-Trichlorobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Naphthalene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Chloroaniline	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	UJ	ug/l	
Hexachlorobutadiene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Chloro-3-methylphenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Methylnaphthalene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorocyclopentadiene	10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4,6-Trichlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Dimethylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	4	J	ug/l	
2,4,5-Trichlorophenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Chloronaphthalene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Nitroaniline	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Acenaphthylene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,6-Dinitrotoluene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3-Nitroaniline	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Acenaphthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4-Dinitrophenol	50	UJ	ug/l		50	UJ	ug/l		50	UJ	ug/l		50	U	ug/l	50
4-Nitrophenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Dibenzofuran	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4-Dinitrotoluene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Diethylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Chlorophenyl-phenylether	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Fluorene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Nitroaniline	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	R8627006				R8783003				R8783004				R9036001			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08MW018S				08MW019S				08MW019SD				08MW020S			
Collect Date:	26-AUG-94				22-SEP-94				22-SEP-94				08-NOV-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
N-Nitrosodiphenylamine (1)	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,2-Diphenylhydrazine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Bromophenyl-phenylether	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pentachlorophenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Phenanthrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Di-n-Butylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pyrene	10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Butylbenzylphthalate	10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3,3-Dichlorobenzidine	20	U	ug/l	20	20	U	ug/l	20	20	U	ug/l	20	20	U	ug/l	20
Benzo (a) anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Chrysene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
bis(2-Ethylhexyl) phthalate	10	U	ug/l	10	3	J	ug/l		10	U	ug/l	10	10	U	ug/l	10
Di-n-octylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo (b) fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo (k) fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo (a) pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Indeno (1,2,3-cd) pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Dibenz (a,h) anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo (g,h,i) perylene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Picoline	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Methyl methanesulfonate	10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10	10	UJ	ug/l	
Ethyl methanesulfonate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Acetophenone	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopiperidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenyl-tert-butylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2,6-Dichlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitroso-di-n-butylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosodiethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopyrrolidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzidine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	UJ	ug/l	
1,2,4,5-Tetrachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pentachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2,3,4,6-Tetrachlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenacetin	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Aminobiphenyl	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pentachloronitrobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pronamide	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
p-(Dimethylamino)azobenzene	10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
7,12-Dimethylbenz(A)Anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3-Methylcholanthrene	10	U	ug/l	10	10	UJ	ug/l		10	UJ	ug/l		10	U	ug/l	10
Pyridine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
N-Nitrosomethylethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosomorpholine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
o-Toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachloropropene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
p-Phenylenediamine	500	U	ug/l	500	500	U	ug/l	500	500	U	ug/l	500	500	U	ug/l	500

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	R8627006				R8783003				R8783004				R9036001			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08MW018S				08MW019S				08MW019SD				08MW020S			
Collect Date:	26-AUG-94				22-SEP-94				22-SEP-94				08-NOV-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Isosafrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1,4-Naphthoquinone	1000	U	ug/l	1000	1000	U	ug/l	1000	1000	U	ug/l	1000	1000	UJ	ug/l	
1,3-Dinitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
5-Nitro-o-toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,3,5-Trinitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Nitroquinoline-1-oxide	500	R	ug/l		500	UJ	ug/l		500	UJ	ug/l		500	U	ug/l	500
Methapyrilene	50	UJ	ug/l		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
3,3-Dimethylbenzidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorophene	500	R	ug/l		500	R	ug/l		500	R	ug/l		500	U	ug/l	500
Aramite	50	UJ	ug/l		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Chlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3- & 4-Methylphenol (2)	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachloropropene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Acetylaminofluorene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number: R9036002
Site GROUP2
Locator 08MW020SD
Collect Date: 08-NOV-94

		VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/l				
N-Nitrosodimethylamine		10	U	ug/l	10
Phenol		10	U	ug/l	10
Aniline		10	U	ug/l	10
bis(2-Chloroethyl) ether		10	U	ug/l	10
Benzyl Alcohol		10	U	ug/l	10
2-Methylphenol		10	U	ug/l	10
bis(2-Chloroisopropyl) ether		10	U	ug/l	10
N-Nitroso-di-n-propylamine		10	U	ug/l	10
Hexachloroethane		10	U	ug/l	10
Nitrobenzene		10	U	ug/l	10
Isophorone		10	U	ug/l	10
2-Nitrophenol		10	U	ug/l	10
2,4-Dimethylphenol		10	U	ug/l	10
Benzoic acid		50	U	ug/l	50
bis(2-Chloroethoxy) methane		10	U	ug/l	10
2,4-Dichlorophenol		10	U	ug/l	10
1,2,4-Trichlorobenzene		10	U	ug/l	10
Naphthalene		10	U	ug/l	10
4-Chloroaniline		10	UJ	ug/l	
Hexachlorobutadiene		10	U	ug/l	10
4-Chloro-3-methylphenol		3	J	ug/l	
2-Methylnaphthalene		10	U	ug/l	10
Hexachlorocyclopentadiene		10	U	ug/l	10
2,4,6-Trichlorophenol		10	U	ug/l	10
Dimethylphthalate		4	J	ug/l	
2,4,5-Trichlorophenol		50	U	ug/l	50
2-Chloronaphthalene		10	U	ug/l	10
2-Nitroaniline		50	U	ug/l	50
Acenaphthylene		10	U	ug/l	10
2,6-Dinitrotoluene		10	U	ug/l	10
3-Nitroaniline		50	U	ug/l	50
Acenaphthene		10	U	ug/l	10
2,4-Dinitrophenol		50	U	ug/l	50
4-Nitrophenol		50	U	ug/l	50
Dibenzofuran		10	U	ug/l	10
2,4-Dinitrotoluene		10	U	ug/l	10
Diethylphthalate		10	U	ug/l	10
4-Chlorophenyl-phenylether		10	U	ug/l	10
Fluorene		10	U	ug/l	10
4-Nitroaniline		50	U	ug/l	50

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	R9036002
Site	GROUP2
Locator	08MW020SD
Collect Date:	08-NOV-94

	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	50	U	ug/l	50
N-Nitrosodiphenylamine (1)	10	U	ug/l	10
1,2-Diphenylhydrazine	10	U	ug/l	10
4-Bromophenyl-phenylether	10	U	ug/l	10
Hexachlorobenzene	10	U	ug/l	10
Pentachlorophenol	50	U	ug/l	50
Phenanthrene	10	U	ug/l	10
Anthracene	10	U	ug/l	10
Di-n-Butylphthalate	10	U	ug/l	10
Fluoranthene	10	U	ug/l	10
Pyrene	10	U	ug/l	10
Butylbenzylphthalate	10	U	ug/l	10
3,3-Dichlorobenzidine	20	U	ug/l	20
Benzo (a) anthracene	10	U	ug/l	10
Chrysene	10	U	ug/l	10
bis(2-Ethylhexyl) phthalate	10	U	ug/l	10
Di-n-octylphthalate	10	U	ug/l	10
Benzo (b) fluoranthene	10	U	ug/l	10
Benzo (k) fluoranthene	10	U	ug/l	10
Benzo (a) pyrene	10	U	ug/l	10
Indeno (1,2,3-cd) pyrene	10	U	ug/l	10
Dibenz (a,h) anthracene	10	U	ug/l	10
Benzo (g,h,i) perylene	10	U	ug/l	10
2-Picoline	50	U	ug/l	50
Methyl methanesulfonate	10	UJ	ug/l	
Ethyl methanesulfonate	10	U	ug/l	10
Acetophenone	10	U	ug/l	10
N-Nitrosopiperidine	10	U	ug/l	10
Phenyl-tert-butylamine	50	U	ug/l	50
2,6-Dichlorophenol	10	U	ug/l	10
N-Nitroso-di-n-butylamine	10	U	ug/l	10
N-Nitrosodiethylamine	10	U	ug/l	10
N-Nitrosopyrrolidine	10	U	ug/l	10
Benzidine	50	UJ	ug/l	
1,2,4,5-Tetrachlorobenzene	50	U	ug/l	50
Pentachlorobenzene	50	U	ug/l	50
1-Naphthylamine	50	U	ug/l	50
2-Naphthylamine	50	U	ug/l	50
2,3,4,6-Tetrachlorophenol	10	U	ug/l	10
Phenacetin	10	U	ug/l	10
4-Aminobiphenyl	50	U	ug/l	50
Pentachloronitrobenzene	50	U	ug/l	50
Pronamide	10	U	ug/l	10
p-(Dimethylamino)azobenzene	10	U	ug/l	10
7,12-Dimethylbenz(A)Anthracene	10	U	ug/l	10
3-Methylcholanthrene	10	U	ug/l	10
Pyridine	50	U	ug/l	50
N-Nitrosomethylethylamine	10	U	ug/l	10
N-Nitrosomorpholine	10	U	ug/l	10
o-Toluidine	10	U	ug/l	10
Hexachloropropene	50	U	ug/l	50
p-Phenylenediamine	500	U	ug/l	500

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	R9036002
Site	GROUP2
Locator	08MW020SD
Collect Date:	08-NOV-94

	VALUE	QUAL	UNITS	DL
Safrole	50	U	ug/l	50
Isosafrole	50	U	ug/l	50
1,4-Naphthoquinone	1000	UJ	ug/l	
1,3-Dinitrobenzene	10	U	ug/l	10
5-Nitro-o-toluidine	10	U	ug/l	10
1,3,5-Trinitrobenzene	10	U	ug/l	10
4-Nitroquinoline-1-oxide	500	U	ug/l	500
Methapyrilene	50	U	ug/l	50
3,3-Dimethylbenzidine	10	U	ug/l	10
Hexachlorophene	500	U	ug/l	500
Aramite	50	U	ug/l	50
2-Chlorophenol	10	U	ug/l	10
3- & 4-Methylphenol (2)	10	U	ug/l	10
Hexachloropropene	50	U	ug/l	50
2-Acetylaminofluorene	10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23918003				M7503004				23918005				R8627004		
Site		GROUP2				GROUP2				GROUP2				GROUP2		
Locator		8MW1				08MW001S				8MW4				08MW004S		
Collect Date:		01-FEB-93				11-JUL-94				01-FEB-93				26-AUG-94		
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/l																
alpha-BHC		.02	U	ug/l	.02	.02	U	ug/l	.02	.04	UJ	ug/l		.02	U	ug/l	.02
beta-BHC		.04	U	ug/l	.04	.04	U	ug/l	.04	.08	UJ	ug/l		.04	U	ug/l	.04
delta-BHC		.02	U	ug/l	.02	.02	U	ug/l	.02	.04	UJ	ug/l		.02	U	ug/l	.02
gamma-BHC (Lindane)		.02	U	ug/l	.02	.02	U	ug/l	.02	.04	UJ	ug/l		.02	U	ug/l	.02
Heptachlor		.02	U	ug/l	.02	.02	U	ug/l	.02	.04	UJ	ug/l		.02	U	ug/l	.02
Aldrin		.02	U	ug/l	.02	.02	U	ug/l	.02	.04	UJ	ug/l		.02	U	ug/l	.02
Heptachlor epoxide		.02	U	ug/l	.02	.02	U	ug/l	.02	.04	U	ug/l	.04	.02	U	ug/l	.02
Endosulfan I		.02	U	ug/l	.02	.02	U	ug/l	.02	.04	U	ug/l	.04	.02	U	ug/l	.02
Dieldrin		.02	U	ug/l	.02	.02	U	ug/l	.02	.04	U	ug/l	.04	.02	U	ug/l	.02
4,4-DDE		.02	U	ug/l	.02	.02	U	ug/l	.02	.04	U	ug/l	.04	.02	U	ug/l	.02
Endrin		.04	U	ug/l	.04	.04	U	ug/l	.04	.08	U	ug/l	.08	.04	U	ug/l	.04
Endosulfan II		.04	U	ug/l	.04	.04	U	ug/l	.04	.08	U	ug/l	.08	.04	U	ug/l	.04
4,4-DDD		.04	U	ug/l	.04	.04	U	ug/l	.04	.08	U	ug/l	.08	.04	U	ug/l	.04
Endosulfan sulfate		.04	U	ug/l	.04	.04	U	ug/l	.04	.08	U	ug/l	.08	.04	U	ug/l	.04
4,4-DDT		.04	U	ug/l	.04	.04	U	ug/l	.04	.08	U	ug/l	.08	.04	U	ug/l	.04
Methoxychlor		.08	U	ug/l	.08	.08	U	ug/l	.08	.16	U	ug/l	.16	.08	U	ug/l	.08
Endrin aldehyde		.04	U	ug/l	.04	.04	U	ug/l	.04	.08	U	ug/l	.08	.052		ug/l	
Endrin ketone		.02	U	ug/l	.02	.04	U	ug/l	.04	.04	U	ug/l	.04	.048		ug/l	
Chlordane		.2	U	ug/l	.2	.2	U	ug/l	.2	.4	U	ug/l	.4	.2	U	ug/l	.2
Chlorobenzilate		.5	U	ug/l	.5	.5	U	ug/l	.5	1	U	ug/l	1	.5	U	ug/l	.5
Diallate		1	U	ug/l	1	1	U	ug/l	1	2	U	ug/l	2	1	U	ug/l	1
Toxaphene		1	U	ug/l	1	1	U	ug/l	1	2	U	ug/l	2	1	U	ug/l	1
Isodrin		.02	U	ug/l	.02	.02	U	ug/l	.02	.04	U	ug/l	.04	.02	U	ug/l	.02
Kepone		1	U	ug/l	1	1	U	ug/l	1	2	U	ug/l	2	1	U	ug/l	1
Aroclor-1016		1	U	ug/l	1	1	U	ug/l	1	2	U	ug/l	2	1	U	ug/l	1
Aroclor-1221		2	U	ug/l	2	2	U	ug/l	2	4	U	ug/l	4	2	U	ug/l	2
Aroclor-1232		2	U	ug/l	2	2	U	ug/l	2	4	U	ug/l	4	2	U	ug/l	2
Aroclor-1242		1	U	ug/l	1	1	U	ug/l	1	2	U	ug/l	2	1	U	ug/l	1
Aroclor-1248		1	U	ug/l	1	1	U	ug/l	1	2	U	ug/l	2	1	U	ug/l	1
Aroclor-1254		.5	U	ug/l	.5	.5	U	ug/l	.5	1	U	ug/l	1	.5	U	ug/l	.5
Aroclor-1260		.5	U	ug/l	.5	.5	U	ug/l	.5	1	U	ug/l	1	.5	U	ug/l	.5

U = NOT DETECTED R = RESULT IS REJECTED
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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23886004				23886005				M7490006				M7490007			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		8MW6				8MW6D				08MW006S				08MW006SD			
Collect Date:		28-JAN-93				28-JAN-93				10-JUL-94				10-JUL-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/l																
alpha-BHC		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
beta-BHC		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
delta-BHC		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
gamma-BHC (Lindane)		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Heptachlor		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Aldrin		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Heptachlor epoxide		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Endosulfan I		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Dieldrin		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
4,4-DDE		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Endrin		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endosulfan II		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
4,4-DDD		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endosulfan sulfate		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
4,4-DDT		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Methoxychlor		.08	U	ug/l	.08	.08	U	ug/l	.08	.08	U	ug/l	.08	.08	U	ug/l	.08
Endrin aldehyde		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endrin ketone		.02	U	ug/l	.02	.02	U	ug/l	.02	.04	U	ug/l	.04	.04	U	ug/l	.04
Chlordane		.2	U	ug/l	.2	.2	U	ug/l	.2	.2	U	ug/l	.2	.2	U	ug/l	.2
Chlorobenzilate		.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5
Diallate		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Toxaphene		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Isodrin		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Kepone		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1016		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1221		2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2
Aroclor-1232		2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2
Aroclor-1242		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1248		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1254		.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5
Aroclor-1260		.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5

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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23918006				23918004				M7490005				R8627003			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		8MW7				8MW8				08MW008S				08MW009S			
Collect Date:		01-FEB-93				01-FEB-93				09-JUL-94				26-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/l																
alpha-BHC		.1	UJ	ug/l		.02	UJ	ug/l		.02	U	ug/l	.02	.02	U	ug/l	.02
beta-BHC		.2	UJ	ug/l		.04	UJ	ug/l		.04	U	ug/l	.04	.04	U	ug/l	.04
delta-BHC		.1	UJ	ug/l		.02	UJ	ug/l		.02	U	ug/l	.02	.02	U	ug/l	.02
gamma-BHC (Lindane)		.1	UJ	ug/l		.02	UJ	ug/l		.02	U	ug/l	.02	.02	U	ug/l	.02
Heptachlor		.1	UJ	ug/l		.02	UJ	ug/l		.02	U	ug/l	.02	.02	U	ug/l	.02
Aldrin		.1	UJ	ug/l		.02	UJ	ug/l		.02	U	ug/l	.02	.02	U	ug/l	.02
Heptachlor epoxide		.1	U	ug/l	.1	.02	UJ	ug/l		.02	U	ug/l	.02	.02	U	ug/l	.02
Endosulfan I		.1	U	ug/l	.1	.02	UJ	ug/l		.02	U	ug/l	.02	.02	U	ug/l	.02
Dieldrin		.1	U	ug/l	.1	.02	UJ	ug/l		.02	U	ug/l	.02	.02	U	ug/l	.02
4,4-DDE		.1	U	ug/l	.1	.02	UJ	ug/l		.02	U	ug/l	.02	.02	U	ug/l	.02
Endrin		.2	U	ug/l	.2	.04	UJ	ug/l		.04	U	ug/l	.04	.04	U	ug/l	.04
Endosulfan II		.2	U	ug/l	.2	.04	UJ	ug/l		.04	U	ug/l	.04	.04	U	ug/l	.04
4,4-DDD		.2	U	ug/l	.2	.04	UJ	ug/l		.04	U	ug/l	.04	.04	U	ug/l	.04
Endosulfan sulfate		.2	U	ug/l	.2	.04	UJ	ug/l		.04	U	ug/l	.04	.04	U	ug/l	.04
4,4-DDT		.2	U	ug/l	.2	.04	UJ	ug/l		.04	U	ug/l	.04	.04	U	ug/l	.04
Methoxychlor		.4	U	ug/l	.4	.08	UJ	ug/l		.08	U	ug/l	.08	.08	U	ug/l	.08
Endrin aldehyde		.2	U	ug/l	.2	.04	UJ	ug/l		.04	U	ug/l	.04	.04	U	ug/l	.04
Endrin ketone		.2	U	ug/l	.2	.02	UJ	ug/l		.04	U	ug/l	.04	.04	U	ug/l	.04
Chlordane		1	U	ug/l	1	.2	UJ	ug/l		.2	U	ug/l	.2	.2	U	ug/l	.2
Chlorobenzilate		2.5	U	ug/l	2.5	.5	UJ	ug/l		.5	U	ug/l	.5	.5	U	ug/l	.5
Diallate		5	U	ug/l	5	1	UJ	ug/l		1	U	ug/l	1	1	U	ug/l	1
Toxaphene		5	U	ug/l	5	1	UJ	ug/l		1	U	ug/l	1	1	U	ug/l	1
Isodrin		.1	U	ug/l	.1	.02	UJ	ug/l		.02	U	ug/l	.02	.02	U	ug/l	.02
Kepone		5	U	ug/l	5	1	UJ	ug/l		1	U	ug/l	1	1	U	ug/l	1
Aroclor-1016		5	U	ug/l	5	1	UJ	ug/l		1	U	ug/l	1	1	U	ug/l	1
Aroclor-1221		10	U	ug/l	10	2	UJ	ug/l		2	U	ug/l	2	2	U	ug/l	2
Aroclor-1232		10	U	ug/l	10	2	UJ	ug/l		2	U	ug/l	2	2	U	ug/l	2
Aroclor-1242		5	U	ug/l	5	1	UJ	ug/l		1	U	ug/l	1	1	U	ug/l	1
Aroclor-1248		5	U	ug/l	5	1	UJ	ug/l		1	U	ug/l	1	1	U	ug/l	1
Aroclor-1254		2.5	U	ug/l	2.5	.5	UJ	ug/l		.5	U	ug/l	.5	.5	U	ug/l	.5
Aroclor-1260		2.5	U	ug/l	2.5	.5	UJ	ug/l		.5	U	ug/l	.5	.5	U	ug/l	.5

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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8709001				R8709002				R8725007				R8618003			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08MW010S				08MW010SD				08MW012S				08MW013S			
Collect Date:		09-SEP-94				09-SEP-94				12-SEP-94				25-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/l																
alpha-BHC		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
beta-BHC		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
delta-BHC		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
gamma-BHC (Lindane)		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Heptachlor		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Aldrin		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Heptachlor epoxide		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Endosulfan I		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Dieldrin		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
4,4-DDE		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Endrin		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endosulfan II		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
4,4-DDD		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endosulfan sulfate		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
4,4-DDT		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Methoxychlor		.08	U	ug/l	.08	.08	U	ug/l	.08	.08	U	ug/l	.08	.08	U	ug/l	.08
Endrin aldehyde		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endrin ketone		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Chlordane		.2	U	ug/l	.2	.2	U	ug/l	.2	.2	U	ug/l	.2	.2	U	ug/l	.2
Chlorobenzilate		.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5
Diallate		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Toxaphene		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Isodrin		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Kepone		1	U	ug/l	1	1	U	ug/l	1	1	UJ	ug/l		1	UJ	ug/l	
Aroclor-1016		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1221		2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2
Aroclor-1232		2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2
Aroclor-1242		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1248		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1254		.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5
Aroclor-1260		.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5

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AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8783001				R8618002				23904004				M7490004			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08MW013I				08MW014S				9MW1				09MW001S			
Collect Date:		22-SEP-94				25-AUG-94				29-JAN-93				09-JUL-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/l																
alpha-BHC		.02	U	ug/l	.02	.02	UJ	ug/l		.02	U	ug/l	.02	.02	U	ug/l	.02
beta-BHC		.04	U	ug/l	.04	.04	UJ	ug/l		.04	U	ug/l	.04	.04	U	ug/l	.04
delta-BHC		.02	U	ug/l	.02	.02	UJ	ug/l		.02	U	ug/l	.02	.02	U	ug/l	.02
gamma-BHC (Lindane)		.02	U	ug/l	.02	.02	UJ	ug/l		.02	U	ug/l	.02	.02	U	ug/l	.02
Heptachlor		.02	U	ug/l	.02	.02	UJ	ug/l		.02	U	ug/l	.02	.02	U	ug/l	.02
Aldrin		.02	U	ug/l	.02	.02	UJ	ug/l		.02	U	ug/l	.02	.02	U	ug/l	.02
Heptachlor epoxide		.02	U	ug/l	.02	.02	UJ	ug/l		.02	U	ug/l	.02	.02	U	ug/l	.02
Endosulfan I		.02	U	ug/l	.02	.02	UJ	ug/l		.02	U	ug/l	.02	.02	U	ug/l	.02
Dieldrin		.02	U	ug/l	.02	.02	UJ	ug/l		.02	U	ug/l	.02	.02	U	ug/l	.02
4,4-DDE		.02	U	ug/l	.02	.02	UJ	ug/l		.02	U	ug/l	.02	.02	U	ug/l	.02
Endrin		.04	U	ug/l	.04	.04	UJ	ug/l		.04	U	ug/l	.04	.04	U	ug/l	.04
Endosulfan II		.04	U	ug/l	.04	.04	UJ	ug/l		.04	U	ug/l	.04	.04	U	ug/l	.04
4,4-DDD		.04	U	ug/l	.04	.04	UJ	ug/l		.04	U	ug/l	.04	.04	U	ug/l	.04
Endosulfan sulfate		.04	U	ug/l	.04	.04	UJ	ug/l		.04	U	ug/l	.04	.04	U	ug/l	.04
4,4-DDT		.04	U	ug/l	.04	.04	UJ	ug/l		.04	U	ug/l	.04	.04	U	ug/l	.04
Methoxychlor		.08	U	ug/l	.08	.08	UJ	ug/l		.08	U	ug/l	.08	.08	U	ug/l	.08
Endrin aldehyde		.04	U	ug/l	.04	.04	UJ	ug/l		.04	U	ug/l	.04	.04	U	ug/l	.04
Endrin ketone		.04	U	ug/l	.04	.04	UJ	ug/l		.02	U	ug/l	.02	.04	U	ug/l	.04
Chlordane		.2	U	ug/l	.2	.2	UJ	ug/l		.2	U	ug/l	.2	.2	U	ug/l	.2
Chlorobenzilate		.5	U	ug/l	.5	.5	UJ	ug/l		.5	U	ug/l	.5	.5	U	ug/l	.5
Diallate		1	U	ug/l	1	1	UJ	ug/l		1	U	ug/l	1	1	U	ug/l	1
Toxaphene		1	U	ug/l	1	1	UJ	ug/l		1	U	ug/l	1	1	U	ug/l	1
Isodrin		.02	U	ug/l	.02	.02	UJ	ug/l		.02	U	ug/l	.02	.02	U	ug/l	.02
Kepone		1	UJ	ug/l		1	UJ	ug/l		1	U	ug/l	1	1	U	ug/l	1
Aroclor-1016		1	U	ug/l	1	1	UJ	ug/l		1	U	ug/l	1	1	U	ug/l	1
Aroclor-1221		2	U	ug/l	2	2	UJ	ug/l		2	U	ug/l	2	2	U	ug/l	2
Aroclor-1232		2	U	ug/l	2	2	UJ	ug/l		2	U	ug/l	2	2	U	ug/l	2
Aroclor-1242		1	U	ug/l	1	1	UJ	ug/l		1	U	ug/l	1	1	U	ug/l	1
Aroclor-1248		1	U	ug/l	1	1	UJ	ug/l		1	U	ug/l	1	1	U	ug/l	1
Aroclor-1254		.5	U	ug/l	.5	.5	UJ	ug/l		.5	U	ug/l	.5	.5	U	ug/l	.5
Aroclor-1260		.5	U	ug/l	.5	.5	UJ	ug/l		.5	U	ug/l	.5	.5	U	ug/l	.5

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23904005				M7503002				23904006				M7503001			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		9MW2				09MW002S				9MW3				09MW003S			
Collect Date:		29-JAN-93				11-JUL-94				29-JAN-93				11-JUL-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/l																
alpha-BHC		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
beta-BHC		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
delta-BHC		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
gamma-BHC (Lindane)		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Heptachlor		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Aldrin		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Heptachlor epoxide		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Endosulfan I		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Dieldrin		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
4,4-DDE		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Endrin		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endosulfan II		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
4,4-DDD		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endosulfan sulfate		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
4,4-DDT		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Methoxychlor		.08	U	ug/l	.08	.08	U	ug/l	.08	.08	U	ug/l	.08	.08	U	ug/l	.08
Endrin aldehyde		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endrin ketone		.02	U	ug/l	.02	.04	U	ug/l	.04	.02	U	ug/l	.02	.04	U	ug/l	.04
Chlordane		.2	U	ug/l	.2	.2	U	ug/l	.2	.2	U	ug/l	.2	.2	U	ug/l	.2
Chlorobenzilate		.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5
Diallate		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Toxaphene		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Isodrin		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Kepone		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1016		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1221		2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2
Aroclor-1232		2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2
Aroclor-1242		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1248		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1254		.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5
Aroclor-1260		.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5

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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23904003				M7490003				23904002				M7503003			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	S-2				OSMW002S				S-3				OSMW003S			
Collect Date:	29-JAN-93				09-JUL-94				28-JAN-93				11-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs ug/l																
alpha-BHC	.02	U	ug/l	.02	.08	U	ug/l	.08	.02	U	ug/l	.02	.02	U	ug/l	.02
beta-BHC	.04	U	ug/l	.04	.16	U	ug/l	.16	.04	U	ug/l	.04	.04	U	ug/l	.04
delta-BHC	.02	U	ug/l	.02	.08	U	ug/l	.08	.02	U	ug/l	.02	.02	U	ug/l	.02
gamma-BHC (Lindane)	.02	U	ug/l	.02	.08	U	ug/l	.08	.02	U	ug/l	.02	.02	U	ug/l	.02
Heptachlor	.02	U	ug/l	.02	.08	U	ug/l	.08	.02	U	ug/l	.02	.02	U	ug/l	.02
Aldrin	.02	U	ug/l	.02	.08	U	ug/l	.08	.02	U	ug/l	.02	.02	U	ug/l	.02
Heptachlor epoxide	.02	U	ug/l	.02	.08	U	ug/l	.08	.02	U	ug/l	.02	.02	U	ug/l	.02
Endosulfan I	.02	U	ug/l	.02	.08	U	ug/l	.08	.02	U	ug/l	.02	.02	U	ug/l	.02
Dieldrin	.02	U	ug/l	.02	.08	U	ug/l	.08	.02	U	ug/l	.02	.02	U	ug/l	.02
4,4-DDE	.02	U	ug/l	.02	.08	U	ug/l	.08	.02	U	ug/l	.02	.02	U	ug/l	.02
Endrin	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endosulfan II	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
4,4-DDD	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endosulfan sulfate	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
4,4-DDT	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Methoxychlor	.08	U	ug/l	.08	.08	U	ug/l	.08	.08	U	ug/l	.08	.08	U	ug/l	.08
Endrin aldehyde	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endrin ketone	.02	U	ug/l	.02	.04	U	ug/l	.04	.02	U	ug/l	.02	.04	U	ug/l	.04
Chlordane	.2	U	ug/l	.2	.2	U	ug/l	.2	.2	U	ug/l	.2	.2	U	ug/l	.2
Chlorobenzilate	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5
Diallate	1	U	ug/l	1	4	U	ug/l	4	1	U	ug/l	1	1	U	ug/l	1
Toxaphene	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Isodrin	.02	U	ug/l	.02	.08	U	ug/l	.08	.02	U	ug/l	.02	.02	U	ug/l	.02
Kepone	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1016	1	U	ug/l	1	4	U	ug/l	4	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1221	2	U	ug/l	2	8	U	ug/l	8	2	U	ug/l	2	2	U	ug/l	2
Aroclor-1232	2	U	ug/l	2	8	U	ug/l	8	2	U	ug/l	2	2	U	ug/l	2
Aroclor-1242	1	U	ug/l	1	4	U	ug/l	4	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1248	1	U	ug/l	1	4	U	ug/l	4	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1254	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5
Aroclor-1260	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5

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J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8608001		
Site		GROUP2		
Locator		100P001		
Collect Date:		24-AUG-94		
	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/l			
alpha-BHC	.02	U	ug/l	.02
beta-BHC	.04	U	ug/l	.04
delta-BHC	.02	U	ug/l	.02
gamma-BHC (Lindane)	.02	U	ug/l	.02
Heptachlor	.02	U	ug/l	.02
Aldrin	.02	U	ug/l	.02
Heptachlor epoxide	.02	U	ug/l	.02
Endosulfan I	.02	U	ug/l	.02
Dieldrin	.02	U	ug/l	.02
4,4-DDE	.02	U	ug/l	.02
Endrin	.04	U	ug/l	.04
Endosulfan II	.04	U	ug/l	.04
4,4-DDD	.04	U	ug/l	.04
Endosulfan sulfate	.04	U	ug/l	.04
4,4-DDT	.04	U	ug/l	.04
Methoxychlor	.08	U	ug/l	.08
Endrin aldehyde	.04	U	ug/l	.04
Endrin ketone	.04	U	ug/l	.04
Chlordane	.2	U	ug/l	.2
Chlorobenzilate	.5	U	ug/l	.5
Diallate	1	U	ug/l	1
Toxaphene	1	U	ug/l	1
Isodrin	.02	U	ug/l	.02
Kepone	1	U	ug/l	1
Aroclor-1016	1	U	ug/l	1
Aroclor-1221	2	U	ug/l	2
Aroclor-1232	2	U	ug/l	2
Aroclor-1242	1	U	ug/l	1
Aroclor-1248	1	U	ug/l	1
Aroclor-1254	.5	U	ug/l	.5
Aroclor-1260	.5	U	ug/l	.5

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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8783002				R8627001				R8627002				R8627005			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08MW015I				08MW016S				08MW016SD				08MW017S			
Collect Date:		22-SEP-94				26-AUG-94				26-AUG-94				26-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/l																
alpha-BHC		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
beta-BHC		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
delta-BHC		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
gamma-BHC (Lindane)		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Heptachlor		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Aldrin		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Heptachlor epoxide		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Endosulfan I		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Dieldrin		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
4,4-DDE		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Endrin		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endosulfan II		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
4,4-DDD		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endosulfan sulfate		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
4,4-DDT		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Methoxychlor		.08	U	ug/l	.08	.08	U	ug/l	.08	.08	U	ug/l	.08	.08	U	ug/l	.08
Endrin aldehyde		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endrin ketone		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Chlordane		.2	U	ug/l	.2	.2	U	ug/l	.2	.2	U	ug/l	.2	.2	U	ug/l	.2
Chlorobenzilate		.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5
Diallate		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Toxaphene		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Isodrin		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Kepone		1	UJ	ug/l		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1016		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1221		2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2
Aroclor-1232		2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2
Aroclor-1242		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1248		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1254		.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5
Aroclor-1260		.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5

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AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8627006				R8783003				R8783004				R9036001			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08MW018S				08MW019S				08MW019SD				08MW020S			
Collect Date:		26-AUG-94				22-SEP-94				22-SEP-94				08-NOV-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/l																
alpha-BHC		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
beta-BHC		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
delta-BHC		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
gamma-BHC (Lindane)		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Heptachlor		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Aldrin		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Heptachlor epoxide		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Endosulfan I		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Dieldrin		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
4,4-DDE		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Endrin		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endosulfan II		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
4,4-DDD		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endosulfan sulfate		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
4,4-DDT		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Methoxychlor		.08	U	ug/l	.08	.08	U	ug/l	.08	.08	U	ug/l	.08	.08	U	ug/l	.08
Endrin aldehyde		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endrin ketone		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Chlordane		.2	U	ug/l	.2	.2	U	ug/l	.2	.2	U	ug/l	.2	.2	U	ug/l	.2
Chlorobenzilate		.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5
Diallate		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Toxaphene		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Isodrin		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Kepone		1	U	ug/l	1	1	UJ	ug/l		1	UJ	ug/l		1	U	ug/l	1
Aroclor-1016		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1221		2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2
Aroclor-1232		2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2
Aroclor-1242		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1248		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1254		.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5
Aroclor-1260		.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	R9036002
Site	GROUP2
Locator	08MW020SD
Collect Date:	08-NOV-94

		VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/l				
alpha-BHC		.02	U	ug/l	.02
beta-BHC		.04	U	ug/l	.04
delta-BHC		.02	U	ug/l	.02
gamma-BHC (Lindane)		.02	U	ug/l	.02
Heptachlor		.02	U	ug/l	.02
Aldrin		.02	U	ug/l	.02
Heptachlor epoxide		.02	U	ug/l	.02
Endosulfan I		.02	U	ug/l	.02
Dieldrin		.02	U	ug/l	.02
4,4-DDE		.02	U	ug/l	.02
Endrin		.04	U	ug/l	.04
Endosulfan II		.04	U	ug/l	.04
4,4-DDD		.04	U	ug/l	.04
Endosulfan sulfate		.04	U	ug/l	.04
4,4-DDT		.04	U	ug/l	.04
Methoxychlor		.08	U	ug/l	.08
Endrin aldehyde		.04	U	ug/l	.04
Endrin ketone		.04	U	ug/l	.04
Chlordane		.2	U	ug/l	.2
Chlorobenzilate		.5	U	ug/l	.5
Dialiate		1	U	ug/l	1
Toxaphene		1	U	ug/l	1
Isodrin		.02	U	ug/l	.02
Kepone		1	U	ug/l	1
Aroclor-1016		1	U	ug/l	1
Aroclor-1221		2	U	ug/l	2
Aroclor-1232		2	U	ug/l	2
Aroclor-1242		1	U	ug/l	1
Aroclor-1248		1	U	ug/l	1
Aroclor-1254		.5	U	ug/l	.5
Aroclor-1260		.5	U	ug/l	.5

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J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23918003				23921002				M7504006				23918005			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		8MW1				8MW1				08MW001S				8MW4			
Collect Date:		01-FEB-93				01-FEB-93				11-JUL-94				01-FEB-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (WATER)	ug/l																
Antimony		16.4	U	ug/l	16.4	-		ug/l		2.2	U	ug/l	2.2	16.4	U	ug/l	16.4
Arsenic		3.2	J	ug/l		-		ug/l		1.1	J	ug/l		11.7		ug/l	
Barium		9.7	J	ug/l		-		ug/l		3.9	J	ug/l		12.1	J	ug/l	
Beryllium		.26	U	ug/l	.26	-		ug/l		.18	U	ug/l	.18	.26	U	ug/l	.26
Cadmium		3	J	ug/l		-		ug/l		3	U	ug/l	3	2.8	U	ug/l	2.8
Calcium		-		ug/l		-		ug/l		57900		ug/l		-		ug/l	
Chromium		4.5	J	ug/l		-		ug/l		2.34	U	ug/l	2.34	5.7	J	ug/l	
Cobalt		2.6	U	ug/l	2.6	-		ug/l		2.7	U	ug/l	2.7	2.6	U	ug/l	2.6
Copper		1.2	UJ	ug/l		-		ug/l		12.7	U	ug/l	12.7	1.2	UJ	ug/l	
Cyanide		-		ug/l		5	U	ug/l	5	.81	U	ug/l	.81	-		ug/l	
Iron		-		ug/l		-		ug/l		710	J	ug/l		-		ug/l	
Lead		2.6	U	ug/l	2.6	-		ug/l		.97	UJ	ug/l		5.8	U	ug/l	5.8
Magnesium		-		ug/l		-		ug/l		6180		ug/l		-		ug/l	
Manganese		-		ug/l		-		ug/l		43.6	J	ug/l		-		ug/l	
Mercury		.07	U	ug/l	.07	-		ug/l		.08	U	ug/l	.08	.07	U	ug/l	.07
Nickel		9.4	U	ug/l	9.4	-		ug/l		7.3	U	ug/l	7.3	9.4	U	ug/l	9.4
Selenium		1.8	UJ	ug/l		-		ug/l		1.3	UJ	ug/l		1.8	UJ	ug/l	
Silver		2	U	ug/l	2	-		ug/l		2.1	U	ug/l	2.1	2	U	ug/l	2
Sodium		-		ug/l		-		ug/l		4980	J	ug/l		-		ug/l	
Thallium		2.3	U	ug/l	2.3	-		ug/l		1.5	J	ug/l		2.3	U	ug/l	2.3
Tin		13.2	J	ug/l		-		ug/l		9.4	U	ug/l	9.4	12.7	UJ	ug/l	
Vanadium		6.3	J	ug/l		-		ug/l		1.7	U	ug/l	1.7	8	J	ug/l	
Zinc		31		ug/l		-		ug/l		5.4	U	ug/l	5.4	34.5		ug/l	

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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23921004			R8628004			23886004			23887004		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		8MW4			08MW004S			8MW6			8MW6		
Collect Date:		01-FEB-93			26-AUG-94			28-JAN-93			28-JAN-93		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
INORGANICS (WATER)	ug/l												
Antimony		-	ug/l		5 U	ug/l	5	16.4 U	ug/l	16.4	-	ug/l	
Arsenic		-	ug/l		1.7 J	ug/l		2.5 J	ug/l		-	ug/l	
Barium		-	ug/l		4.9 J	ug/l		5.9 J	ug/l		-	ug/l	
Beryllium		-	ug/l		.3 U	ug/l	.3	.26 U	ug/l	.26	-	ug/l	
Cadmium		-	ug/l		1 U	ug/l	1	2.8 U	ug/l	2.8	-	ug/l	
Calcium		-	ug/l		146000	ug/l		62200	ug/l		-	ug/l	
Chromium		-	ug/l		2.6 U	ug/l	2.6	4.2 J	ug/l		-	ug/l	
Cobalt		-	ug/l		3.1 U	ug/l	3.1	2.6 U	ug/l	2.6	-	ug/l	
Copper		-	ug/l		.9 U	ug/l	.9	5.8 J	ug/l		-	ug/l	
Cyanide		5.5	ug/l		2.7 U	ug/l	2.7	-	ug/l		5 U	ug/l	5
Iron		-	ug/l		15000	ug/l		2340 J	ug/l		-	ug/l	
Lead		-	ug/l		.8 J	ug/l		2.7 U	ug/l	2.7	-	ug/l	
Magnesium		-	ug/l		15400	ug/l		13300	ug/l		-	ug/l	
Manganese		-	ug/l		280	ug/l		36.1	ug/l		-	ug/l	
Mercury		-	ug/l		.5 UJ	ug/l		.07 U	ug/l	.07	-	ug/l	
Nickel		-	ug/l		5.9 U	ug/l	5.9	9.4 U	ug/l	9.4	-	ug/l	
Selenium		-	ug/l		.6 UJ	ug/l		1.8 U	ug/l	1.8	-	ug/l	
Silver		-	ug/l		2.1 U	ug/l	2.1	2 U	ug/l	2	-	ug/l	
Sodium		-	ug/l		35600	ug/l		-	ug/l		-	ug/l	
Thallium		-	ug/l		.6 U	ug/l	.6	2.3 U	ug/l	2.3	-	ug/l	
Tin		-	ug/l		8 U	ug/l	8	34.9 J	ug/l		-	ug/l	
Vanadium		-	ug/l		2 J	ug/l		5.7 J	ug/l		-	ug/l	
Zinc		-	ug/l		2.5 J	ug/l		97.5 J	ug/l		-	ug/l	

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AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23886005				23887005				M7491006				M7491007			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		8MW6D				8MW6D				08MW006S				08MW006SD			
Collect Date:		28-JAN-93				28-JAN-93				10-JUL-94				10-JUL-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (WATER)	ug/l																
Antimony		16.4	U	ug/l	16.4	-		ug/l		2.2	U	ug/l	2.2	2.2	U	ug/l	2.2
Arsenic		2.8	J	ug/l		-		ug/l		2.1	J	ug/l		2.1	J	ug/l	
Barium		6.6	J	ug/l		-		ug/l		3.3	U	ug/l	3.3	3.3	U	ug/l	3.3
Beryllium		.26	U	ug/l	.26	-		ug/l		.18	U	ug/l	.18	.18	U	ug/l	.18
Cadmium		2.8	U	ug/l	2.8	-		ug/l		3	U	ug/l	3	3	U	ug/l	3
Calcium		62300		ug/l		-		ug/l		56700		ug/l		56700		ug/l	
Chromium		6.7	J	ug/l		-		ug/l		2.09	U	ug/l	2.09	2.09	U	ug/l	2.09
Cobalt		2.6	U	ug/l	2.6	-		ug/l		2.7	U	ug/l	2.7	2.7	U	ug/l	2.7
Copper		14.5	J	ug/l		-		ug/l		12.7	U	ug/l	12.7	12.7	U	ug/l	12.7
Cyanide		-		ug/l		5	U	ug/l	5	1.1	J	ug/l		.81	U	ug/l	.81
Iron		2750	J	ug/l		-		ug/l		57.1	J	ug/l		69.2	J	ug/l	
Lead		1.9	U	ug/l	1.9	-		ug/l		.97	U	ug/l	.97	.97	U	ug/l	.97
Magnesium		12400		ug/l		-		ug/l		8300		ug/l		8050		ug/l	
Manganese		36.8		ug/l		-		ug/l		21.5		ug/l		21		ug/l	
Mercury		.07	U	ug/l	.07	-		ug/l		.08	J	ug/l		.08	J	ug/l	
Nickel		9.4	U	ug/l	9.4	-		ug/l		7.3	U	ug/l	7.3	7.3	U	ug/l	7.3
Selenium		1.8	U	ug/l	1.8	-		ug/l		1.3	UJ	ug/l		13.2	UJ	ug/l	
Silver		2	U	ug/l	2	-		ug/l		2.3	U	ug/l	2.3	2.3	U	ug/l	2.3
Sodium		-		ug/l		-		ug/l		5690		ug/l		5530		ug/l	
Thallium		2.3	U	ug/l	2.3	-		ug/l		1.3	UJ	ug/l		1.3	UJ	ug/l	
Tin		12.7	U	ug/l	12.7	-		ug/l		9.4	U	ug/l	9.4	9.4	U	ug/l	9.4
Vanadium		8.3	J	ug/l		-		ug/l		1.7	U	ug/l	1.7	1.7	U	ug/l	1.7
Zinc		35.1	J	ug/l		-		ug/l		8.5	U	ug/l	8.5	4.2	U	ug/l	4.2

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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23918006				23921005				23918004				23921003			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		8MW7				8MW7				8MW8				8MW8			
Collect Date:		01-FEB-93				01-FEB-93				01-FEB-93				01-FEB-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (WATER)	ug/l																
Antimony		16.4	U	ug/l	16.4	-		ug/l		16.4	U	ug/l	16.4	-		ug/l	
Arsenic		41.2		ug/l		-		ug/l		20.7		ug/l		-		ug/l	
Barium		67.6	J	ug/l		-		ug/l		28.1	J	ug/l		-		ug/l	
Beryllium		1.6	J	ug/l		-		ug/l		.98	J	ug/l		-		ug/l	
Cadmium		2.8	U	ug/l	2.8	-		ug/l		2.8	U	ug/l	2.8	-		ug/l	
Calcium		-		ug/l		-		ug/l		-		ug/l		-		ug/l	
Chromium		40.9		ug/l		-		ug/l		36.8		ug/l		-		ug/l	
Cobalt		11.7	J	ug/l		-		ug/l		7.1	J	ug/l		-		ug/l	
Copper		15.4	J	ug/l		-		ug/l		3.4	J	ug/l		-		ug/l	
Cyanide		-		ug/l		12.8		ug/l		-		ug/l		5	U	ug/l	5
Iron		-		ug/l		-		ug/l		-		ug/l		-		ug/l	
Lead		45.9		ug/l		-		ug/l		10.4		ug/l		-		ug/l	
Magnesium		-		ug/l		-		ug/l		-		ug/l		-		ug/l	
Manganese		-		ug/l		-		ug/l		-		ug/l		-		ug/l	
Mercury		.29		ug/l		-		ug/l		.07	U	ug/l	.07	-		ug/l	
Nickel		19.9	J	ug/l		-		ug/l		9.4	U	ug/l	9.4	-		ug/l	
Selenium		1.8	UJ	ug/l		-		ug/l		1.8	UJ	ug/l		-		ug/l	
Silver		2.1	J	ug/l		-		ug/l		2	U	ug/l	2	-		ug/l	
Sodium		-		ug/l		-		ug/l		-		ug/l		-		ug/l	
Thallium		2.3	U	ug/l	2.3	-		ug/l		2.3	U	ug/l	2.3	-		ug/l	
Tin		12.7	UJ	ug/l		-		ug/l		12.7	UJ	ug/l		-		ug/l	
Vanadium		60.3		ug/l		-		ug/l		48	J	ug/l		-		ug/l	
Zinc		127		ug/l		-		ug/l		52.2		ug/l		-		ug/l	

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AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		M7491005				R8628003				R8710001				R8710002		
Site		GROUP2				GROUP2				GROUP2				GROUP2		
Locator		08MW008S				08MW009S				08MW010S				08MW010SD		
Collect Date:		09-JUL-94				26-AUG-94				09-SEP-94				09-SEP-94		
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (WATER)	ug/l																
Antimony		2.2	U	ug/l	2.2	50	UJ	ug/l		5	U	ug/l	5	5	U	ug/l	5
Arsenic		5.6	J	ug/l		.6	J	ug/l		1.8	J	ug/l		1.1	J	ug/l	
Barium		8.4	J	ug/l		112	J	ug/l		6.2	J	ug/l		6.3	J	ug/l	
Beryllium		.18	U	ug/l	.18	.3	U	ug/l	.3	.3	U	ug/l	.3	.3	U	ug/l	.3
Cadmium		3	U	ug/l	3	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Calcium		33800		ug/l		1830000		ug/l		79600		ug/l		77100		ug/l	
Chromium		2.09	U	ug/l	2.09	2.6	U	ug/l	2.6	2.6	U	ug/l	2.6	2.6	U	ug/l	2.6
Cobalt		2.7	U	ug/l	2.7	3.1	U	ug/l	3.1	3.1	U	ug/l	3.1	3.1	U	ug/l	3.1
Copper		4	U	ug/l	4	.9	U	ug/l	.9	.9	U	ug/l	.9	.9	U	ug/l	.9
Cyanide		.81	U	ug/l	.81	2.7	U	ug/l	2.7	2.7	U	ug/l	2.7	2.7	U	ug/l	2.7
Iron		88	J	ug/l		4820		ug/l		9.1	U	ug/l	9.1	9.1	U	ug/l	9.1
Lead		.97	U	ug/l	.97	6	UJ	ug/l		.6	U	ug/l	.6	.6	U	ug/l	.6
Magnesium		28100		ug/l		401000		ug/l		17100		ug/l		16500		ug/l	
Manganese		12	J	ug/l		2260		ug/l		21.5		ug/l		19.2		ug/l	
Mercury		.08	U	ug/l	.08	.5	UJ	ug/l		.1	U	ug/l	.1	.1	U	ug/l	.1
Nickel		7.3	U	ug/l	7.3	5.9	U	ug/l	5.9	5.9	U	ug/l	5.9	5.9	U	ug/l	5.9
Selenium		1.55	UJ	ug/l		30	UJ	ug/l		1.9	J	ug/l		1.2	J	ug/l	
Silver		2.3	U	ug/l	2.3	2.1	U	ug/l	2.1	2.1	U	ug/l	2.1	2.1	U	ug/l	2.1
Sodium		675000		ug/l		1810000		ug/l		24100		ug/l		23100		ug/l	
Thallium		1.3	UJ	ug/l		6	UJ	ug/l		.6	U	ug/l	.6	.6	U	ug/l	.6
Tin		9.4	U	ug/l	9.4	8	U	ug/l	8	8	U	ug/l	8	8	U	ug/l	8
Vanadium		1.7	U	ug/l	1.7	8.3	J	ug/l		3	J	ug/l		2	J	ug/l	
Zinc		5.8	U	ug/l	5.8	16.5	J	ug/l		2.9	U	ug/l	2.9	2.9	U	ug/l	2.9

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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8619004			R8619003			R8784001			R8619002		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		08MW012S			08MW013S			08MW013I			08MW014S		
Collect Date:		25-AUG-94			25-AUG-94			22-SEP-94			25-AUG-94		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
INORGANICS (WATER)	ug/l												
Antimony		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Arsenic		.6 U	ug/l	.6	1.4 J	ug/l		8.9 J	ug/l		1.3 J	ug/l	
Barium		11 J	ug/l		9.9 J	ug/l		21.4 J	ug/l		16.3 J	ug/l	
Beryllium		.3 U	ug/l	.3	.3 U	ug/l	.3	.3 U	ug/l	.3	.3 U	ug/l	.3
Cadmium		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1.1 J	ug/l	
Calcium		138000	ug/l		98200	ug/l		47700	ug/l		201000	ug/l	
Chromium		2.6 U	ug/l	2.6	2.6 U	ug/l	2.6	2.6 U	ug/l	2.6	2.6 U	ug/l	2.6
Cobalt		3.1 U	ug/l	3.1	3.1 U	ug/l	3.1	3.1 U	ug/l	3.1	3.1 U	ug/l	3.1
Copper		.9 U	ug/l	.9	.9 U	ug/l	.9	.9 U	ug/l	.9	.9 U	ug/l	.9
Cyanide		2.7 U	ug/l	2.7	2.7 U	ug/l	2.7	2.7 U	ug/l	2.7	2.7 U	ug/l	2.7
Iron		3890	ug/l		38 J	ug/l		167	ug/l		34500	ug/l	
Lead		2.5 J	ug/l		1.9 J	ug/l		.8 J	ug/l		.6 UJ	ug/l	
Magnesium		8300	ug/l		5480	ug/l		28200	ug/l		20500	ug/l	
Manganese		135	ug/l		3.4 J	ug/l		83.5	ug/l		734	ug/l	
Mercury		.5 UJ	ug/l		.1 U	ug/l	.1	.5 UJ	ug/l		.5 UJ	ug/l	
Nickel		5.9 U	ug/l	5.9	5.9 U	ug/l	5.9	5.9 U	ug/l	5.9	5.9 U	ug/l	5.9
Selenium		.6 UJ	ug/l		.6 U	ug/l	.6	.6 UJ	ug/l		.6 UJ	ug/l	
Silver		2.1 U	ug/l	2.1	2.1 U	ug/l	2.1	2.1 U	ug/l	2.1	2.1 U	ug/l	2.1
Sodium		12300	ug/l		8070	ug/l		357000	ug/l		18700	ug/l	
Thallium		.6 U	ug/l	.6	.6 U	ug/l	.6	.6 U	ug/l	.6	.6 U	ug/l	.6
Tin		8 U	ug/l	8	8 U	ug/l	8	8 U	ug/l	8	8 U	ug/l	8
Vanadium		2.1 J	ug/l		4.9 J	ug/l		3.8 J	ug/l		3.9 J	ug/l	
Zinc		13.5 U	ug/l	13.5	5.7 U	ug/l	5.7	6.5 U	ug/l	6.5	5.7 U	ug/l	5.7

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AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23904004				23905004				M7491004				23904005		
Site		GROUP2				GROUP2				GROUP2				GROUP2		
Locator		9MW1				9MW1				09MW001S				9MW2		
Collect Date:		29-JAN-93				29-JAN-93				09-JUL-94				29-JAN-93		
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (WATER)	ug/l																
Antimony		16.4	U	ug/l	16.4	-		ug/l		2.2	U	ug/l	2.2	16.4	U	ug/l	16.4
Arsenic		11.4		ug/l		-		ug/l		2.8	J	ug/l		.68	U	ug/l	.68
Barium		32.8	J	ug/l		-		ug/l		7.6	J	ug/l		7.1	J	ug/l	
Beryllium		.37	J	ug/l		-		ug/l		.18	U	ug/l	.18	.26	U	ug/l	.26
Cadmium		2.8	U	ug/l	2.8	-		ug/l		3	U	ug/l	3	2.8	U	ug/l	2.8
Calcium		145000		ug/l		-		ug/l		103000		ug/l		168000		ug/l	
Chromium		16.4		ug/l		-		ug/l		2.09	U	ug/l	2.09	2.8	U	ug/l	2.8
Cobalt		2.8	J	ug/l		-		ug/l		2.7	U	ug/l	2.7	2.7	J	ug/l	
Copper		1.2	U	ug/l	1.2	-		ug/l		12.7	U	ug/l	12.7	1.2	U	ug/l	1.2
Cyanide		-		ug/l		5	U	ug/l	5	.82	J	ug/l		-		ug/l	
Iron		12200	J	ug/l		-		ug/l		6.9	U	ug/l	6.9	9350	J	ug/l	
Lead		5.7	U	ug/l	5.7	-		ug/l		.97	U	ug/l	.97	1.7	U	ug/l	1.7
Magnesium		23000		ug/l		-		ug/l		19000		ug/l		11900		ug/l	
Manganese		386		ug/l		-		ug/l		4.7	J	ug/l		285		ug/l	
Mercury		.07	U	ug/l	.07	-		ug/l		.08	J	ug/l		.07	U	ug/l	.07
Nickel		9.4	U	ug/l	9.4	-		ug/l		7.3	U	ug/l	7.3	9.4	U	ug/l	9.4
Selenium		1.8	U	ug/l	1.8	-		ug/l		1.3	UJ	ug/l		1.8	U	ug/l	1.8
Silver		2	U	ug/l	2	-		ug/l		2.3	U	ug/l	2.3	2.3	J	ug/l	
Sodium		-		ug/l		-		ug/l		13700		ug/l		-		ug/l	
Thallium		2.3	U	ug/l	2.3	-		ug/l		1.3	U	ug/l	1.3	2.3	U	ug/l	2.3
Tin		12.7	U	ug/l	12.7	-		ug/l		9.4	U	ug/l	9.4	12.7	U	ug/l	12.7
Vanadium		21.2	J	ug/l		-		ug/l		3.8	J	ug/l		2.6	U	ug/l	2.6
Zinc		86.4	J	ug/l		-		ug/l		4.5	U	ug/l	4.5	15	J	ug/l	

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AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23905005			M7504003			23904006			23905006		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		9MW2			09MW002S			9MW3			9MW3		
Collect Date:		29-JAN-93			11-JUL-94			29-JAN-93			29-JAN-93		
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (WATER)	ug/l															
Antimony		-	ug/l		2.2	U	ug/l	2.2	16.4	U	ug/l	16.4	-		ug/l	
Arsenic		-	ug/l		1.4	J	ug/l		6.7	J	ug/l		-		ug/l	
Barium		-	ug/l		5.4	J	ug/l		13.9	J	ug/l		-		ug/l	
Beryllium		-	ug/l		.18	U	ug/l	.18	.26	U	ug/l	.26	-		ug/l	
Cadmium		-	ug/l		3	U	ug/l	3	2.8	U	ug/l	2.8	-		ug/l	
Calcium		-	ug/l		170000		ug/l		130000		ug/l		-		ug/l	
Chromium		-	ug/l		2.34	U	ug/l	2.34	11		ug/l		-		ug/l	
Cobalt		-	ug/l		2.7	U	ug/l	2.7	2.6	U	ug/l	2.6	-		ug/l	
Copper		-	ug/l		4.29	U	ug/l	4.29	3.1	J	ug/l		-		ug/l	
Cyanide		5	U ug/l	5	.81	U	ug/l	.81	-		ug/l		5	U ug/l		5
Iron		-	ug/l		7710	J	ug/l		8240	J	ug/l		-		ug/l	
Lead		-	ug/l		.97	U	ug/l	.97	3.6	U	ug/l	3.6	-		ug/l	
Magnesium		-	ug/l		10100		ug/l		12500		ug/l		-		ug/l	
Manganese		-	ug/l		236	J	ug/l		142		ug/l		-		ug/l	
Mercury		-	ug/l		.08	U	ug/l	.08	.07	U	ug/l	.07	-		ug/l	
Nickel		-	ug/l		7.3	U	ug/l	7.3	9.4	U	ug/l	9.4	-		ug/l	
Selenium		-	ug/l		13.2	UJ	ug/l		1.8	U	ug/l	1.8	-		ug/l	
Silver		-	ug/l		2.1	U	ug/l	2.1	2	U	ug/l	2	-		ug/l	
Sodium		-	ug/l		37200	J	ug/l		-		ug/l		-		ug/l	
Thallium		-	ug/l		1.3	UJ	ug/l		2.3	U	ug/l	2.3	-		ug/l	
Tin		-	ug/l		9.4	U	ug/l	9.4	12.7	U	ug/l	12.7	-		ug/l	
Vanadium		-	ug/l		1.7	U	ug/l	1.7	14.7	J	ug/l		-		ug/l	
Zinc		-	ug/l		4.2	U	ug/l	4.2	31.6	J	ug/l		-		ug/l	

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AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		M7504001				23904003				23905003				M7491003			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		09MW003S				S-2				S-2				0SMW002S			
Collect Date:		11-JUL-94				29-JAN-93				29-JAN-93				09-JUL-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (WATER)	ug/l																
Antimony		2.2	U	ug/l	2.2	16.4	U	ug/l	16.4	-		ug/l		3.4	U	ug/l	3.4
Arsenic		3.8	J	ug/l		2.6	J	ug/l		-		ug/l		3.3	J	ug/l	
Barium		3.3	U	ug/l	3.3	13.2	J	ug/l		-		ug/l		18.1	J	ug/l	
Beryllium		.18	U	ug/l	.18	.26	U	ug/l	.26	-		ug/l		.18	U	ug/l	.18
Cadmium		3	U	ug/l	3	2.8	U	ug/l	2.8	-		ug/l		3	U	ug/l	3
Calcium		118000		ug/l		162000		ug/l		-		ug/l		185000		ug/l	
Chromium		2.34	U	ug/l	2.34	2.8	U	ug/l	2.8	-		ug/l		2.09	U	ug/l	2.09
Cobalt		2.7	U	ug/l	2.7	2.6	U	ug/l	2.6	-		ug/l		2.7	U	ug/l	2.7
Copper		4.29	U	ug/l	4.29	1.2	U	ug/l	1.2	-		ug/l		12.7	U	ug/l	12.7
Cyanide		.81	U	ug/l	.81	-		ug/l		5	U	ug/l	5	1.3	J	ug/l	
Iron		86.4	J	ug/l		753	J	ug/l		-		ug/l		238		ug/l	
Lead		.97	U	ug/l	.97	3.1	U	ug/l	3.1	-		ug/l		2	U	ug/l	2
Magnesium		10900		ug/l		260000		ug/l		-		ug/l		351000		ug/l	
Manganese		7.5	J	ug/l		25.3		ug/l		-		ug/l		20.8		ug/l	
Mercury		.08	U	ug/l	.08	.07	U	ug/l	.07	-		ug/l		.08	U	ug/l	.08
Nickel		7.3	U	ug/l	7.3	9.4	U	ug/l	9.4	-		ug/l		7.3	U	ug/l	7.3
Selenium		1.3	UJ	ug/l		1.8	U	ug/l	1.8	-		ug/l		13.2	UJ	ug/l	
Silver		2.1	U	ug/l	2.1	2.2	J	ug/l		-		ug/l		2.3	U	ug/l	2.3
Sodium		11200	J	ug/l		-		ug/l		-		ug/l		3030000		ug/l	
Thallium		1.3	UJ	ug/l		2.3	U	ug/l	2.3	-		ug/l		1.7	J	ug/l	
Tin		9.4	U	ug/l	9.4	12.7	U	ug/l	12.7	-		ug/l		9.4	U	ug/l	9.4
Vanadium		1.7	U	ug/l	1.7	6.2	J	ug/l		-		ug/l		4.4	J	ug/l	
Zinc		6.3	U	ug/l	6.3	25.6	J	ug/l		-		ug/l		9.4	U	ug/l	9.4

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AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23904002				23905002				M7504004				R8609002			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		S-3				S-3				OSMW003S				100P001			
Collect Date:		28-JAN-93				28-JAN-93				11-JUL-94				24-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (WATER)	ug/l																
Antimony		16.4	U	ug/l	16.4	-		ug/l		2.2	U	ug/l	2.2	5	U	ug/l	5
Arsenic		12.5		ug/l		-		ug/l		2.9	J	ug/l		1.4	J	ug/l	
Barium		7	J	ug/l		-		ug/l		3.8	J	ug/l		4.7	J	ug/l	
Beryllium		.26	U	ug/l	.26	-		ug/l		.18	U	ug/l	.18	.3	U	ug/l	.3
Cadmium		2.8	U	ug/l	2.8	-		ug/l		3	U	ug/l	3	1	U	ug/l	1
Calcium		99100		ug/l		-		ug/l		142000		ug/l		77900		ug/l	
Chromium		2.8	U	ug/l	2.8	-		ug/l		2.34	U	ug/l	2.34	2.6	U	ug/l	2.6
Cobalt		2.6	U	ug/l	2.6	-		ug/l		2.7	U	ug/l	2.7	3.1	U	ug/l	3.1
Copper		1.2	U	ug/l	1.2	-		ug/l		4.29	U	ug/l	4.29	.9	U	ug/l	.9
Cyanide		-		ug/l		5	U	ug/l	5	.81	U	ug/l	.81	3.6	J	ug/l	
Iron		11200	J	ug/l		-		ug/l		96.2	J	ug/l		46.7	J	ug/l	
Lead		2.2	U	ug/l	2.2	-		ug/l		.97	U	ug/l	.97	.6	U	ug/l	.6
Magnesium		7440		ug/l		-		ug/l		9500		ug/l		11400		ug/l	
Manganese		67.5		ug/l		-		ug/l		1.4	J	ug/l		4.5	J	ug/l	
Mercury		.07	U	ug/l	.07	-		ug/l		.08	U	ug/l	.08	.1	U	ug/l	.1
Nickel		9.4	U	ug/l	9.4	-		ug/l		7.3	U	ug/l	7.3	5.9	U	ug/l	5.9
Selenium		1.8	U	ug/l	1.8	-		ug/l		1.3	UJ	ug/l		.6	U	ug/l	.6
Silver		2.8	J	ug/l		-		ug/l		2.1	U	ug/l	2.1	2.1	U	ug/l	2.1
Sodium		-		ug/l		-		ug/l		11000	J	ug/l		8910		ug/l	
Thallium		2.3	U	ug/l	2.3	-		ug/l		1.3	UJ	ug/l		.6	U	ug/l	.6
Tin		12.7	U	ug/l	12.7	-		ug/l		9.4	U	ug/l	9.4	8	U	ug/l	8
Vanadium		10.8	J	ug/l		-		ug/l		2.3	J	ug/l		4.4	J	ug/l	
Zinc		26.2	J	ug/l		-		ug/l		4.7	U	ug/l	4.7	3.6	J	ug/l	

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AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		M7504007				M7504002				M7504005			
Site		GROUP2				GROUP2				GROUP2			
Locator		08MW001SF				09MW003SF				0SMW003SF			
Collect Date:		11-JUL-94				11-JUL-94				11-JUL-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (WATER)	ug/l												
Antimony		6.2	U	ug/l	6.2	2.2	U	ug/l	2.2	2.2	U	ug/l	2.2
Arsenic		.95	J	ug/l		2.9	J	ug/l		3.2	J	ug/l	
Barium		3.3	U	ug/l	3.3	3.3	U	ug/l	3.3	3.5	J	ug/l	
Beryllium		.18	U	ug/l	.18	.18	U	ug/l	.18	.18	U	ug/l	.18
Cadmium		3	U	ug/l	3	3	U	ug/l	3	3	U	ug/l	3
Calcium		58800		ug/l		119000		ug/l		140000		ug/l	
Chromium		2.34	U	ug/l	2.34	2.34	U	ug/l	2.34	2.34	U	ug/l	2.34
Cobalt		2.7	U	ug/l	2.7	2.7	U	ug/l	2.7	2.7	U	ug/l	2.7
Copper		12.7	U	ug/l	12.7	4.29	U	ug/l	4.29	4.29	U	ug/l	4.29
Cyanide		-		ug/l		-		ug/l		-		ug/l	
Iron		450		ug/l		24.6	J	ug/l		6.9	U	ug/l	6.9
Lead		1.6	U	ug/l	1.6	.97	U	ug/l	.97	8.7	U	ug/l	8.7
Magnesium		5730		ug/l		11100		ug/l		9250		ug/l	
Manganese		39.3	J	ug/l		7	J	ug/l		.84	J	ug/l	
Mercury		.08	U	ug/l	.08	.08	U	ug/l	.08	.08	U	ug/l	.08
Nickel		7.3	U	ug/l	7.3	7.3	U	ug/l	7.3	7.3	U	ug/l	7.3
Selenium		1.3	UJ	ug/l		1.3	UJ	ug/l		1.3	UJ	ug/l	
Silver		2.1	U	ug/l	2.1	2.1	U	ug/l	2.1	2.1	U	ug/l	2.1
Sodium		4940	J	ug/l		11200	J	ug/l		10900		ug/l	
Thallium		1.5	J	ug/l		1.6	J	ug/l		1.3	U	ug/l	1.3
Tin		9.4	U	ug/l	9.4	9.4	U	ug/l	9.4	9.4	U	ug/l	9.4
Vanadium		1.7	U	ug/l	1.7	2.2	J	ug/l		3.2	J	ug/l	
Zinc		7.5	U	ug/l	7.5	8.9	U	ug/l	8.9	4.2	U	ug/l	4.2

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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	R8784002				R8628001				R8628002				R8628005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	08MW015I				08MW016S				08MW016SD				08MW017S			
Collect Date:	22-SEP-94				26-AUG-94				26-AUG-94				26-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (WATER) ug/l																
Antimony	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Arsenic	4	UJ	ug/l		24.1		ug/l		23.5		ug/l		1.6	J	ug/l	
Barium	86.3	J	ug/l		11	J	ug/l		11	J	ug/l		5.3	J	ug/l	
Beryllium	.3	U	ug/l	.3	.3	U	ug/l	.3	.3	U	ug/l	.3	.3	U	ug/l	.3
Cadmium	1	U	ug/l	1	1	U	ug/l	1	2.9	J	ug/l		1	U	ug/l	1
Calcium	70400		ug/l		145000		ug/l		143000		ug/l		130000		ug/l	
Chromium	2.6	U	ug/l	2.6	2.6	U	ug/l	2.6	2.6	U	ug/l	2.6	2.6	U	ug/l	2.6
Cobalt	3.1	U	ug/l	3.1	3.1	U	ug/l	3.1	3.1	U	ug/l	3.1	3.1	U	ug/l	3.1
Copper	2.5	U	ug/l	2.5	.9	U	ug/l	.9	.9	U	ug/l	.9	.9	U	ug/l	.9
Cyanide	2.7	U	ug/l	2.7	2.7	U	ug/l	2.7	2.7	U	ug/l	2.7	2.7	U	ug/l	2.7
Iron	76.8	U	ug/l	76.8	14300		ug/l		13900		ug/l		2810		ug/l	
Lead	.9	J	ug/l		.6	U	ug/l	.6	.6	U	ug/l	.6	.6	U	ug/l	.6
Magnesium	90200		ug/l		10100		ug/l		9790		ug/l		7010		ug/l	
Manganese	215		ug/l		343		ug/l		338		ug/l		95.1		ug/l	
Mercury	.5	UJ	ug/l		.5	UJ	ug/l		.5	UJ	ug/l		.5	UJ	ug/l	
Nickel	6.3	J	ug/l		5.9	U	ug/l	5.9	5.9	U	ug/l	5.9	5.9	U	ug/l	5.9
Selenium	6	UJ	ug/l		.6	UJ	ug/l		.6	UJ	ug/l		.6	UJ	ug/l	
Silver	2.1	U	ug/l	2.1	2.1	U	ug/l	2.1	2.1	U	ug/l	2.1	2.1	U	ug/l	2.1
Sodium	683000		ug/l		12700		ug/l		12500		ug/l		14800		ug/l	
Thallium	.6	U	ug/l	.6	.6	U	ug/l	.6	.6	U	ug/l	.6	.6	U	ug/l	.6
Tin	8	U	ug/l	8	8	U	ug/l	8	8	U	ug/l	8	8	U	ug/l	8
Vanadium	3.6	J	ug/l		2.3	J	ug/l		2.6	J	ug/l		2.3	J	ug/l	
Zinc	16.8	J	ug/l		6.3	J	ug/l		11.7	J	ug/l		3.1	J	ug/l	

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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8628006				R8784003				R8784004				R9037001			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08MW018S				08MW019S				08MW019SD				08MW020S			
Collect Date:		26-AUG-94				22-SEP-94				22-SEP-94				08-NOV-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (WATER)	ug/l																
Antimony		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Arsenic		2.3	J	ug/l		.6	U	ug/l	.6	.6	U	ug/l	.6	3	UJ	ug/l	
Barium		3.7	J	ug/l		8	J	ug/l		6.5	J	ug/l		5.4	J	ug/l	
Beryllium		.3	U	ug/l	.3	.3	U	ug/l	.3	.3	U	ug/l	.3	.3	U	ug/l	.3
Cadmium		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Calcium		41500		ug/l		166000		ug/l		155000		ug/l		186000		ug/l	
Chromium		2.6	U	ug/l	2.6	2.6	U	ug/l	2.6	2.6	U	ug/l	2.6	2.6	U	ug/l	2.6
Cobalt		3.1	U	ug/l	3.1	3.1	U	ug/l	3.1	3.1	U	ug/l	3.1	3.1	U	ug/l	3.1
Copper		.9	U	ug/l	.9	.9	U	ug/l	.9	.9	U	ug/l	.9	.9	U	ug/l	.9
Cyanide		2.7	U	ug/l	2.7	2.7	U	ug/l	2.7	2.7	U	ug/l	2.7	2.7	U	ug/l	2.7
Iron		221		ug/l		25.9	U	ug/l	25.9	25.9	U	ug/l	25.9	333		ug/l	
Lead		.6	U	ug/l	.6	9	J	ug/l		8	J	ug/l		6	UJ	ug/l	
Magnesium		17800		ug/l		390000		ug/l		359000		ug/l		357000		ug/l	
Manganese		35.5		ug/l		23.3		ug/l		23.8		ug/l		24.2		ug/l	
Mercury		.5	UJ	ug/l		.5	UJ	ug/l		.5	UJ	ug/l		.1	U	ug/l	.1
Nickel		5.9	U	ug/l	5.9	5.9	U	ug/l	5.9	5.9	U	ug/l	5.9	5.9	U	ug/l	5.9
Selenium		.6	UJ	ug/l		30	UJ	ug/l		6	UJ	ug/l		6	UJ	ug/l	
Silver		2.1	U	ug/l	2.1	2.1	U	ug/l	2.1	2.1	U	ug/l	2.1	2.1	U	ug/l	2.1
Sodium		176000		ug/l		3510000		ug/l		3440000		ug/l		2970000		ug/l	
Thallium		.6	UJ	ug/l		6	UJ	ug/l		6	UJ	ug/l		6	UJ	ug/l	
Tin		8	U	ug/l	8	8	U	ug/l	8	8	U	ug/l	8	8	U	ug/l	8
Vanadium		3.2	J	ug/l		3.4	J	ug/l		3	J	ug/l		3.8	J	ug/l	
Zinc		2	J	ug/l		5.3	U	ug/l	5.3	2.9	U	ug/l	2.9	7.3	U	ug/l	7.3

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AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number: R9037002
Site GROUP2
Locator 08MW020SD
Collect Date: 08-NOV-94

	VALUE	QUAL	UNITS	DL
INORGANICS (WATER) ug/l				
Antimony	5	U	ug/l	5
Arsenic	6	UJ	ug/l	
Barium	5.3	J	ug/l	
Beryllium	.3	U	ug/l	.3
Cadmium	1	U	ug/l	1
Calcium	187000		ug/l	
Chromium	2.6	U	ug/l	2.6
Cobalt	3.1	U	ug/l	3.1
Copper	.9	U	ug/l	.9
Cyanide	2.7	U	ug/l	2.7
Iron	322		ug/l	
Lead	6	UJ	ug/l	
Magnesium	361000		ug/l	
Manganese	23.5		ug/l	
Mercury	.1	U	ug/l	.1
Nickel	5.9	U	ug/l	5.9
Selenium	6	UJ	ug/l	
Silver	2.1	U	ug/l	2.1
Sodium	2990000		ug/l	
Thallium	6	UJ	ug/l	
Tin	8	U	ug/l	8
Vanadium	3.4	J	ug/l	
Zinc	7.3	U	ug/l	7.3

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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23921002			M7505004			23921004			R8626004		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		8MW1			08MW001S			8MW4			08MW004S		
Collect Date:		01-FEB-93			11-JUL-94			01-FEB-93			26-AUG-94		
		VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL
GROUND WATER QUALITY	mg/l												
Alkalinity as CaCO3		163	mg/l		150	mg/l		492	mg/l		464	mg/l	
Ammonia-N		.2	mg/l		.7	mg/l		2.6	mg/l		3.4	mg/l	
Chloride		14.9	mg/l		5.6	mg/l		21.3	mg/l		39.5	mg/l	
Hardness as CaCO3		220	mg/l		180	mg/l		502	mg/l		444	mg/l	
Nitrate/Nitrite-N		.05 U	mg/l	.05	.1 U	mg/l	.1	.05 U	mg/l	.05	.1 U	mg/l	.1
Oil and Grease		324	mg/l		5 U	mg/l	5	577	mg/l		52	mg/l	
Phosphorous-P, Total		.75	mg/l		1.08	mg/l		.68	mg/l		.51	mg/l	
Sulfate		25.5	mg/l		33.2	mg/l		1 U	mg/l	1	2.1	mg/l	
Sulfide		.5	mg/l		1 U	mg/l	1	.1 U	mg/l	.1	10 U	mg/l	10
Total Dissolved Solids		324	mg/l		422	mg/l		577	mg/l		556	mg/l	
Total Kjeldahl Nitrogen		.8	mg/l		1.3	mg/l		6.8	mg/l		4.1	mg/l	
Total Organic Carbon		4.1	mg/l		4.6	mg/l		22	mg/l		15.3	mg/l	
COLOR	APHA												
Color		15	APHA		70	APHA		30	APHA		50	APHA	
pH	units												
pH		7.6	units		7.6	units		6.8	units		6.8	units	
TOTAL PETROLEUM HYDROCARBONS	mg/l												
Total petroleum hydrocarbon		-	mg/l		-	mg/l		-	mg/l		-	mg/l	

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AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23887004				23921005				23921003				M7492004			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		8MW6				8MW7				8MW8				08MW008S			
Collect Date:		28-JAN-93				01-FEB-93				01-FEB-93				09-JUL-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
GROUND WATER QUALITY	mg/l																
Alkalinity as CaCO3		200		mg/l		973		mg/l		329		mg/l		224		mg/l	
Ammonia-N		.2	U	mg/l	.2	3.3		mg/l		.2		mg/l		.3	U	mg/l	.3
Chloride		19.9		mg/l		297		mg/l		291		mg/l		906		mg/l	
Hardness as CaCO3		210		mg/l		1040		mg/l		162		mg/l		224		mg/l	
Nitrate/Nitrite-N		.36		mg/l		.05	U	mg/l	.05	.35		mg/l		.52		mg/l	
Oil and Grease		.3		mg/l		1480		mg/l		1090		mg/l		5	U	mg/l	5
Phosphorous-P, Total		.19		mg/l		2.83		mg/l		1.23		mg/l		.21		mg/l	
Sulfate		18.2		mg/l		39.1		mg/l		107		mg/l		167		mg/l	
Sulfide		.1	U	mg/l	.1	4.4		mg/l		1.3		mg/l		1	U	mg/l	1
Total Dissolved Solids		282		mg/l		1480		mg/l		1090		mg/l		1980		mg/l	
Total Kjeldahl Nitrogen		.6		mg/l		12.4		mg/l		2.2		mg/l		.3	U	mg/l	.3
Total Organic Carbon		2.7		mg/l		97		mg/l		7		mg/l		4.6		mg/l	
COLOR	APHA																
Color		15	J	APHA		100		APHA		100		APHA		25		APHA	
pH	units																
pH		7.5		units		7		units		9.1		units		7		units	
TOTAL PETROLEUM HYDROCARBONS	mg/l																
Total petroleum hydrocarbon		-		mg/l		-		mg/l		-		mg/l		-		mg/l	

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AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8626003				R8708001				R8617003				R8617002			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		08MW009S				08MW010S				08MW012S				08MW013S			
Collect Date:		26-AUG-94				09-SEP-94				25-AUG-94				25-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
GROUND WATER QUALITY	mg/l																
Alkalinity as CaCO3		3390		mg/l		238		mg/l		327		mg/l		242		mg/l	
Ammonia-N		7.6		mg/l		.3	U	mg/l	.3	.8		mg/l		.3	U	mg/l	.3
Chloride		3790		mg/l		29.6		mg/l		21.7		mg/l		13.6		mg/l	
Hardness as CaCO3		7180		mg/l		300		mg/l		378		mg/l		267		mg/l	
Nitrate/Nitrite-N		.38		mg/l		3.69		mg/l		.1	U	mg/l	.1	.62		mg/l	
Oil and Grease		5	U	mg/l	5	5	U	mg/l	5	5	U	mg/l	5	5	U	mg/l	5
Phosphorous-P, Total		28		mg/l		.58		mg/l		3.25		mg/l		2.02		mg/l	
Sulfate		100	U	mg/l	100	54.5		mg/l		35.5		mg/l		23.8		mg/l	
Sulfide		15.1		mg/l		1	U	mg/l	1	2		mg/l		1	U	mg/l	1
Total Dissolved Solids		14500		mg/l		387		mg/l		457		mg/l		341		mg/l	
Total Kjeldahl Nitrogen		15.2		mg/l		1.3		mg/l		4.8		mg/l		5.5		mg/l	
Total Organic Carbon		3990		mg/l		6		mg/l		40.3		mg/l		7.1		mg/l	
COLOR	APHA																
Color		70		APHA		15		APHA		20		APHA		20		APHA	
pH	units																
pH		6.2		units		7.47		units		7.03		units		7.11		units	
TOTAL PETROLEUM HYDROCARBONS	mg/l																
Total petroleum hydrocarbon		-		mg/l		-		mg/l		-		mg/l		-		mg/l	

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AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8782001			R8617001			23905004			M7492003		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		08MW013I			08MW014S			9MW1			09MW001S		
Collect Date:		22-SEP-94			25-AUG-94			29-JAN-93			09-JUL-94		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
GROUND WATER QUALITY	mg/l												
Alkalinity as CaCO3		446	mg/l		584	mg/l		19	mg/l		293	mg/l	
Ammonia-N		1.5	mg/l		3.8	mg/l		.6 U	mg/l	.6	.3 U	mg/l	.3
Chloride		440	mg/l		21.9	mg/l		19.7	mg/l		17.4	mg/l	
Hardness as CaCO3		244	mg/l		580	mg/l		400	mg/l		374	mg/l	
Nitrate/Nitrite-N		.17	mg/l		.1 U	mg/l	.1	1	mg/l		.45	mg/l	
Oil and Grease		5 U	mg/l	5	19	mg/l		1.5	mg/l		5 U	mg/l	5
Phosphorous-P, Total		.59	mg/l		3.68	mg/l		.82	mg/l		.43	mg/l	
Sulfate		86.8	mg/l		10 U	mg/l	10	29.6	mg/l		64	mg/l	
Sulfide		13.9	mg/l		1 U	mg/l	1	.1 U	mg/l	.1	1 U	mg/l	1
Total Dissolved Solids		1290	mg/l		738	mg/l		479	mg/l		506	mg/l	
Total Kjeldahl Nitrogen		1.8	mg/l		8.9	mg/l		.9	mg/l		.4	mg/l	
Total Organic Carbon		20.3	mg/l		46.8	mg/l		18	mg/l		6.2	mg/l	
COLOR	APHA												
Color		140	APHA		40	APHA		10	APHA		50	APHA	
pH	units												
pH		7.64	units		6.64	units		7.2	units		8	units	
TOTAL PETROLEUM HYDROCARBONS	mg/l												
Total petroleum hydrocarbon		-	mg/l		-	mg/l		-	mg/l		-	mg/l	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23905005			23905006			M7505001			23905003		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		9MW2			9MW3			09MW003S			S-2		
Collect Date:		29-JAN-93			29-JAN-93			11-JUL-94			29-JAN-93		
		VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL
GROUND WATER QUALITY	mg/l												
Alkalinity as CaCO3		508	mg/l		313	mg/l		308	mg/l		315	mg/l	
Ammonia-N		1.7	mg/l		.6 U	mg/l	.6	.3 U	mg/l	.3	.4	mg/l	
Chloride		39.2	mg/l		12.4	mg/l		13.2	mg/l		5020	mg/l	
Hardness as CaCO3		484	mg/l		402	mg/l		364	mg/l		2200	mg/l	
Nitrate/Nitrite-N		.05 U	mg/l	.05	.75	mg/l		.38	mg/l		1.04	mg/l	
Oil and Grease		.7	mg/l		.5	mg/l		5 U	mg/l	5	3.7	mg/l	
Phosphorous-P, Total		.3	mg/l		.93	mg/l		.66	mg/l		.22	mg/l	
Sulfate		17.4	mg/l		56.2	mg/l		43.3	mg/l		732	mg/l	
Sulfide		.1 U	mg/l	.1	.1 U	mg/l	.1	1 U	mg/l	1	.2	mg/l	
Total Dissolved Solids		591	mg/l		468	mg/l		499	mg/l		9520	mg/l	
Total Kjeldahl Nitrogen		3.6	mg/l		1	mg/l		.3	mg/l		1.4	mg/l	
Total Organic Carbon		7.2	mg/l		2.9	mg/l		3	mg/l		12	mg/l	
COLOR	APHA												
Color		50	APHA		20	APHA		50	APHA		35	APHA	
pH	units												
pH		6.9	units		7.3	units		7.1	units		6.9	units	
TOTAL PETROLEUM HYDROCARBONS	mg/l												
Total petroleum hydrocarbon		-	mg/l		-	mg/l		-	mg/l		-	mg/l	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23905002
Site	GROUP2
Locator	S-3
Collect Date:	28-JAN-93

		VALUE	QUAL	UNITS	DL
GROUND WATER QUALITY	mg/l				
Alkalinity as CaCO3		304		mg/l	
Ammonia-N		.2	U	mg/l	.2
Chloride		13		mg/l	
Hardness as CaCO3		308		mg/l	
Nitrate/Nitrite-N		.2		mg/l	
Oil and Grease		.1	U	mg/l	.1
Phosphorous-P, Total		1.04		mg/l	
Sulfate		27.9		mg/l	
Sulfide		.1	U	mg/l	.1
Total Dissolved Solids		391		mg/l	
Total Kjeldahl Nitrogen		.6		mg/l	
Total Organic Carbon		4.8		mg/l	
COLOR	APHA				
Color		15		APHA	
pH	units				
pH		7.1		units	
TOTAL PETROLEUM HYDROCARBONS	mg/l				
Total petroleum hydrocarbon		-		mg/l	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8782002			R8626001			R8626005			R8626006		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		08MW015I			08MW016S			08MW017S			08MW018S		
Collect Date:		22-SEP-94			26-AUG-94			26-AUG-94			26-AUG-94		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
GROUND WATER QUALITY	mg/l												
Alkalinity as CaCO3		574	mg/l		400	mg/l		320	mg/l		290	mg/l	
Ammonia-N		3.8	mg/l		3.9	mg/l		.4	mg/l		.3	mg/l	
Chloride		1110	mg/l		23.5	mg/l		52.6	mg/l		148	mg/l	
Hardness as CaCO3		550	mg/l		404	mg/l		368	mg/l		208	mg/l	
Nitrate/Nitrite-N		.21	mg/l		.17	mg/l		.49	mg/l		.21	mg/l	
Oil and Grease		5 U	mg/l	5	5 U	mg/l	5	5 U	mg/l	5	5 U	mg/l	5
Phosphorous-P, Total		.73	mg/l		.75	mg/l		2.01	mg/l		1.56	mg/l	
Sulfate		89	mg/l		4.7	mg/l		8.3	mg/l		19.8	mg/l	
Sulfide		33	mg/l		2 U	mg/l	2	1 U	mg/l	1	1.2	mg/l	
Total Dissolved Solids		2500	mg/l		470	mg/l		457	mg/l		577	mg/l	
Total Kjeldahl Nitrogen		6.8	mg/l		4.7	mg/l		3.9	mg/l		3.3	mg/l	
Total Organic Carbon		40	mg/l		11.9	mg/l		96.4	mg/l		19	mg/l	
COLOR	APHA												
Color		120	APHA		40	APHA		30	APHA		70	APHA	
pH	units												
pH		7.32	units		6.8	units		7.05	units		7.57	units	
TOTAL PETROLEUM HYDROCARBONS	mg/l												
Total petroleum hydrocarbon		-	mg/l		-	mg/l		-	mg/l		-	mg/l	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8782003				R9035001			
Site		GROUP2				GROUP2			
Locator		08MW019S				08MW020S			
Collect Date:		22-SEP-94				08-NOV-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
GROUND WATER QUALITY	mg/l								
Alkalinity as CaCO3		230		mg/l		452		mg/l	
Ammonia-N		1.2		mg/l		1.9		mg/l	
Chloride		13600		mg/l		5660		mg/l	
Hardness as CaCO3		2100		mg/l		2240		mg/l	
Nitrate/Nitrite-N		.25		mg/l		.14		mg/l	
Oil and Grease		5	U	mg/l	5	10	U	mg/l	10
Phosphorous-P, Total		.41		mg/l		.22		mg/l	
Sulfate		1950		mg/l		806		mg/l	
Sulfide		7		mg/l		4.4		mg/l	
Total Dissolved Solids		12400		mg/l		8120		mg/l	
Total Kjeldahl Nitrogen		1.6		mg/l		1.9		mg/l	
Total Organic Carbon		6.7		mg/l		14.2		mg/l	
COLOR	APHA								
Color		30		APHA		10		APHA	
pH	units								
pH		7.41		units		6.88		units	
TOTAL PETROLEUM HYDROCARBONS	mg/l								
Total petroleum hydrocarbon		-		mg/l		-		mg/l	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

APPENDIX A-5

GROUNDWATER SAMPLE ANALYSES, SWMU 12

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23885001			35071001			GN-0124400			M7472001		
Site	GROUP2			GROUP2			GROUP2			GROUP2		
Locator	MPT-11-1			MPT-11-1			MPT-11-1			11MW001S		
Collect Date:	27-JAN-93			27-JAN-93			27-JAN-93			07-JUL-94		
	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
VOLATILES ug/l												
Chloromethane	-	ug/l		10 U	ug/l	10	1 U	ug/l	1	10 U	ug/l	10
Bromomethane	-	ug/l		10 U	ug/l	10	1 U	ug/l	1	10 UJ	ug/l	
Vinyl chloride	-	ug/l		10 U	ug/l	10	1 U	ug/l	1	10 U	ug/l	10
Chloroethane	-	ug/l		10 U	ug/l	10	1 U	ug/l	1	10 U	ug/l	10
Methylene chloride	-	ug/l		5 U	ug/l	5	1 U	ug/l	1	5 U	ug/l	5
Acetone	-	ug/l		1 UJ	ug/l		-	ug/l		10 U	ug/l	10
Carbon disulfide	-	ug/l		5 U	ug/l	5	-	ug/l		5 U	ug/l	5
1,1-Dichloroethane	-	ug/l		5 U	ug/l	5	1 U	ug/l	1	5 U	ug/l	5
1,1-Dichloroethene	-	ug/l		5 U	ug/l	5	1 U	ug/l	1	5 U	ug/l	5
1,2-Dichloroethene (total)	-	ug/l		5 U	ug/l	5	-	ug/l		5 U	ug/l	5
Chloroform	-	ug/l		5 U	ug/l	5	1 U	ug/l	1	5 U	ug/l	5
1,2-Dichloroethane	-	ug/l		5 U	ug/l	5	1 U	ug/l	1	5 U	ug/l	5
2-Butanone	-	ug/l		10 UJ	ug/l		-	ug/l		10 U	ug/l	10
1,1,1-Trichloroethane	-	ug/l		5 U	ug/l	5	1 U	ug/l	1	5 U	ug/l	5
Carbon tetrachloride	-	ug/l		5 U	ug/l	5	1 U	ug/l	1	5 U	ug/l	5
Bromodichloromethane	-	ug/l		5 U	ug/l	5	1 U	ug/l	1	5 U	ug/l	5
1,2-Dichloropropane	-	ug/l		5 U	ug/l	5	1 U	ug/l	1	5 U	ug/l	5
cis-1,3-Dichloropropene	-	ug/l		5 U	ug/l	5	1 U	ug/l	1	5 U	ug/l	5
Trichloroethene	-	ug/l		5 U	ug/l	5	1 U	ug/l	1	5 U	ug/l	5
Dibromochloromethane	-	ug/l		5 U	ug/l	5	1 U	ug/l	1	5 U	ug/l	5
1,1,2-Trichloroethane	-	ug/l		5 U	ug/l	5	1 U	ug/l	1	5 U	ug/l	5
Benzene	-	ug/l		5 U	ug/l	5	-	ug/l		5 U	ug/l	5
trans-1,3-Dichloropropene	-	ug/l		5 U	ug/l	5	1 U	ug/l	1	5 U	ug/l	5
Bromoform	-	ug/l		5 U	ug/l	5	1 U	ug/l	1	5 U	ug/l	5
4-Methyl-2-pentanone	-	ug/l		10 U	ug/l	10	-	ug/l		10 U	ug/l	10
2-Hexanone	-	ug/l		10 U	ug/l	10	-	ug/l		10 U	ug/l	10
Tetrachloroethene	-	ug/l		5 U	ug/l	5	1 U	ug/l	1	5 U	ug/l	5
1,1,2,2-Tetrachloroethane	-	ug/l		5 U	ug/l	5	1 U	ug/l	1	5 U	ug/l	5
Toluene	-	ug/l		5 U	ug/l	5	-	ug/l		5 U	ug/l	5
Chlorobenzene	-	ug/l		5 U	ug/l	5	1 U	ug/l	1	5 U	ug/l	5
Ethylbenzene	-	ug/l		5 U	ug/l	5	-	ug/l		5 U	ug/l	5
Styrene	-	ug/l		5 U	ug/l	5	-	ug/l		5 U	ug/l	5
Xylenes (total)	-	ug/l		-	ug/l		-	ug/l		5 U	ug/l	5
Dichlorodifluoromethane	-	ug/l		10 U	ug/l	10	1 U	ug/l	1	10 UJ	ug/l	
Trichlorofluoromethane	-	ug/l		5 U	ug/l	5	1 U	ug/l	1	5 U	ug/l	5
1,3-Dichlorobenzene	10 U	ug/l	10	5 U	ug/l	5	1 U	ug/l	1	5 U	ug/l	5
Acrolein	-	ug/l		100 U	ug/l	100	-	ug/l		100 U	ug/l	100
Iodomethane	-	ug/l		10 U	ug/l	10	-	ug/l		10 UJ	ug/l	
1,4-Dichlorobenzene	10 U	ug/l	10	5 U	ug/l	5	1 U	ug/l	1	5 U	ug/l	5
Acrylonitrile	-	ug/l		100 U	ug/l	100	-	ug/l		100 U	ug/l	100
Dibromomethane	-	ug/l		5 U	ug/l	5	-	ug/l		5 U	ug/l	5
1,2-Dichlorobenzene	10 U	ug/l	10	5 U	ug/l	5	1 U	ug/l	1	10 U	ug/l	10
2-Chloroethylvinylether	-	ug/l		10 U	ug/l	10	1 U	ug/l	1	10 U	ug/l	10
Ethyl methacrylate	-	ug/l		5 U	ug/l	5	-	ug/l		5 U	ug/l	5
1,2,3-Trichloropropane	-	ug/l		5 U	ug/l	5	-	ug/l		5 U	ug/l	5
trans-1,4-Dichloro-2-butene	-	ug/l		5 U	ug/l	5	-	ug/l		5 U	ug/l	5
Isobutyl alcohol	-	ug/l		200 U	ug/l	200	-	ug/l		200 U	ug/l	200
1,1,1,2-Tetrachloroethane	-	ug/l		5 U	ug/l	5	-	ug/l		5 U	ug/l	5
1,2-Dibromo-3-chloropropane	-	ug/l		10 U	ug/l	10	-	ug/l		10 U	ug/l	10
1,2-Dibromoethane	-	ug/l		5 U	ug/l	5	-	ug/l		5 U	ug/l	5

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23885001				35071001				GN-0124400				M7472001			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT-11-1				MPT-11-1				MPT-11-1				11MW001S			
Collect Date:	27-JAN-93				27-JAN-93				27-JAN-93				07-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	-		ug/l		200	R	ug/l		-		ug/l		200	R	ug/l	
3-Chloropropene	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Acetonitrile	-		ug/l		100	U	ug/l	100	-		ug/l		100	U	ug/l	100
Chloroprene	-		ug/l		-		ug/l		-		ug/l		-		ug/l	
Methacrylonitrile	-		ug/l		5	U	ug/l	5	-		ug/l		5	U	ug/l	5
Methyl methacrylate	-		ug/l		10	U	ug/l	10	-		ug/l		10	UJ	ug/l	
Pentachloroethane	-		ug/l		10	U	ug/l	10	-		ug/l		10	U	ug/l	10
Propionitrile	-		ug/l		100	U	ug/l	100	-		ug/l		100	U	ug/l	100
Vinyl acetate	-		ug/l		10	U	ug/l	10	-		ug/l		10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23885002				GN-0124400				M7457002				23885003			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT-11-2				MPT-11-2				11MW002S				11MW3			
Collect Date:	27-JAN-93				27-JAN-93				06-JUL-94				27-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES ug/l																
Chloromethane	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10	-		ug/l	
Bromomethane	10	U	ug/l	10	1	U	ug/l	1	10	UJ	ug/l		-		ug/l	
Vinyl chloride	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10	-		ug/l	
Chloroethane	10	U	ug/l	10	1	U	ug/l	1	10	U	ug/l	10	-		ug/l	
Methylene chloride	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	-		ug/l	
Acetone	11		ug/l		-		ug/l		10	U	ug/l	10	-		ug/l	
Carbon disulfide	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
1,1-Dichloroethane	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	-		ug/l	
1,1-Dichloroethene	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	-		ug/l	
1,2-Dichloroethene (total)	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Chloroform	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	-		ug/l	
1,2-Dichloroethane	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	-		ug/l	
2-Butanone	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	-		ug/l	
1,1,1-Trichloroethane	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	-		ug/l	
Carbon tetrachloride	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	-		ug/l	
Bromodichloromethane	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	-		ug/l	
1,2-Dichloropropane	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	-		ug/l	
cis-1,3-Dichloropropene	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	-		ug/l	
Trichloroethene	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	-		ug/l	
Dibromochloromethane	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	-		ug/l	
1,1,2-Trichloroethane	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	-		ug/l	
Benzene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
trans-1,3-Dichloropropene	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	-		ug/l	
Bromoform	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	-		ug/l	
4-Methyl-2-pentanone	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	-		ug/l	
2-Hexanone	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	-		ug/l	
Tetrachloroethene	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	-		ug/l	
1,1,2,2-Tetrachloroethane	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	-		ug/l	
Toluene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Chlorobenzene	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	-		ug/l	
Ethylbenzene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Styrene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Xylenes (total)	-		ug/l		-		ug/l		5	U	ug/l	5	-		ug/l	
Dichlorodifluoromethane	10	U	ug/l	10	1	U	ug/l	1	10	UJ	ug/l		-		ug/l	
Trichlorofluoromethane	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	-		ug/l	
1,3-Dichlorobenzene	5	U	ug/l	5	1	U	ug/l	1	5	U	ug/l	5	10	U	ug/l	10
Acrolein	100	U	ug/l	100	-		ug/l		100	U	ug/l	100	-		ug/l	
Iodomethane	10	U	ug/l	10	-		ug/l		10	UJ	ug/l		-		ug/l	
1,4-Dichlorobenzene	5	U	ug/l	5	1	U	ug/l	1	10	U	ug/l	10	10	U	ug/l	10
Acrylonitrile	100	U	ug/l	100	-		ug/l		100	U	ug/l	100	-		ug/l	

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23885002				GN-0124400				M7457002				23885003			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT-11-2				MPT-11-2				11MW002S				11MW3			
Collect Date:	27-JAN-93				27-JAN-93				06-JUL-94				27-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
1,2-Dichlorobenzene	10	U	ug/l	10	1	U	ug/l	1	2	J	ug/l		10	U	ug/l	10
2-Chloroethylvinylether	10	R	ug/l		1	U	ug/l	1	10	U	ug/l	10	-		ug/l	
Ethyl methacrylate	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
1,2,3-Trichloropropane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
trans-1,4-Dichloro-2-butene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Isobutyl alcohol	200	R	ug/l		-		ug/l		200	U	ug/l	200	-		ug/l	
1,1,1,2-Tetrachloroethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
1,2-Dibromo-3-chloropropane	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	-		ug/l	
1,2-Dibromoethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
1,4-Dioxane	200	R	ug/l		-		ug/l		200	R	ug/l		-		ug/l	
3-Chloropropene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Acetonitrile	100	U	ug/l	100	-		ug/l		100	U	ug/l	100	-		ug/l	
Chloroprene	-		ug/l		-		ug/l		-		ug/l		-		ug/l	
Methacrylonitrile	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Methyl methacrylate	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	-		ug/l	
Pentachloroethane	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	-		ug/l	
Propionitrile	100	U	ug/l	100	-		ug/l		100	U	ug/l	100	-		ug/l	
Vinyl acetate	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	-		ug/l	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		35071002				GN-0124400				23885004				35071003		
Site		GROUP2				GROUP2				GROUP2				GROUP2		
Locator		11MW3				11MW3				11MW3D				11MW3D		
Collect Date:		27-JAN-93				27-JAN-93				27-JAN-93				27-JAN-93		
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/l																
Chloromethane		10	U	ug/l	10	1	U	ug/l	1	-		ug/l		10	U	ug/l	10
Bromomethane		10	U	ug/l	10	1	U	ug/l	1	-		ug/l		10	U	ug/l	10
Vinyl chloride		10	U	ug/l	10	1	U	ug/l	1	-		ug/l		10	U	ug/l	10
Chloroethane		10	U	ug/l	10	1	U	ug/l	1	-		ug/l		10	U	ug/l	10
Methylene chloride		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
Acetone		10	UJ	ug/l		-		ug/l		-		ug/l		10	UJ	ug/l	
Carbon disulfide		5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
1,1-Dichloroethane		1	J	ug/l		1	U	ug/l	1	-		ug/l		1	J	ug/l	
1,1-Dichloroethene		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
1,2-Dichloroethene (total)		5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
Chloroform		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
1,2-Dichloroethane		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
2-Butanone		10	UJ	ug/l		-		ug/l		-		ug/l		10	UJ	ug/l	
1,1,1-Trichloroethane		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
Carbon tetrachloride		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
Bromodichloromethane		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
1,2-Dichloropropane		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
cis-1,3-Dichloropropene		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
Trichloroethene		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
Dibromochloromethane		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
1,1,2-Trichloroethane		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
Benzene		5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
trans-1,3-Dichloropropene		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
Bromoform		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
4-Methyl-2-pentanone		10	U	ug/l	10	-		ug/l		-		ug/l		10	U	ug/l	10
2-Hexanone		10	U	ug/l	10	-		ug/l		-		ug/l		10	U	ug/l	10
Tetrachloroethene		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
1,1,2,2-Tetrachloroethane		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
Toluene		5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
Chlorobenzene		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
Ethylbenzene		5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
Styrene		5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
Xylenes (total)		-		ug/l		-		ug/l		-		ug/l		-		ug/l	
Dichlorodifluoromethane		10	U	ug/l	10	1	U	ug/l	1	-		ug/l		10	U	ug/l	10
Trichlorofluoromethane		5	U	ug/l	5	1	U	ug/l	1	-		ug/l		5	U	ug/l	5
1,3-Dichlorobenzene		5	U	ug/l	5	1	U	ug/l	1	10	U	ug/l	10	5	U	ug/l	5
Acrolein		100	U	ug/l	100	-		ug/l		-		ug/l		100	U	ug/l	100
Iodomethane		10	U	ug/l	10	-		ug/l		-		ug/l		10	U	ug/l	10
1,4-Dichlorobenzene		5	U	ug/l	5	1	U	ug/l	1	10	U	ug/l	10	5	U	ug/l	5
Acrylonitrile		100	U	ug/l	100	-		ug/l		-		ug/l		100	U	ug/l	100

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	35071002				GN-0124400				23885004				35071003			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	11MW3				11MW3				11MW3D				11MW3D			
Collect Date:	27-JAN-93				27-JAN-93				27-JAN-93				27-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
1,2-Dichlorobenzene	5	U	ug/l	5	1	U	ug/l	1	10	U	ug/l	10	5	U	ug/l	5
2-Chloroethylvinylether	10	U	ug/l	10	1	U	ug/l	1	-		ug/l		10	U	ug/l	10
Ethyl methacrylate	5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
1,2,3-Trichloropropane	5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
trans-1,4-Dichloro-2-butene	5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
Isobutyl alcohol	200	U	ug/l	200	-		ug/l		-		ug/l		200	U	ug/l	200
1,1,1,2-Tetrachloroethane	5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
1,2-Dibromo-3-chloropropane	10	U	ug/l	10	-		ug/l		-		ug/l		10	U	ug/l	10
1,2-Dibromoethane	5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
1,4-Dioxane	200	R	ug/l		-		ug/l		-		ug/l		200	R	ug/l	
3-Chloropropene	5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
Acetonitrile	100	U	ug/l	100	-		ug/l		-		ug/l		100	U	ug/l	100
Chloroprene	-		ug/l		-		ug/l		-		ug/l		-		ug/l	
Methacrylonitrile	5	U	ug/l	5	-		ug/l		-		ug/l		5	U	ug/l	5
Methyl methacrylate	10	U	ug/l	10	-		ug/l		-		ug/l		10	U	ug/l	10
Pentachloroethane	10	U	ug/l	10	-		ug/l		-		ug/l		10	U	ug/l	10
Propionitrile	100	U	ug/l	100	-		ug/l		-		ug/l		100	U	ug/l	100
Vinyl acetate	10	U	ug/l	10	-		ug/l		-		ug/l		10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	M7457001
Site	GROUP2
Locator	11MW003S
Collect Date:	06-JUL-94

		VALUE	QUAL	UNITS	DL
VOLATILES	ug/l				
Chloromethane		10	UJ	ug/l	
Bromomethane		10	UJ	ug/l	
Vinyl chloride		10	U	ug/l	10
Chloroethane		10	U	ug/l	10
Methylene chloride		1	J	ug/l	
Acetone		10	U	ug/l	10
Carbon disulfide		5	U	ug/l	5
1,1-Dichloroethane		1	J	ug/l	
1,1-Dichloroethene		5	U	ug/l	5
1,2-Dichloroethene (total)		2	J	ug/l	
Chloroform		5	U	ug/l	5
1,2-Dichloroethane		5	U	ug/l	5
2-Butanone		10	U	ug/l	10
1,1,1-Trichloroethane		5	U	ug/l	5
Carbon tetrachloride		5	U	ug/l	5
Bromodichloromethane		5	U	ug/l	5
1,2-Dichloropropane		5	U	ug/l	5
cis-1,3-Dichloropropene		5	U	ug/l	5
Trichloroethene		5	U	ug/l	5
Dibromochloromethane		5	U	ug/l	5
1,1,2-Trichloroethane		5	U	ug/l	5
Benzene		5	U	ug/l	5
trans-1,3-Dichloropropene		5	U	ug/l	5
Bromoform		5	U	ug/l	5
4-Methyl-2-pentanone		10	U	ug/l	10
2-Hexanone		10	U	ug/l	10
Tetrachloroethene		5	U	ug/l	5
1,1,2,2-Tetrachloroethane		5	U	ug/l	5
Toluene		5	U	ug/l	5
Chlorobenzene		5	U	ug/l	5
Ethylbenzene		5	U	ug/l	5
Styrene		5	U	ug/l	5
Xylenes (total)		5	U	ug/l	5
Dichlorodifluoromethane		10	UJ	ug/l	
Trichlorofluoromethane		5	U	ug/l	5
1,3-Dichlorobenzene		10	U	ug/l	10
Acrolein		100	U	ug/l	100
Iodomethane		10	UJ	ug/l	
1,4-Dichlorobenzene		10	U	ug/l	10
Acrylonitrile		100	U	ug/l	100

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	M7457001
Site	GROUP2
Locator	11MW003S
Collect Date:	06-JUL-94

	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/l	5
1,2-Dichlorobenzene	10	U	ug/l	10
2-Chloroethylvinylether	10	U	ug/l	10
Ethyl methacrylate	5	U	ug/l	5
1,2,3-Trichloropropane	5	U	ug/l	5
trans-1,4-Dichloro-2-butene	5	U	ug/l	5
Isobutyl alcohol	200	U	ug/l	200
1,1,1,2-Tetrachloroethane	5	U	ug/l	5
1,2-Dibromo-3-chloropropane	10	U	ug/l	10
1,2-Dibromoethane	5	U	ug/l	5
1,4-Dioxane	200	R	ug/l	
3-Chloropropene	5	U	ug/l	5
Acetonitrile	100	U	ug/l	100
Chloroprene	-		ug/l	
Methacrylonitrile	5	U	ug/l	5
Methyl methacrylate	10	U	ug/l	10
Pentachloroethane	10	U	ug/l	10
Propionitrile	100	U	ug/l	100
Vinyl acetate	10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23885001				M7472001				23885002				M7457002			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT-11-1				11MW001S				MPT-11-2				11MW002S			
Collect Date:	27-JAN-93				07-JUL-94				27-JAN-93				06-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/l																
N-Nitrosodimethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenol	10	U	ug/l	10	10	U	ug/l	10	22		ug/l		43		ug/l	
Aniline	10	U	ug/l	10	10	UJ	ug/l		10	U	ug/l	10	10	UJ	ug/l	
bis (2-Chloroethyl) ether	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzyl Alcohol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Methylphenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
bis(2-Chloroisopropyl)ether	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitroso-di-n-propylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachloroethane	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Nitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Isophorone	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Nitrophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4-Dimethylphenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzoic acid	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
bis(2-Chloroethoxy)methane	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4-Dichlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,2,4-Trichlorobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Naphthalene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Chloroaniline	10	U	ug/l	10	10	UJ	ug/l		10	U	ug/l	10	10	UJ	ug/l	
Hexachlorobutadiene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Chloro-3-methylphenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Methylnaphthalene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorocyclopentadiene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4,6-Trichlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Dimethylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4,5-Trichlorophenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Chloronaphthalene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Nitroaniline	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Acenaphthylene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,6-Dinitrotoluene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3-Nitroaniline	50	U	ug/l	50	50	UJ	ug/l		50	U	ug/l	50	50	UJ	ug/l	
Acenaphthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4-Dinitrophenol	50	UJ	ug/l		50	UJ	ug/l		50	UJ	ug/l		50	UJ	ug/l	
4-Nitrophenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	11	J	ug/l	
Dibenzofuran	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4-Dinitrotoluene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Diethylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Chlorophenyl-phenylether	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Fluorene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Nitroaniline	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
4,6-Dinitro-2-methylphenol	50	UJ	ug/l		50	UJ	ug/l		50	UJ	ug/l		50	UJ	ug/l	
N-Nitrosodiphenylamine (1)	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,2-Diphenylhydrazine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Bromophenyl-phenylether	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pentachlorophenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Phenanthrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Di-n-Butylphthalate	11	U	ug/l	11	10	U	ug/l	10	11	U	ug/l	11	10	U	ug/l	10
Fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23885001				M7472001				23885002				M7457002			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT-11-1				11MW001S				MPT-11-2				11MW002S			
Collect Date:	27-JAN-93				07-JUL-94				27-JAN-93				06-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Butylbenzylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3,3'-Dichlorobenzidine	20	U	ug/l	20	20	U	ug/l	20	20	U	ug/l	20	20	U	ug/l	20
Benzo(a)anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Chrysene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
bis(2-Ethylhexyl)phthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Di-n-octylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(b)fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(k)fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(a)pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Indeno(1,2,3-cd)pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Dibenz(a,h)anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(g,h,i)perylene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Picoline	50	UJ	ug/l		50	U	ug/l	50	50	UJ	ug/l		50	U	ug/l	50
Methyl methanesulfonate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Ethyl methanesulfonate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Acetophenone	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopiperidine	10	U	ug/l	10	10	UJ	ug/l		10	U	ug/l	10	10	UJ	ug/l	
Phenyl-tert-butylamine	50	UJ	ug/l		50	U	ug/l	50	50	UJ	ug/l		50	U	ug/l	50
2,6-Dichlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitroso-di-n-butylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosodiethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopyrrolidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzidine	50	U	ug/l	50	50	UJ	ug/l		50	U	ug/l	50	50	UJ	ug/l	
1,2,4,5-Tetrachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pentachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2,3,4,6-Tetrachlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenacetin	10	U	ug/l	10	10	UJ	ug/l		10	U	ug/l	10	10	UJ	ug/l	
4-Aminobiphenyl	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pentachloronitrobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pronamide	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
p-(Dimethylamino)azobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
7,12-Dimethylbenz(A)Anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3-Methylcholanthrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pyridine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
N-Nitrosomethylethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosomorpholine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
o-Toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachloropropene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
p-Phenylenediamine	50	U	ug/l	50	500	U	ug/l	500	50	U	ug/l	50	500	U	ug/l	500
Safrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Isosafrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1,4-Naphthoquinone	50	U	ug/l	50	1000	UJ	ug/l		50	U	ug/l	50	1000	UJ	ug/l	
1,3-Dinitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
5-Nitro-o-toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,3,5-Trinitrobenzene	10	U	ug/l	10	10	UJ	ug/l		10	U	ug/l	10	10	UJ	ug/l	
4-Nitroquinoline-1-oxide	10	U	ug/l	10	500	UJ	ug/l		10	U	ug/l	10	500	UJ	ug/l	
Methapyrilene	50	U	ug/l	50	50	UJ	ug/l		50	U	ug/l	50	50	UJ	ug/l	
3,3'-Dimethylbenzidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorophene	50	U	ug/l	50	500	UJ	ug/l		50	U	ug/l	50	500	UJ	ug/l	

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23885001				M7472001				23885002				M7457002			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT-11-1				11MW001S				MPT-11-2				11MW002S			
Collect Date:	27-JAN-93				07-JUL-94				27-JAN-93				06-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Aramite	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Chlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3- & 4-Methylphenol (2)	-		ug/l		10	U	ug/l	10	-		ug/l		10	U	ug/l	10
Hexachloropropene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Acetylaminofluorene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23885003			23885004			M7457001		
Site		GROUP2			GROUP2			GROUP2		
Locator		11MW3			11MW3D			11MW003S		
Collect Date:		27-JAN-93			27-JAN-93			06-JUL-94		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES	ug/l									
N-Nitrosodimethylamine		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Phenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Aniline		10 U	ug/l	10	10 U	ug/l	10	10 UJ	ug/l	
bis (2-Chloroethyl) ether		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Benzyl Alcohol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Methylphenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
bis(2-Chloroisopropyl)ether		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
N-Nitroso-di-n-propylamine		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Hexachloroethane		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Nitrobenzene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Isophorone		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Nitrophenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4-Dimethylphenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Benzoic acid		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
bis(2-Chloroethoxy)methane		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4-Dichlorophenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
1,2,4-Trichlorobenzene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Naphthalene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Chloroaniline		10 U	ug/l	10	10 U	ug/l	10	10 UJ	ug/l	
Hexachlorobutadiene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Chloro-3-methylphenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Methylnaphthalene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Hexachlorocyclopentadiene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4,6-Trichlorophenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Dimethylphthalate		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4,5-Trichlorophenol		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
2-Chloronaphthalene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Nitroaniline		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
Acenaphthylene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,6-Dinitrotoluene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
3-Nitroaniline		50 U	ug/l	50	50 U	ug/l	50	50 UJ	ug/l	
Acenaphthene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4-Dinitrophenol		50 UJ	ug/l		50 UJ	ug/l		50 UJ	ug/l	
4-Nitrophenol		50 U	ug/l	50	50 U	ug/l	50	13 J	ug/l	
Dibenzofuran		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4-Dinitrotoluene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Diethylphthalate		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Chlorophenyl-phenylether		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Fluorene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Nitroaniline		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23885003				23885004				M7457001			
Site	GROUP2				GROUP2				GROUP2			
Locator	11MW3				11MW3D				11MW003S			
Collect Date:	27-JAN-93				27-JAN-93				06-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	50	UJ	ug/l		50	UJ	ug/l		50	UJ	ug/l	
N-Nitrosodiphenylamine (1)	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,2-Diphenylhydrazine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Bromophenyl-phenylether	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pentachlorophenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Phenanthrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Di-n-Butylphthalate	10	U	ug/l	10	11	U	ug/l	11	10	U	ug/l	10
Fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Butylbenzylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3,3'-Dichlorobenzidine	20	U	ug/l	20	20	U	ug/l	20	20	U	ug/l	20
Benzo(a)anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Chrysene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
bis(2-Ethylhexyl)phthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Di-n-octylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(b)fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(k)fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(a)pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Indeno(1,2,3-cd)pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Dibenz(a,h)anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(g,h,i)perylene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Picoline	50	UJ	ug/l		50	UJ	ug/l		50	U	ug/l	50
Methyl methanesulfonate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Ethyl methanesulfonate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Acetophenone	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopiperidine	10	U	ug/l	10	10	U	ug/l	10	10	UJ	ug/l	
Phenyl-tert-butylamine	50	UJ	ug/l		50	UJ	ug/l		50	U	ug/l	50
2,6-Dichlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitroso-di-n-butylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosodiethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopyrrolidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzidine	50	U	ug/l	50	50	U	ug/l	50	50	UJ	ug/l	
1,2,4,5-Tetrachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pentachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2,3,4,6-Tetrachlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenacetin	10	U	ug/l	10	10	U	ug/l	10	10	UJ	ug/l	
4-Aminobiphenyl	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pentachloronitrobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pronamide	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
p-(Dimethylamino)azobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
7,12-Dimethylbenz(A)Anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3-Methylcholanthrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pyridine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
N-Nitrosomethylethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosomorpholine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
o-Toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachloropropene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
p-Phenylenediamine	50	U	ug/l	50	50	U	ug/l	50	500	U	ug/l	500

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23885003				23885004				M7457001			
Site	GROUP2				GROUP2				GROUP2			
Locator	11MW3				11MW3D				11MW003S			
Collect Date:	27-JAN-93				27-JAN-93				06-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Isosafrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1,4-Naphthoquinone	50	U	ug/l	50	50	U	ug/l	50	1000	UJ	ug/l	
1,3-Dinitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
5-Nitro-o-toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,3,5-Trinitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	UJ	ug/l	
4-Nitroquinoline-1-oxide	10	U	ug/l	10	10	U	ug/l	10	500	UJ	ug/l	
Methapyrilene	50	U	ug/l	50	50	U	ug/l	50	50	UJ	ug/l	
3,3'-Dimethylbenzidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorophene	50	U	ug/l	50	50	U	ug/l	50	500	UJ	ug/l	
Aramite	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Chlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3- & 4-Methylphenol (2)	-		ug/l		-		ug/l		10	U	ug/l	10
Hexachloropropene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Acetylaminofluorene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23885001				M7472001				23885002				M7457002			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT-11-1				11MW001S				MPT-11-2				11MW002S			
Collect Date:	27-JAN-93				07-JUL-94				27-JAN-93				06-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs ug/l																
alpha-BHC	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
beta-BHC	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
delta-BHC	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
gamma-BHC (Lindane)	.02	U	ug/l	.02	.02	UJ	ug/l		.02	U	ug/l	.02	.02	UJ	ug/l	
Heptachlor	.02	U	ug/l	.02	.02	UJ	ug/l		.02	U	ug/l	.02	.02	UJ	ug/l	
Aldrin	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Heptachlor epoxide	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Endosulfan I	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Dieldrin	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
4,4-DDE	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Endrin	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endosulfan II	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
4,4-DDD	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endosulfan sulfate	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
4,4-DDT	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Methoxychlor	.08	U	ug/l	.08	.08	U	ug/l	.08	.08	U	ug/l	.08	.08	U	ug/l	.08
Endrin aldehyde	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endrin ketone	-		ug/l		.04	U	ug/l	.04	-		ug/l		.04	U	ug/l	.04
Chlordane	.2	U	ug/l	.2	.2	U	ug/l	.2	.2	U	ug/l	.2	.2	U	ug/l	.2
Chlorobenzilate	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5
Diallate	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Toxaphene	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Isodrin	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Kepone	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1016	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1221	2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2
Aroclor-1232	2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2
Aroclor-1242	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1248	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1254	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5
Aroclor-1260	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5

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J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23885003			23885004			M7457001		
Site		GROUP2			GROUP2			GROUP2		
Locator		11MW3			11MW3D			11MW003S		
Collect Date:		27-JAN-93			27-JAN-93			06-JUL-94		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
PESTICIDES/PCBs	ug/l									
alpha-BHC		.02 U	ug/l	.02	.02 U	ug/l	.02	.04 U	ug/l	.04
beta-BHC		.04 U	ug/l	.04	.04 U	ug/l	.04	.08 U	ug/l	.08
delta-BHC		.02 U	ug/l	.02	.02 U	ug/l	.02	.04 U	ug/l	.04
gamma-BHC (Lindane)		.02 U	ug/l	.02	.02 U	ug/l	.02	.04 UJ	ug/l	
Heptachlor		.02 U	ug/l	.02	.02 U	ug/l	.02	.04 UJ	ug/l	
Aldrin		.02 U	ug/l	.02	.02 U	ug/l	.02	.04 U	ug/l	.04
Heptachlor epoxide		.02 U	ug/l	.02	.02 U	ug/l	.02	.04 U	ug/l	.04
Endosulfan I		.02 U	ug/l	.02	.02 U	ug/l	.02	.04 U	ug/l	.04
Dieldrin		.02 U	ug/l	.02	.02 U	ug/l	.02	.04 U	ug/l	.04
4,4-DDE		.02 U	ug/l	.02	.02 U	ug/l	.02	.04 U	ug/l	.04
Endrin		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
Endosulfan II		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
4,4-DDD		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
Endosulfan sulfate		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
4,4-DDT		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
Methoxychlor		.08 U	ug/l	.08	.08 U	ug/l	.08	.08 U	ug/l	.08
Endrin aldehyde		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
Endrin ketone		-	ug/l		-	ug/l		.04 U	ug/l	.04
Chlordane		.2 U	ug/l	.2	.2 U	ug/l	.2	.2 U	ug/l	.2
Chlorobenzilate		.5 U	ug/l	.5	.5 U	ug/l	.5	.5 U	ug/l	.5
Diallate		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Toxaphene		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Isodrin		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
Kepone		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Aroclor-1016		1 U	ug/l	1	1 U	ug/l	1	2 U	ug/l	2
Aroclor-1221		2 U	ug/l	2	2 U	ug/l	2	4 U	ug/l	4
Aroclor-1232		2 U	ug/l	2	2 U	ug/l	2	4 U	ug/l	4
Aroclor-1242		1 U	ug/l	1	1 U	ug/l	1	2 U	ug/l	2
Aroclor-1248		1 U	ug/l	1	1 U	ug/l	1	2 U	ug/l	2
Aroclor-1254		.5 U	ug/l	.5	.5 U	ug/l	.5	.5 U	ug/l	.5
Aroclor-1260		.5 U	ug/l	.5	.5 U	ug/l	.5	.5 U	ug/l	.5

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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

ARO1 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23885001				M7473001				23885002				M7458003			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MPT-11-1				11MW001S				MPT-11-2				11MW002S			
Collect Date:	27-JAN-93				07-JUL-94				27-JAN-93				06-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (WATER) ug/l																
Antimony	16.4	U	ug/l	16.4	2.2	U	ug/l	2.2	16.4	U	ug/l	16.4	2.2	U	ug/l	2.2
Arsenic	14.1		ug/l		3.2	J	ug/l		34.3		ug/l		42.5		ug/l	
Barium	37.2	J	ug/l		3.9	J	ug/l		4.3	J	ug/l		1.5	U	ug/l	1.5
Beryllium	1.4	J	ug/l		.15	U	ug/l	.15	.26	U	ug/l	.26	.15	U	ug/l	.15
Cadmium	2.8	U	ug/l	2.8	2.7	U	ug/l	2.7	2.8	U	ug/l	2.8	2.7	U	ug/l	2.7
Calcium	115000		ug/l		90300		ug/l		15200		ug/l		1770	J	ug/l	
Chromium	27		ug/l		2.8	U	ug/l	2.8	6.3	J	ug/l		5.1	J	ug/l	
Cobalt	5.1	J	ug/l		3.6	U	ug/l	3.6	2.6	U	ug/l	2.6	3.6	U	ug/l	3.6
Copper	14.5	J	ug/l		7.4	J	ug/l		6.3	J	ug/l		19.7	J	ug/l	
Cyanide	-		ug/l		.69	J	ug/l		-		ug/l		.81	U	ug/l	.81
Iron	14200		ug/l		26.2	U	ug/l	26.2	888		ug/l		180		ug/l	
Lead	10.5		ug/l		.97	U	ug/l	.97	6.1	U	ug/l	6.1	5.7	J	ug/l	
Magnesium	8720		ug/l		7300		ug/l		9440		ug/l		98.3	J	ug/l	
Manganese	324		ug/l		7.5	J	ug/l		62.6		ug/l		2.6	U	ug/l	2.6
Mercury	.07	U	ug/l	.07	.08	U	ug/l	.08	.07	U	ug/l	.07	.12	J	ug/l	
Nickel	9.4	U	ug/l	9.4	9.7	U	ug/l	9.7	10.8	J	ug/l		20.4	J	ug/l	
Selenium	1.8	UJ	ug/l		1.3	UJ	ug/l		1.8	UJ	ug/l		13.2	UJ	ug/l	
Silver	2	U	ug/l	2	2.7	U	ug/l	2.7	2	U	ug/l	2	2.7	U	ug/l	2.7
Sodium	-		ug/l		15300	J	ug/l		-		ug/l		831000		ug/l	
Thallium	2.3	U	ug/l	2.3	1.3	UJ	ug/l		2.3	U	ug/l	2.3	1.3	UJ	ug/l	
Tin	12.7	UJ	ug/l		9.5	U	ug/l	9.5	12.7	UJ	ug/l		9.5	U	ug/l	9.5
Vanadium	28.7	J	ug/l		5	J	ug/l		79.2		ug/l		110		ug/l	
Zinc	105		ug/l		3.7	U	ug/l	3.7	98.8		ug/l		14.1	J	ug/l	

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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23885003			23885004			M7458001			M7473002		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		11MW3			11MW3D			11MW003S			11MW001SF		
Collect Date:		27-JAN-93			27-JAN-93			06-JUL-94			07-JUL-94		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
INORGANICS (WATER)	ug/l												
Antimony		16.4 U	ug/l	16.4	16.4 U	ug/l	16.4	2.2 U	ug/l	2.2	5.4	ug/l	
Arsenic		2.7 J	ug/l		3.2 J	ug/l		1.7 J	ug/l		4.2 J	ug/l	
Barium		8.8 J	ug/l		9.5 J	ug/l		5.6 J	ug/l		4.9 J	ug/l	
Beryllium		.26 U	ug/l	.26	.26 U	ug/l	.26	.15 U	ug/l	.15	.15 U	ug/l	.15
Cadmium		2.8 U	ug/l	2.8	2.8 U	ug/l	2.8	2.7 U	ug/l	2.7	2.7 U	ug/l	2.7
Calcium		191000	ug/l		189000	ug/l		173000	ug/l		96400	ug/l	
Chromium		4.6 J	ug/l		5.2 J	ug/l		2.8 U	ug/l	2.8	2.8 U	ug/l	2.8
Cobalt		2.6 U	ug/l	2.6	2.6 U	ug/l	2.6	3.6 U	ug/l	3.6	3.6 U	ug/l	3.6
Copper		9 J	ug/l		12.9 J	ug/l		3.2 U	ug/l	3.2	3.2 U	ug/l	3.2
Cyanide		-	ug/l		-	ug/l		.94 J	ug/l		-	ug/l	
Iron		2510	ug/l		3070	ug/l		915	ug/l		11.1 U	ug/l	11.1
Lead		1.8 U	ug/l	1.8	2.3 U	ug/l	2.3	1 J	ug/l		2.1 J	ug/l	
Magnesium		44300	ug/l		43500	ug/l		30700	ug/l		8150	ug/l	
Manganese		86.8	ug/l		88.7	ug/l		87.2	ug/l		10 J	ug/l	
Mercury		.07 U	ug/l	.07	.07 U	ug/l	.07	.08 U	ug/l	.08	.08 U	ug/l	.08
Nickel		9.4 U	ug/l	9.4	9.4 U	ug/l	9.4	9.7 U	ug/l	9.7	9.7 U	ug/l	9.7
Selenium		1.8 UJ	ug/l		1.8 UJ	ug/l		1.3 UJ	ug/l		13.2 UJ	ug/l	
Silver		2 U	ug/l	2	2 U	ug/l	2	2.7 U	ug/l	2.7	2.7 U	ug/l	2.7
Sodium		-	ug/l		-	ug/l		223000	ug/l		17500 J	ug/l	
Thallium		2.3 U	ug/l	2.3	2.3 U	ug/l	2.3	1.3 UJ	ug/l		1.3 UJ	ug/l	
Tin		12.7 UJ	ug/l		2950 UJ	ug/l		9.5 U	ug/l	9.5	9.5 U	ug/l	9.5
Vanadium		8.1 J	ug/l		8.3 J	ug/l		2.1 U	ug/l	2.1	3.4 J	ug/l	
Zinc		33.2	ug/l		19.3 J	ug/l		2.4 U	ug/l	2.4	4.9 U	ug/l	4.9

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AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		M7458004			M7458002		
Site		GROUP2			GROUP2		
Locator		11MW002SF			11MW003SF		
Collect Date:		06-JUL-94			06-JUL-94		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
INORGANICS (WATER)	ug/l						
Antimony		6.3	ug/l		2.2 UJ	ug/l	
Arsenic		40.8	ug/l		1.3 J	ug/l	
Barium		1.8 U	ug/l	1.8	5.6 J	ug/l	
Beryllium		.15 U	ug/l	.15	.15 U	ug/l	.15
Cadmium		2.7 U	ug/l	2.7	2.7 U	ug/l	2.7
Calcium		1370 J	ug/l		178000	ug/l	
Chromium		4.5 J	ug/l		2.8 U	ug/l	2.8
Cobalt		3.6 U	ug/l	3.6	3.6 U	ug/l	3.6
Copper		15 J	ug/l		3.2 U	ug/l	3.2
Cyanide		-	ug/l		-	ug/l	
Iron		62.9 J	ug/l		390	ug/l	
Lead		9.8	ug/l		1.9 J	ug/l	
Magnesium		40.5 J	ug/l		31600	ug/l	
Manganese		.44 UJ	ug/l		89.9	ug/l	
Mercury		.11 J	ug/l		.08 U	ug/l	.08
Nickel		17.1 J	ug/l		9.7 U	ug/l	9.7
Selenium		13.2 UJ	ug/l		1.3 UJ	ug/l	
Silver		2.7 U	ug/l	2.7	2.7 U	ug/l	2.7
Sodium		797000	ug/l		232000	ug/l	
Thallium		1.3 UJ	ug/l		1.3 UJ	ug/l	
Tin		9.5 U	ug/l	9.5	9.5 U	ug/l	9.5
Vanadium		98.2	ug/l		2.1 U	ug/l	2.1
Zinc		12.9 J	ug/l		5.2 U	ug/l	5.2

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		M7474001			M7459002			M7459001		
Site		GROUP2			GROUP2			GROUP2		
Locator		11MW001S			11MW002S			11MW003S		
Collect Date:		07-JUL-94			06-JUL-94			06-JUL-94		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
GROUND WATER QUALITY	mg/l									
Alkalinity as CaCO3		248	mg/l	2	1440	mg/l	2	347	mg/l	2
Ammonia-N		.7	mg/l	.3	2.2	mg/l	.3	.7	mg/l	.3
Chloride		34	mg/l	20	1030	mg/l	20	1190	mg/l	20
Hardness as CaCO3		353	mg/l	10	27	mg/l	3	281	mg/l	3
Nitrate/Nitrite-N		.34	mg/l	.1	.28	mg/l	.1	.12	mg/l	.1
Oil and Grease		5 U	mg/l	5	10	mg/l	5	5 U	mg/l	5
Phosphorous-P, Total		.32	mg/l	.1	1.16	mg/l	.1	.19	mg/l	.1
Sulfate		29.3	mg/l	1	105	mg/l	10	95.9	mg/l	2
Sulfide		1 U	mg/l	1	2	mg/l	1	1 U	mg/l	1
Total Dissolved Solids		374	mg/l	10	2550	mg/l	10	1370	mg/l	10
Total Kjeldahl Nitrogen		.7	mg/l	.3	4.7	mg/l	.3	1.5	mg/l	.3
Total Organic Carbon		3.2	mg/l	1	23.3	mg/l	1	17.2	mg/l	1
COLOR	APHA									
Color		15	APHA	5	800	APHA	100	25	APHA	5
pH	units									
pH		7.5	units		11.4	units		7.2	units	
TOTAL PETROLEUM HYDROCARBONS	mg/l									
Total petroleum hydrocarbon		-	mg/l		-	mg/l		-	mg/l	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

APPENDIX A-6

SURFACE SOIL SAMPLE ANALYSES, SWMU 15

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:	35083001				35083003				35083003RE				35083005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15SS11				15SS21				15SS21				15SS31			
Collect Date:	02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES ug/kg																
Chloromethane	11	U	ug/kg	11	11	U	ug/kg	11	11	R	ug/kg		11	U	ug/kg	11
Bromomethane	11	U	ug/kg	11	11	U	ug/kg	11	11	R	ug/kg		11	U	ug/kg	11
Vinyl chloride	11	U	ug/kg	11	11	U	ug/kg	11	11	R	ug/kg		11	U	ug/kg	11
Chloroethane	11	U	ug/kg	11	11	U	ug/kg	11	11	R	ug/kg		11	U	ug/kg	11
Methylene chloride	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
Acetone	11	U	ug/kg	11	11	U	ug/kg	11	20	R	ug/kg		11	U	ug/kg	11
Carbon disulfide	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
1,1-Dichloroethane	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
1,1-Dichloroethene	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
1,2-Dichloroethene (total)	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
Chloroform	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
1,2-Dichloroethane	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
2-Butanone	11	U	ug/kg	11	11	U	ug/kg	11	11	R	ug/kg		11	U	ug/kg	11
1,1,1-Trichloroethane	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
Carbon tetrachloride	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
Bromodichloromethane	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
1,2-Dichloropropane	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
cis-1,3-Dichloropropene	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
Trichloroethene	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
Dibromochloromethane	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
1,1,2-Trichloroethane	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
Benzene	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
trans-1,3-Dichloropropene	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
Bromoform	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
4-Methyl-2-pentanone	11	U	ug/kg	11	11	U	ug/kg	11	11	R	ug/kg		11	U	ug/kg	11
2-Hexanone	11	U	ug/kg	11	11	U	ug/kg	11	11	R	ug/kg		11	U	ug/kg	11
Tetrachloroethene	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
1,1,2,2-Tetrachloroethane	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
Toluene	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
Chlorobenzene	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
Ethylbenzene	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
Styrene	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
Xylenes (total)	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
Dichlorodifluoromethane	11	U	ug/kg	11	11	U	ug/kg	11	11	R	ug/kg		11	UJ	ug/kg	
Trichlorofluoromethane	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
1,3-Dichlorobenzene	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
Acrolein	110	U	ug/kg	110	110	U	ug/kg	110	110	R	ug/kg		110	U	ug/kg	110
Iodomethane	11	U	ug/kg	11	11	U	ug/kg	11	11	R	ug/kg		11	U	ug/kg	11
1,4-Dichlorobenzene	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
Acrylonitrile	110	U	ug/kg	110	110	U	ug/kg	110	110	R	ug/kg		110	U	ug/kg	110
Dibromomethane	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
1,2-Dichlorobenzene	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
2-Chloroethylvinylether	11	U	ug/kg	11	11	U	ug/kg	11	11	R	ug/kg		11	U	ug/kg	11
Ethyl methacrylate	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
1,2,3-Trichloropropane	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
Isobutyl alcohol	220	U	ug/kg	220	220	U	ug/kg	220	220	R	ug/kg		220	U	ug/kg	220
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11	11	U	ug/kg	11	11	R	ug/kg		11	U	ug/kg	11
1,2-Dibromoethane	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:	35083001				35083003				35083003RE				35083005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15SS11				15SS21				15SS21				15SS31			
Collect Date:	02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	220	R	ug/kg		220	R	ug/kg		220	R	ug/kg		220	R	ug/kg	
3-Chloropropene	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
Acetonitrile	110	U	ug/kg	110	110	U	ug/kg	110	110	R	ug/kg		110	U	ug/kg	110
Chloroprene	220	U	ug/kg	220	220	U	ug/kg	220	220	R	ug/kg		220	U	ug/kg	220
Methacrylonitrile	5	U	ug/kg	5	5	U	ug/kg	5	5	R	ug/kg		5	U	ug/kg	5
Methyl methacrylate	11	U	ug/kg	11	11	U	ug/kg	11	11	R	ug/kg		11	U	ug/kg	11
Pentachloroethane	11	U	ug/kg	11	11	U	ug/kg	11	11	R	ug/kg		11	U	ug/kg	11
Propionitrile	110	U	ug/kg	110	110	U	ug/kg	110	110	R	ug/kg		110	U	ug/kg	110
Vinyl acetate	11	U	ug/kg	11	11	U	ug/kg	11	11	R	ug/kg		11	U	ug/kg	11

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:		35083007				35083009				35083009DL				35083011			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		15SS41				15SS51				15SS51				15SS61			
Collect Date:		02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/kg																
Chloromethane		11	U	ug/kg	11	10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10
Bromomethane		11	U	ug/kg	11	10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10
Vinyl chloride		11	U	ug/kg	11	10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10
Chloroethane		11	U	ug/kg	11	10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10
Methylene chloride		5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
Acetone		2	J	ug/kg		30	J	ug/kg		-		ug/kg		9	J	ug/kg	
Carbon disulfide		5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
1,1-Dichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
1,1-Dichloroethene		5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
1,2-Dichloroethene (total)		5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
Chloroform		5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
1,2-Dichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
2-Butanone		11	U	ug/kg	11	10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10
1,1,1-Trichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
Carbon tetrachloride		5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
Bromodichloromethane		5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
1,2-Dichloropropane		5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
cis-1,3-Dichloropropene		5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
Trichloroethene		5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
Dibromochloromethane		5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
1,1,2-Trichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
Benzene		5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
trans-1,3-Dichloropropene		5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
Bromoform		5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
4-Methyl-2-pentanone		11	U	ug/kg	11	10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10
2-Hexanone		11	U	ug/kg	11	10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10
Tetrachloroethene		5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
1,1,2,2-Tetrachloroethane		5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
Toluene		5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
Chlorobenzene		5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
Ethylbenzene		5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
Styrene		5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
Xylenes (total)		5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
Dichlorodifluoromethane		11	U	ug/kg	11	10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10
Trichlorofluoromethane		5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
1,3-Dichlorobenzene		5	U	ug/kg	5	5	U	ug/kg	5	2700	R	ug/kg		680	U	ug/kg	680
Acrolein		110	U	ug/kg	110	100	U	ug/kg	100	-		ug/kg		100	U	ug/kg	100
Iodomethane		11	U	ug/kg	11	10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10
1,4-Dichlorobenzene		5	U	ug/kg	5	5	U	ug/kg	5	2700	R	ug/kg		5	U	ug/kg	5
Acrylonitrile		110	U	ug/kg	110	100	U	ug/kg	100	-		ug/kg		100	U	ug/kg	100

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:	35083007				35083009				35083009DL				35083011			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15SS41				15SS51				15SS51				15SS61			
Collect Date:	02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
1,2-Dichlorobenzene	5	U	ug/kg	5	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680
2-Chloroethylvinylether	11	U	ug/kg	11	10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10
Ethyl methacrylate	5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
1,2,3-Trichloropropene	5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
Isobutyl alcohol	220	U	ug/kg	220	210	U	ug/kg	210	-		ug/kg		210	U	ug/kg	210
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11	10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10
1,2-Dibromoethane	5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
1,4-Dioxane	220	R	ug/kg		210	R	ug/kg		-		ug/kg		210	R	ug/kg	
3-Chloropropene	5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
Acetonitrile	110	U	ug/kg	110	100	U	ug/kg	100	-		ug/kg		100	U	ug/kg	100
Chloroprene	220	U	ug/kg	220	210	U	ug/kg	210	-		ug/kg		210	U	ug/kg	210
Methacrylonitrile	5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5
Methyl methacrylate	11	U	ug/kg	11	10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10
Pentachloroethane	11	U	ug/kg	11	10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10
Propionitrile	110	U	ug/kg	110	100	U	ug/kg	100	-		ug/kg		100	U	ug/kg	100
Vinyl acetate	11	U	ug/kg	11	10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:	35083013				35083015				35083016			
Site	GROUP2				GROUP2				GROUP2			
Locator	15SS71				15SS81				15SS81D			
Collect Date:	02-FEB-93				02-FEB-93				02-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES ug/kg												
Chloromethane	11	U	ug/kg	11	10	U	ug/kg	10	10	U	ug/kg	10
Bromomethane	11	U	ug/kg	11	10	U	ug/kg	10	10	U	ug/kg	10
Vinyl chloride	11	U	ug/kg	11	10	U	ug/kg	10	10	U	ug/kg	10
Chloroethane	11	U	ug/kg	11	10	U	ug/kg	10	10	U	ug/kg	10
Methylene chloride	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Acetone	11	U	ug/kg	11	10	U	ug/kg	10	10	U	ug/kg	10
Carbon disulfide	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,1-Dichloroethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,1-Dichloroethene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloroethene (total)	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Chloroform	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloroethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
2-Butanone	11	U	ug/kg	11	10	U	ug/kg	10	10	U	ug/kg	10
1,1,1-Trichloroethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Carbon tetrachloride	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Bromodichloromethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloropropane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
cis-1,3-Dichloropropene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Trichloroethene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Dibromochloromethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,1,2-Trichloroethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Benzene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
trans-1,3-Dichloropropene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Bromoform	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
4-Methyl-2-pentanone	11	U	ug/kg	11	10	U	ug/kg	10	10	U	ug/kg	10
2-Hexanone	11	U	ug/kg	11	10	U	ug/kg	10	10	U	ug/kg	10
Tetrachloroethene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,1,2,2-Tetrachloroethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Toluene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Chlorobenzene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Ethylbenzene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Styrene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Xylenes (total)	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Dichlorodifluoromethane	11	UJ	ug/kg		10	UJ	ug/kg		10	UJ	ug/kg	
Trichlorofluoromethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,3-Dichlorobenzene	5	U	ug/kg	5	5	U	ug/kg	5	690	U	ug/kg	690
Acrolein	110	U	ug/kg	110	100	U	ug/kg	100	100	U	ug/kg	100
Iodomethane	11	U	ug/kg	11	10	U	ug/kg	10	10	U	ug/kg	10
1,4-Dichlorobenzene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Acrylonitrile	110	U	ug/kg	110	100	U	ug/kg	100	100	U	ug/kg	100

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:	35083013				35083015				35083016			
Site	GROUP2				GROUP2				GROUP2			
Locator	15SS71				15SS81				15SS81D			
Collect Date:	02-FEB-93				02-FEB-93				02-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichlorobenzene	5	U	ug/kg	5	5	U	ug/kg	5	690	U	ug/kg	690
2-Chloroethylvinylether	11	U	ug/kg	11	10	U	ug/kg	10	10	U	ug/kg	10
Ethyl methacrylate	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,2,3-Trichloropropane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Isobutyl alcohol	210	U	ug/kg	210	210	U	ug/kg	210	210	U	ug/kg	210
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11	10	U	ug/kg	10	10	U	ug/kg	10
1,2-Dibromoethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,4-Dioxane	210	R	ug/kg		210	R	ug/kg		210	R	ug/kg	
3-Chloropropene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Acetonitrile	110	U	ug/kg	110	100	U	ug/kg	100	100	U	ug/kg	100
Chloroprene	210	U	ug/kg	210	210	U	ug/kg	210	210	U	ug/kg	210
Methacrylonitrile	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Methyl methacrylate	11	U	ug/kg	11	10	U	ug/kg	10	10	U	ug/kg	10
Pentachloroethane	11	U	ug/kg	11	10	U	ug/kg	10	10	U	ug/kg	10
Propionitrile	110	U	ug/kg	110	100	U	ug/kg	100	100	U	ug/kg	100
Vinyl acetate	11	U	ug/kg	11	10	U	ug/kg	10	10	U	ug/kg	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:		35083001				35083003				35083005				35083007			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		15SS11				15SS21				15SS31				15SS41			
Collect Date:		02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg																
N-Nitrosodimethylamine		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Phenol		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Aniline		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
bis (2-Chloroethyl) ether		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Benzyl Alcohol		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
2-Methylphenol		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
bis(2-Chloroisopropyl)ether		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
N-Nitroso-di-n-propylamine		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Hexachloroethane		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Nitrobenzene		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Isophorone		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
2-Nitrophenol		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
2,4-Dimethylphenol		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Benzoic acid		3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
bis(2-Chloroethoxy)methane		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
2,4-Dichlorophenol		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
1,2,4-Trichlorobenzene		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Naphthalene		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
4-Chloroaniline		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Hexachlorobutadiene		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
4-Chloro-3-methylphenol		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
2-Methylnaphthalene		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Hexachlorocyclopentadiene		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
2,4,6-Trichlorophenol		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Dimethylphthalate		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
2,4,5-Trichlorophenol		3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
2-Chloronaphthalene		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
2-Nitroaniline		3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
Acenaphthylene		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
2,6-Dinitrotoluene		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
3-Nitroaniline		3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
Acenaphthene		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
2,4-Dinitrophenol		3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
4-Nitrophenol		3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
Dibenzofuran		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
2,4-Dinitrotoluene		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Diethylphthalate		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
4-Chlorophenyl-phenylether		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Fluorene		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
4-Nitroaniline		3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
4,6-Dinitro-2-methylphenol		3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
N-Nitrosodiphenylamine (1)		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
1,2-Diphenylhydrazine		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
4-Bromophenyl-phenylether		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Hexachlorobenzene		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Pentachlorophenol		3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
Phenanthrene		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Anthracene		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Di-n-Butylphthalate		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Fluoranthene		720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:	35083001				35083003				35083005				35083007			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15SS11				15SS21				15SS31				15SS41			
Collect Date:	02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Pyrene	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Butylbenzylphthalate	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
3,3'-Dichlorobenzidine	1400	U	ug/kg	1400	1400	U	ug/kg	1400	1400	U	ug/kg	1400	1400	U	ug/kg	1400
Benzo(a)anthracene	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Chrysene	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
bis(2-Ethylhexyl)phthalate	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Di-n-octylphthalate	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Benzo(b)fluoranthene	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Benzo(k)fluoranthene	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Benzo(a)pyrene	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Indeno(1,2,3-cd)pyrene	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Dibenz(a,h)anthracene	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Benzo(g,h,i)perylene	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
2-Picoline	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
Methyl methanesulfonate	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Ethyl methanesulfonate	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Acetophenone	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
N-Nitrosopiperidine	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Phenyl-tert-butylamine	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
2,6-Dichlorophenol	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
N-Nitroso-di-n-butylamine	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
N-Nitrosodiethylamine	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
N-Nitrosopyrrolidine	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Benzidine	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
1,2,4,5-Tetrachlorobenzene	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
Pentachlorobenzene	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
1-Naphthylamine	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
2-Naphthylamine	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
2,3,4,6-Tetrachlorophenol	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Phenacetin	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
4-Aminobiphenyl	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
Pentachloronitrobenzene	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
Pronamide	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
p-(Dimethylamino)azobenzene	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
7,12-Dimethylbenz(A)Anthracene	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
3-Methylcholanthrene	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Pyridine	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
N-Nitrosomethylethylamine	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
N-Nitrosomorpholine	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
o-Toluidine	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Hexachloropropene	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
p-Phenylenediamine	35000	R	ug/kg		35000	R	ug/kg		34000	R	ug/kg		35000	R	ug/kg	
Safrole	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
Isosafrole	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
1,4-Naphthoquinone	72000	U	ug/kg	72000	72000	U	ug/kg	72000	71000	U	ug/kg	71000	72000	U	ug/kg	72000
1,3-Dinitrobenzene	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
5-Nitro-o-toluidine	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
1,3,5-Trinitrobenzene	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
4-Nitroquinoline-1-oxide	35000	R	ug/kg		35000	R	ug/kg		34000	R	ug/kg		35000	R	ug/kg	
Methapyrilene	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
3,3'-Dimethylbenzidine	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
Hexachlorophene	35000	U	ug/kg	35000	35000	U	ug/kg	35000	34000	U	ug/kg	34000	35000	U	ug/kg	35000

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:	35083001				35083003				35083005				35083007			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15SS11				15SS21				15SS31				15SS41			
Collect Date:	02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Aramite	3500	R	ug/kg		3500	R	ug/kg		3400	R	ug/kg		3500	R	ug/kg	
2-Chlorophenol	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720
3- & 4-Methylphenol (2)	-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Hexachloropropene	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
2-Acetylaminofluorene	720	U	ug/kg	720	720	U	ug/kg	720	710	U	ug/kg	710	720	U	ug/kg	720

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:		35083009				35083009DL				35083011				35083013			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		15SS51				15SS51				15SS61				15SS71			
Collect Date:		02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg																
N-Nitrosodimethylamine		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Phenol		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Aniline		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
bis (2-Chloroethyl) ether		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Benzyl Alcohol		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
2-Methylphenol		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
bis(2-Chloroisopropyl)ether		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
N-Nitroso-di-n-propylamine		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Hexachloroethane		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Nitrobenzene		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Isophorone		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
2-Nitrophenol		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
2,4-Dimethylphenol		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Benzoic acid		3300	U	ug/kg	3300	13000	R	ug/kg		3300	U	ug/kg	3300	3400	U	ug/kg	3400
bis(2-Chloroethoxy)methane		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
2,4-Dichlorophenol		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
1,2,4-Trichlorobenzene		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Naphthalene		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
4-Chloroaniline		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Hexachlorobutadiene		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
4-Chloro-3-methylphenol		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
2-Methylnaphthalene		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Hexachlorocyclopentadiene		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
2,4,6-Trichlorophenol		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Dimethylphthalate		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
2,4,5-Trichlorophenol		3300	U	ug/kg	3300	13000	R	ug/kg		3300	U	ug/kg	3300	3400	U	ug/kg	3400
2-Chloronaphthalene		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
2-Nitroaniline		3300	U	ug/kg	3300	13000	R	ug/kg		3300	U	ug/kg	3300	3400	U	ug/kg	3400
Acenaphthylene		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
2,6-Dinitrotoluene		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
3-Nitroaniline		3300	U	ug/kg	3300	13000	R	ug/kg		3300	U	ug/kg	3300	3400	U	ug/kg	3400
Acenaphthene		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
2,4-Dinitrophenol		3300	U	ug/kg	3300	13000	R	ug/kg		3300	U	ug/kg	3300	3400	U	ug/kg	3400
4-Nitrophenol		3300	U	ug/kg	3300	13000	R	ug/kg		3300	U	ug/kg	3300	3400	U	ug/kg	3400
Dibenzofuran		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
2,4-Dinitrotoluene		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Diethylphthalate		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
4-Chlorophenyl-phenylether		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Fluorene		680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
4-Nitroaniline		3300	U	ug/kg	3300	13000	R	ug/kg		3300	U	ug/kg	3300	3400	U	ug/kg	3400

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:	35083009				35083009DL				35083011				35083013			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15SS51				15SS51				15SS61				15SS71			
Collect Date:	02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	3300	U	ug/kg	3300	13000	R	ug/kg		3300	U	ug/kg	3300	3400	U	ug/kg	3400
N-Nitrosodiphenylamine (1)	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
1,2-Diphenylhydrazine	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
4-Bromophenyl-phenylether	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Hexachlorobenzene	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Pentachlorophenol	3300	U	ug/kg	3300	13000	R	ug/kg		3300	U	ug/kg	3300	3400	U	ug/kg	3400
Phenanthrene	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Anthracene	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Di-n-Butylphthalate	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Fluoranthene	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Pyrene	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Butylbenzylphthalate	18000	U	ug/kg	18000	16000	R	ug/kg		640	J	ug/kg		690	U	ug/kg	690
3,3'-Dichlorobenzidine	1400	U	ug/kg	1400	5400	R	ug/kg		1400	U	ug/kg	1400	1400	U	ug/kg	1400
Benzo(a)anthracene	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Chrysene	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
bis(2-Ethylhexyl)phthalate	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	200	J	ug/kg	
Di-n-octylphthalate	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Benzo(b)fluoranthene	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Benzo(k)fluoranthene	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Benzo(a)pyrene	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Indeno(1,2,3-cd)pyrene	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Dibenz(a,h)anthracene	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Benzo(g,h,i)perylene	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
2-Picoline	3300	U	ug/kg	3300	13000	R	ug/kg		3300	U	ug/kg	3300	3400	U	ug/kg	3400
Methyl methanesulfonate	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Ethyl methanesulfonate	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Acetophenone	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
N-Nitrosopiperidine	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Phenyl-tert-butylamine	3300	U	ug/kg	3300	13000	R	ug/kg		3300	U	ug/kg	3300	3400	U	ug/kg	3400
2,6-Dichlorophenol	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
N-Nitroso-di-n-butylamine	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
N-Nitrosodiethylamine	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
N-Nitrosopyrrolidine	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Benzidine	3300	U	ug/kg	3300	13000	R	ug/kg		3300	U	ug/kg	3300	3400	U	ug/kg	3400
1,2,4,5-Tetrachlorobenzene	3300	U	ug/kg	3300	13000	R	ug/kg		3300	U	ug/kg	3300	3400	U	ug/kg	3400
Pentachlorobenzene	3300	U	ug/kg	3300	13000	R	ug/kg		3300	U	ug/kg	3300	3400	U	ug/kg	3400
1-Naphthylamine	3300	U	ug/kg	3300	13000	R	ug/kg		3300	U	ug/kg	3300	3400	U	ug/kg	3400
2-Naphthylamine	3300	U	ug/kg	3300	13000	R	ug/kg		3300	U	ug/kg	3300	3400	U	ug/kg	3400
2,3,4,6-Tetrachlorophenol	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Phenacetin	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
4-Aminobiphenyl	3300	U	ug/kg	3300	13000	R	ug/kg		3300	U	ug/kg	3300	3400	U	ug/kg	3400
Pentachloronitrobenzene	3300	U	ug/kg	3300	13000	R	ug/kg		3300	U	ug/kg	3300	3400	U	ug/kg	3400
Pronamide	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
p-(Dimethylamino)azobenzene	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
7,12-Dimethylbenz(A)Anthracene	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
3-Methylcholanthrene	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Pyridine	3300	U	ug/kg	3300	13000	R	ug/kg		3300	U	ug/kg	3300	3400	U	ug/kg	3400
N-Nitrosomethylethylamine	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
N-Nitrosomorpholine	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
o-Toluidine	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Hexachloropropene	3300	U	ug/kg	3300	13000	R	ug/kg		3300	U	ug/kg	3300	3400	U	ug/kg	3400
p-Phenylenediamine	33000	R	ug/kg		133000	R	ug/kg		33000	R	ug/kg		34000	R	ug/kg	

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:	35083009				35083009DL				35083011				35083013			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15SS51				15SS51				15SS61				15SS71			
Collect Date:	02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	3300	U	ug/kg	3300	13000	R	ug/kg		3300	U	ug/kg	3300	3400	U	ug/kg	3400
Isosafrole	3300	U	ug/kg	3300	13000	R	ug/kg		3300	U	ug/kg	3300	3400	U	ug/kg	3400
1,4-Naphthoquinone	68000	U	ug/kg	68000	274000	R	ug/kg		68000	U	ug/kg	68000	68000	U	ug/kg	68000
1,3-Dinitrobenzene	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
5-Nitro-o-toluidine	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
1,3,5-Trinitrobenzene	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
4-Nitroquinoline-1-oxide	33000	R	ug/kg		133000	R	ug/kg		33000	R	ug/kg		34000	R	ug/kg	
Methapyrilene	3300	U	ug/kg	3300	13000	R	ug/kg		3300	U	ug/kg	3300	3400	U	ug/kg	3400
3,3'-Dimethylbenzidine	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
Hexachlorophene	68000	U	ug/kg	68000	133000	R	ug/kg		33000	U	ug/kg	33000	34000	U	ug/kg	34000
Aramite	3300	R	ug/kg		13000	R	ug/kg		3300	R	ug/kg		3400	R	ug/kg	
2-Chlorophenol	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690
3- & 4-Methylphenol (2)	-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Hexachloropropene	3300	U	ug/kg	3300	13000	R	ug/kg		3300	U	ug/kg	3300	3400	U	ug/kg	3400
2-Acetylaminofluorene	680	U	ug/kg	680	2700	R	ug/kg		680	U	ug/kg	680	690	U	ug/kg	690

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:		35083015				35083016			
Site		GROUP2				GROUP2			
Locator		15SS81				15SS81D			
Collect Date:		02-FEB-93				02-FEB-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg								
N-Nitrosodimethylamine		690	U	ug/kg	690	690	U	ug/kg	690
Phenol		690	U	ug/kg	690	690	U	ug/kg	690
Aniline		690	U	ug/kg	690	690	U	ug/kg	690
bis (2-Chloroethyl) ether		690	U	ug/kg	690	690	U	ug/kg	690
Benzyl Alcohol		690	U	ug/kg	690	690	U	ug/kg	690
2-Methylphenol		690	U	ug/kg	690	690	U	ug/kg	690
bis(2-Chloroisopropyl)ether		690	U	ug/kg	690	690	U	ug/kg	690
N-Nitroso-di-n-propylamine		690	U	ug/kg	690	690	U	ug/kg	690
Hexachloroethane		690	U	ug/kg	690	690	U	ug/kg	690
Nitrobenzene		690	U	ug/kg	690	690	U	ug/kg	690
Isophorone		690	U	ug/kg	690	690	U	ug/kg	690
2-Nitrophenol		690	U	ug/kg	690	690	U	ug/kg	690
2,4-Dimethylphenol		690	U	ug/kg	690	690	U	ug/kg	690
Benzoic acid		3300	U	ug/kg	3300	3300	U	ug/kg	3300
bis(2-Chloroethoxy)methane		690	U	ug/kg	690	690	U	ug/kg	690
2,4-Dichlorophenol		690	U	ug/kg	690	690	U	ug/kg	690
1,2,4-Trichlorobenzene		690	U	ug/kg	690	690	U	ug/kg	690
Naphthalene		690	U	ug/kg	690	690	U	ug/kg	690
4-Chloroaniline		690	U	ug/kg	690	690	U	ug/kg	690
Hexachlorobutadiene		690	U	ug/kg	690	690	U	ug/kg	690
4-Chloro-3-methylphenol		690	U	ug/kg	690	690	U	ug/kg	690
2-Methylnaphthalene		690	U	ug/kg	690	690	U	ug/kg	690
Hexachlorocyclopentadiene		690	U	ug/kg	690	690	U	ug/kg	690
2,4,6-Trichlorophenol		690	U	ug/kg	690	690	U	ug/kg	690
Dimethylphthalate		690	U	ug/kg	690	690	U	ug/kg	690
2,4,5-Trichlorophenol		3300	U	ug/kg	3300	3300	U	ug/kg	3300
2-Chloronaphthalene		690	U	ug/kg	690	690	U	ug/kg	690
2-Nitroaniline		3300	U	ug/kg	3300	3300	U	ug/kg	3300
Acenaphthylene		690	U	ug/kg	690	690	U	ug/kg	690
2,6-Dinitrotoluene		690	U	ug/kg	690	690	U	ug/kg	690
3-Nitroaniline		3300	U	ug/kg	3300	3300	U	ug/kg	3300
Acenaphthene		690	U	ug/kg	690	690	U	ug/kg	690
2,4-Dinitrophenol		3300	U	ug/kg	3300	3300	U	ug/kg	3300
4-Nitrophenol		3300	U	ug/kg	3300	3300	U	ug/kg	3300
Dibenzofuran		690	U	ug/kg	690	690	U	ug/kg	690
2,4-Dinitrotoluene		690	U	ug/kg	690	690	U	ug/kg	690
Diethylphthalate		690	U	ug/kg	690	690	U	ug/kg	690
4-Chlorophenyl-phenylether		690	U	ug/kg	690	690	U	ug/kg	690
Fluorene		690	U	ug/kg	690	690	U	ug/kg	690
4-Nitroaniline		3300	U	ug/kg	3300	3300	U	ug/kg	3300

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:	35083015				35083016			
Site	GROUP2				GROUP2			
Locator	15SS81				15SS81D			
Collect Date:	02-FEB-93				02-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	3300	U	ug/kg	3300	3300	U	ug/kg	3300
N-Nitrosodiphenylamine (1)	690	U	ug/kg	690	690	U	ug/kg	690
1,2-Diphenylhydrazine	690	U	ug/kg	690	690	U	ug/kg	690
4-Bromophenyl-phenylether	690	U	ug/kg	690	690	U	ug/kg	690
Hexachlorobenzene	690	U	ug/kg	690	690	U	ug/kg	690
Pentachlorophenol	3300	U	ug/kg	3300	3300	U	ug/kg	3300
Phenanthrene	690	U	ug/kg	690	690	U	ug/kg	690
Anthracene	690	U	ug/kg	690	690	U	ug/kg	690
Di-n-Butylphthalate	690	U	ug/kg	690	690	U	ug/kg	690
Fluoranthene	690	U	ug/kg	690	690	U	ug/kg	690
Pyrene	690	U	ug/kg	690	690	U	ug/kg	690
Butylbenzylphthalate	180	J	ug/kg		250	J	ug/kg	
3,3'-Dichlorobenzidine	1400	U	ug/kg	1400	1400	U	ug/kg	1400
Benzo(a)anthracene	690	U	ug/kg	690	690	U	ug/kg	690
Chrysene	690	U	ug/kg	690	690	U	ug/kg	690
bis(2-Ethylhexyl)phthalate	690	U	ug/kg	690	690	U	ug/kg	690
Di-n-octylphthalate	690	U	ug/kg	690	690	U	ug/kg	690
Benzo(b)fluoranthene	690	U	ug/kg	690	690	U	ug/kg	690
Benzo(k)fluoranthene	690	U	ug/kg	690	690	U	ug/kg	690
Benzo(a)pyrene	690	U	ug/kg	690	690	U	ug/kg	690
Indeno(1,2,3-cd)pyrene	690	U	ug/kg	690	690	U	ug/kg	690
Dibenz(a,h)anthracene	690	U	ug/kg	690	690	U	ug/kg	690
Benzo(g,h,i)perylene	690	U	ug/kg	690	690	U	ug/kg	690
2-Picoline	3300	U	ug/kg	3300	3300	U	ug/kg	3300
Methyl methanesulfonate	690	U	ug/kg	690	690	U	ug/kg	690
Ethyl methanesulfonate	690	U	ug/kg	690	690	U	ug/kg	690
Acetophenone	690	U	ug/kg	690	690	U	ug/kg	690
N-Nitrosopiperidine	690	U	ug/kg	690	690	U	ug/kg	690
Phenyl-tert-butylamine	3300	U	ug/kg	3300	3300	U	ug/kg	3300
2,6-Dichlorophenol	690	U	ug/kg	690	690	U	ug/kg	690
N-Nitroso-di-n-butylamine	690	U	ug/kg	690	690	U	ug/kg	690
N-Nitrosodiethylamine	690	U	ug/kg	690	690	U	ug/kg	690
N-Nitrosopyrrolidine	690	U	ug/kg	690	690	U	ug/kg	690
Benzidine	3300	U	ug/kg	3300	3300	U	ug/kg	3300
1,2,4,5-Tetrachlorobenzene	3300	U	ug/kg	3300	3300	U	ug/kg	3300
Pentachlorobenzene	3300	U	ug/kg	3300	3300	U	ug/kg	3300
1-Naphthylamine	3300	U	ug/kg	3300	3300	U	ug/kg	3300
2-Naphthylamine	3300	U	ug/kg	3300	3300	U	ug/kg	3300
2,3,4,6-Tetrachlorophenol	690	U	ug/kg	690	690	U	ug/kg	690
Phenacetin	690	U	ug/kg	690	690	U	ug/kg	690
4-Aminobiphenyl	3300	U	ug/kg	3300	3300	U	ug/kg	3300
Pentachloronitrobenzene	3300	U	ug/kg	3300	3300	U	ug/kg	3300
Pronamide	690	U	ug/kg	690	690	U	ug/kg	690
p-(Dimethylamino)azobenzene	690	U	ug/kg	690	690	U	ug/kg	690
7,12-Dimethylbenz(A)Anthracene	690	U	ug/kg	690	690	U	ug/kg	690
3-Methylcholanthrene	690	U	ug/kg	690	690	U	ug/kg	690
Pyridine	3300	U	ug/kg	3300	3300	U	ug/kg	3300
N-Nitrosomethylethylamine	690	U	ug/kg	690	690	U	ug/kg	690
N-Nitrosomorpholine	690	U	ug/kg	690	690	U	ug/kg	690
o-Toluidine	690	U	ug/kg	690	690	U	ug/kg	690
Hexachloropropene	3300	U	ug/kg	3300	3300	U	ug/kg	3300
p-Phenylenediamine	33000	R	ug/kg		33000	R	ug/kg	

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:	35083015				35083016			
Site	GROUP2				GROUP2			
Locator	15SS81				15SS81D			
Collect Date:	02-FEB-93				02-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	3300	U	ug/kg	3300	3300	U	ug/kg	3300
Isosafrole	3300	U	ug/kg	3300	3300	U	ug/kg	3300
1,4-Naphthoquinone	69000	U	ug/kg	69000	69000	U	ug/kg	69000
1,3-Dinitrobenzene	690	U	ug/kg	690	690	U	ug/kg	690
5-Nitro-o-toluidine	690	U	ug/kg	690	690	U	ug/kg	690
1,3,5-Trinitrobenzene	690	U	ug/kg	690	690	U	ug/kg	690
4-Nitroquinoline-1-oxide	33000	R	ug/kg		33000	R	ug/kg	
Methapyrilene	3300	U	ug/kg	3300	3300	U	ug/kg	3300
3,3'-Dimethylbenzidine	690	U	ug/kg	690	690	U	ug/kg	690
Hexachlorophene	33000	U	ug/kg	33000	33000	U	ug/kg	33000
Aramite	3300	R	ug/kg		3300	R	ug/kg	
2-Chlorophenol	690	U	ug/kg	690	690	U	ug/kg	690
3- & 4-Methylphenol (2)	-		ug/kg		-		ug/kg	
Hexachloropropene	3300	U	ug/kg	3300	3300	U	ug/kg	3300
2-Acetylaminofluorene	690	U	ug/kg	690	690	U	ug/kg	690

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:	23953001				23953003				23953005				23953007			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15SS11				15SS21				15SS31				15SS41			
Collect Date:	02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs ug/kg																
alpha-BHC	1.4	U	ug/kg	1.4	3	U	ug/kg	3	14	U	ug/kg	14	2.8	U	ug/kg	2.8
beta-BHC	2.8	U	ug/kg	2.8	5.9	U	ug/kg	5.9	28	U	ug/kg	28	5.7	U	ug/kg	5.7
delta-BHC	1.4	U	ug/kg	1.4	3	U	ug/kg	3	14	U	ug/kg	14	2.8	U	ug/kg	2.8
gamma-BHC (Lindane)	1.4	U	ug/kg	1.4	3	U	ug/kg	3	14	U	ug/kg	14	2.8	U	ug/kg	2.8
Heptachlor	1.4	U	ug/kg	1.4	3	U	ug/kg	3	14	U	ug/kg	14	2.8	U	ug/kg	2.8
Aldrin	1.4	U	ug/kg	1.4	3	U	ug/kg	3	14	U	ug/kg	14	2.8	U	ug/kg	2.8
Heptachlor epoxide	1.4	U	ug/kg	1.4	3	U	ug/kg	3	14	U	ug/kg	14	2.8	U	ug/kg	2.8
Endosulfan I	1.4	U	ug/kg	1.4	3	U	ug/kg	3	14	U	ug/kg	14	2.8	U	ug/kg	2.8
Dieldrin	1.4	U	ug/kg	1.4	3	U	ug/kg	3	14	U	ug/kg	14	2.8	U	ug/kg	2.8
4,4-DDE	24		ug/kg		28		ug/kg		160		ug/kg		49		ug/kg	
Endrin	2.8	U	ug/kg	2.8	5.9	U	ug/kg	5.9	28	U	ug/kg	28	5.7	U	ug/kg	5.7
Endosulfan II	2.8	U	ug/kg	2.8	5.9	U	ug/kg	5.9	28	U	ug/kg	28	5.7	U	ug/kg	5.7
4,4-DDD	2.8	U	ug/kg	2.8	5.9	U	ug/kg	5.9	28	U	ug/kg	28	5.7	U	ug/kg	5.7
Endosulfan sulfate	2.8	U	ug/kg	2.8	5.9	U	ug/kg	5.9	28	U	ug/kg	28	5.7	U	ug/kg	5.7
4,4-DDT	9.2		ug/kg		22		ug/kg		34		ug/kg		18		ug/kg	
Methoxychlor	5.7	U	ug/kg	5.7	12	U	ug/kg	12	57	U	ug/kg	57	11	U	ug/kg	11
Endrin aldehyde	2.8	U	ug/kg	2.8	5.9	U	ug/kg	5.9	28	U	ug/kg	28	5.7	U	ug/kg	5.7
Endrin ketone	2.8	U	ug/kg	2.8	5.9	U	ug/kg	5.9	28	U	ug/kg	28	5.7	U	ug/kg	5.7
Chlordane	14	U	ug/kg	14	30	U	ug/kg	30	140	U	ug/kg	140	28	U	ug/kg	28
Chlorobenzilate	41	U	ug/kg	41	89	U	ug/kg	89	430	U	ug/kg	430	85	U	ug/kg	85
Diallate	81	U	ug/kg	81	180	U	ug/kg	180	850	U	ug/kg	850	170	U	ug/kg	170
Toxaphene	71	U	ug/kg	71	150	U	ug/kg	150	710	U	ug/kg	710	140	U	ug/kg	140
Isodrin	1.7	U	ug/kg	1.7	3.6	U	ug/kg	3.6	17	U	ug/kg	17	3.4	U	ug/kg	3.4
Kepone	85	U	ug/kg	85	180	U	ug/kg	180	850	U	ug/kg	850	170	U	ug/kg	170
Aroclor-1016	71	U	ug/kg	71	150	U	ug/kg	150	710	U	ug/kg	710	140	U	ug/kg	140
Aroclor-1221	140	U	ug/kg	140	300	U	ug/kg	300	1400	U	ug/kg	1400	280	U	ug/kg	280
Aroclor-1232	140	U	ug/kg	140	300	U	ug/kg	300	1400	U	ug/kg	1400	280	U	ug/kg	280
Aroclor-1242	71	U	ug/kg	71	150	U	ug/kg	150	710	U	ug/kg	710	140	U	ug/kg	140
Aroclor-1248	71	U	ug/kg	71	150	U	ug/kg	150	710	U	ug/kg	710	140	U	ug/kg	140
Aroclor-1254	35	U	ug/kg	35	74	U	ug/kg	74	350	U	ug/kg	350	71	U	ug/kg	71
Aroclor-1260	35	U	ug/kg	35	74	U	ug/kg	74	350	U	ug/kg	350	71	U	ug/kg	71
ORGANOPHOSPHORUS PESTICIDES ug/kg																
Dimethoate	-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Disulfoton	-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Ethyl parathion	-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Famphur	-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Methyl parathion	-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Phorate	-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Sulfotepp	-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Thionazin	-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Triethylphosphorothioate	-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
CHLORINATED HERBICIDES ug/kg																
2,4,5-T	-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
2,4-D	-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Dinoseb	-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Silvex (2,4,5-TP)	-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:		23953009				23953011				23953013				23953015			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		15SS51				15SS61				15SS71				15SS81			
Collect Date:		02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg																
alpha-BHC		27	U	ug/kg	27	14	U	ug/kg	14	140	U	ug/kg	140	14	U	ug/kg	14
beta-BHC		55	U	ug/kg	55	28	U	ug/kg	28	280	U	ug/kg	280	28	U	ug/kg	28
delta-BHC		27	U	ug/kg	27	14	U	ug/kg	14	140	U	ug/kg	140	14	U	ug/kg	14
gamma-BHC (Lindane)		27	U	ug/kg	27	14	U	ug/kg	14	140	U	ug/kg	140	14	U	ug/kg	14
Heptachlor		16	J	ug/kg		14	U	ug/kg	14	140	U	ug/kg	140	14	U	ug/kg	14
Aldrin		27	U	ug/kg	27	14	U	ug/kg	14	140	U	ug/kg	140	14	U	ug/kg	14
Heptachlor epoxide		85	J	ug/kg		14	U	ug/kg	14	140	U	ug/kg	140	14	U	ug/kg	14
Endosulfan I		27	U	ug/kg	27	14	U	ug/kg	14	140	U	ug/kg	140	14	U	ug/kg	14
Dieldrin		27	U	ug/kg	27	14	U	ug/kg	14	140	U	ug/kg	140	14	U	ug/kg	14
4,4-DDE		100	J	ug/kg		72	J	ug/kg		2800		ug/kg		260	J	ug/kg	
Endrin		55	U	ug/kg	55	28	U	ug/kg	28	280	U	ug/kg	280	28	U	ug/kg	28
Endosulfan II		55	U	ug/kg	55	28	U	ug/kg	28	280	U	ug/kg	280	28	U	ug/kg	28
4,4-DDD		55	U	ug/kg	55	28	U	ug/kg	28	280	U	ug/kg	280	28	U	ug/kg	28
Endosulfan sulfate		55	U	ug/kg	55	28	U	ug/kg	28	280	U	ug/kg	280	28	U	ug/kg	28
4,4-DDT		100	J	ug/kg		84	J	ug/kg		1500		ug/kg		110	J	ug/kg	
Methoxychlor		110	U	ug/kg	110	56	U	ug/kg	56	560	U	ug/kg	560	56	U	ug/kg	56
Endrin aldehyde		55	U	ug/kg	55	28	U	ug/kg	28	280	U	ug/kg	280	28	U	ug/kg	28
Endrin ketone		55	U	ug/kg	55	28	U	ug/kg	28	280	U	ug/kg	280	28	U	ug/kg	28
Chlordane		5600		ug/kg		1100		ug/kg		1400	U	ug/kg	1400	1000		ug/kg	
Chlorobenzilate		820	U	ug/kg	820	420	U	ug/kg	420	4200	U	ug/kg	4200	420	U	ug/kg	420
Diallate		1600	U	ug/kg	1600	830	U	ug/kg	830	8400	U	ug/kg	8400	830	U	ug/kg	830
Toxaphene		1400	U	ug/kg	1400	690	U	ug/kg	690	7000	U	ug/kg	7000	690	U	ug/kg	690
Isodrin		33	U	ug/kg	33	17	U	ug/kg	17	170	U	ug/kg	170	17	U	ug/kg	17
Kepone		1600	U	ug/kg	1600	830	U	ug/kg	830	8400	U	ug/kg	8400	830	U	ug/kg	830
Aroclor-1016		1400	U	ug/kg	1400	690	U	ug/kg	690	7000	U	ug/kg	7000	690	U	ug/kg	690
Aroclor-1221		2700	U	ug/kg	2700	1400	U	ug/kg	1400	14000	U	ug/kg	14000	1400	U	ug/kg	1400
Aroclor-1232		2700	U	ug/kg	2700	1400	U	ug/kg	1400	14000	U	ug/kg	14000	1400	U	ug/kg	1400
Aroclor-1242		1400	U	ug/kg	1400	690	U	ug/kg	690	7000	U	ug/kg	7000	690	U	ug/kg	690
Aroclor-1248		1400	U	ug/kg	1400	690	U	ug/kg	690	7000	U	ug/kg	7000	690	U	ug/kg	690
Aroclor-1254		690	U	ug/kg	690	350	U	ug/kg	350	3500	U	ug/kg	3500	350	U	ug/kg	350
Aroclor-1260		690	U	ug/kg	690	350	U	ug/kg	350	3500	U	ug/kg	3500	350	U	ug/kg	350
ORGANOPHOSPHORUS PESTICIDES	ug/kg																
Dimethoate		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Disulfoton		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Ethyl parathion		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Famphur		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Methyl parathion		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Phorate		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Sulfotepp		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:		23953009			23953011			23953013			23953015		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		15SS51			15SS61			15SS71			15SS81		
Collect Date:		02-FEB-93			02-FEB-93			02-FEB-93			02-FEB-93		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
Thionazin		-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Triethylphosphorothioate		-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
CHLORINATED HERBICIDES	ug/kg												
2,4,5-T		-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
2,4-D		-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Dinoseb		-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Silvex (2,4,5-TP)		-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:		23953016				M7902001				M7902002				M7867004		
Site		GROUP2				GROUP2				GROUP2				GROUP2		
Locator		15SS81D				15SS00901				15SS00901D				15SS01001		
Collect Date:		02-FEB-93				20-SEP-94				20-SEP-94				13-SEP-94		
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg																
alpha-BHC		14	U	ug/kg	14	1.8	U	ug/kg	1.8	1.8	U	ug/kg	1.8	3.5	U	ug/kg	3.5
beta-BHC		28	U	ug/kg	28	3.5	U	ug/kg	3.5	3.4	U	ug/kg	3.4	6.8	U	ug/kg	6.8
delta-BHC		14	U	ug/kg	14	1.8	U	ug/kg	1.8	1.8	U	ug/kg	1.8	3.5	U	ug/kg	3.5
gamma-BHC (Lindane)		14	U	ug/kg	14	1.8	U	ug/kg	1.8	1.8	U	ug/kg	1.8	3.5	U	ug/kg	3.5
Heptachlor		14	U	ug/kg	14	1.8	U	ug/kg	1.8	1.8	U	ug/kg	1.8	3.5	U	ug/kg	3.5
Aldrin		14	U	ug/kg	14	1.8	U	ug/kg	1.8	1.8	U	ug/kg	1.8	3.5	U	ug/kg	3.5
Heptachlor epoxide		14	U	ug/kg	14	1.8	U	ug/kg	1.8	1.8	U	ug/kg	1.8	3.5	U	ug/kg	3.5
Endosulfan I		14	U	ug/kg	14	1.8	U	ug/kg	1.8	1.8	U	ug/kg	1.8	3.5	U	ug/kg	3.5
Dieldrin		14	U	ug/kg	14	1.8	U	ug/kg	1.8	1.8	U	ug/kg	1.8	3.5	U	ug/kg	3.5
4,4-DDE		230	J	ug/kg		63	J	ug/kg		60	J	ug/kg		54		ug/kg	
Endrin		28	U	ug/kg	28	3.5	U	ug/kg	3.5	3.4	U	ug/kg	3.4	6.8	U	ug/kg	6.8
Endosulfan II		28	U	ug/kg	28	3.5	U	ug/kg	3.5	3.4	U	ug/kg	3.4	6.8	U	ug/kg	6.8
4,4-DDD		28	U	ug/kg	28	3.5	U	ug/kg	3.5	3.4	U	ug/kg	3.4	6.8	U	ug/kg	6.8
Endosulfan sulfate		28	U	ug/kg	28	3.5	U	ug/kg	3.5	3.4	U	ug/kg	3.4	6.8	U	ug/kg	6.8
4,4-DDT		140	J	ug/kg		7.1	J	ug/kg		7.4	J	ug/kg		18		ug/kg	
Methoxychlor		56	U	ug/kg	56	7.2	U	ug/kg	7.2	7.2	U	ug/kg	7.2	14	U	ug/kg	14
Endrin aldehyde		28	U	ug/kg	28	3.5	U	ug/kg	3.5	3.4	U	ug/kg	3.4	6.8	U	ug/kg	6.8
Endrin ketone		28	U	ug/kg	28	3.5	U	ug/kg	3.5	3.4	U	ug/kg	3.4	6.8	U	ug/kg	6.8
Chlordane		710		ug/kg		18	U	ug/kg	18	18	U	ug/kg	18	35	U	ug/kg	35
Chlorobenzilate		420	U	ug/kg	420	54	U	ug/kg	54	53	U	ug/kg	53	100	U	ug/kg	100
Diallate		830	U	ug/kg	830	110	U	ug/kg	110	110	U	ug/kg	110	210	U	ug/kg	210
Toxaphene		690	U	ug/kg	690	89	U	ug/kg	89	88	U	ug/kg	88	170	U	ug/kg	170
Isodrin		17	U	ug/kg	17	1.8	U	ug/kg	1.8	1.8	U	ug/kg	1.8	3.5	U	ug/kg	3.5
Kepone		830	U	ug/kg	830	110	UJ	ug/kg		110	UJ	ug/kg		210	UJ	ug/kg	
Aroclor-1016		690	U	ug/kg	690	-		ug/kg		-		ug/kg		-		ug/kg	
Aroclor-1221		1400	U	ug/kg	1400	-		ug/kg		-		ug/kg		-		ug/kg	
Aroclor-1232		1400	U	ug/kg	1400	-		ug/kg		-		ug/kg		-		ug/kg	
Aroclor-1242		690	U	ug/kg	690	-		ug/kg		-		ug/kg		-		ug/kg	
Aroclor-1248		690	U	ug/kg	690	-		ug/kg		-		ug/kg		-		ug/kg	
Aroclor-1254		350	U	ug/kg	350	-		ug/kg		-		ug/kg		-		ug/kg	
Aroclor-1260		350	U	ug/kg	350	-		ug/kg		-		ug/kg		-		ug/kg	
ORGANOPHOSPHORUS PESTICIDES	ug/kg																
Dimethoate		-		ug/kg		720	U	ug/kg	720	71	U	ug/kg	71	70	U	ug/kg	70
Disulfoton		-		ug/kg		350	U	ug/kg	350	35	U	ug/kg	35	34	U	ug/kg	34
Ethyl parathion		-		ug/kg		350	U	ug/kg	350	35	U	ug/kg	35	34	U	ug/kg	34
Famphur		-		ug/kg		350	U	ug/kg	350	35	U	ug/kg	35	34	UJ	ug/kg	
Methyl parathion		-		ug/kg		350	UJ	ug/kg		35	UJ	ug/kg		34	U	ug/kg	34
Phorate		-		ug/kg		350	U	ug/kg	350	350	U	ug/kg	350	34	U	ug/kg	34
Sulfotepp		-		ug/kg		350	U	ug/kg	350	35	U	ug/kg	35	34	U	ug/kg	34

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:		23953016				M7902001				M7902002				M7867004			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		15SS81D				15SS00901				15SS00901D				15SS01001			
Collect Date:		02-FEB-93				20-SEP-94				20-SEP-94				13-SEP-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Thionazin		-		ug/kg		350	U	ug/kg	350	350	U	ug/kg	350	34	U	ug/kg	34
Triethylphosphorothioate		-		ug/kg		350	U	ug/kg	350	350	U	ug/kg	350	34	U	ug/kg	34
CHLORINATED HERBICIDES	ug/kg																
2,4,5-T		-		ug/kg		11	U	ug/kg	11	11	U	ug/kg	11	10	UJ	ug/kg	
2,4-D		-		ug/kg		54	U	ug/kg	54	53	U	ug/kg	53	52	U	ug/kg	52
Dinoseb		-		ug/kg		11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10
Silvex (2,4,5-TP)		-		ug/kg		11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:		M7867006				M7867007				M7867009				M7867011			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		15SS01101				15SS01201				15SS01301				15SS01401			
Collect Date:		13-SEP-94				13-SEP-94				13-SEP-94				13-SEP-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg																
alpha-BHC		.7	U	ug/kg	.7	14	U	ug/kg	14	.7	U	ug/kg	.7	1.4	U	ug/kg	1.4
beta-BHC		1.4	U	ug/kg	1.4	27	U	ug/kg	27	1.4	U	ug/kg	1.4	2.7	U	ug/kg	2.7
delta-BHC		.7	U	ug/kg	.7	14	U	ug/kg	14	.7	U	ug/kg	.7	1.4	U	ug/kg	1.4
gamma-BHC (Lindane)		.7	U	ug/kg	.7	14	U	ug/kg	14	.7	U	ug/kg	.7	1.4	U	ug/kg	1.4
Heptachlor		.7	U	ug/kg	.7	14	U	ug/kg	14	.7	U	ug/kg	.7	1.4	U	ug/kg	1.4
Aldrin		.7	U	ug/kg	.7	14	U	ug/kg	14	.7	U	ug/kg	.7	1.4	U	ug/kg	1.4
Heptachlor epoxide		.7	U	ug/kg	.7	14	U	ug/kg	14	.7	U	ug/kg	.7	1.4	U	ug/kg	1.4
Endosulfan I		.7	U	ug/kg	.7	14	U	ug/kg	14	.7	U	ug/kg	.7	1.4	U	ug/kg	1.4
Dieldrin		.7	U	ug/kg	.7	14	U	ug/kg	14	.7	U	ug/kg	.7	1.4	U	ug/kg	1.4
4,4-DDE		3.1		ug/kg		220		ug/kg		3.4		ug/kg		9.3		ug/kg	
Endrin		1.4	U	ug/kg	1.4	27	U	ug/kg	27	1.4	U	ug/kg	1.4	2.7	U	ug/kg	2.7
Endosulfan II		1.4	U	ug/kg	1.4	27	U	ug/kg	27	1.4	U	ug/kg	1.4	2.7	U	ug/kg	2.7
4,4-DDD		1.4	U	ug/kg	1.4	27	U	ug/kg	27	1.4	U	ug/kg	1.4	2.7	U	ug/kg	2.7
Endosulfan sulfate		1.4	U	ug/kg	1.4	27	U	ug/kg	27	1.4	U	ug/kg	1.4	2.7	U	ug/kg	2.7
4,4-DDT		1.8		ug/kg		56	J	ug/kg		4.4	J	ug/kg		34		ug/kg	
Methoxychlor		2.8	U	ug/kg	2.8	57	U	ug/kg	57	2.8	U	ug/kg	2.8	5.6	U	ug/kg	5.6
Endrin aldehyde		1.4	U	ug/kg	1.4	27	U	ug/kg	27	1.4	U	ug/kg	1.4	2.7	U	ug/kg	2.7
Endrin ketone		1.4	U	ug/kg	1.4	27	U	ug/kg	27	1.4	U	ug/kg	1.4	2.7	U	ug/kg	2.7
Chlordane		7	U	ug/kg	7	380		ug/kg		20		ug/kg		75		ug/kg	
Chlorobenzilate		21	U	ug/kg	21	420	U	ug/kg	420	21	U	ug/kg	21	41	U	ug/kg	41
Diallate		42	U	ug/kg	42	840	U	ug/kg	840	42	U	ug/kg	42	82	U	ug/kg	82
Toxaphene		35	U	ug/kg	35	690	U	ug/kg	690	34	U	ug/kg	34	68	U	ug/kg	68
Isodrin		.7	U	ug/kg	.7	14	U	ug/kg	14	.7	U	ug/kg	.7	1.4	U	ug/kg	1.4
Kepone		42	UJ	ug/kg		840	UJ	ug/kg		42	UJ	ug/kg		82	UJ	ug/kg	
Aroclor-1016		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Aroclor-1221		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Aroclor-1232		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Aroclor-1242		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Aroclor-1248		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Aroclor-1254		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Aroclor-1260		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
ORGANOPHOSPHORUS PESTICIDES	ug/kg																
Dimethoate		71	U	ug/kg	71	71	U	ug/kg	71	70	U	ug/kg	70	69	U	ug/kg	69
Disulfoton		35	U	ug/kg	35	35	U	ug/kg	35	34	U	ug/kg	34	34	U	ug/kg	34
Ethyl parathion		35	U	ug/kg	35	35	U	ug/kg	35	34	U	ug/kg	34	34	U	ug/kg	34
Famphur		35	UJ	ug/kg		35	UJ	ug/kg		34	UJ	ug/kg		34	UJ	ug/kg	
Methyl parathion		35	U	ug/kg	35	35	U	ug/kg	35	34	U	ug/kg	34	34	U	ug/kg	34
Phorate		35	U	ug/kg	35	35	U	ug/kg	35	34	U	ug/kg	34	34	U	ug/kg	34
Sulfotepp		35	U	ug/kg	35	35	U	ug/kg	35	34	U	ug/kg	34	34	U	ug/kg	34

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:		M7867006				M7867007				M7867009				M7867011			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		15SS01101				15SS01201				15SS01301				15SS01401			
Collect Date:		13-SEP-94				13-SEP-94				13-SEP-94				13-SEP-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Thionazin		35	U	ug/kg	35	35	U	ug/kg	35	34	U	ug/kg	34	34	U	ug/kg	34
Triethylphosphorothioate		35	U	ug/kg	35	35	U	ug/kg	35	34	U	ug/kg	34	34	U	ug/kg	34
CHLORINATED HERBICIDES	ug/kg																
2,4,5-T		11	UJ	ug/kg		11	UJ	ug/kg		10	UJ	ug/kg		10	UJ	ug/kg	
2,4-D		100	UJ	ug/kg		100	UJ	ug/kg		52	U	ug/kg	52	52	U	ug/kg	52
Dinoseb		11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10	10	U	ug/kg	10
Silvex (2,4,5-TP)		11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10	10	U	ug/kg	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:		M7867005				M7867010				M7867008				M7867013			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		15SS01501				15SS01601				15SS01701				15SS01801			
Collect Date:		13-SEP-94				13-SEP-94				13-SEP-94				13-SEP-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg																
alpha-BHC		.72	U	ug/kg	.72	140	U	ug/kg	140	3.5	U	ug/kg	3.5	7.2	U	ug/kg	7.2
beta-BHC		1.4	U	ug/kg	1.4	280	U	ug/kg	280	6.8	U	ug/kg	6.8	14	U	ug/kg	14
delta-BHC		.72	U	ug/kg	.72	140	U	ug/kg	140	3.5	U	ug/kg	3.5	7.2	U	ug/kg	7.2
gamma-BHC (Lindane)		.72	U	ug/kg	.72	140	U	ug/kg	140	3.5	U	ug/kg	3.5	7.2	U	ug/kg	7.2
Heptachlor		.72	U	ug/kg	.72	140	U	ug/kg	140	3.5	U	ug/kg	3.5	7.2	U	ug/kg	7.2
Aldrin		.72	U	ug/kg	.72	140	U	ug/kg	140	3.5	U	ug/kg	3.5	7.2	U	ug/kg	7.2
Heptachlor epoxide		.72	U	ug/kg	.72	140	U	ug/kg	140	3.5	U	ug/kg	3.5	7.2	U	ug/kg	7.2
Endosulfan I		.72	U	ug/kg	.72	140	U	ug/kg	140	3.5	U	ug/kg	3.5	7.2	U	ug/kg	7.2
Dieldrin		.72	U	ug/kg	.72	140	U	ug/kg	140	3.5	U	ug/kg	3.5	7.2	U	ug/kg	7.2
4,4-DDE		1.1		ug/kg		560		ug/kg		93		ug/kg		180		ug/kg	
Endrin		1.4	U	ug/kg	1.4	280	U	ug/kg	280	6.8	U	ug/kg	6.8	14	U	ug/kg	14
Endosulfan II		1.4	U	ug/kg	1.4	280	U	ug/kg	280	6.8	U	ug/kg	6.8	14	U	ug/kg	14
4,4-DDD		1.4	U	ug/kg	1.4	280	U	ug/kg	280	6.8	U	ug/kg	6.8	14	U	ug/kg	14
Endosulfan sulfate		1.4	U	ug/kg	1.4	280	U	ug/kg	280	6.8	U	ug/kg	6.8	14	U	ug/kg	14
4,4-DDT		2.5		ug/kg		340		ug/kg		89		ug/kg		54		ug/kg	
Methoxychlor		2.9	U	ug/kg	2.9	590	U	ug/kg	590	14	U	ug/kg	14	29	U	ug/kg	29
Endrin aldehyde		1.4	U	ug/kg	1.4	280	U	ug/kg	280	6.8	U	ug/kg	6.8	14	U	ug/kg	14
Endrin ketone		1.4	U	ug/kg	1.4	280	U	ug/kg	280	6.8	U	ug/kg	6.8	14	U	ug/kg	14
Chlordane		31		ug/kg		9000		ug/kg		35	U	ug/kg	35	72	U	ug/kg	72
Chlorobenzilate		22	U	ug/kg	22	4300	U	ug/kg	4300	100	U	ug/kg	100	220	U	ug/kg	220
Diallate		43	U	ug/kg	43	8700	U	ug/kg	8700	210	U	ug/kg	210	430	U	ug/kg	430
Toxaphene		35	U	ug/kg	35	7200	U	ug/kg	7200	170	U	ug/kg	170	350	U	ug/kg	350
Isodrin		.72	U	ug/kg	.72	140	U	ug/kg	140	3.5	U	ug/kg	3.5	7.2	U	ug/kg	7.2
Kepone		43	UJ	ug/kg		8700	UJ	ug/kg		210	UJ	ug/kg		430	UJ	ug/kg	
Aroclor-1016		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Aroclor-1221		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Aroclor-1232		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Aroclor-1242		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Aroclor-1248		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Aroclor-1254		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Aroclor-1260		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
ORGANOPHOSPHORUS PESTICIDES	ug/kg																
Dimethoate		720	U	ug/kg	720	73	U	ug/kg	73	710	U	ug/kg	710	720	U	ug/kg	720
Disulfoton		350	U	ug/kg	350	36	U	ug/kg	36	350	U	ug/kg	350	350	U	ug/kg	350
Ethyl parathion		350	U	ug/kg	350	36	U	ug/kg	36	350	U	ug/kg	350	350	U	ug/kg	350
Famphur		350	UJ	ug/kg		36	UJ	ug/kg		350	UJ	ug/kg		350	UJ	ug/kg	
Methyl parathion		350	U	ug/kg	350	36	U	ug/kg	36	350	U	ug/kg	350	350	U	ug/kg	350
Phorate		350	U	ug/kg	350	36	U	ug/kg	36	350	U	ug/kg	350	350	U	ug/kg	350
Sulfotepp		350	U	ug/kg	350	36	U	ug/kg	36	350	U	ug/kg	350	350	U	ug/kg	350

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:	M7867005				M7867010				M7867008				M7867013			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15SS01501				15SS01601				15SS01701				15SS01801			
Collect Date:	13-SEP-94				13-SEP-94				13-SEP-94				13-SEP-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Thionazin	350	U	ug/kg	350	36	U	ug/kg	36	350	U	ug/kg	350	350	U	ug/kg	350
Triethylphosphorothioate	350	U	ug/kg	350	36	U	ug/kg	36	350	U	ug/kg	350	350	U	ug/kg	350
CHLORINATED HERBICIDES ug/kg																
2,4,5-T	11	UJ	ug/kg		11	UJ	ug/kg		11	UJ	ug/kg		11	UJ	ug/kg	
2,4-D	54	U	ug/kg	54	110	UJ	ug/kg		100	UJ	ug/kg		54	U	ug/kg	54
Dinoseb	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Silvex (2,4,5-TP)	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:		M7902003			M7902004			M7867012			M7867020		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		15SS01901			15SS01901D			15SS02001			15SS02101		
Collect Date:		20-SEP-94			20-SEP-94			13-SEP-94			13-SEP-94		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg												
alpha-BHC		.75 U	ug/kg	.75	.75 U	ug/kg	.75	.73 U	ug/kg	.73	14 U	ug/kg	14
beta-BHC		1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	28 U	ug/kg	28
delta-BHC		.75 U	ug/kg	.75	.75 U	ug/kg	.75	.73 U	ug/kg	.73	14 U	ug/kg	14
gamma-BHC (Lindane)		.75 U	ug/kg	.75	.75 U	ug/kg	.75	.73 U	ug/kg	.73	14 U	ug/kg	14
Heptachlor		.75 U	ug/kg	.75	.75 U	ug/kg	.75	.73 U	ug/kg	.73	14 U	ug/kg	14
Aldrin		.75 U	ug/kg	.75	.75 U	ug/kg	.75	.73 U	ug/kg	.73	14 U	ug/kg	14
Heptachlor epoxide		.75 U	ug/kg	.75	.75 U	ug/kg	.75	.73 U	ug/kg	.73	14 U	ug/kg	14
Endosulfan I		.75 U	ug/kg	.75	.75 U	ug/kg	.75	.73 U	ug/kg	.73	14 U	ug/kg	14
Dieldrin		.75 U	ug/kg	.75	.75 U	ug/kg	.75	.73 U	ug/kg	.73	14 U	ug/kg	14
4,4-DDE		2.1 J	ug/kg		1.7 J	ug/kg		4.8	ug/kg		270	ug/kg	
Endrin		1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	28 U	ug/kg	28
Endosulfan II		1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	28 U	ug/kg	28
4,4-DDD		1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	28 U	ug/kg	28
Endosulfan sulfate		1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	28 U	ug/kg	28
4,4-DDT		1.5 J	ug/kg		1.7 J	ug/kg		3.1	ug/kg		60	ug/kg	
Methoxychlor		3 U	ug/kg	3	3 U	ug/kg	3	2.9 U	ug/kg	2.9	57 U	ug/kg	57
Endrin aldehyde		1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	28 U	ug/kg	28
Endrin ketone		1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	28 U	ug/kg	28
Chlordane		7.5 U	ug/kg	7.5	7.5 U	ug/kg	7.5	7.3 U	ug/kg	7.3	140 U	ug/kg	140
Chlorobenzilate		22 U	ug/kg	22	22 U	ug/kg	22	22 U	ug/kg	22	420 U	ug/kg	420
Diallate		45 U	ug/kg	45	45 U	ug/kg	45	43 U	ug/kg	43	850 U	ug/kg	850
Toxaphene		37 U	ug/kg	37	37 U	ug/kg	37	36 U	ug/kg	36	700 U	ug/kg	700
Isodrin		.75 U	ug/kg	.75	.75 U	ug/kg	.75	.73 U	ug/kg	.73	14 U	ug/kg	14
Kepone		45 UJ	ug/kg		45 UJ	ug/kg		43 UJ	ug/kg		850 UJ	ug/kg	
Aroclor-1016		-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Aroclor-1221		-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Aroclor-1232		-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Aroclor-1242		-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Aroclor-1248		-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Aroclor-1254		-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Aroclor-1260		-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
ORGANOPHOSPHORUS PESTICIDES	ug/kg												
Dimethoate		75 U	ug/kg	75	75 U	ug/kg	75	73 U	ug/kg	73	71 U	ug/kg	71
Disulfoton		37 U	ug/kg	37	37 U	ug/kg	37	36 U	ug/kg	36	35 U	ug/kg	35
Ethyl parathion		37 U	ug/kg	37	37 U	ug/kg	37	36 U	ug/kg	36	35 U	ug/kg	35
Famphur		37 U	ug/kg	37	37 U	ug/kg	37	36 UJ	ug/kg		35 U	ug/kg	35
Methyl parathion		37 UJ	ug/kg		37 UJ	ug/kg		36 U	ug/kg	36	35 U	ug/kg	35
Phorate		37 U	ug/kg	37	37 U	ug/kg	37	36 U	ug/kg	36	35 U	ug/kg	35
Sulfotepp		37 U	ug/kg	37	37 U	ug/kg	37	36 U	ug/kg	36	35 U	ug/kg	35

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:		M7902003				M7902004				M7867012				M7867020			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		15SS01901				15SS01901D				15SS02001				15SS02101			
Collect Date:		20-SEP-94				20-SEP-94				13-SEP-94				13-SEP-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Thionazin		37	U	ug/kg	37	37	U	ug/kg	37	36	U	ug/kg	36	35	U	ug/kg	35
Triethylphosphorothioate		37	U	ug/kg	37	37	U	ug/kg	37	36	U	ug/kg	36	35	U	ug/kg	35
CHLORINATED HERBICIDES	ug/kg																
2,4,5-T		11	U	ug/kg	11	11	U	ug/kg	11	11	UJ	ug/kg		11	UJ	ug/kg	
2,4-D		56	U	ug/kg	56	56	U	ug/kg	56	110	UJ	ug/kg		110	UJ	ug/kg	
Dinoseb		11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Silvex (2,4,5-TP)		11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:		M7867017				M7867014				M7867019				M7867018			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		15SS02201				15SS02301				15SS02501				15SS02601			
Collect Date:		13-SEP-94				13-SEP-94				13-SEP-94				13-SEP-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg																
alpha-BHC		1.4	U	ug/kg	1.4	14000	U	ug/kg	14000	1.4	U	ug/kg	1.4	.71	U	ug/kg	.71
beta-BHC		2.8	U	ug/kg	2.8	28000	U	ug/kg	28000	2.7	U	ug/kg	2.7	1.4	U	ug/kg	1.4
delta-BHC		1.4	U	ug/kg	1.4	14000	U	ug/kg	14000	1.4	U	ug/kg	1.4	.71	U	ug/kg	.71
gamma-BHC (Lindane)		1.4	U	ug/kg	1.4	14000	U	ug/kg	14000	1.4	U	ug/kg	1.4	.71	U	ug/kg	.71
Heptachlor		1.4	U	ug/kg	1.4	14000	U	ug/kg	14000	1.4	U	ug/kg	1.4	.71	U	ug/kg	.71
Aldrin		1.4	U	ug/kg	1.4	14000	U	ug/kg	14000	1.4	U	ug/kg	1.4	.71	U	ug/kg	.71
Heptachlor epoxide		1.4	U	ug/kg	1.4	14000	U	ug/kg	14000	1.4	U	ug/kg	1.4	.71	U	ug/kg	.71
Endosulfan I		1.4	U	ug/kg	1.4	14000	U	ug/kg	14000	1.4	U	ug/kg	1.4	.71	U	ug/kg	.71
Dieldrin		1.4	U	ug/kg	1.4	14000	U	ug/kg	14000	1.4	U	ug/kg	1.4	.71	U	ug/kg	.71
4,4-DDE		14		ug/kg		14000	U	ug/kg	14000	49		ug/kg		7.9		ug/kg	
Endrin		2.8	U	ug/kg	2.8	28000	U	ug/kg	28000	2.7	U	ug/kg	2.7	1.4	U	ug/kg	1.4
Endosulfan II		2.8	U	ug/kg	2.8	28000	U	ug/kg	28000	2.7	U	ug/kg	2.7	1.4	U	ug/kg	1.4
4,4-DDD		2.8	U	ug/kg	2.8	28000	U	ug/kg	28000	2.7	U	ug/kg	2.7	1.4	U	ug/kg	1.4
Endosulfan sulfate		2.8	U	ug/kg	2.8	28000	U	ug/kg	28000	2.7	U	ug/kg	2.7	1.4	U	ug/kg	1.4
4,4-DDT		6.5		ug/kg		790000		ug/kg		17		ug/kg		7.4		ug/kg	
Methoxychlor		5.7	U	ug/kg	5.7	57000	U	ug/kg	57000	5.7	U	ug/kg	5.7	2.9	U	ug/kg	2.9
Endrin aldehyde		2.8	U	ug/kg	2.8	28000	U	ug/kg	28000	2.7	U	ug/kg	2.7	1.4	U	ug/kg	1.4
Endrin ketone		2.8	U	ug/kg	2.8	28000	U	ug/kg	28000	2.7	U	ug/kg	2.7	1.4	U	ug/kg	1.4
Chlordane		14	U	ug/kg	14	140000	U	ug/kg	140000	14	U	ug/kg	14	7.1	U	ug/kg	7.1
Chlorobenzilate		42	U	ug/kg	42	20000	U	ug/kg	20000	42	U	ug/kg	42	21	U	ug/kg	21
Diallate		85	U	ug/kg	85	50000	U	ug/kg	50000	84	U	ug/kg	84	42	U	ug/kg	42
Toxaphene		70	U	ug/kg	70	700000	U	ug/kg	700000	69	U	ug/kg	69	35	U	ug/kg	35
Isodrin		1.4	U	ug/kg	1.4	14000	U	ug/kg	14000	1.4	U	ug/kg	1.4	.71	U	ug/kg	.71
Kepone		85	UJ	ug/kg		850000	UJ	ug/kg		84	UJ	ug/kg		42	UJ	ug/kg	
Aroclor-1016		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Aroclor-1221		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Aroclor-1232		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Aroclor-1242		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Aroclor-1248		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Aroclor-1254		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Aroclor-1260		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
ORGANOPHOSPHORUS PESTICIDES	ug/kg																
Dimethoate		71	U	ug/kg	71	71	U	ug/kg	71	71	U	ug/kg	71	71	U	ug/kg	71
Disulfoton		35	U	ug/kg	35	35	U	ug/kg	35	35	U	ug/kg	35	35	U	ug/kg	35
Ethyl parathion		35	U	ug/kg	35	35	U	ug/kg	35	35	U	ug/kg	35	35	U	ug/kg	35
Famphur		35	UJ	ug/kg		35	UJ	ug/kg		35	U	ug/kg	35	35	UJ	ug/kg	
Methyl parathion		35	U	ug/kg	35	35	U	ug/kg	35	35	U	ug/kg	35	35	U	ug/kg	35
Phorate		35	U	ug/kg	35	35	U	ug/kg	35	35	U	ug/kg	35	35	U	ug/kg	35
Sulfotepp		35	U	ug/kg	35	35	U	ug/kg	35	35	U	ug/kg	35	35	U	ug/kg	35

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:	M7867017				M7867014				M7867019				M7867018			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15SS02201				15SS02301				15SS02501				15SS02601			
Collect Date:	13-SEP-94				13-SEP-94				13-SEP-94				13-SEP-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Thionazin	35	U	ug/kg	35	35	U	ug/kg	35	35	U	ug/kg	35	35	U	ug/kg	35
Triethylphosphorothioate	35	U	ug/kg	35	35	U	ug/kg	35	35	U	ug/kg	35	35	U	ug/kg	35
CHLORINATED HERBICIDES ug/kg																
2,4,5-T	11	UJ	ug/kg		11	UJ	ug/kg		11	UJ	ug/kg		11	UJ	ug/kg	
2,4-D	110	UJ	ug/kg		110	UJ	ug/kg		100	UJ	ug/kg		110	UJ	ug/kg	
Dinoseb	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Silvex (2,4,5-TP)	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:		R8785001			R8785002			R8742003			R8742004		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		15SS02701			15SS02701D			15SS02801			15SS02901		
Collect Date:		22-SEP-94			22-SEP-94			13-SEP-94			13-SEP-94		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg												
alpha-BHC		.72 U	ug/kg	.72	.71 U	ug/kg	.71	.71 U	ug/kg	.71	.72 U	ug/kg	.72
beta-BHC		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4
delta-BHC		.72 U	ug/kg	.72	.71 U	ug/kg	.71	.71 U	ug/kg	.71	.72 U	ug/kg	.72
gamma-BHC (Lindane)		.72 U	ug/kg	.72	.71 U	ug/kg	.71	.71 U	ug/kg	.71	.72 U	ug/kg	.72
Heptachlor		.72 U	ug/kg	.72	.71 U	ug/kg	.71	.71 U	ug/kg	.71	.72 U	ug/kg	.72
Aldrin		.72 U	ug/kg	.72	.71 U	ug/kg	.71	.71 U	ug/kg	.71	.72 U	ug/kg	.72
Heptachlor epoxide		.72 U	ug/kg	.72	.71 U	ug/kg	.71	.71 U	ug/kg	.71	.72 U	ug/kg	.72
Endosulfan I		.72 U	ug/kg	.72	.71 U	ug/kg	.71	.71 U	ug/kg	.71	.72 U	ug/kg	.72
Dieldrin		.72 U	ug/kg	.72	.71 U	ug/kg	.71	.71 U	ug/kg	.71	.72 U	ug/kg	.72
4,4-DDE		1.2	ug/kg		.67 J	ug/kg		2.8	ug/kg		6.5	ug/kg	
Endrin		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4
Endosulfan II		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4
4,4-DDD		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4
Endosulfan sulfate		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4
4,4-DDT		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	2.1	ug/kg	
Methoxychlor		2.9 U	ug/kg	2.9	2.9 U	ug/kg	2.9	2.9 U	ug/kg	2.9	2.9 U	ug/kg	2.9
Endrin aldehyde		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4
Endrin ketone		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4
Chlordane		7.2 U	ug/kg	7.2	7.1 U	ug/kg	7.1	7.1 U	ug/kg	7.1	7.2 U	ug/kg	7.2
Chlorobenzilate		21 U	ug/kg	21	21 U	ug/kg	21	21 U	ug/kg	21	21 U	ug/kg	21
Diallate		43 U	ug/kg	43	42 U	ug/kg	42	43 U	ug/kg	43	43 U	ug/kg	43
Toxaphene		35 U	ug/kg	35	35 U	ug/kg	35	35 U	ug/kg	35	35 U	ug/kg	35
Isodrin		.72 U	ug/kg	.72	.71 U	ug/kg	.71	.71 U	ug/kg	.71	.72 U	ug/kg	.72
Kepone		43 U	ug/kg	43	42 U	ug/kg	42	43 UJ	ug/kg		43 UJ	ug/kg	
Aroclor-1016		-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Aroclor-1221		-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Aroclor-1232		-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Aroclor-1242		-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Aroclor-1248		-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Aroclor-1254		-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Aroclor-1260		-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
ORGANOPHOSPHORUS PESTICIDES	ug/kg												
Dimethoate		72 U	ug/kg	72	71 U	ug/kg	71	71 U	ug/kg	71	71 U	ug/kg	71
Disulfoton		35 U	ug/kg	35	35 U	ug/kg	35	35 U	ug/kg	35	35 U	ug/kg	35
Ethyl parathion		35 U	ug/kg	35	35 U	ug/kg	35	35 U	ug/kg	35	35 U	ug/kg	35
Famphur		35 U	ug/kg	35	35 U	ug/kg	35	35 U	ug/kg	35	35 U	ug/kg	35
Methyl parathion		35 U	ug/kg	35	35 U	ug/kg	35	35 U	ug/kg	35	35 U	ug/kg	35
Phorate		35 U	ug/kg	35	35 U	ug/kg	35	35 U	ug/kg	35	35 U	ug/kg	35
Sulfotepp		35 U	ug/kg	35	35 U	ug/kg	35	35 UJ	ug/kg		35 UJ	ug/kg	

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:	R8785001				R8785002				R8742003				R8742004			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15SS02701				15SS02701D				15SS02801				15SS02901			
Collect Date:	22-SEP-94				22-SEP-94				13-SEP-94				13-SEP-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Thionazin	35	U	ug/kg	35	35	U	ug/kg	35	35	U	ug/kg	35	35	U	ug/kg	35
Triethylphosphorothioate	35	U	ug/kg	35	35	U	ug/kg	35	35	U	ug/kg	35	35	U	ug/kg	35
CHLORINATED HERBICIDES ug/kg																
2,4,5-T	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
2,4-D	53	U	ug/kg	53	53	U	ug/kg	53	53	U	ug/kg	53	54	U	ug/kg	54
Dinoseb	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Silvex (2,4,5-TP)	11	UJ	ug/kg		11	UJ	ug/kg		11	U	ug/kg	11	11	U	ug/kg	11

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:	R8742006
Site	GROUP2
Locator	15SS03001
Collect Date:	13-SEP-94

		VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg				
alpha-BHC		.72	U	ug/kg	.72
beta-BHC		1.4	U	ug/kg	1.4
delta-BHC		.72	U	ug/kg	.72
gamma-BHC (Lindane)		.72	U	ug/kg	.72
Heptachlor		.72	U	ug/kg	.72
Aldrin		.72	U	ug/kg	.72
Heptachlor epoxide		.72	U	ug/kg	.72
Endosulfan I		.72	U	ug/kg	.72
Dieldrin		.72	U	ug/kg	.72
4,4-DDE		3.8		ug/kg	
Endrin		1.4	U	ug/kg	1.4
Endosulfan II		1.4	U	ug/kg	1.4
4,4-DDD		1.4	U	ug/kg	1.4
Endosulfan sulfate		1.4	U	ug/kg	1.4
4,4-DDT		2.2		ug/kg	
Methoxychlor		2.9	U	ug/kg	2.9
Endrin aldehyde		1.4	U	ug/kg	1.4
Endrin ketone		1.4	U	ug/kg	1.4
Chlordane		7.2	U	ug/kg	7.2
Chlorobenzilate		22	U	ug/kg	22
Diallate		43	U	ug/kg	43
Toxaphene		36	U	ug/kg	36
Isodrin		1.4	U	ug/kg	1.4
Kepone		43	UJ	ug/kg	
Aroclor-1016		-		ug/kg	
Aroclor-1221		-		ug/kg	
Aroclor-1232		-		ug/kg	
Aroclor-1242		-		ug/kg	
Aroclor-1248		-		ug/kg	
Aroclor-1254		-		ug/kg	
Aroclor-1260		-		ug/kg	
ORGANOPHOSPHORUS PESTICIDES	ug/kg				
Dimethoate		71	U	ug/kg	71
Disulfoton		35	U	ug/kg	35
Ethyl parathion		35	U	ug/kg	35
Famphur		35	U	ug/kg	35
Methyl parathion		35	U	ug/kg	35
Phorate		35	U	ug/kg	35
Sulfotepp		35	UJ	ug/kg	

Lab Sample Number:		R8742006			
Site		GROUP2			
Locator		15SS03001			
Collect Date:		13-SEP-94			
		VALUE	QUAL	UNITS	DL
Thionazin		35	U	ug/kg	35
Triethylphosphorothioate		35	U	ug/kg	35
CHLORINATED HERBICIDES	ug/kg				
2,4,5-T		11	U	ug/kg	11
2,4-D		54	U	ug/kg	54
Dinoseb		11	U	ug/kg	11
Silvex (2,4,5-TP)		11	U	ug/kg	11

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:		GN-0128900				GN-0128900				GN-0128900				GN-0128900			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		15SS11				15SS21				15SS31				15SS41			
Collect Date:		02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg																
Antimony		2.8	J	mg/kg		2.7	U	mg/kg	2.7	2.7	U	mg/kg	2.7	2.7	U	mg/kg	2.7
Arsenic		1.3	J	mg/kg		1.2	J	mg/kg		1.2	J	mg/kg		1.4	J	mg/kg	
Barium		7.1	J	mg/kg		5.1	J	mg/kg		4.3	J	mg/kg		5.5	J	mg/kg	
Beryllium		.16	J	mg/kg		.12	J	mg/kg		.14	J	mg/kg		.17	J	mg/kg	
Cadmium		.43	U	mg/kg	.43	.62		mg/kg		.43	U	mg/kg	.43	.59		mg/kg	
Chromium		4.3		mg/kg		5.4		mg/kg		3.2		mg/kg		4		mg/kg	
Cobalt		.48	J	mg/kg		.51	J	mg/kg		.7	J	mg/kg		.36	J	mg/kg	
Copper		8.2		mg/kg		4.5		mg/kg		2.3	J	mg/kg		2.3	J	mg/kg	
Cyanide		-		mg/kg		-		mg/kg		-		mg/kg		-		mg/kg	
Lead		17.1		mg/kg		26.3		mg/kg		15.5		mg/kg		2.4		mg/kg	
Mercury		.13	U	mg/kg	.13	.11	U	mg/kg	.11	.1	U	mg/kg	.1	.1	U	mg/kg	.1
Nickel		1.4	U	mg/kg	1.4	1.6	J	mg/kg		1.4	U	mg/kg	1.4	1.9	J	mg/kg	
Selenium		.81	J	mg/kg		.64	J	mg/kg		.5	J	mg/kg		.48	J	mg/kg	
Silver		.27	U	mg/kg	.27	.27	U	mg/kg	.27	.26	U	mg/kg	.26	.26	U	mg/kg	.26
Thallium		.28	U	mg/kg	.28	.28	U	mg/kg	.28	.28	U	mg/kg	.28	.28	U	mg/kg	.28
Tin		3.8	U	mg/kg	3.8	3.8	U	mg/kg	3.8	4.2	J	mg/kg		3.8	U	mg/kg	3.8
Vanadium		2.1	J	mg/kg		3.2	J	mg/kg		3.2	J	mg/kg		3.6	J	mg/kg	
Zinc		22.8	J	mg/kg		53.6	J	mg/kg		72.6	J	mg/kg		28.5	J	mg/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:	GN-0128900				GN-0128901				GN-0128901				GN-0128901			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15SS51				15SS61				15SS71				15SS81			
Collect Date:	02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	2.5	U	mg/kg	2.5	2.6	U	mg/kg	2.6	2.6	U	mg/kg	2.6	2.6	U	mg/kg	2.6
Arsenic	2.9	J	mg/kg		5		mg/kg		3	J	mg/kg		2.9	J	mg/kg	
Barium	7.5	J	mg/kg		4.6	J	mg/kg		30.6	J	mg/kg		27.7	J	mg/kg	
Beryllium	.09	J	mg/kg		.1	J	mg/kg		.07	J	mg/kg		.09	J	mg/kg	
Cadmium	.41	U	mg/kg	.41	.41	U	mg/kg	.41	.5	J	mg/kg		.8		mg/kg	
Chromium	2.5		mg/kg		6.7		mg/kg		14.6		mg/kg		9.1		mg/kg	
Cobalt	.26	J	mg/kg		.38	J	mg/kg		.59	J	mg/kg		.66	J	mg/kg	
Copper	2	J	mg/kg		1.1	J	mg/kg		11.4		mg/kg		9.3		mg/kg	
Cyanide	-		mg/kg		-		mg/kg		-		mg/kg		-		mg/kg	
Lead	8.9		mg/kg		4.9		mg/kg		107	J	mg/kg		267	J	mg/kg	
Mercury	.04	U	mg/kg	.04	.04	U	mg/kg	.04	.07	J	mg/kg		.53		mg/kg	
Nickel	1.3	U	mg/kg	1.3	1.3	U	mg/kg	1.3	1.4	J	mg/kg		1.3	U	mg/kg	1.3
Selenium	.37	J	mg/kg		.74	J	mg/kg		.78	J	mg/kg		.27	J	mg/kg	
Silver	.25	U	mg/kg	.25	.25	U	mg/kg	.25	.26	U	mg/kg	.26	.25	U	mg/kg	.25
Thallium	.26	U	mg/kg	.26	.26	U	mg/kg	.26	.27	U	mg/kg	.27	.27	U	mg/kg	.27
Tin	3.6	U	mg/kg	3.6	3.6	U	mg/kg	3.6	3.7	U	mg/kg	3.7	3.7	J	mg/kg	
Vanadium	1.6	J	mg/kg		1.8	J	mg/kg		3.7	J	mg/kg		3	J	mg/kg	
Zinc	39.6	J	mg/kg		9.1	J	mg/kg		165	J	mg/kg		169	J	mg/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:	GN-0128901
Site	GROUP2
Locator	15SS81D
Collect Date:	02-FEB-93

		VALUE	QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg				
Antimony		2.6	U	mg/kg	2.6
Arsenic		2.9	J	mg/kg	
Barium		21.8	J	mg/kg	
Beryllium		.09	J	mg/kg	
Cadmium		.84		mg/kg	
Chromium		10.9		mg/kg	
Cobalt		.65	J	mg/kg	
Copper		10.8		mg/kg	
Cyanide		-		mg/kg	
Lead		326	J	mg/kg	
Mercury		.62		mg/kg	
Nickel		1.3	U	mg/kg	1.3
Selenium		.59	J	mg/kg	
Silver		.25	U	mg/kg	.25
Thallium		.27	U	mg/kg	.27
Tin		3.8	J	mg/kg	
Vanadium		3.3	J	mg/kg	
Zinc		174	J	mg/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

APPENDIX A-7

SUBSURFACE SOIL SAMPLE ANALYSES, SWMU 15

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:		35083002				35083004				35083006				35083008			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		15SS12				15SS22				15SS32				15SS42			
Collect Date:		02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/kg																
Chloromethane		10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11
Bromomethane		10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11
Vinyl chloride		10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11
Chloroethane		10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11
Methylene chloride		5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Acetone		4	J	ug/kg		2	J	ug/kg		2	J	ug/kg		3	J	ug/kg	
Carbon disulfide		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,1-Dichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,1-Dichloroethene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloroethene (total)		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Chloroform		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
2-Butanone		10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11
1,1,1-Trichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Carbon tetrachloride		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Bromodichloromethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloropropane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
cis-1,3-Dichloropropene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Trichloroethene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Dibromochloromethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,1,2-Trichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Benzene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
trans-1,3-Dichloropropene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Bromoform		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
4-Methyl-2-pentanone		10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11
2-Hexanone		10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11
Tetrachloroethene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,1,2,2-Tetrachloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Toluene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Chlorobenzene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Ethylbenzene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Styrene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Xylenes (total)		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Dichlorodifluoromethane		10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11
Trichlorofluoromethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,3-Dichlorobenzene		340	U	ug/kg	340	5	U	ug/kg	5	340	U	ug/kg	340	5	U	ug/kg	5
Acrolein		100	U	ug/kg	100	100	U	ug/kg	100	100	U	ug/kg	100	110	U	ug/kg	110
Iodomethane		10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11
1,4-Dichlorobenzene		340	U	ug/kg	340	5	U	ug/kg	5	5	U	ug/kg	5	350	U	ug/kg	350
Acrylonitrile		100	U	ug/kg	100	100	U	ug/kg	100	100	U	ug/kg	100	110	U	ug/kg	110
Dibromomethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichlorobenzene		5	U	ug/kg	5	5	U	ug/kg	5	340	U	ug/kg	340	5	U	ug/kg	5
2-Chloroethylvinylether		10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11
Ethyl methacrylate		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,2,3-Trichloropropane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
trans-1,4-Dichloro-2-butene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Isobutyl alcohol		210	U	ug/kg	210	210	U	ug/kg	210	210	U	ug/kg	210	210	U	ug/kg	210
1,1,1,2-Tetrachloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dibromo-3-chloropropane		10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11
1,2-Dibromoethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:	35083002				35083004				35083006				35083008			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15SS12				15SS22				15SS32				15SS42			
Collect Date:	02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	210	R	ug/kg		210	R	ug/kg		210	R	ug/kg		210	R	ug/kg	
3-Chloropropene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Acetonitrile	100	U	ug/kg	100	100	U	ug/kg	100	100	U	ug/kg	100	110	U	ug/kg	110
Chloroprene	210	U	ug/kg	210	210	U	ug/kg	210	210	U	ug/kg	210	210	U	ug/kg	210
Methacrylonitrile	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Methyl methacrylate	10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11
Pentachloroethane	10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11
Propionitrile	100	U	ug/kg	100	100	U	ug/kg	100	100	U	ug/kg	100	110	U	ug/kg	110
Vinyl acetate	10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:		35083010				35083012				35083014				35083017			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		15SS52				15SS62				15SS72				15SS82			
Collect Date:		02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/kg																
Chloromethane		10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10
Bromomethane		10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10
Vinyl chloride		10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10
Chloroethane		10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10
Methylene chloride		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Acetone		5	J	ug/kg		46	J	ug/kg		10	U	ug/kg	10	10	U	ug/kg	10
Carbon disulfide		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,1-Dichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,1-Dichloroethene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloroethene (total)		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Chloroform		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
2-Butanone		10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10
1,1,1-Trichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Carbon tetrachloride		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Bromodichloromethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloropropane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
cis-1,3-Dichloropropene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Trichloroethene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Dibromochloromethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,1,2-Trichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Benzene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
trans-1,3-Dichloropropene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Bromoform		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
4-Methyl-2-pentanone		10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10
2-Hexanone		10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10
Tetrachloroethene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,1,2,2-Tetrachloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Toluene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Chlorobenzene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Ethylbenzene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Styrene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Xylenes (total)		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Dichlorodifluoromethane		10	U	ug/kg	10	10	U	ug/kg	10	10	UJ	ug/kg		10	U	ug/kg	10
Trichlorofluoromethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,3-Dichlorobenzene		340	U	ug/kg	340	5	U	ug/kg	5	340	U	ug/kg	340	5	U	ug/kg	5
Acrolein		100	U	ug/kg	100	100	U	ug/kg	100	100	U	ug/kg	100	100	U	ug/kg	100
Iodomethane		10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10
1,4-Dichlorobenzene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Acrylonitrile		100	U	ug/kg	100	100	U	ug/kg	100	100	U	ug/kg	100	100	U	ug/kg	100

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:	35083010				35083012				35083014				35083017			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15SS52				15SS62				15SS72				15SS82			
Collect Date:	02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichlorobenzene	5	U	ug/kg	5	5	U	ug/kg	5	340	U	ug/kg	340	5	U	ug/kg	5
2-Chloroethylvinylether	10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10
Ethyl methacrylate	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,2,3-Trichloropropane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Isobutyl alcohol	210	U	ug/kg	210	210	U	ug/kg	210	210	U	ug/kg	210	210	U	ug/kg	210
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dibromo-3-chloropropane	10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10
1,2-Dibromoethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,4-Dioxane	210	R	ug/kg		210	R	ug/kg		210	R	ug/kg		210	R	ug/kg	
3-Chloropropene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Acetonitrile	100	U	ug/kg	100	100	U	ug/kg	100	100	U	ug/kg	100	100	U	ug/kg	100
Chloroprene	210	U	ug/kg	210	210	U	ug/kg	210	210	U	ug/kg	210	210	U	ug/kg	210
Methacrylonitrile	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Methyl methacrylate	10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10
Pentachloroethane	10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10
Propionitrile	100	U	ug/kg	100	100	U	ug/kg	100	100	U	ug/kg	100	100	U	ug/kg	100
Vinyl acetate	10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:		35083018			23829002			34901004			23829003		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		15SS82D			MP15MS1S2			MP15MS1S2			MP15MS1S6		
Collect Date:		02-FEB-93			15-JAN-93			15-JAN-93			15-JAN-93		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
VOLATILES	ug/kg												
Chloromethane		10 U	ug/kg	10	11 U	ug/kg	11	-	ug/kg		12 U	ug/kg	12
Bromomethane		10 U	ug/kg	10	11 U	ug/kg	11	-	ug/kg		12 U	ug/kg	12
Vinyl chloride		10 U	ug/kg	10	11 U	ug/kg	11	-	ug/kg		12 U	ug/kg	12
Chloroethane		10 U	ug/kg	10	11 U	ug/kg	11	-	ug/kg		12 U	ug/kg	12
Methylene chloride		5 U	ug/kg	5	5 U	ug/kg	5	-	ug/kg		7 U	ug/kg	7
Acetone		10 U	ug/kg	10	13 U	ug/kg	13	-	ug/kg		150	ug/kg	
Carbon disulfide		5 U	ug/kg	5	5 U	ug/kg	5	-	ug/kg		6 U	ug/kg	6
1,1-Dichloroethane		5 U	ug/kg	5	5 U	ug/kg	5	-	ug/kg		6 U	ug/kg	6
1,1-Dichloroethene		5 U	ug/kg	5	5 U	ug/kg	5	-	ug/kg		6 U	ug/kg	6
1,2-Dichloroethene (total)		5 U	ug/kg	5	5 U	ug/kg	5	-	ug/kg		6 U	ug/kg	6
Chloroform		5 U	ug/kg	5	5 U	ug/kg	5	-	ug/kg		6 U	ug/kg	6
1,2-Dichloroethane		5 U	ug/kg	5	5 U	ug/kg	5	-	ug/kg		6 U	ug/kg	6
2-Butanone		10 U	ug/kg	10	11 U	ug/kg	11	-	ug/kg		12 U	ug/kg	12
1,1,1-Trichloroethane		5 U	ug/kg	5	5 U	ug/kg	5	-	ug/kg		6 U	ug/kg	6
Carbon tetrachloride		5 U	ug/kg	5	5 U	ug/kg	5	-	ug/kg		6 U	ug/kg	6
Bromodichloromethane		5 U	ug/kg	5	5 U	ug/kg	5	-	ug/kg		6 U	ug/kg	6
1,2-Dichloropropane		5 U	ug/kg	5	5 U	ug/kg	5	-	ug/kg		6 U	ug/kg	6
cis-1,3-Dichloropropene		5 U	ug/kg	5	5 U	ug/kg	5	-	ug/kg		6 U	ug/kg	6
Trichloroethene		5 U	ug/kg	5	5 U	ug/kg	5	-	ug/kg		6 U	ug/kg	6
Dibromochloromethane		5 U	ug/kg	5	5 U	ug/kg	5	-	ug/kg		6 U	ug/kg	6
1,1,2-Trichloroethane		5 U	ug/kg	5	5 U	ug/kg	5	-	ug/kg		6 U	ug/kg	6
Benzene		5 U	ug/kg	5	5 U	ug/kg	5	-	ug/kg		6 U	ug/kg	6
trans-1,3-Dichloropropene		5 U	ug/kg	5	5 U	ug/kg	5	-	ug/kg		6 U	ug/kg	6
Bromoform		5 U	ug/kg	5	5 U	ug/kg	5	-	ug/kg		6 U	ug/kg	6
4-Methyl-2-pentanone		10 U	ug/kg	10	11 U	ug/kg	11	-	ug/kg		12 U	ug/kg	12
2-Hexanone		10 U	ug/kg	10	11 U	ug/kg	11	-	ug/kg		12 U	ug/kg	12
Tetrachloroethene		5 U	ug/kg	5	5 U	ug/kg	5	-	ug/kg		6 U	ug/kg	6
1,1,2,2-Tetrachloroethane		5 U	ug/kg	5	5 U	ug/kg	5	-	ug/kg		6 U	ug/kg	6
Toluene		5 U	ug/kg	5	5 U	ug/kg	5	-	ug/kg		6 U	ug/kg	6
Chlorobenzene		5 U	ug/kg	5	5 U	ug/kg	5	-	ug/kg		6 U	ug/kg	6
Ethylbenzene		5 U	ug/kg	5	5 U	ug/kg	5	-	ug/kg		6 U	ug/kg	6
Styrene		5 U	ug/kg	5	5 U	ug/kg	5	-	ug/kg		6 U	ug/kg	6
Xylenes (total)		5 U	ug/kg	5	5 U	ug/kg	5	-	ug/kg		6 U	ug/kg	6
Dichlorodifluoromethane		10 UJ	ug/kg		11 U	ug/kg	11	-	ug/kg		12 U	ug/kg	12
Trichlorofluoromethane		5 U	ug/kg	5	5 U	ug/kg	5	-	ug/kg		6 U	ug/kg	6
1,3-Dichlorobenzene		340 U	ug/kg	340	5 U	ug/kg	5	340 U	ug/kg	340	6 U	ug/kg	6
Acrolein		100 U	ug/kg	100	110 U	ug/kg	110	-	ug/kg		120 U	ug/kg	120
Iodomethane		10 U	ug/kg	10	11 U	ug/kg	11	-	ug/kg		12 U	ug/kg	12
1,4-Dichlorobenzene		340 U	ug/kg	340	5 U	ug/kg	5	340 U	ug/kg	340	6 U	ug/kg	6
Acrylonitrile		100 U	ug/kg	100	110 U	ug/kg	110	-	ug/kg		120 U	ug/kg	120

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:	35083018				23829002				34901004				23829003			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15SS82D				MP15MS1S2				MP15MS1S2				MP15MS1S6			
Collect Date:	02-FEB-93				15-JAN-93				15-JAN-93				15-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6
1,2-Dichlorobenzene	340	U	ug/kg	340	5	U	ug/kg	5	340	U	ug/kg	340	6	U	ug/kg	6
2-Chloroethylvinylether	10	U	ug/kg	10	11	U	ug/kg	11	-		ug/kg		12	U	ug/kg	12
Ethyl methacrylate	5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6
1,2,3-Trichloropropane	5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6
Isobutyl alcohol	210	U	ug/kg	210	210	U	ug/kg	210	-		ug/kg		240	U	ug/kg	240
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6
1,2-Dibromo-3-chloropropane	10	U	ug/kg	10	11	U	ug/kg	11	-		ug/kg		12	U	ug/kg	12
1,2-Dibromoethane	5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6
1,4-Dioxane	210	R	ug/kg		210	R	ug/kg		-		ug/kg		240	R	ug/kg	
3-Chloropropene	5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6
Acetonitrile	100	U	ug/kg	100	110	U	ug/kg	110	-		ug/kg		120	U	ug/kg	120
Chloroprene	210	U	ug/kg	210	210	U	ug/kg	210	-		ug/kg		240	U	ug/kg	240
Methacrylonitrile	5	U	ug/kg	5	5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6
Methyl methacrylate	10	U	ug/kg	10	11	U	ug/kg	11	-		ug/kg		12	U	ug/kg	12
Pentachloroethane	10	U	ug/kg	10	11	U	ug/kg	11	-		ug/kg		12	U	ug/kg	12
Propionitrile	100	U	ug/kg	100	110	U	ug/kg	110	-		ug/kg		120	U	ug/kg	120
Vinyl acetate	10	U	ug/kg	10	11	U	ug/kg	11	-		ug/kg		12	U	ug/kg	12

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:	34901005
Site	GROUP2
Locator	MP15MS1S6
Collect Date:	15-JAN-93

		VALUE	QUAL	UNITS	DL
VOLATILES	ug/kg				
Chloromethane		-		ug/kg	
Bromomethane		-		ug/kg	
Vinyl chloride		-		ug/kg	
Chloroethane		-		ug/kg	
Methylene chloride		-		ug/kg	
Acetone		-		ug/kg	
Carbon disulfide		-		ug/kg	
1,1-Dichloroethane		-		ug/kg	
1,1-Dichloroethene		-		ug/kg	
1,2-Dichloroethene (total)		-		ug/kg	
Chloroform		-		ug/kg	
1,2-Dichloroethane		-		ug/kg	
2-Butanone		-		ug/kg	
1,1,1-Trichloroethane		-		ug/kg	
Carbon tetrachloride		-		ug/kg	
Bromodichloromethane		-		ug/kg	
1,2-Dichloropropane		-		ug/kg	
cis-1,3-Dichloropropene		-		ug/kg	
Trichloroethene		-		ug/kg	
Dibromochloromethane		-		ug/kg	
1,1,2-Trichloroethane		-		ug/kg	
Benzene		-		ug/kg	
trans-1,3-Dichloropropene		-		ug/kg	
Bromoform		-		ug/kg	
4-Methyl-2-pentanone		-		ug/kg	
2-Hexanone		-		ug/kg	
Tetrachloroethene		-		ug/kg	
1,1,2,2-Tetrachloroethane		-		ug/kg	
Toluene		-		ug/kg	
Chlorobenzene		-		ug/kg	
Ethylbenzene		-		ug/kg	
Styrene		-		ug/kg	
Xylenes (total)		-		ug/kg	
Dichlorodifluoromethane		-		ug/kg	
Trichlorofluoromethane		-		ug/kg	
1,3-Dichlorobenzene		400	U	ug/kg	400
Acrolein		-		ug/kg	
Iodomethane		-		ug/kg	
1,4-Dichlorobenzene		400	U	ug/kg	400
Acrylonitrile		-		ug/kg	

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:	34901005
Site	GROUP2
Locator	MP15MS1S6
Collect Date:	15-JAN-93

	VALUE	QUAL	UNITS	DL
Dibromomethane	-		ug/kg	
1,2-Dichlorobenzene	400	U	ug/kg	400
2-Chloroethylvinylether	-		ug/kg	
Ethyl methacrylate	-		ug/kg	
1,2,3-Trichloropropane	-		ug/kg	
trans-1,4-Dichloro-2-butene	-		ug/kg	
Isobutyl alcohol	-		ug/kg	
1,1,1,2-Tetrachloroethane	-		ug/kg	
1,2-Dibromo-3-chloropropane	-		ug/kg	
1,2-Dibromoethane	-		ug/kg	
1,4-Dioxane	-		ug/kg	
3-Chloropropene	-		ug/kg	
Acetonitrile	-		ug/kg	
Chloroprene	-		ug/kg	
Methacrylonitrile	-		ug/kg	
Methyl methacrylate	-		ug/kg	
Pentachloroethane	-		ug/kg	
Propionitrile	-		ug/kg	
Vinyl acetate	-		ug/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:		35083002				35083004				35083006				35083008			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		15SS12				15SS22				15SS32				15SS42			
Collect Date:		02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg																
N-Nitrosodimethylamine		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Phenol		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Aniline		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
bis (2-Chloroethyl) ether		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Benzyl Alcohol		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
2-Methylphenol		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
bis(2-Chloroisopropyl)ether		340	U	ug/kg	340	340	UJ	ug/kg		340	UJ	ug/kg		350	UJ	ug/kg	
N-Nitroso-di-n-propylamine		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Hexachloroethane		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Nitrobenzene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Isophorone		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
2-Nitrophenol		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
2,4-Dimethylphenol		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Benzoic acid		1700	U	ug/kg	1700	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700
bis(2-Chloroethoxy)methane		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
2,4-Dichlorophenol		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
1,2,4-Trichlorobenzene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Naphthalene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
4-Chloroaniline		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Hexachlorobutadiene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
4-Chloro-3-methylphenol		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
2-Methylnaphthalene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Hexachlorocyclopentadiene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
2,4,6-Trichlorophenol		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Dimethylphthalate		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
2,4,5-Trichlorophenol		1700	U	ug/kg	1700	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700
2-Chloronaphthalene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
2-Nitroaniline		1700	U	ug/kg	1700	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700
Acenaphthylene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
2,6-Dinitrotoluene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
3-Nitroaniline		1700	U	ug/kg	1700	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700
Acenaphthene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
2,4-Dinitrophenol		1700	U	ug/kg	1700	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700
4-Nitrophenol		1700	U	ug/kg	1700	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700
Dibenzofuran		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
2,4-Dinitrotoluene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Diethylphthalate		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
4-Chlorophenyl-phenylether		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Fluorene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
4-Nitroaniline		1700	U	ug/kg	1700	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700
4,6-Dinitro-2-methylphenol		1700	U	ug/kg	1700	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700
N-Nitrosodiphenylamine (1)		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
1,2-Diphenylhydrazine		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
4-Bromophenyl-phenylether		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Hexachlorobenzene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Pentachlorophenol		1700	U	ug/kg	1700	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700
Phenanthrene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Anthracene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Di-n-Butylphthalate		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Fluoranthene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:	35083002				35083004				35083006				35083008			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15SS12				15SS22				15SS32				15SS42			
Collect Date:	02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Pyrene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Butylbenzylphthalate	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
3,3'-Dichlorobenzidine	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680	690	U	ug/kg	690
Benzo(a)anthracene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Chrysene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
bis(2-Ethylhexyl)phthalate	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Di-n-octylphthalate	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Benzo(b)fluoranthene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Benzo(k)fluoranthene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Benzo(a)pyrene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Indeno(1,2,3-cd)pyrene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Dibenz(a,h)anthracene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Benzo(g,h,i)perylene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
2-Picoline	1700	U	ug/kg	1700	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700
Methyl methanesulfonate	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Ethyl methanesulfonate	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Acetophenone	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
N-Nitrosopiperidine	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Phenyl-tert-butylamine	1700	UJ	ug/kg		1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700
2,6-Dichlorophenol	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
N-Nitroso-di-n-butylamine	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
N-Nitrosodiethylamine	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
N-Nitrosopyrrolidine	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Benzidine	1700	U	ug/kg	1700	1600	UJ	ug/kg		1600	UJ	ug/kg		1700	UJ	ug/kg	
1,2,4,5-Tetrachlorobenzene	1700	U	ug/kg	1700	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700
Pentachlorobenzene	1700	U	ug/kg	1700	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700
1-Naphthylamine	1700	UJ	ug/kg		1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700
2-Naphthylamine	1700	U	ug/kg	1700	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700
2,3,4,6-Tetrachlorophenol	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Phenacetin	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
4-Aminobiphenyl	1700	U	ug/kg	1700	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700
Pentachloronitrobenzene	1700	U	ug/kg	1700	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700
Pronamide	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
p-(Dimethylamino)azobenzene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
7,12-Dimethylbenz(A)Anthracene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
3-Methylcholanthrene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Pyridine	1700	U	ug/kg	1700	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700
N-Nitrosomethylethylamine	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
N-Nitrosomorpholine	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
o-Toluidine	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Hexachloropropene	1700	U	ug/kg	1700	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700
p-Phenylenediamine	17000	R	ug/kg		17000	R	ug/kg		17000	R	ug/kg		17000	R	ug/kg	
Safrole	1700	U	ug/kg	1700	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700
Isosafrole	1700	U	ug/kg	1700	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700
1,4-Naphthoquinone	34000	U	ug/kg	34000	34000	U	ug/kg	34000	34000	U	ug/kg	34000	35000	U	ug/kg	35000
1,3-Dinitrobenzene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
5-Nitro-o-toluidine	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
1,3,5-Trinitrobenzene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
4-Nitroquinoline-1-oxide	17000	R	ug/kg		17000	R	ug/kg		17000	R	ug/kg		17000	R	ug/kg	
Methapyrilene	1700	U	ug/kg	1700	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700
3,3'-Dimethylbenzidine	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
Hexachlorophene	17000	U	ug/kg	17000	17000	U	ug/kg	17000	17000	U	ug/kg	17000	17000	U	ug/kg	17000

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Group2 Sub-Surface Soil Data

Lab Sample Number:	35083002				35083004				35083006				35083008			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15SS12				15SS22				15SS32				15SS42			
Collect Date:	02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Aramite	1700	R	ug/kg		1600	R	ug/kg		1600	R	ug/kg		1700	R	ug/kg	
2-Chlorophenol	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350
3- & 4-Methylphenol (2)	-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Hexachloropropene	1700	U	ug/kg	1700	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700
2-Acetylaminofluorene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	350	U	ug/kg	350

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:		35083010				35083012				35083014				35083017			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		15SS52				15SS62				15SS72				15SS82			
Collect Date:		02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg																
N-Nitrosodimethylamine		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Phenol		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Aniline		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
bis (2-Chloroethyl) ether		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Benzyl Alcohol		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
2-Methylphenol		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
bis(2-Chloroisopropyl)ether		340	UJ	ug/kg		340	UJ	ug/kg		340	UJ	ug/kg		340	UJ	ug/kg	
N-Nitroso-di-n-propylamine		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Hexachloroethane		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Nitrobenzene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Isophorone		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
2-Nitrophenol		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
2,4-Dimethylphenol		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Benzoic acid		1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1600	U	ug/kg	1600
bis(2-Chloroethoxy)methane		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
2,4-Dichlorophenol		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
1,2,4-Trichlorobenzene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Naphthalene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
4-Chloroaniline		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Hexachlorobutadiene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
4-Chloro-3-methylphenol		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
2-Methylnaphthalene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Hexachlorocyclopentadiene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
2,4,6-Trichlorophenol		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Dimethylphthalate		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
2,4,5-Trichlorophenol		1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1600	U	ug/kg	1600
2-Chloronaphthalene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
2-Nitroaniline		1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1600	U	ug/kg	1600
Acenaphthylene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
2,6-Dinitrotoluene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
3-Nitroaniline		1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1600	U	ug/kg	1600
Acenaphthene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
2,4-Dinitrophenol		1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1600	U	ug/kg	1600
4-Nitrophenol		1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1600	U	ug/kg	1600
Dibenzofuran		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
2,4-Dinitrotoluene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Diethylphthalate		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
4-Chlorophenyl-phenylether		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Fluorene		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
4-Nitroaniline		1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1600	U	ug/kg	1600

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:	35083010				35083012				35083014				35083017			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15SS52				15SS62				15SS72				15SS82			
Collect Date:	02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1600	U	ug/kg	1600
N-Nitrosodiphenylamine (1)	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
1,2-Diphenylhydrazine	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
4-Bromophenyl-phenylether	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Hexachlorobenzene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Pentachlorophenol	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1600	U	ug/kg	1600
Phenanthrene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Anthracene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Di-n-Butylphthalate	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Fluoranthene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Pyrene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Butylbenzylphthalate	380		ug/kg		340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
3,3'-Dichlorobenzidine	680	U	ug/kg	680	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Benzo(a)anthracene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Chrysene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
bis(2-Ethylhexyl)phthalate	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Di-n-octylphthalate	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Benzo(b)fluoranthene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Benzo(k)fluoranthene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Benzo(a)pyrene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Indeno(1,2,3-cd)pyrene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Dibenz(a,h)anthracene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Benzo(g,h,i)perylene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
2-Picoline	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1600	U	ug/kg	1600
Methyl methanesulfonate	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Ethyl methanesulfonate	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Acetophenone	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
N-Nitrosopiperidine	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Phenyl-tert-butylamine	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1600	U	ug/kg	1600
2,6-Dichlorophenol	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
N-Nitroso-di-n-butylamine	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
N-Nitrosodiethylamine	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
N-Nitrosopyrrolidine	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Benzidine	1600	UJ	ug/kg		1600	UJ	ug/kg		1700	UJ	ug/kg		1600	UJ	ug/kg	
1,2,4,5-Tetrachlorobenzene	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1600	U	ug/kg	1600
Pentachlorobenzene	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1600	U	ug/kg	1600
1-Naphthylamine	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1600	U	ug/kg	1600
2-Naphthylamine	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1600	U	ug/kg	1600
2,3,4,6-Tetrachlorophenol	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Phenacetin	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
4-Aminobiphenyl	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1600	U	ug/kg	1600
Pentachloronitrobenzene	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1600	U	ug/kg	1600
Pronamide	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
p-(Dimethylamino)azobenzene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
7,12-Dimethylbenz(A)Anthracene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
3-Methylcholanthrene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Pyridine	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1600	U	ug/kg	1600
N-Nitrosomethylethylamine	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
N-Nitrosomorpholine	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
o-Toluidine	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Hexachloropropene	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1600	U	ug/kg	1600
p-Phenylenediamine	16000	R	ug/kg		16000	R	ug/kg		17000	R	ug/kg		17000	R	ug/kg	

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Group2 Sub-Surface Soil Data

Lab Sample Number:	35083010				35083012				35083014				35083017			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15SS52				15SS62				15SS72				15SS82			
Collect Date:	02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1600	U	ug/kg	1600
Isosafrole	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1600	U	ug/kg	1600
1,4-Naphthoquinone	34000	U	ug/kg	34000	34000	U	ug/kg	34000	34000	U	ug/kg	34000	34000	U	ug/kg	34000
1,3-Dinitrobenzene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
5-Nitro-o-toluidine	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
1,3,5-Trinitrobenzene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
4-Nitroquinoline-1-oxide	16000	R	ug/kg		16000	R	ug/kg		17000	R	ug/kg		17000	R	ug/kg	
Methapyrilene	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1600	U	ug/kg	1600
3,3'-Dimethylbenzidine	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
Hexachlorophene	16000	U	ug/kg	16000	16000	U	ug/kg	16000	17000	U	ug/kg	17000	17000	U	ug/kg	17000
Aramite	1600	R	ug/kg		1600	R	ug/kg		1700	R	ug/kg		1600	R	ug/kg	
2-Chlorophenol	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340
3- & 4-Methylphenol (2)	-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Hexachloropropene	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1600	U	ug/kg	1600
2-Acetylaminofluorene	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340	340	U	ug/kg	340

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:		35083018				34901004				34901005			
Site		GROUP2				GROUP2				GROUP2			
Locator		15SS82D				MP15MS1S2				MP15MS1S6			
Collect Date:		02-FEB-93				15-JAN-93				15-JAN-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg												
N-Nitrosodimethylamine		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Phenol		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Aniline		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
bis (2-Chloroethyl) ether		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Benzyl Alcohol		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
2-Methylphenol		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
bis(2-Chloroisopropyl)ether		340	UJ	ug/kg		340	U	ug/kg	340	400	U	ug/kg	400
N-Nitroso-di-n-propylamine		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Hexachloroethane		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Nitrobenzene		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Isophorone		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
2-Nitrophenol		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
2,4-Dimethylphenol		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Benzoic acid		1600	U	ug/kg	1600	1700	U	ug/kg	1700	1900	U	ug/kg	1900
bis(2-Chloroethoxy)methane		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
2,4-Dichlorophenol		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
1,2,4-Trichlorobenzene		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Naphthalene		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
4-Chloroaniline		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Hexachlorobutadiene		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
4-Chloro-3-methylphenol		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
2-Methylnaphthalene		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Hexachlorocyclopentadiene		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
2,4,6-Trichlorophenol		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Dimethylphthalate		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
2,4,5-Trichlorophenol		1600	U	ug/kg	1600	1700	U	ug/kg	1700	1900	U	ug/kg	1900
2-Chloronaphthalene		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
2-Nitroaniline		1600	U	ug/kg	1600	1700	U	ug/kg	1700	1900	U	ug/kg	1900
Acenaphthylene		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
2,6-Dinitrotoluene		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
3-Nitroaniline		1600	U	ug/kg	1600	1700	U	ug/kg	1700	1900	U	ug/kg	1900
Acenaphthene		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
2,4-Dinitrophenol		1600	U	ug/kg	1600	1700	U	ug/kg	1700	1900	U	ug/kg	1900
4-Nitrophenol		1600	U	ug/kg	1600	1700	U	ug/kg	1700	1900	U	ug/kg	1900
Dibenzofuran		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
2,4-Dinitrotoluene		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Diethylphthalate		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
4-Chlorophenyl-phenylether		340	U	ug/kg	340	40	U	ug/kg	40	400	U	ug/kg	400
Fluorene		340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
4-Nitroaniline		1600	U	ug/kg	1600	1700	U	ug/kg	1700	1900	U	ug/kg	1900

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Group2 Sub-Surface Soil Data

Lab Sample Number:	35083018				34901004				34901005			
Site	GROUP2				GROUP2				GROUP2			
Locator	15SS82D				MP15MS1S2				MP15MS1S6			
Collect Date:	02-FEB-93				15-JAN-93				15-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1900	U	ug/kg	1900
N-Nitrosodiphenylamine (1)	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
1,2-Diphenylhydrazine	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
4-Bromophenyl-phenylether	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Hexachlorobenzene	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Pentachlorophenol	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1900	U	ug/kg	1900
Phenanthrene	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Anthracene	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Di-n-Butylphthalate	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Fluoranthene	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Pyrene	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Butylbenzylphthalate	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
3,3'-Dichlorobenzidine	680	U	ug/kg	680	690	U	ug/kg	690	800	U	ug/kg	800
Benzo(a)anthracene	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Chrysene	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
bis(2-Ethylhexyl)phthalate	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Di-n-octylphthalate	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Benzo(b)fluoranthene	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Benzo(k)fluoranthene	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Benzo(a)pyrene	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Indeno(1,2,3-cd)pyrene	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Dibenz(a,h)anthracene	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Benzo(g,h,i)perylene	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
2-Picoline	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1900	U	ug/kg	1900
Methyl methanesulfonate	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Ethyl methanesulfonate	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Acetophenone	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
N-Nitrosopiperidine	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Phenyl-tert-butylamine	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1900	U	ug/kg	1900
2,6-Dichlorophenol	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
N-Nitroso-di-n-butylamine	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
N-Nitrosodiethylamine	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
N-Nitrosopyrrolidine	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Benzidine	1600	UJ	ug/kg		1700	U	ug/kg	1700	1900	U	ug/kg	1900
1,2,4,5-Tetrachlorobenzene	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1900	U	ug/kg	1900
Pentachlorobenzene	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1900	U	ug/kg	1900
1-Naphthylamine	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1900	U	ug/kg	1900
2-Naphthylamine	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1900	U	ug/kg	1900
2,3,4,6-Tetrachlorophenol	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Phenacetin	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
4-Aminobiphenyl	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1900	U	ug/kg	1900
Pentachloronitrobenzene	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1900	U	ug/kg	1900
Pronamide	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
p-(Dimethylamino)azobenzene	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
7,12-Dimethylbenz(A)Anthracene	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
3-Methylcholanthrene	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Pyridine	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1900	U	ug/kg	1900
N-Nitrosomethylethylamine	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
N-Nitrosomorpholine	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
a-Toluidine	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Hexachloropropene	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1900	U	ug/kg	1900
p-Phenylenediamine	17000	R	ug/kg		17000	R	ug/kg		19000	R	ug/kg	

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:	35083018				34901004				34901005			
Site	GROUP2				GROUP2				GROUP2			
Locator	15SS82D				MP15MS1S2				MP15MS1S6			
Collect Date:	02-FEB-93				15-JAN-93				15-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1900	U	ug/kg	1900
Isosafrole	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1900	U	ug/kg	1900
1,4-Naphthoquinone	34000	U	ug/kg	34000	34000	U	ug/kg	34000	36000	U	ug/kg	36000
1,3-Dinitrobenzene	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
5-Nitro-o-toluidine	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
1,3,5-Trinitrobenzene	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
4-Nitroquinoline-1-oxide	17000	R	ug/kg		17000	U	ug/kg	17000	19000	U	ug/kg	19000
Methapyrilene	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1900	U	ug/kg	1900
3,3'-Dimethylbenzidine	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
Hexachlorophene	17000	U	ug/kg	17000	17000	U	ug/kg	17000	19000	U	ug/kg	19000
Aramite	1600	R	ug/kg		1700	R	ug/kg		1900	R	ug/kg	
2-Chlorophenol	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400
3- & 4-Methylphenol (2)	-		ug/kg		-		ug/kg		-		ug/kg	
Hexachloropropene	1600	U	ug/kg	1600	1700	U	ug/kg	1700	1900	U	ug/kg	1900
2-Acetylaminofluorene	340	U	ug/kg	340	340	U	ug/kg	340	400	U	ug/kg	400

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:	23953002				23953004				23953006				23953008			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15SS12				15SS22				15SS32				15SS42			
Collect Date:	02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs ug/kg																
alpha-BHC	.69	U	ug/kg	.69	.69	U	ug/kg	.69	.69	U	ug/kg	.69	.7	U	ug/kg	.7
beta-BHC	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
delta-BHC	.69	U	ug/kg	.69	.69	U	ug/kg	.69	.69	U	ug/kg	.69	.7	U	ug/kg	.7
gamma-BHC (Lindane)	.69	U	ug/kg	.69	.69	U	ug/kg	.69	.69	U	ug/kg	.69	.7	U	ug/kg	.7
Heptachlor	.69	U	ug/kg	.69	.69	U	ug/kg	.69	.69	U	ug/kg	.69	.7	U	ug/kg	.7
Aldrin	.69	U	ug/kg	.69	.69	U	ug/kg	.69	.69	U	ug/kg	.69	.7	U	ug/kg	.7
Heptachlor epoxide	.69	U	ug/kg	.69	.69	U	ug/kg	.69	.69	U	ug/kg	.69	.7	U	ug/kg	.7
Endosulfan I	.69	U	ug/kg	.69	.69	U	ug/kg	.69	.69	U	ug/kg	.69	.7	U	ug/kg	.7
Dieldrin	.69	U	ug/kg	.69	.69	U	ug/kg	.69	.69	U	ug/kg	.69	.7	U	ug/kg	.7
4,4-DDE	.69	U	ug/kg	.69	.69	U	ug/kg	.69	.69	U	ug/kg	.69	2.1		ug/kg	
Endrin	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endosulfan II	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
4,4-DDD	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endosulfan sulfate	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
4,4-DDT	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	2.4		ug/kg	
Methoxychlor	2.7	U	ug/kg	2.7	2.8	U	ug/kg	2.8	2.7	U	ug/kg	2.7	2.8	U	ug/kg	2.8
Endrin aldehyde	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endrin ketone	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Chlordane	6.9	U	ug/kg	6.9	6.9	U	ug/kg	6.9	6.9	U	ug/kg	6.9	7	U	ug/kg	7
Chlorobenzilate	21	U	ug/kg	21	21	U	ug/kg	21	21	U	ug/kg	21	21	U	ug/kg	21
Diallate	41	U	ug/kg	41	42	U	ug/kg	42	41	U	ug/kg	41	42	U	ug/kg	42
Toxaphene	34	U	ug/kg	34	35	U	ug/kg	35	34	U	ug/kg	34	35	U	ug/kg	35
Isodrin	.82	U	ug/kg	.82	.83	U	ug/kg	.83	.82	U	ug/kg	.82	.84	U	ug/kg	.84
Kepone	41	U	ug/kg	41	42	U	ug/kg	42	41	U	ug/kg	41	42	U	ug/kg	42
Aroclor-1016	34	U	ug/kg	34	35	U	ug/kg	35	34	U	ug/kg	34	35	U	ug/kg	35
Aroclor-1221	69	U	ug/kg	69	69	U	ug/kg	69	69	U	ug/kg	69	70	U	ug/kg	70
Aroclor-1232	69	U	ug/kg	69	69	U	ug/kg	69	69	U	ug/kg	69	70	U	ug/kg	70
Aroclor-1242	34	U	ug/kg	34	35	U	ug/kg	35	34	U	ug/kg	34	35	U	ug/kg	35
Aroclor-1248	34	U	ug/kg	34	35	U	ug/kg	35	34	U	ug/kg	34	35	U	ug/kg	35
Aroclor-1254	17	U	ug/kg	17	17	U	ug/kg	17	17	U	ug/kg	17	18	U	ug/kg	18
Aroclor-1260	17	U	ug/kg	17	17	U	ug/kg	17	17	U	ug/kg	17	18	U	ug/kg	18

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:		23953010				23953012				23953014				23953017			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		15SS52				15SS62				15SS72				15SS82			
Collect Date:		02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg																
alpha-BHC		1.4	U	ug/kg	1.4	.69	U	ug/kg	.69	.69	U	ug/kg	.69	.69	U	ug/kg	.69
beta-BHC		2.7	U	ug/kg	2.7	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
delta-BHC		1.4	U	ug/kg	1.4	.69	U	ug/kg	.69	.69	U	ug/kg	.69	.69	U	ug/kg	.69
gamma-BHC (Lindane)		1.4	U	ug/kg	1.4	.69	U	ug/kg	.69	.69	U	ug/kg	.69	.69	U	ug/kg	.69
Heptachlor		1.4	U	ug/kg	1.4	.69	U	ug/kg	.69	.69	U	ug/kg	.69	.69	U	ug/kg	.69
Aldrin		1.4	U	ug/kg	1.4	.69	U	ug/kg	.69	.69	U	ug/kg	.69	.69	U	ug/kg	.69
Heptachlor epoxide		1.4	U	ug/kg	1.4	.69	U	ug/kg	.69	.69	U	ug/kg	.69	.69	U	ug/kg	.69
Endosulfan I		1.4	U	ug/kg	1.4	.69	U	ug/kg	.69	.69	U	ug/kg	.69	.69	U	ug/kg	.69
Dieldrin		1.4	U	ug/kg	1.4	.69	U	ug/kg	.69	.69	U	ug/kg	.69	.69	U	ug/kg	.69
4,4-DDE		1.9	J	ug/kg		.69	U	ug/kg	.69	.69	U	ug/kg	.69	.69	U	ug/kg	.69
Endrin		2.7	U	ug/kg	2.7	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endosulfan II		2.7	U	ug/kg	2.7	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
4,4-DDD		2.7	U	ug/kg	2.7	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endosulfan sulfate		2.7	U	ug/kg	2.7	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
4,4-DDT		2.7	U	ug/kg	2.7	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Methoxychlor		5.5	U	ug/kg	5.5	2.7	U	ug/kg	2.7	2.8	U	ug/kg	2.8	2.8	U	ug/kg	2.8
Endrin aldehyde		2.7	U	ug/kg	2.7	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endrin ketone		2.7	U	ug/kg	2.7	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Chlordane		180		ug/kg		6.9	U	ug/kg	6.9	6.9	U	ug/kg	6.9	6.9	U	ug/kg	6.9
Chlorobenzilate		41	U	ug/kg	41	21	U	ug/kg	21	21	U	ug/kg	21	21	U	ug/kg	21
Diallate		82	U	ug/kg	82	41	U	ug/kg	41	42	U	ug/kg	42	42	U	ug/kg	42
Toxaphene		69	U	ug/kg	69	34	U	ug/kg	34	35	U	ug/kg	35	35	U	ug/kg	35
Isodrin		1.6	U	ug/kg	1.6	.82	U	ug/kg	.82	.83	U	ug/kg	.83	.83	U	ug/kg	.83
Kepone		82	U	ug/kg	82	41	U	ug/kg	41	42	U	ug/kg	42	42	U	ug/kg	42
Aroclor-1016		69	U	ug/kg	69	34	U	ug/kg	34	35	U	ug/kg	35	35	U	ug/kg	35
Aroclor-1221		140	U	ug/kg	140	69	U	ug/kg	69	69	U	ug/kg	69	69	U	ug/kg	69
Aroclor-1232		140	U	ug/kg	140	69	U	ug/kg	69	69	U	ug/kg	69	69	U	ug/kg	69
Aroclor-1242		69	U	ug/kg	69	34	U	ug/kg	34	35	U	ug/kg	35	35	U	ug/kg	35
Aroclor-1248		69	U	ug/kg	69	34	U	ug/kg	34	35	U	ug/kg	35	35	U	ug/kg	35
Aroclor-1254		34	U	ug/kg	34	17	U	ug/kg	17	17	U	ug/kg	17	17	U	ug/kg	17
Aroclor-1260		34	U	ug/kg	34	17	U	ug/kg	17	17	U	ug/kg	17	17	U	ug/kg	17

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:		23953018			23763004			23763005		
Site		GROUP2			GROUP2			GROUP2		
Locator		15SS82D			MP15MS1S2			MP15MS1S6		
Collect Date:		02-FEB-93			15-JAN-93			15-JAN-93		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg									
alpha-BHC		.69 U	ug/kg	.69	.7 U	ug/kg	.7	.8 U	ug/kg	.8
beta-BHC		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5
delta-BHC		.69 U	ug/kg	.69	.7 U	ug/kg	.7	.8 U	ug/kg	.8
gamma-BHC (Lindane)		.69 U	ug/kg	.69	.7 U	ug/kg	.7	.8 U	ug/kg	.8
Heptachlor		.69 U	ug/kg	.69	.7 U	ug/kg	.7	.8 U	ug/kg	.8
Aldrin		.69 U	ug/kg	.69	.7 U	ug/kg	.7	.8 U	ug/kg	.8
Heptachlor epoxide		.69 U	ug/kg	.69	.7 U	ug/kg	.7	.8 U	ug/kg	.8
Endosulfan I		.69 U	ug/kg	.69	.7 U	ug/kg	.7	.8 U	ug/kg	.8
Dieldrin		.69 U	ug/kg	.69	.7 U	ug/kg	.7	.8 U	ug/kg	.8
4,4-DDE		.69 U	ug/kg	.69	.7 U	ug/kg	.7	.8 U	ug/kg	.8
Endrin		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5
Endosulfan II		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5
4,4-DDD		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5
Endosulfan sulfate		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5
4,4-DDT		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5
Methoxychlor		2.8 U	ug/kg	2.8	2.8 U	ug/kg	2.8	3.2 U	ug/kg	3.2
Endrin aldehyde		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5
Endrin ketone		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5
Chlordane		6.9 U	ug/kg	6.9	7 U	ug/kg	7	8 U	ug/kg	8
Chlorobenzilate		21 U	ug/kg	21	21 U	ug/kg	21	24 U	ug/kg	24
Diallate		42 U	ug/kg	42	42 U	ug/kg	42	48 U	ug/kg	48
Toxaphene		35 U	ug/kg	35	35 U	ug/kg	35	39 U	ug/kg	39
Isodrin		.83 U	ug/kg	.83	.84 U	ug/kg	.84	.95 U	ug/kg	.95
Kepone		42 U	ug/kg	42	42 U	ug/kg	42	48 U	ug/kg	48
Aroclor-1016		35 U	ug/kg	35	35 U	ug/kg	35	39 U	ug/kg	39
Aroclor-1221		69 U	ug/kg	69	70 U	ug/kg	70	80 U	ug/kg	80
Aroclor-1232		69 U	ug/kg	69	70 U	ug/kg	70	80 U	ug/kg	80
Aroclor-1242		35 U	ug/kg	35	35 U	ug/kg	35	39 U	ug/kg	39
Aroclor-1248		35 U	ug/kg	35	35 U	ug/kg	35	39 U	ug/kg	39
Aroclor-1254		17 U	ug/kg	17	18 U	ug/kg	18	20 U	ug/kg	20
Aroclor-1260		17 U	ug/kg	17	18 U	ug/kg	18	20 U	ug/kg	20

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:	GN-0128900				GN-0128900				GN-0128900				GN-0128900			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15SS12				15SS22				15SS32				15SS42			
Collect Date:	02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	2.6	U	mg/kg	2.6	2.6	U	mg/kg	2.6	2.6	U	mg/kg	2.6	2.6	U	mg/kg	2.6
Arsenic	1.2	J	mg/kg		1.1	J	mg/kg		1.5	J	mg/kg		1.5	J	mg/kg	
Barium	2.9	J	mg/kg		2.1	J	mg/kg		2.9	J	mg/kg		3.9	J	mg/kg	
Beryllium	.12	J	mg/kg		.12	J	mg/kg		.11	J	mg/kg		.14	J	mg/kg	
Cadmium	.41	U	mg/kg	.41	.41	U	mg/kg	.41	.41	U	mg/kg	.41	.42	U	mg/kg	.42
Chromium	2		mg/kg		1.8		mg/kg		2		mg/kg		2.5		mg/kg	
Cobalt	.24	J	mg/kg		.31	J	mg/kg		.49	J	mg/kg		.35	J	mg/kg	
Copper	.28	J	mg/kg		.33	J	mg/kg		.46	J	mg/kg		.5	J	mg/kg	
Cyanide	-		mg/kg		-		mg/kg		-		mg/kg		-		mg/kg	
Lead	.9		mg/kg		1.5		mg/kg		1		mg/kg		2.6		mg/kg	
Mercury	.08	U	mg/kg	.08	.09	U	mg/kg	.09	.08	U	mg/kg	.08	.04	U	mg/kg	.04
Nickel	1.3	U	mg/kg	1.3	1.3	U	mg/kg	1.3	1.3	U	mg/kg	1.3	1.3	U	mg/kg	1.3
Selenium	.52	J	mg/kg		.54	J	mg/kg		.22	UJ	mg/kg		.37	J	mg/kg	
Silver	.25	U	mg/kg	.25	.25	U	mg/kg	.25	.25	U	mg/kg	.25	.26	U	mg/kg	.26
Thallium	.26	U	mg/kg	.26	.26	U	mg/kg	.26	.26	U	mg/kg	.26	.27	U	mg/kg	.27
Tin	3.6	U	mg/kg	3.6	3.6	U	mg/kg	3.6	4.2	J	mg/kg		3.7	U	mg/kg	3.7
Vanadium	1.6	J	mg/kg		2	J	mg/kg		1.5	J	mg/kg		2.2	J	mg/kg	
Zinc	1.3	J	mg/kg		1.5	J	mg/kg		3.6	J	mg/kg		3.1	J	mg/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:	GN-0128901				GN-0128901				GN-0128901				GN-0128901			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15SS52				15SS62				15SS72				15SS82			
Collect Date:	02-FEB-93				02-FEB-93				02-FEB-93				02-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg															
Antimony	2.5	U	mg/kg	2.5	2.6	U	mg/kg	2.6	2.6	U	mg/kg	2.6	2.6	U	mg/kg	2.6
Arsenic	2.5	J	mg/kg		5.1		mg/kg		2.1	J	mg/kg		1.5	J	mg/kg	
Barium	4.5	J	mg/kg		2.8	J	mg/kg		4.8	J	mg/kg		5	J	mg/kg	
Beryllium	.05	J	mg/kg		.07	J	mg/kg		.07	J	mg/kg		.09	J	mg/kg	
Cadmium	.41	U	mg/kg	.41	.41	U	mg/kg	.41	.41	U	mg/kg	.41	.41	U	mg/kg	.41
Chromium	.86	J	mg/kg		2.9		mg/kg		1.9		mg/kg		1.3		mg/kg	
Cobalt	.41	J	mg/kg		.23	U	mg/kg	.23	.23	U	mg/kg	.23	.37	J	mg/kg	
Copper	.44	J	mg/kg		.54	J	mg/kg		1.6	J	mg/kg		1.1	J	mg/kg	
Cyanide	-		mg/kg		-		mg/kg		-		mg/kg		-		mg/kg	
Lead	.5		mg/kg		.3	J	mg/kg		.86		mg/kg		.5		mg/kg	
Mercury	.04	U	mg/kg	.04	.04	U	mg/kg	.04	.04	U	mg/kg	.04	.07	U	mg/kg	.07
Nickel	1.3	U	mg/kg	1.3	1.3	U	mg/kg	1.3	1.3	U	mg/kg	1.3	1.3	U	mg/kg	1.3
Selenium	.44	J	mg/kg		.62	J	mg/kg		.64	J	mg/kg		.46	J	mg/kg	
Silver	.25	U	mg/kg	.25	.25	U	mg/kg	.25	.25	U	mg/kg	.25	.25	U	mg/kg	.25
Thallium	.26	U	mg/kg	.26	.26	U	mg/kg	.26	.26	U	mg/kg	.26	.26	U	mg/kg	.26
Tin	3.6	U	mg/kg	3.6	3.6	U	mg/kg	3.6	3.6	U	mg/kg	3.6	3.6	U	mg/kg	3.6
Vanadium	.86	J	mg/kg		.97	J	mg/kg		1.6	J	mg/kg		1.2	J	mg/kg	
Zinc	3.5	J	mg/kg		2.6	J	mg/kg		7.8	J	mg/kg		5	J	mg/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:	GN-0128901				34901004				34901005			
Site	GROUP2				GROUP2				GROUP2			
Locator	15SS82D				MP15MS1S2				MP15MS1S6			
Collect Date:	02-FEB-93				15-JAN-93				15-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg												
Antimony	2.6	U	mg/kg	2.6	2.5	U	mg/kg	2.5	3	J	mg/kg	
Arsenic	1.5	J	mg/kg		.9	J	mg/kg		.53	J	mg/kg	
Barium	4.7	J	mg/kg		2.3	J	mg/kg		5.1	J	mg/kg	
Beryllium	.07	J	mg/kg		.1	U	mg/kg	.1	.12	U	mg/kg	.12
Cadmium	.41	U	mg/kg	.41	.25	UJ	mg/kg		.29	UJ	mg/kg	
Chromium	.93	J	mg/kg		.78	UJ	mg/kg		1.5	J	mg/kg	
Cobalt	.23	U	mg/kg	.23	1.2	U	mg/kg	1.2	1.4	U	mg/kg	1.4
Copper	1.3	J	mg/kg		1.7	J	mg/kg		2.4	J	mg/kg	
Cyanide	-		mg/kg		.16	U	mg/kg	.16	.18	U	mg/kg	.18
Lead	.41		mg/kg		.63		mg/kg		.56	J	mg/kg	
Mercury	.11	U	mg/kg	.11	.03	R	mg/kg		.03	J	mg/kg	
Nickel	1.3	U	mg/kg	1.3	1.6	U	mg/kg	1.6	1.9	U	mg/kg	1.9
Selenium	.46	J	mg/kg		.1	U	mg/kg	.1	.12	U	mg/kg	.12
Silver	.25	U	mg/kg	.25	.44	U	mg/kg	.44	.51	U	mg/kg	.51
Thallium	.26	U	mg/kg	.26	.15	U	mg/kg	.15	.22	J	mg/kg	
Tin	3.6	U	mg/kg	3.6	2.4	U	mg/kg	2.4	2.8	U	mg/kg	2.8
Vanadium	1.1	J	mg/kg		.96	J	mg/kg		1.8	J	mg/kg	
Zinc	2.4	J	mg/kg		3.6	J	mg/kg		2.9	J	mg/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

APPENDIX A-8

GROUNDWATER SAMPLE ANALYSES, SWMU 15

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23886001			35070001			R8608006			R8394009		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		15MW1			15MW1			15MW001S			15MW002S		
Collect Date:		27-JAN-93			27-JAN-93			24-AUG-94			25-JUL-94		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
VOLATILES	ug/l												
Chloromethane		-	ug/l		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Bromomethane		-	ug/l		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Vinyl chloride		-	ug/l		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Chloroethane		-	ug/l		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Methylene chloride		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Acetone		-	ug/l		10 UJ	ug/l		10 UJ	ug/l		10 U	ug/l	10
Carbon disulfide		-	ug/l		5 U	ug/l	5	2 J	ug/l		5 U	ug/l	5
1,1-Dichloroethane		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
1,1-Dichloroethene		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
1,2-Dichloroethene (total)		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Chloroform		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
1,2-Dichloroethane		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
2-Butanone		-	ug/l		10 UJ	ug/l		10 R	ug/l		10 U	ug/l	10
1,1,1-Trichloroethane		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Carbon tetrachloride		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Bromodichloromethane		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
1,2-Dichloropropane		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
cis-1,3-Dichloropropene		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Trichloroethene		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Dibromochloromethane		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
1,1,2-Trichloroethane		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Benzene		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
trans-1,3-Dichloropropene		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Bromoform		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
4-Methyl-2-pentanone		-	ug/l		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Hexanone		-	ug/l		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Tetrachloroethene		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
1,1,2,2-Tetrachloroethane		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Toluene		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Chlorobenzene		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Ethylbenzene		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Styrene		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Xylenes (total)		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Dichlorodifluoromethane		-	ug/l		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Trichlorofluoromethane		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
1,3-Dichlorobenzene		10 U	ug/l	10	5 U	ug/l	5	10 U	ug/l	10	5 U	ug/l	5
Acrolein		-	ug/l		100 U	ug/l	100	100 U	ug/l	100	100 U	ug/l	100
Iodomethane		-	ug/l		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
1,4-Dichlorobenzene		10 U	ug/l	10	5 U	ug/l	5	10 U	ug/l	10	10 U	ug/l	10
Acrylonitrile		-	ug/l		100 U	ug/l	100	100 U	ug/l	100	100 U	ug/l	100
Dibromomethane		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
1,2-Dichlorobenzene		10 U	ug/l	10	5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
2-Chloroethylvinylether		-	ug/l		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Ethyl methacrylate		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
1,2,3-Trichloropropane		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
trans-1,4-Dichloro-2-butene		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Isobutyl alcohol		-	ug/l		200 U	ug/l	200	200 R	ug/l		200 R	ug/l	
1,1,1,2-Tetrachloroethane		-	ug/l		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
1,2-Dibromo-3-chloropropane		-	ug/l		10 U	ug/l	10	10 UJ	ug/l		10 UJ	ug/l	
1,2-Dibromoethane		-	ug/l		5 U	ug/l	5	5 UJ	ug/l		5 U	ug/l	5

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23886001				35070001				R8608006				R8394009			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15MW1				15MW1				15MW001S				15MW002S			
Collect Date:	27-JAN-93				27-JAN-93				24-AUG-94				25-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	-		ug/l		200	R	ug/l		200	R	ug/l		200	R	ug/l	
3-Chloropropene	-		ug/l		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Acetonitrile	-		ug/l		100	U	ug/l	100	100	UJ	ug/l		100	U	ug/l	100
Chloroprene	-		ug/l		200	U	ug/l	200	200	U	ug/l	200	200	U	ug/l	200
Methacrylonitrile	-		ug/l		5	U	ug/l	5	5	UJ	ug/l		5	U	ug/l	5
Methyl methacrylate	-		ug/l		10	U	ug/l	10	10	UJ	ug/l		10	U	ug/l	10
Pentachloroethane	-		ug/l		10	U	ug/l	10	10	UJ	ug/l		10	UJ	ug/l	
Propionitrile	-		ug/l		100	U	ug/l	100	100	UJ	ug/l		100	U	ug/l	100
Vinyl acetate	-		ug/l		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8394010				R8403003				R8608004				R8608005			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		15MW003S				15MW004S				15MW005S				15MW005SD			
Collect Date:		25-JUL-94				26-JUL-94				24-AUG-94				24-AUG-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/l																
Chloromethane		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Bromomethane		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Vinyl chloride		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Chloroethane		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Methylene chloride		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Acetone		11	U	ug/l	11	12	U	ug/l	12	10	UJ	ug/l		13	UJ	ug/l	
Carbon disulfide		5	U	ug/l	5	1	J	ug/l		5	U	ug/l	5	5	U	ug/l	5
1,1-Dichloroethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,1-Dichloroethene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloroethene (total)		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Chloroform		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloroethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
2-Butanone		10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l		10	R	ug/l	
1,1,1-Trichloroethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Carbon tetrachloride		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Bromodichloromethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloropropane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
cis-1,3-Dichloropropene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Trichloroethene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Dibromochloromethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,1,2-Trichloroethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Benzene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
trans-1,3-Dichloropropene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Bromoform		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
4-Methyl-2-pentanone		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Hexanone		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Tetrachloroethene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,1,2,2-Tetrachloroethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Toluene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Chlorobenzene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Ethylbenzene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Styrene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Xylenes (total)		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Dichlorodifluoromethane		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Trichlorofluoromethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,3-Dichlorobenzene		5	U	ug/l	5	10	U	ug/l	10	5	U	ug/l	5	5	U	ug/l	5
Acrolein		100	U	ug/l	100	100	UJ	ug/l		100	U	ug/l	100	100	U	ug/l	100
Iodomethane		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,4-Dichlorobenzene		5	U	ug/l	5	10	U	ug/l	10	10	U	ug/l	10	5	U	ug/l	5
Acrylonitrile		100	U	ug/l	100	100	U	ug/l	100	100	U	ug/l	100	100	U	ug/l	100

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Group2 Ground Water Data

Lab Sample Number:	R8394010				R8403003				R8608004				R8608005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15MW003S				15MW004S				15MW005S				15MW005SD			
Collect Date:	25-JUL-94				26-JUL-94				24-AUG-94				24-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dichlorobenzene	5	U	ug/l	5	10	U	ug/l	10	5	U	ug/l	5	5	U	ug/l	5
2-Chloroethylvinylether	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Ethyl methacrylate	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2,3-Trichloropropane	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
trans-1,4-Dichloro-2-butene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Isobutyl alcohol	200	R	ug/l		200	R	ug/l		200	R	ug/l		200	R	ug/l	
1,1,1,2-Tetrachloroethane	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dibromo-3-chloropropane	10	UJ	ug/l		10	U	ug/l	10	10	UJ	ug/l		10	UJ	ug/l	
1,2-Dibromoethane	5	U	ug/l	5	5	U	ug/l	5	5	UJ	ug/l		5	UJ	ug/l	
1,4-Dioxane	200	R	ug/l		200	R	ug/l		200	R	ug/l		200	R	ug/l	
3-Chloropropene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Acetonitrile	100	U	ug/l	100	100	UJ	ug/l		100	UJ	ug/l		100	UJ	ug/l	
Chloroprene	200	U	ug/l	200	200	UJ	ug/l		200	U	ug/l	200	200	U	ug/l	200
Methacrylonitrile	5	U	ug/l	5	5	U	ug/l	5	5	UJ	ug/l		5	UJ	ug/l	
Methyl methacrylate	10	U	ug/l	10	10	U	ug/l	10	10	UJ	ug/l		10	UJ	ug/l	
Pentachloroethane	10	UJ	ug/l		10	U	ug/l	10	10	UJ	ug/l		10	UJ	ug/l	
Propionitrile	100	U	ug/l	100	100	UJ	ug/l		100	UJ	ug/l		100	UJ	ug/l	
Vinyl acetate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8421001			R8394010RE			R8403003RE		
Site		GROUP2			GROUP2			GROUP2		
Locator		15MW005I			15MW003SRE			15MW004SRE		
Collect Date:		28-JUL-94			25-JUL-94			26-JUL-94		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
VOLATILES	ug/l									
Chloromethane		10 U	ug/l	10	-	ug/l		-	ug/l	
Bromomethane		10 U	ug/l	10	-	ug/l		-	ug/l	
Vinyl chloride		10 U	ug/l	10	-	ug/l		-	ug/l	
Chloroethane		10 U	ug/l	10	-	ug/l		-	ug/l	
Methylene chloride		5 U	ug/l	5	-	ug/l		-	ug/l	
Acetone		27 U	ug/l	27	-	ug/l		-	ug/l	
Carbon disulfide		5 U	ug/l	5	-	ug/l		-	ug/l	
1,1-Dichloroethane		5 U	ug/l	5	-	ug/l		-	ug/l	
1,1-Dichloroethene		5 U	ug/l	5	-	ug/l		-	ug/l	
1,2-Dichloroethene (total)		5 U	ug/l	5	-	ug/l		-	ug/l	
Chloroform		5 U	ug/l	5	-	ug/l		-	ug/l	
1,2-Dichloroethane		5 U	ug/l	5	-	ug/l		-	ug/l	
2-Butanone		10 U	ug/l	10	-	ug/l		-	ug/l	
1,1,1-Trichloroethane		5 U	ug/l	5	-	ug/l		-	ug/l	
Carbon tetrachloride		5 U	ug/l	5	-	ug/l		-	ug/l	
Bromodichloromethane		5 U	ug/l	5	-	ug/l		-	ug/l	
1,2-Dichloropropane		5 U	ug/l	5	-	ug/l		-	ug/l	
cis-1,3-Dichloropropene		5 U	ug/l	5	-	ug/l		-	ug/l	
Trichloroethene		5 U	ug/l	5	-	ug/l		-	ug/l	
Dibromochloromethane		5 U	ug/l	5	-	ug/l		-	ug/l	
1,1,2-Trichloroethane		5 U	ug/l	5	-	ug/l		-	ug/l	
Benzene		5 U	ug/l	5	-	ug/l		-	ug/l	
trans-1,3-Dichloropropene		5 U	ug/l	5	-	ug/l		-	ug/l	
Bromoform		5 U	ug/l	5	-	ug/l		-	ug/l	
4-Methyl-2-pentanone		10 U	ug/l	10	-	ug/l		-	ug/l	
2-Hexanone		10 U	ug/l	10	-	ug/l		-	ug/l	
Tetrachloroethene		5 U	ug/l	5	-	ug/l		-	ug/l	
1,1,2,2-Tetrachloroethane		5 U	ug/l	5	-	ug/l		-	ug/l	
Toluene		5 U	ug/l	5	-	ug/l		-	ug/l	
Chlorobenzene		5 U	ug/l	5	-	ug/l		-	ug/l	
Ethylbenzene		5 U	ug/l	5	-	ug/l		-	ug/l	
Styrene		5 U	ug/l	5	-	ug/l		-	ug/l	
Xylenes (total)		5 U	ug/l	5	-	ug/l		-	ug/l	
Dichlorodifluoromethane		10 U	ug/l	10	-	ug/l		-	ug/l	
Trichlorofluoromethane		5 U	ug/l	5	-	ug/l		-	ug/l	
1,3-Dichlorobenzene		10 U	ug/l	10	10 UJ	ug/l		10 U	ug/l	10
Acrolein		100 UJ	ug/l		-	ug/l		-	ug/l	
Iodomethane		10 U	ug/l	10	-	ug/l		-	ug/l	
1,4-Dichlorobenzene		5 U	ug/l	5	10 UJ	ug/l		10 U	ug/l	10
Acrylonitrile		100 U	ug/l	100	-	ug/l		-	ug/l	

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Group2 Ground Water Data

Lab Sample Number:	R8421001				R8394010RE				R8403003RE			
Site	GROUP2				GROUP2				GROUP2			
Locator	15MW005I				15MW003SRE				15MW004SRE			
Collect Date:	28-JUL-94				25-JUL-94				26-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/l	5	-		ug/l		-		ug/l	
1,2-Dichlorobenzene	10	U	ug/l	10	10	UJ	ug/l		10	U	ug/l	10
2-Chloroethylvinylether	10	U	ug/l	10	-		ug/l		-		ug/l	
Ethyl methacrylate	5	U	ug/l	5	-		ug/l		-		ug/l	
1,2,3-Trichloropropane	5	U	ug/l	5	-		ug/l		-		ug/l	
trans-1,4-Dichloro-2-butene	5	U	ug/l	5	-		ug/l		-		ug/l	
Isobutyl alcohol	200	R	ug/l		-		ug/l		-		ug/l	
1,1,1,2-Tetrachloroethane	5	U	ug/l	5	-		ug/l		-		ug/l	
1,2-Dibromo-3-chloropropane	10	U	ug/l	10	-		ug/l		-		ug/l	
1,2-Dibromoethane	5	U	ug/l	5	-		ug/l		-		ug/l	
1,4-Dioxane	200	R	ug/l		-		ug/l		-		ug/l	
3-Chloropropene	5	U	ug/l	5	-		ug/l		-		ug/l	
Acetonitrile	100	U	ug/l	100	-		ug/l		-		ug/l	
Chloroprene	200	UJ	ug/l		-		ug/l		-		ug/l	
Methacrylonitrile	5	U	ug/l	5	-		ug/l		-		ug/l	
Methyl methacrylate	10	U	ug/l	10	-		ug/l		-		ug/l	
Pentachloroethane	10	UJ	ug/l		-		ug/l		-		ug/l	
Propionitrile	100	UJ	ug/l		-		ug/l		-		ug/l	
Vinyl acetate	10	U	ug/l	10	-		ug/l		-		ug/l	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23886001			R8608006			R8394009			R8394010		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		15MW1			15MW001S			15MW002S			15MW003S		
Collect Date:		27-JAN-93			24-AUG-94			25-JUL-94			25-JUL-94		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES	ug/l												
N-Nitrosodimethylamine		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Phenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Aniline		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
bis (2-Chloroethyl) ether		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Benzyl Alcohol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
2-Methylphenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
bis(2-Chloroisopropyl)ether		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
N-Nitroso-di-n-propylamine		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Hexachloroethane		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Nitrobenzene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Isophorone		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Nitrophenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
2,4-Dimethylphenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Benzoic acid		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
bis(2-Chloroethoxy)methane		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4-Dichlorophenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
1,2,4-Trichlorobenzene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Naphthalene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Chloroaniline		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Hexachlorobutadiene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Chloro-3-methylphenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
2-Methylnaphthalene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Hexachlorocyclopentadiene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4,6-Trichlorophenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Dimethylphthalate		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4,5-Trichlorophenol		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 R	ug/l	
2-Chloronaphthalene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Nitroaniline		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
Acenaphthylene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,6-Dinitrotoluene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
3-Nitroaniline		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
Acenaphthene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4-Dinitrophenol		50 U	ug/l	50	50 U	ug/l	50	50 UJ	ug/l		50 R	ug/l	
4-Nitrophenol		50 U	ug/l	50	50 UJ	ug/l		50 UJ	ug/l		50 R	ug/l	
Dibenzofuran		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4-Dinitrotoluene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Diethylphthalate		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Chlorophenyl-phenylether		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Fluorene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Nitroaniline		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
4,6-Dinitro-2-methylphenol		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 R	ug/l	
N-Nitrosodiphenylamine (1)		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
1,2-Diphenylhydrazine		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Bromophenyl-phenylether		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Hexachlorobenzene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Pentachlorophenol		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 R	ug/l	
Phenanthrene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Anthracene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Di-n-Butylphthalate		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Fluoranthene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10

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Group2 Ground Water Data

Lab Sample Number:	23886001				R8608006				R8394009				R8394010			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15MW1				15MW001S				15MW002S				15MW003S			
Collect Date:	27-JAN-93				24-AUG-94				25-JUL-94				25-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Butylbenzylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3,3'-Dichlorobenzidine	20	U	ug/l	20	20	U	ug/l	20	20	U	ug/l	20	20	U	ug/l	20
Benzo(a)anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Chrysene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
bis(2-Ethylhexyl)phthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	14		ug/l	
Di-n-octylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(b)fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(k)fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(a)pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Indeno(1,2,3-cd)pyrene	10	U	ug/l	10	10	U	ug/l	10	10	UJ	ug/l		10	UJ	ug/l	
Dibenz(a,h)anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(g,h,i)perylene	10	U	ug/l	10	10	U	ug/l	10	10	UJ	ug/l		10	UJ	ug/l	
2-Picoline	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Methyl methanesulfonate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Ethyl methanesulfonate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Acetophenone	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
N-Nitrosopiperidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenyl-tert-butylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2,6-Dichlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
N-Nitroso-di-n-butylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosodiethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopyrrolidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzidine	50	U	ug/l	50	50	U	ug/l	50	50	UJ	ug/l		50	UJ	ug/l	
1,2,4,5-Tetrachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pentachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50	50	UJ	ug/l		50	UJ	ug/l	
2-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50	50	UJ	ug/l		50	UJ	ug/l	
2,3,4,6-Tetrachlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Phenacetin	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Aminobiphenyl	50	U	ug/l	50	50	U	ug/l	50	50	UJ	ug/l		50	UJ	ug/l	
Pentachloronitrobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pronamide	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
p-(Dimethylamino)azobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
7,12-Dimethylbenz(A)Anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3-Methylcholanthrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pyridine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
N-Nitrosomethylethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosomorpholine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
o-Toluidine	10	U	ug/l	10	10	U	ug/l	10	10	UJ	ug/l		10	UJ	ug/l	
Hexachloropropene	50	U	ug/l	50	50	U	ug/l	50	50	UJ	ug/l		50	UJ	ug/l	
p-Phenylenediamine	50	U	ug/l	50	500	UJ	ug/l		500	UJ	ug/l		500	UJ	ug/l	
Safrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Isosafrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1,4-Naphthoquinone	50	U	ug/l	50	1000	U	ug/l	1000	1000	UJ	ug/l		1000	UJ	ug/l	
1,3-Dinitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
5-Nitro-o-toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,3,5-Trinitrobenzene	10	U	ug/l	10	10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10
4-Nitroquinoline-1-oxide	10	U	ug/l	10	500	R	ug/l		500	UJ	ug/l		500	UJ	ug/l	
Methapyrilene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
3,3'-Dimethylbenzidine	10	U	ug/l	10	10	U	ug/l	10	10	UJ	ug/l		10	UJ	ug/l	
Hexachlorophene	50	U	ug/l	50	500	R	ug/l		500	R	ug/l		500	R	ug/l	

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Group2 Ground Water Data

Lab Sample Number:	23886001				R8608006				R8394009				R8394010			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15MW1				15MW001S				15MW002S				15MW003S			
Collect Date:	27-JAN-93				24-AUG-94				25-JUL-94				25-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Aramite	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Chlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
3- & 4-Methylphenol (2)	-		ug/l		10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Hexachloropropene	50	U	ug/l	50	50	U	ug/l	50	50	UJ	ug/l		50	UJ	ug/l	
2-Acetylaminofluorene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8403003			R8608004			R8608005			R8421001		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		15MW004S			15MW005S			15MW005SD			15MW005I		
Collect Date:		26-JUL-94			24-AUG-94			24-AUG-94			28-JUL-94		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES	ug/l												
N-Nitrosodimethylamine		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Phenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Aniline		10 UJ	ug/l		10 U	ug/l	10	10 U	ug/l	10	10 UJ	ug/l	
bis (2-Chloroethyl) ether		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Benzyl Alcohol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Methylphenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
bis(2-Chloroisopropyl)ether		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
N-Nitroso-di-n-propylamine		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Hexachloroethane		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Nitrobenzene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Isophorone		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Nitrophenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4-Dimethylphenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Benzoic acid		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
bis(2-Chloroethoxy)methane		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4-Dichlorophenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
1,2,4-Trichlorobenzene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Naphthalene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Chloroaniline		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Hexachlorobutadiene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Chloro-3-methylphenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Methylnaphthalene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Hexachlorocyclopentadiene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4,6-Trichlorophenol		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Dimethylphthalate		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4,5-Trichlorophenol		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
2-Chloronaphthalene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2-Nitroaniline		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
Acenaphthylene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,6-Dinitrotoluene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
3-Nitroaniline		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
Acenaphthene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4-Dinitrophenol		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50
4-Nitrophenol		50 UJ	ug/l		50 UJ	ug/l		50 UJ	ug/l		50 UJ	ug/l	
Dibenzofuran		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
2,4-Dinitrotoluene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Diethylphthalate		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Chlorophenyl-phenylether		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
Fluorene		10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10
4-Nitroaniline		50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50

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Group2 Ground Water Data

Lab Sample Number:	R8403003				R8608004				R8608005				R8421001			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15MW004S				15MW005S				15MW005SD				15MW005I			
Collect Date:	26-JUL-94				24-AUG-94				24-AUG-94				28-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
N-Nitrosodiphenylamine (1)	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,2-Diphenylhydrazine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Bromophenyl-phenylether	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pentachlorophenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Phenanthrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Di-n-Butylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Butylbenzylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3,3'-Dichlorobenzidine	20	U	ug/l	20	20	U	ug/l	20	20	U	ug/l	20	20	U	ug/l	20
Benzo(a)anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Chrysene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
bis(2-Ethylhexyl)phthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Di-n-octylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(b)fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(k)fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(a)pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Indeno(1,2,3-cd)pyrene	10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Dibenz(a,h)anthracene	10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(g,h,i)perylene	10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Picoline	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Methyl methanesulfonate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Ethyl methanesulfonate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Acetophenone	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopiperidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenyl-tert-butylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2,6-Dichlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitroso-di-n-butylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosodiethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopyrrolidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzidine	50	UJ	ug/l		50	U	ug/l	50	50	U	ug/l	50	50	UJ	ug/l	
1,2,4,5-Tetrachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pentachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2,3,4,6-Tetrachlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenacetin	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Aminobiphenyl	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pentachloronitrobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pronamide	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
p-(Dimethylamino)azobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
7,12-Dimethylbenz(A)Anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3-Methylcholanthrene	10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pyridine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
N-Nitrosomethylethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosomorpholine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
o-Toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachloropropene	50	UJ	ug/l		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
p-Phenylenediamine	500	UJ	ug/l		500	UJ	ug/l		500	UJ	ug/l		500	UJ	ug/l	

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	R8403003				R8608004				R8608005				R8421001			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15MW004S				15MW005S				15MW005SD				15MW005I			
Collect Date:	26-JUL-94				24-AUG-94				24-AUG-94				28-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Isosafrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1,4-Naphthoquinone	1000	UJ	ug/l		1000	U	ug/l	1000	1000	U	ug/l	1000	1000	UJ	ug/l	
1,3-Dinitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
5-Nitro-o-toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,3,5-Trinitrobenzene	10	U	ug/l	10	10	UJ	ug/l		10	UJ	ug/l		10	U	ug/l	10
4-Nitroquinoline-1-oxide	500	UJ	ug/l		500	R	ug/l		500	R	ug/l		500	UJ	ug/l	
Methapyrilene	50	UJ	ug/l		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
3,3'-Dimethylbenzidine	10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10	10	UJ	ug/l	
Hexachlorophene	500	R	ug/l		500	R	ug/l		500	R	ug/l		500	R	ug/l	
Aramite	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Chlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3- & 4-Methylphenol (2)	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachloropropene	50	UJ	ug/l		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Acetylaminofluorene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8394010RE				R8403003RE			
Site		GROUP2				GROUP2			
Locator		15MW003SRE				15MW004SRE			
Collect Date:		25-JUL-94				26-JUL-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/l								
N-Nitrosodimethylamine		10	UJ	ug/l		10	U	ug/l	10
Phenol		10	UJ	ug/l		10	U	ug/l	10
Aniline		10	UJ	ug/l		10	U	ug/l	10
bis (2-Chloroethyl) ether		10	UJ	ug/l		10	U	ug/l	10
Benzyl Alcohol		10	UJ	ug/l		10	U	ug/l	10
2-Methylphenol		10	UJ	ug/l		10	U	ug/l	10
bis(2-Chloroisopropyl)ether		10	UJ	ug/l		10	U	ug/l	10
N-Nitroso-di-n-propylamine		10	UJ	ug/l		10	U	ug/l	10
Hexachloroethane		10	UJ	ug/l		10	U	ug/l	10
Nitrobenzene		10	UJ	ug/l		10	U	ug/l	10
Isophorone		10	UJ	ug/l		10	U	ug/l	10
2-Nitrophenol		10	UJ	ug/l		10	U	ug/l	10
2,4-Dimethylphenol		10	UJ	ug/l		10	U	ug/l	10
Benzoic acid		50	UJ	ug/l		4	J	ug/l	
bis(2-Chloroethoxy)methane		10	UJ	ug/l		10	U	ug/l	10
2,4-Dichlorophenol		10	UJ	ug/l		10	U	ug/l	10
1,2,4-Trichlorobenzene		10	UJ	ug/l		10	U	ug/l	10
Naphthalene		10	UJ	ug/l		10	U	ug/l	10
4-Chloroaniline		10	UJ	ug/l		10	U	ug/l	10
Hexachlorobutadiene		10	UJ	ug/l		10	U	ug/l	10
4-Chloro-3-methylphenol		10	UJ	ug/l		10	U	ug/l	10
2-Methylnaphthalene		10	UJ	ug/l		10	U	ug/l	10
Hexachlorocyclopentadiene		10	UJ	ug/l		10	U	ug/l	10
2,4,6-Trichlorophenol		10	UJ	ug/l		10	U	ug/l	10
Dimethylphthalate		10	UJ	ug/l		10	U	ug/l	10
2,4,5-Trichlorophenol		50	UJ	ug/l		50	U	ug/l	50
2-Chloronaphthalene		10	UJ	ug/l		10	U	ug/l	10
2-Nitroaniline		50	UJ	ug/l		50	U	ug/l	50
Acenaphthylene		10	UJ	ug/l		10	U	ug/l	10
2,6-Dinitrotoluene		10	UJ	ug/l		10	U	ug/l	10
3-Nitroaniline		50	UJ	ug/l		50	U	ug/l	50
Acenaphthene		10	UJ	ug/l		10	U	ug/l	10
2,4-Dinitrophenol		50	UJ	ug/l		50	U	ug/l	50
4-Nitrophenol		50	UJ	ug/l		50	U	ug/l	50
Dibenzofuran		10	UJ	ug/l		10	U	ug/l	10
2,4-Dinitrotoluene		10	UJ	ug/l		10	U	ug/l	10
Diethylphthalate		10	UJ	ug/l		10	U	ug/l	10
4-Chlorophenyl-phenylether		10	UJ	ug/l		10	U	ug/l	10
Fluorene		10	UJ	ug/l		10	U	ug/l	10
4-Nitroaniline		50	UJ	ug/l		50	U	ug/l	50

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	R8394010RE				R8403003RE			
Site	GROUP2				GROUP2			
Locator	15MW003SRE				15MW004SRE			
Collect Date:	25-JUL-94				26-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	50	UJ	ug/l		50	U	ug/l	50
N-Nitrosodiphenylamine (1)	10	UJ	ug/l		3	U	ug/l	3
1,2-Diphenylhydrazine	10	UJ	ug/l		10	U	ug/l	10
4-Bromophenyl-phenylether	10	UJ	ug/l		10	U	ug/l	10
Hexachlorobenzene	10	UJ	ug/l		10	U	ug/l	10
Pentachlorophenol	50	UJ	ug/l		50	U	ug/l	50
Phenanthrene	10	UJ	ug/l		10	U	ug/l	10
Anthracene	10	UJ	ug/l		10	U	ug/l	10
Di-n-Butylphthalate	10	UJ	ug/l		10	U	ug/l	10
Fluoranthene	10	UJ	ug/l		10	U	ug/l	10
Pyrene	10	UJ	ug/l		10	U	ug/l	10
Butylbenzylphthalate	10	UJ	ug/l		10	U	ug/l	10
3,3'-Dichlorobenzidine	20	UJ	ug/l		20	U	ug/l	20
Benzo(a)anthracene	10	UJ	ug/l		10	U	ug/l	10
Chrysene	10	UJ	ug/l		10	U	ug/l	10
bis(2-Ethylhexyl)phthalate	10	UJ	ug/l		10	U	ug/l	10
Di-n-octylphthalate	10	UJ	ug/l		10	U	ug/l	10
Benzo(b)fluoranthene	10	UJ	ug/l		10	U	ug/l	10
Benzo(k)fluoranthene	10	UJ	ug/l		10	U	ug/l	10
Benzo(a)pyrene	10	UJ	ug/l		10	U	ug/l	10
Indeno(1,2,3-cd)pyrene	10	UJ	ug/l		10	U	ug/l	10
Dibenz(a,h)anthracene	10	UJ	ug/l		10	U	ug/l	10
Benzo(g,h,i)perylene	10	UJ	ug/l		10	U	ug/l	10
2-Picoline	50	UJ	ug/l		50	U	ug/l	50
Methyl methanesulfonate	10	UJ	ug/l		10	U	ug/l	10
Ethyl methanesulfonate	10	UJ	ug/l		10	U	ug/l	10
Acetophenone	10	UJ	ug/l		10	U	ug/l	10
N-Nitrosopiperidine	10	UJ	ug/l		10	U	ug/l	10
Phenyl-tert-butylamine	50	UJ	ug/l		50	U	ug/l	50
2,6-Dichlorophenol	10	UJ	ug/l		10	U	ug/l	10
N-Nitroso-di-n-butylamine	10	UJ	ug/l		10	U	ug/l	10
N-Nitrosodiethylamine	10	UJ	ug/l		10	U	ug/l	10
N-Nitrosopyrrolidine	10	UJ	ug/l		10	U	ug/l	10
Benzidine	50	UJ	ug/l		50	U	ug/l	50
1,2,4,5-Tetrachlorobenzene	50	UJ	ug/l		50	U	ug/l	50
Pentachlorobenzene	50	UJ	ug/l		50	U	ug/l	50
1-Naphthylamine	50	UJ	ug/l		50	U	ug/l	50
2-Naphthylamine	50	UJ	ug/l		50	U	ug/l	50
2,3,4,6-Tetrachlorophenol	10	UJ	ug/l		10	U	ug/l	10
Phenacetin	10	UJ	ug/l		10	U	ug/l	10
4-Aminobiphenyl	50	UJ	ug/l		50	U	ug/l	50
Pentachloronitrobenzene	50	UJ	ug/l		50	U	ug/l	50
Pronamide	10	UJ	ug/l		10	U	ug/l	10
p-(Dimethylamino)azobenzene	10	UJ	ug/l		10	U	ug/l	10
7,12-Dimethylbenz(A)Anthracene	10	UJ	ug/l		10	U	ug/l	10
3-Methylcholanthrene	10	UJ	ug/l		10	U	ug/l	10
Pyridine	50	UJ	ug/l		50	U	ug/l	50
N-Nitrosomethylethylamine	10	UJ	ug/l		10	U	ug/l	10
N-Nitrosomorpholine	10	UJ	ug/l		10	U	ug/l	10
o-Toluidine	10	UJ	ug/l		10	U	ug/l	10
Hexachloropropene	50	UJ	ug/l		50	U	ug/l	50
p-Phenylenediamine	500	UJ	ug/l		500	U	ug/l	500

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Group2 Ground Water Data

Lab Sample Number:	R8394010RE				R8403003RE			
Site	GROUP2				GROUP2			
Locator	15MW003SRE				15MW004SRE			
Collect Date:	25-JUL-94				26-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	50	UJ	ug/l		50	U	ug/l	50
Isosafrole	50	UJ	ug/l		50	U	ug/l	50
1,4-Naphthoquinone	1000	UJ	ug/l		1000	U	ug/l	1000
1,3-Dinitrobenzene	10	UJ	ug/l		10	U	ug/l	10
5-Nitro-o-toluidine	10	UJ	ug/l		10	U	ug/l	10
1,3,5-Trinitrobenzene	10	UJ	ug/l		10	U	ug/l	10
4-Nitroquinoline-1-oxide	500	UJ	ug/l		500	U	ug/l	500
Methapyrilene	50	UJ	ug/l		50	U	ug/l	50
3,3'-Dimethylbenzidine	10	UJ	ug/l		10	U	ug/l	10
Hexachlorophene	500	R	ug/l		500	U	ug/l	500
Aramite	50	UJ	ug/l		50	U	ug/l	50
2-Chlorophenol	10	UJ	ug/l		10	U	ug/l	10
3- & 4-Methylphenol (2)	10	UJ	ug/l		10	U	ug/l	10
Hexachloropropene	50	UJ	ug/l		50	U	ug/l	50
2-Acetylaminofluorene	10	UJ	ug/l		10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23886001			R8608006			R8394009			R8394010		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		15MW1			15MW001S			15MW002S			15MW003S		
Collect Date:		27-JAN-93			24-AUG-94			25-JUL-94			25-JUL-94		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
PESTICIDES/PCBs	ug/l												
alpha-BHC		.035	ug/l		.058	ug/l		.02 U	ug/l	.02	.02 U	ug/l	.02
beta-BHC		.68	ug/l		.84	ug/l		.04 U	ug/l	.04	.04 U	ug/l	.04
delta-BHC		.027	ug/l		.029	ug/l		.02 U	ug/l	.02	.02 U	ug/l	.02
gamma-BHC (Lindane)		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
Heptachlor		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
Aldrin		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
Heptachlor epoxide		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
Endosulfan I		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
Dieldrin		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
4,4-DDE		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
Endrin		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
Endosulfan II		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
4,4-DDD		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
Endosulfan sulfate		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
4,4-DDT		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
Methoxychlor		.08 U	ug/l	.08	.08 U	ug/l	.08	.08 U	ug/l	.08	.08 U	ug/l	.08
Endrin aldehyde		.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
Endrin ketone		.02 U	ug/l	.02	.04 U	ug/l	.04	.04 U	ug/l	.04	.04 U	ug/l	.04
Chlordane		.2 U	ug/l	.2	.2 U	ug/l	.2	.2 U	ug/l	.2	.2 U	ug/l	.2
Chlorobenzilate		.5 U	ug/l	.5	.5 U	ug/l	.5	.5 U	ug/l	.5	.5 U	ug/l	.5
Diallate		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Toxaphene		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Isodrin		.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02	.02 U	ug/l	.02
Kepone		1 U	ug/l	1	1 UJ	ug/l		1 UJ	ug/l		1 UJ	ug/l	
Aroclor-1016		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Aroclor-1221		2 U	ug/l	2	2 U	ug/l	2	2 U	ug/l	2	2 U	ug/l	2
Aroclor-1232		2 U	ug/l	2	2 U	ug/l	2	2 U	ug/l	2	2 U	ug/l	2
Aroclor-1242		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Aroclor-1248		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Aroclor-1254		.5 U	ug/l	.5	.5 U	ug/l	.5	.5 U	ug/l	.5	.5 U	ug/l	.5
Aroclor-1260		.5 U	ug/l	.5	.5 U	ug/l	.5	.5 U	ug/l	.5	.5 U	ug/l	.5

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8403003				R8608004				R8608005				R8421001			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		15MW004S				15MW005S				15MW005SD				15MW005I			
Collect Date:		26-JUL-94				24-AUG-94				24-AUG-94				28-JUL-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/l																
alpha-BHC		.23		ug/l		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
beta-BHC		3.6		ug/l		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
delta-BHC		.1	U	ug/l	.1	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
gamma-BHC (Lindane)		.1	U	ug/l	.1	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Heptachlor		.1	U	ug/l	.1	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Aldrin		.1	U	ug/l	.1	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Heptachlor epoxide		.1	U	ug/l	.1	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Endosulfan I		.1	U	ug/l	.1	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Dieldrin		.1	U	ug/l	.1	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
4,4-DDE		.1	U	ug/l	.1	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Endrin		.2	U	ug/l	.2	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endosulfan II		.2	U	ug/l	.2	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
4,4-DDD		.2	U	ug/l	.2	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endosulfan sulfate		.2	U	ug/l	.2	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
4,4-DDT		.2	U	ug/l	.2	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Methoxychlor		.4	U	ug/l	.4	.08	U	ug/l	.08	.08	U	ug/l	.08	.08	U	ug/l	.08
Endrin aldehyde		.2	U	ug/l	.2	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endrin ketone		.2	U	ug/l	.2	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Chlordane		.2	U	ug/l	.2	.2	U	ug/l	.2	.2	U	ug/l	.2	.2	U	ug/l	.2
Chlorobenzilate		2.5	U	ug/l	2.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5
Diallate		5	U	ug/l	5	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Toxaphene		5	U	ug/l	5	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Isodrin		.1	U	ug/l	.1	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Kepone		1	UJ	ug/l		1	UJ	ug/l		1	UJ	ug/l		1	UJ	ug/l	
Aroclor-1016		5	U	ug/l	5	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1221		10	U	ug/l	10	2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2
Aroclor-1232		10	U	ug/l	10	2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2
Aroclor-1242		5	U	ug/l	5	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1248		5	U	ug/l	5	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1254		2.5	U	ug/l	2.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5
Aroclor-1260		2.5	U	ug/l	2.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5

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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23886001				23887001				R8609007				R8395009			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15MW1				15MW1				15MW001S				15MW002S			
Collect Date:	27-JAN-93				27-JAN-93				24-AUG-94				25-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (WATER)			ug/l													
Antimony	16.4	U	ug/l	16.4	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Arsenic	9	J	ug/l		-		ug/l		10.4		ug/l		.7	J	ug/l	
Barium	28.4	J	ug/l		-		ug/l		14.6	J	ug/l		7	U	ug/l	7
Beryllium	.44	J	ug/l		-		ug/l		.3	U	ug/l	.3	.3	U	ug/l	.3
Cadmium	2.8	U	ug/l	2.8	-		ug/l		1	U	ug/l	1	1	U	ug/l	1
Calcium	84300		ug/l		-		ug/l		99700		ug/l		80200		ug/l	
Chromium	17.1		ug/l		-		ug/l		2.6	U	ug/l	2.6	2.6	U	ug/l	2.6
Cobalt	3.3	J	ug/l		-		ug/l		3.1	U	ug/l	3.1	3.1	U	ug/l	3.1
Copper	8.8	J	ug/l		-		ug/l		.9	U	ug/l	.9	.9	U	ug/l	.9
Cyanide	-		ug/l		5	U	ug/l	5	2.7	U	ug/l	2.7	2.7	U	ug/l	2.7
Iron	8630	J	ug/l		-		ug/l		162		ug/l		325		ug/l	
Lead	38.1		ug/l		-		ug/l		7.5		ug/l		.6	U	ug/l	.6
Magnesium	8790		ug/l		-		ug/l		9950		ug/l		10600	UJ	ug/l	
Manganese	65.3		ug/l		-		ug/l		77.9		ug/l		89.4		ug/l	
Mercury	.12	U	ug/l	.12	-		ug/l		.1	U	ug/l	.1	.16	J	ug/l	
Nickel	9.4	U	ug/l	9.4	-		ug/l		5.9	U	ug/l	5.9	5.9	U	ug/l	5.9
Selenium	1.8	U	ug/l	1.8	-		ug/l		.6	U	ug/l	.6	.6	U	ug/l	.6
Silver	2	U	ug/l	2	-		ug/l		2.1	U	ug/l	2.1	2.1	U	ug/l	2.1
Sodium	-		ug/l		-		ug/l		77800		ug/l		20600	UJ	ug/l	
Thallium	2.3	U	ug/l	2.3	-		ug/l		.6	U	ug/l	.6	.6	U	ug/l	.6
Tin	12.7	U	ug/l	12.7	-		ug/l		8	U	ug/l	8	8	U	ug/l	8
Vanadium	14.5	J	ug/l		-		ug/l		3	J	ug/l		2.3	J	ug/l	
Zinc	79.1	J	ug/l		-		ug/l		61.2		ug/l		2.6	U	ug/l	2.6

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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	R8395010				R8404003				R8609005				R8609006			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15MW003S				15MW004S				15MW005S				15MW005SD			
Collect Date:	25-JUL-94				26-JUL-94				24-AUG-94				24-AUG-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (WATER) ug/l																
Antimony	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Arsenic	1.6	J	ug/l		62	J	ug/l		.6	U	ug/l	.6	.6	U	ug/l	.6
Barium	6.6	U	ug/l	6.6	6.9	U	ug/l	6.9	7.5	J	ug/l		7.5	J	ug/l	
Beryllium	.3	U	ug/l	.3	.3	UJ	ug/l		.3	U	ug/l	.3	.3	U	ug/l	.3
Cadmium	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Calcium	74000		ug/l		76900	J	ug/l		79300		ug/l		78600		ug/l	
Chromium	2.6	U	ug/l	2.6	2.7	J	ug/l		2.6	U	ug/l	2.6	2.6	U	ug/l	2.6
Cobalt	3.1	U	ug/l	3.1	3.1	UJ	ug/l		3.1	U	ug/l	3.1	3.1	U	ug/l	3.1
Copper	.9	U	ug/l	.9	.9	U	ug/l	.9	.9	U	ug/l	.9	.9	U	ug/l	.9
Cyanide	2.7	U	ug/l	2.7	2.7	U	ug/l	2.7	2.7	U	ug/l	2.7	3	J	ug/l	
Iron	102		ug/l		156		ug/l		117		ug/l		108		ug/l	
Lead	.6	U	ug/l	.6	.6	J	ug/l		.6	J	ug/l		.6	U	ug/l	.6
Magnesium	4610	UJ	ug/l		73000	U	ug/l	73000	3000	J	ug/l		2960	J	ug/l	
Manganese	70		ug/l		45.8	J	ug/l		4.7	J	ug/l		4.5	J	ug/l	
Mercury	.12	J	ug/l		.1	U	ug/l	.1	.1	U	ug/l	.1	.1	U	ug/l	.1
Nickel	5.9	U	ug/l	5.9	5.9	UJ	ug/l		5.9	U	ug/l	5.9	5.9	U	ug/l	5.9
Selenium	.6	U	ug/l	.6	6	UJ	ug/l		1.3	J	ug/l		.6	U	ug/l	.6
Silver	2.1	U	ug/l	2.1	2.1	U	ug/l	2.1	2.1	U	ug/l	2.1	2.1	U	ug/l	2.1
Sodium	10800	UJ	ug/l		783000		ug/l		5040		ug/l		4990	J	ug/l	
Thallium	.6	U	ug/l	.6	6	UJ	ug/l		.6	U	ug/l	.6	.6	U	ug/l	.6
Tin	8	U	ug/l	8	8	U	ug/l	8	8	U	ug/l	8	8	U	ug/l	8
Vanadium	3	J	ug/l		7.7	J	ug/l		2.6	J	ug/l		1.9	J	ug/l	
Zinc	6.5	U	ug/l	6.5	3.4	U	ug/l	3.4	4.1	J	ug/l		3.7	J	ug/l	

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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8422001			
Site		GROUP2			
Locator		15MW005I			
Collect Date:		28-JUL-94			
		VALUE	QUAL	UNITS	DL
INORGANICS (WATER)	ug/l				
Antimony		5	U	ug/l	5
Arsenic		2.9	J	ug/l	
Barium		4.7	J	ug/l	
Beryllium		.3	U	ug/l	.3
Cadmium		1	U	ug/l	1
Calcium		82900		ug/l	
Chromium		2.6	U	ug/l	2.6
Cobalt		3.1	U	ug/l	3.1
Copper		.9	U	ug/l	.9
Cyanide		3.3	J	ug/l	
Iron		496		ug/l	
Lead		.6	U	ug/l	.6
Magnesium		6730		ug/l	
Manganese		241		ug/l	
Mercury		.1	U	ug/l	.1
Nickel		5.9	U	ug/l	5.9
Selenium		.78	J	ug/l	
Silver		2.1	U	ug/l	2.1
Sodium		7880		ug/l	
Thallium		.6	U	ug/l	.6
Tin		8	U	ug/l	8
Vanadium		2.8	J	ug/l	
Zinc		2.6	U	ug/l	2.6

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23887001			R8607005			R8396002			R8396003		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		15MW1			15MW001S			15MW002S			15MW003S		
Collect Date:		27-JAN-93			25-AUG-94			25-JUL-94			25-JUL-94		
		VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL
GROUND WATER QUALITY	mg/l												
Alkalinity as CaCO3		217	mg/l		359	mg/l		229	mg/l		200	mg/l	
Ammonia-N		1.9	mg/l		1.6	mg/l		1.1	mg/l		.4	mg/l	
Chloride		48.9	mg/l		148	mg/l		26.3	mg/l		15.4	mg/l	
Hardness as CaCO3		356	mg/l		303	mg/l		320	mg/l		224	mg/l	
Nitrate/Nitrite-N		1.29	mg/l		1.1	mg/l		.1 U	mg/l	.1	.1	mg/l	
Oil and Grease		3	mg/l		5 U	mg/l	5	5 U	mg/l	5	18.1	mg/l	
Phosphorous-P, Total		1.47	mg/l		2.14	mg/l		1.42	mg/l		.78	mg/l	
Sulfate		26.4	mg/l		28.9	mg/l		11.5	mg/l		21.4	mg/l	
Sulfide		.3	mg/l		137	mg/l		1.6	mg/l		1 U	mg/l	1
Total Dissolved Solids		356	mg/l		613	mg/l		349	mg/l		306	mg/l	
Total Kjeldahl Nitrogen		3.4	mg/l		2	mg/l		1.6	mg/l		1.9	mg/l	
Total Organic Carbon		5.8	mg/l		8.8	mg/l		5.5	mg/l		3.5	mg/l	
COLOR	APHA												
Color		25 J	APHA		30	APHA		50	APHA		60	APHA	
pH	units												
pH		7.2	units		7.28	units		7.49	units		7.43	units	
TOTAL PETROLEUM HYDROCARBONS	mg/l												
Total petroleum hydrocarbon		-	mg/l		-	mg/l		-	mg/l		-	mg/l	

U = NOT DETECTED R = RESULT IS REJECTED
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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		R8405003			R8607004			R8420001		
Site		GROUP2			GROUP2			GROUP2		
Locator		15MW004S			15MW005S			15MW005I		
Collect Date:		26-JUL-94			24-AUG-94			28-JUL-94		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
GROUND WATER QUALITY	mg/l									
Alkalinity as CaCO3		587	mg/l		170	mg/l		220	mg/l	
Ammonia-N		7.1	mg/l		.3 U	mg/l	.3	.4	mg/l	
Chloride		1180	mg/l		6.5	mg/l		14.6	mg/l	
Hardness as CaCO3		720	mg/l		212	mg/l		202	mg/l	
Nitrate/Nitrite-N		.7	mg/l		.2	mg/l		.1 U	mg/l	.1
Oil and Grease		5 U	mg/l	5	5 U	mg/l	5	5 U	mg/l	5
Phosphorous-P, Total		5.07	mg/l		1.09	mg/l		.52	mg/l	
Sulfate		21.6	mg/l		35.4	mg/l		20.1	mg/l	
Sulfide		50	mg/l		1 U	mg/l	1	1 U	mg/l	1
Total Dissolved Solids		2650	mg/l		268	mg/l		283	mg/l	
Total Kjeldahl Nitrogen		16	mg/l		1.3	mg/l		.6	mg/l	
Total Organic Carbon		18.2	mg/l		7.9	mg/l		4.7	mg/l	
COLOR	APHA									
Color		350	APHA		20	APHA		30	APHA	
pH	units									
pH		7.24	units		7.03	units		7.33	units	
TOTAL PETROLEUM HYDROCARBONS	mg/l									
Total petroleum hydrocarbon		-	mg/l		-	mg/l		-	mg/l	

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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

APPENDIX A-9

WORM TISSUE SAMPLE ANALYSES, SWMU 15

AR01 - Trend Report
Group2 Worm Tissue Data

Lab Sample Number:		R9137002				R9137004				R9137003				R9137005			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		15E01201				15E01601				15E01701				15E02001			
Collect Date:		20-OCT-94				20-OCT-94				20-OCT-94				20-OCT-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg																
N-Nitrosodimethylamine		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Phenol		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Aniline		1600	UJ	ug/kg		1500	UJ	ug/kg		1500	UJ	ug/kg		1600	UJ	ug/kg	
bis (2-Chloroethyl) ether		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Benzyl Alcohol		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
2-Methylphenol		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
bis(2-Chloroisopropyl)ether		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
N-Nitroso-di-n-propylamine		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Hexachloroethane		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Nitrobenzene		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Isophorone		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
2-Nitrophenol		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
2,4-Dimethylphenol		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Benzoic acid		1900	J	ug/kg		1500	J	ug/kg		1900	J	ug/kg		1100	J	ug/kg	
bis(2-Chloroethoxy)methane		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
2,4-Dichlorophenol		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
1,2,4-Trichlorobenzene		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Naphthalene		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
4-Chloroaniline		1600	UJ	ug/kg		1500	UJ	ug/kg		1500	UJ	ug/kg		1600	UJ	ug/kg	
Hexachlorobutadiene		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
4-Chloro-3-methylphenol		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
2-Methylnaphthalene		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Hexachlorocyclopentadiene		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
2,4,6-Trichlorophenol		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Dimethylphthalate		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
2,4,5-Trichlorophenol		8000	U	ug/kg	8000	7200	U	ug/kg	7200	7200	U	ug/kg	7200	7700	U	ug/kg	7700
2-Chloronaphthalene		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
2-Nitroaniline		8000	U	ug/kg	8000	7200	U	ug/kg	7200	7200	U	ug/kg	7200	7700	U	ug/kg	7700
Acenaphthylene		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
2,6-Dinitrotoluene		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
3-Nitroaniline		8000	UJ	ug/kg		7200	UJ	ug/kg		7200	UJ	ug/kg		7700	UJ	ug/kg	
Acenaphthene		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
2,4-Dinitrophenol		8000	UJ	ug/kg		7200	UJ	ug/kg		7200	UJ	ug/kg		7700	UJ	ug/kg	
4-Nitrophenol		8000	UJ	ug/kg		7200	UJ	ug/kg		7200	UJ	ug/kg		7700	UJ	ug/kg	
Dibenzofuran		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
2,4-Dinitrotoluene		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Diethylphthalate		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
4-Chlorophenyl-phenylether		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Fluorene		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
4-Nitroaniline		8000	UJ	ug/kg		7200	UJ	ug/kg		7200	UJ	ug/kg		7700	UJ	ug/kg	
4,6-Dinitro-2-methylphenol		8000	U	ug/kg	8000	7200	U	ug/kg	7200	7200	U	ug/kg	7200	7700	U	ug/kg	7700
N-Nitrosodiphenylamine (1)		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
1,2-Diphenylhydrazine		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
4-Bromophenyl-phenylether		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Hexachlorobenzene		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Pentachlorophenol		800	J	ug/kg		540	J	ug/kg		680	J	ug/kg		680	J	ug/kg	
Phenanthrene		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Anthracene		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Di-n-Butylphthalate		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Fluoranthene		1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600

AR01 - Trend Report
Group2 Worm Tissue Data

Lab Sample Number:	R9137002				R9137004				R9137003				R9137005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15E01201				15E01601				15E01701				15E02001			
Collect Date:	20-OCT-94				20-OCT-94				20-OCT-94				20-OCT-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Pyrene	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Butylbenzylphthalate	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
3,3'-Dichlorobenzidine	3300	U	ug/kg	3300	3000	U	ug/kg	3000	3000	U	ug/kg	3000	3200	U	ug/kg	3200
Benzo(a)anthracene	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Chrysene	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
bis(2-Ethylhexyl)phthalate	1600	U	ug/kg	1600	2100		ug/kg		1500	U	ug/kg	1500	1600	U	ug/kg	1600
Di-n-octylphthalate	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Benzo(b)fluoranthene	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Benzo(k)fluoranthene	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Benzo(a)pyrene	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Indeno(1,2,3-cd)pyrene	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Dibenz(a,h)anthracene	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Benzo(g,h,i)perylene	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
2-Picoline	8000	U	ug/kg	8000	7200	U	ug/kg	7200	7200	U	ug/kg	7200	7700	U	ug/kg	7700
Methyl methanesulfonate	1600	UJ	ug/kg		1500	UJ	ug/kg		1500	UJ	ug/kg		1600	UJ	ug/kg	
Ethyl methanesulfonate	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Acetophenone	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
N-Nitrosopiperidine	1600	UJ	ug/kg		1500	UJ	ug/kg		1500	UJ	ug/kg		1600	UJ	ug/kg	
Phenyl-tert-butylamine	8000	UJ	ug/kg		7200	UJ	ug/kg		7200	UJ	ug/kg		7700	UJ	ug/kg	
2,6-Dichlorophenol	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
N-Nitroso-di-n-butylamine	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
N-Nitrosodiethylamine	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
N-Nitrosopyrrolidine	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Benzidine	8000	U	ug/kg	8000	7200	U	ug/kg	7200	7200	U	ug/kg	7200	7700	U	ug/kg	7700
1,2,4,5-Tetrachlorobenzene	8000	U	ug/kg	8000	7200	U	ug/kg	7200	7200	U	ug/kg	7200	7700	U	ug/kg	7700
Pentachlorobenzene	8000	U	ug/kg	8000	7200	U	ug/kg	7200	7200	U	ug/kg	7200	7700	U	ug/kg	7700
1-Naphthylamine	8000	UJ	ug/kg		7200	UJ	ug/kg		7200	UJ	ug/kg		7700	UJ	ug/kg	
2-Naphthylamine	8000	UJ	ug/kg		7200	UJ	ug/kg		7200	UJ	ug/kg		7700	UJ	ug/kg	
2,3,4,6-Tetrachlorophenol	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Phenacetin	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
4-Aminobiphenyl	8000	UJ	ug/kg		7200	UJ	ug/kg		7200	UJ	ug/kg		7700	UJ	ug/kg	
Pentachloronitrobenzene	8000	U	ug/kg	8000	7200	U	ug/kg	7200	7200	U	ug/kg	7200	7700	U	ug/kg	7700
Pronamide	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
p-(Dimethylamino)azobenzene	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
7,12-Dimethylbenz(A)Anthracene	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
3-Methylcholanthrene	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Pyridine	8000	UJ	ug/kg		7200	UJ	ug/kg		7200	UJ	ug/kg		7700	UJ	ug/kg	
N-Nitrosomethylethylamine	1600	UJ	ug/kg		1500	UJ	ug/kg		1500	UJ	ug/kg		1600	UJ	ug/kg	
N-Nitrosomorpholine	1600	UJ	ug/kg		1500	UJ	ug/kg		1500	UJ	ug/kg		1600	UJ	ug/kg	
o-Toluidine	1600	UJ	ug/kg		1500	UJ	ug/kg		1500	UJ	ug/kg		1600	UJ	ug/kg	
Hexachloropropene	8000	U	ug/kg	8000	7200	U	ug/kg	7200	7200	U	ug/kg	7200	7700	U	ug/kg	7700
p-Phenylenediamine	80000	UJ	ug/kg		72000	UJ	ug/kg		72000	UJ	ug/kg		77000	UJ	ug/kg	
Safrole	8000	U	ug/kg	8000	7200	U	ug/kg	7200	7200	U	ug/kg	7200	7700	U	ug/kg	7700
Isosafrole	8000	U	ug/kg	8000	7200	U	ug/kg	7200	7200	U	ug/kg	7200	7700	U	ug/kg	7700
1,4-Naphthoquinone	160000	U	ug/kg	160000	150000	U	ug/kg	150000	150000	U	ug/kg	150000	160000	U	ug/kg	160000
1,3-Dinitrobenzene	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
5-Nitro-o-toluidine	1600	UJ	ug/kg		1500	UJ	ug/kg		1500	UJ	ug/kg		1600	UJ	ug/kg	
1,3,5-Trinitrobenzene	1600	UJ	ug/kg		1500	UJ	ug/kg		1500	UJ	ug/kg		1600	UJ	ug/kg	
4-Nitroquinoline-1-oxide	80000	UJ	ug/kg		72000	UJ	ug/kg		72000	UJ	ug/kg		77000	UJ	ug/kg	
Methapyrilene	8000	U	ug/kg	8000	7200	U	ug/kg	7200	7200	U	ug/kg	7200	7700	U	ug/kg	7700
3,3'-Dimethylbenzidine	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Hexachlorophene	80000	UJ	ug/kg		72000	UJ	ug/kg		72000	UJ	ug/kg		77000	UJ	ug/kg	

AR01 - Trend Report
Group2 Worm Tissue Data

Lab Sample Number:	R9137002				R9137004				R9137003				R9137005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15E01201				15E01601				15E01701				15E02001			
Collect Date:	20-OCT-94				20-OCT-94				20-OCT-94				20-OCT-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Aramite	8000	U	ug/kg	8000	7200	U	ug/kg	7200	7200	U	ug/kg	7200	7700	U	ug/kg	7700
2-Chlorophenol	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
3- & 4-Methylphenol (2)	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600
Hexachloropropene	8000	U	ug/kg	8000	7200	U	ug/kg	7200	7200	U	ug/kg	7200	7700	U	ug/kg	7700
2-Acetylaminofluorene	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1600	U	ug/kg	1600

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Worm Tissue Data

Lab Sample Number:	R9137006				R9137007			
Site	GROUP2				GROUP2			
Locator	15E02301				15E03001			
Collect Date:	20-OCT-94				20-OCT-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/kg								
N-Nitrosodimethylamine	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Phenol	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Aniline	2100	UJ	ug/kg		1500	UJ	ug/kg	
bis (2-Chloroethyl) ether	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Benzyl Alcohol	2100	U	ug/kg	2100	1500	U	ug/kg	1500
2-Methylphenol	2100	U	ug/kg	2100	1500	U	ug/kg	1500
bis(2-Chloroisopropyl)ether	2100	U	ug/kg	2100	1500	U	ug/kg	1500
N-Nitroso-di-n-propylamine	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Hexachloroethane	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Nitrobenzene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Isophorone	2100	U	ug/kg	2100	1500	U	ug/kg	1500
2-Nitrophenol	2100	U	ug/kg	2100	1500	U	ug/kg	1500
2,4-Dimethylphenol	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Benzoic acid	980	J	ug/kg		1100	J	ug/kg	
bis(2-Chloroethoxy)methane	2100	U	ug/kg	2100	1500	U	ug/kg	1500
2,4-Dichlorophenol	2100	U	ug/kg	2100	1500	U	ug/kg	1500
1,2,4-Trichlorobenzene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Naphthalene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
4-Chloroaniline	2100	UJ	ug/kg		1500	UJ	ug/kg	
Hexachlorobutadiene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
4-Chloro-3-methylphenol	2100	U	ug/kg	2100	1500	U	ug/kg	1500
2-Methylnaphthalene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Hexachlorocyclopentadiene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
2,4,6-Trichlorophenol	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Dimethylphthalate	2100	U	ug/kg	2100	1500	U	ug/kg	1500
2,4,5-Trichlorophenol	10000	U	ug/kg	10000	7000	U	ug/kg	7000
2-Chloronaphthalene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
2-Nitroaniline	10000	U	ug/kg	10000	7000	U	ug/kg	7000
Acenaphthylene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
2,6-Dinitrotoluene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
3-Nitroaniline	10000	UJ	ug/kg		7000	U	ug/kg	7000
Acenaphthene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
2,4-Dinitrophenol	10000	UJ	ug/kg		7000	U	ug/kg	7000
4-Nitrophenol	10000	UJ	ug/kg		7000	U	ug/kg	7000
Dibenzofuran	2100	U	ug/kg	2100	1500	U	ug/kg	1500
2,4-Dinitrotoluene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Diethylphthalate	2100	U	ug/kg	2100	1500	U	ug/kg	1500
4-Chlorophenyl-phenylether	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Fluorene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
4-Nitroaniline	10000	UJ	ug/kg		7000	UJ	ug/kg	

AR01 - Trend Report
Group2 Worm Tissue Data

Lab Sample Number:	R9137006				R9137007			
Site	GROUP2				GROUP2			
Locator	15E02301				15E03001			
Collect Date:	20-OCT-94				20-OCT-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	10000	U	ug/kg	10000	7000	U	ug/kg	7000
N-Nitrosodiphenylamine (1)	2100	U	ug/kg	2100	1500	U	ug/kg	1500
1,2-Diphenylhydrazine	2100	U	ug/kg	2100	1500	U	ug/kg	1500
4-Bromophenyl-phenylether	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Hexachlorobenzene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Pentachlorophenol	640	J	ug/kg		540	J	ug/kg	
Phenanthrene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Anthracene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Di-n-Butylphthalate	2100	U	ug/kg	2100	1500	UJ	ug/kg	
Fluoranthene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Pyrene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Butylbenzylphthalate	2100	U	ug/kg	2100	1500	U	ug/kg	1500
3,3'-Dichlorobenzidine	4200	U	ug/kg	4200	2900	U	ug/kg	2900
Benzo(a)anthracene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Chrysene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
bis(2-Ethylhexyl)phthalate	2100	U	ug/kg	2100	1700	J	ug/kg	
Di-n-octylphthalate	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Benzo(b)fluoranthene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Benzo(k)fluoranthene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Benzo(a)pyrene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Indeno(1,2,3-cd)pyrene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Dibenz(a,h)anthracene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Benzo(g,h,i)perylene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
2-Picoline	10000	U	ug/kg	10000	7000	U	ug/kg	7000
Methyl methanesulfonate	2100	UJ	ug/kg		1500	U	ug/kg	1500
Ethyl methanesulfonate	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Acetophenone	2100	U	ug/kg	2100	1500	U	ug/kg	1500
N-Nitrosopiperidine	2100	UJ	ug/kg		1500	U	ug/kg	1500
Phenyl-tert-butylamine	10000	UJ	ug/kg		7000	U	ug/kg	7000
2,6-Dichlorophenol	2100	U	ug/kg	2100	1500	U	ug/kg	1500
N-Nitroso-di-n-butylamine	2100	U	ug/kg	2100	1500	U	ug/kg	1500
N-Nitrosodiethylamine	2100	U	ug/kg	2100	1500	U	ug/kg	1500
N-Nitrosopyrrolidine	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Benzidine	10000	U	ug/kg	10000	7000	UJ	ug/kg	
1,2,4,5-Tetrachlorobenzene	10000	U	ug/kg	10000	7000	U	ug/kg	7000
Pentachlorobenzene	10000	U	ug/kg	10000	7000	U	ug/kg	7000
1-Naphthylamine	10000	UJ	ug/kg		7000	UJ	ug/kg	
2-Naphthylamine	10000	UJ	ug/kg		7000	UJ	ug/kg	
2,3,4,6-Tetrachlorophenol	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Phenacetin	2100	U	ug/kg	2100	1500	U	ug/kg	1500
4-Aminobiphenyl	10000	UJ	ug/kg		7000	UJ	ug/kg	
Pentachloronitrobenzene	10000	U	ug/kg	10000	7000	U	ug/kg	7000
Pronamide	2100	U	ug/kg	2100	1500	U	ug/kg	1500
p-(Dimethylamino)azobenzene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
7,12-Dimethylbenz(A)Anthracene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
3-Methylcholanthrene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Pyridine	10000	UJ	ug/kg		7000	U	ug/kg	7000
N-Nitrosomethylethylamine	2100	UJ	ug/kg		1500	U	ug/kg	1500
N-Nitrosomorpholine	2100	UJ	ug/kg		1500	U	ug/kg	1500
o-Toluidine	2100	UJ	ug/kg		1500	UJ	ug/kg	
Hexachloropropene	10000	U	ug/kg	10000	7000	U	ug/kg	7000
p-Phenylenediamine	100000	UJ	ug/kg		70000	UJ	ug/kg	

AR01 - Trend Report
Group2 Worm Tissue Data

Lab Sample Number:	R9137006				R9137007			
Site	GROUP2				GROUP2			
Locator	15E02301				15E03001			
Collect Date:	20-OCT-94				20-OCT-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	10000	U	ug/kg	10000	7000	U	ug/kg	7000
Isosafrole	10000	U	ug/kg	10000	7000	U	ug/kg	7000
1,4-Naphthoquinone	210000	U	ug/kg	210000	150000	U	ug/kg	150000
1,3-Dinitrobenzene	2100	U	ug/kg	2100	1500	U	ug/kg	1500
5-Nitro-o-toluidine	2100	UJ	ug/kg		1500	UJ	ug/kg	
1,3,5-Trinitrobenzene	2100	UJ	ug/kg		1500	U	ug/kg	1500
4-Nitroquinoline-1-oxide	100000	UJ	ug/kg		70000	UJ	ug/kg	
Methapyrilene	10000	U	ug/kg	10000	7000	U	ug/kg	7000
3,3'-Dimethylbenzidine	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Hexachlorophene	100000	UJ	ug/kg		70000	R	ug/kg	
Aramite	10000	U	ug/kg	10000	7000	U	ug/kg	7000
2-Chlorophenol	2100	U	ug/kg	2100	1500	U	ug/kg	1500
3- & 4-Methylphenol (2)	2100	U	ug/kg	2100	1500	U	ug/kg	1500
Hexachloropropene	10000	U	ug/kg	10000	7000	U	ug/kg	7000
2-Acetylaminofluorene	2100	U	ug/kg	2100	1500	U	ug/kg	1500

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Worm Tissue Data

Lab Sample Number:	R9137002				R9137004				R9137003				R9137005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	15E01201				15E01601				15E01701				15E02001			
Collect Date:	20-OCT-94				20-OCT-94				20-OCT-94				20-OCT-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs ug/kg																
alpha-BHC	1.8	U	ug/kg	1.8	15	U	ug/kg	15	1.5	U	ug/kg	1.5	1.7	U	ug/kg	1.7
beta-BHC	3.5	U	ug/kg	3.5	30	U	ug/kg	30	3	U	ug/kg	3	3.2	U	ug/kg	3.2
delta-BHC	1.8	U	ug/kg	1.8	15	U	ug/kg	15	1.5	U	ug/kg	1.5	1.7	U	ug/kg	1.7
gamma-BHC (Lindane)	1.8	U	ug/kg	1.8	15	U	ug/kg	15	1.5	U	ug/kg	1.5	1.7	U	ug/kg	1.7
Heptachlor	1.8	U	ug/kg	1.8	15	U	ug/kg	15	1.5	U	ug/kg	1.5	1.7	U	ug/kg	1.7
Aldrin	1.8	U	ug/kg	1.8	15	U	ug/kg	15	1.5	U	ug/kg	1.5	1.7	U	ug/kg	1.7
Heptachlor epoxide	1.9	J	ug/kg		46	J	ug/kg		1.5	U	ug/kg	1.5	1.7	U	ug/kg	1.7
Endosulfan I	1.8	U	ug/kg	1.8	15	U	ug/kg	15	1.5	U	ug/kg	1.5	1.7	U	ug/kg	1.7
Dieldrin	3.8		ug/kg		15	U	ug/kg	15	4	J	ug/kg		5.4	J	ug/kg	
4,4-DDE	130		ug/kg		820		ug/kg		19	J	ug/kg		8.5	J	ug/kg	
Endrin	3.5	U	ug/kg	3.5	30	U	ug/kg	30	3	U	ug/kg	3	3.2	U	ug/kg	3.2
Endosulfan II	3.5	U	ug/kg	3.5	30	U	ug/kg	30	3	U	ug/kg	3	3.2	U	ug/kg	3.2
4,4-DDD	3.5	U	ug/kg	3.5	30	U	ug/kg	30	3	U	ug/kg	3	3.2	U	ug/kg	3.2
Endosulfan sulfate	3.5	U	ug/kg	3.5	30	U	ug/kg	30	3	U	ug/kg	3	3.2	U	ug/kg	3.2
4,4-DDT	31		ug/kg		500		ug/kg		60		ug/kg		6.4		ug/kg	
Methoxychlor	7.3	U	ug/kg	7.3	62	U	ug/kg	62	6.2	U	ug/kg	6.2	6.7	U	ug/kg	6.7
Endrin aldehyde	3.5	U	ug/kg	3.5	30	U	ug/kg	30	2.3	J	ug/kg		3.2	U	ug/kg	3.2
Endrin ketone	3.5	U	ug/kg	3.5	30	U	ug/kg	30	3	U	ug/kg	3	3.2	U	ug/kg	3.2
Chlordane	18	UJ	ug/kg		3500	J	ug/kg		15	UJ	ug/kg		17	UJ	ug/kg	
Chlorobenzilate	54	U	ug/kg	54	460	U	ug/kg	460	46	U	ug/kg	46	50	U	ug/kg	50
Diallate	110	U	ug/kg	110	920	U	ug/kg	920	92	U	ug/kg	92	99	U	ug/kg	99
Toxaphene	89	U	ug/kg	89	760	U	ug/kg	760	75	U	ug/kg	75	82	U	ug/kg	82
Isodrin	2.9		ug/kg		15	U	ug/kg	15	1.5	U	ug/kg	1.5	1.7	U	ug/kg	1.7
Kepone	110	UJ	ug/kg		92	UJ	ug/kg		92	UJ	ug/kg		99	UJ	ug/kg	
Aroclor-1016	89	U	ug/kg	89	760	U	ug/kg	760	75	U	ug/kg	75	82	U	ug/kg	82
Aroclor-1221	180	U	ug/kg	180	1500	U	ug/kg	1500	150	U	ug/kg	150	170	U	ug/kg	170
Aroclor-1232	180	U	ug/kg	180	1500	U	ug/kg	1500	150	U	ug/kg	150	170	U	ug/kg	170
Aroclor-1242	89	U	ug/kg	89	760	U	ug/kg	760	75	U	ug/kg	75	82	U	ug/kg	82
Aroclor-1248	89	U	ug/kg	89	760	U	ug/kg	760	75	U	ug/kg	75	82	U	ug/kg	82
Aroclor-1254	43	U	ug/kg	43	370	U	ug/kg	370	37	U	ug/kg	37	40	U	ug/kg	40
Aroclor-1260	43	U	ug/kg	43	370	U	ug/kg	370	37	U	ug/kg	37	40	U	ug/kg	40

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Worm Tissue Data

Lab Sample Number:		R9137006			R9137006DL			R9137007			R9137007DL		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		15E02301			15E02301DL			15E03001			15E03001DL		
Collect Date:		20-OCT-94			20-OCT-94			20-OCT-94			20-OCT-94		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg												
alpha-BHC		220 U	ug/kg	220	2200 U	ug/kg	2200	1.5 U	ug/kg	1.5	15 U	ug/kg	15
beta-BHC		420 U	ug/kg	420	4200 U	ug/kg	4200	2.9 U	ug/kg	2.9	29 U	ug/kg	29
delta-BHC		220 U	ug/kg	220	2200 U	ug/kg	2200	1.5 U	ug/kg	1.5	15 U	ug/kg	15
gamma-BHC (Lindane)		220 U	ug/kg	220	2200 U	ug/kg	2200	1.5 U	ug/kg	1.5	15 U	ug/kg	15
Heptachlor		220 U	ug/kg	220	2200 U	ug/kg	2200	1.5 U	ug/kg	1.5	15 U	ug/kg	15
Aldrin		220 U	ug/kg	220	2200 U	ug/kg	2200	1.5 U	ug/kg	1.5	15 U	ug/kg	15
Heptachlor epoxide		220 U	ug/kg	220	2200 U	ug/kg	2200	1.5 U	ug/kg	1.5	15 U	ug/kg	15
Endosulfan I		220 U	ug/kg	220	2200 U	ug/kg	2200	1.5 U	ug/kg	1.5	15 U	ug/kg	15
Dieldrin		220 U	ug/kg	220	2200 U	ug/kg	2200	3.3	ug/kg		15 U	ug/kg	15
4,4-DDE		4000	ug/kg		4800	ug/kg		7.9 J	ug/kg		14 J	ug/kg	
Endrin		420 U	ug/kg	420	4200 U	ug/kg	4200	2.9 U	ug/kg	2.9	29 U	ug/kg	29
Endosulfan II		420 U	ug/kg	420	4200 U	ug/kg	4200	2.9 U	ug/kg	2.9	29 U	ug/kg	29
4,4-DDD		2600 J	ug/kg		3800 J	ug/kg		5.1 J	ug/kg		29 U	ug/kg	29
Endosulfan sulfate		420 U	ug/kg	420	4200 U	ug/kg	4200	2.9 U	ug/kg	2.9	29 U	ug/kg	29
4,4-DDT		76000 J	ug/kg		130000	ug/kg		270 J	ug/kg		390	ug/kg	
Methoxychlor		870 U	ug/kg	870	8700 U	ug/kg	8700	6.1 U	ug/kg	6.1	61 U	ug/kg	61
Endrin aldehyde		420 U	ug/kg	420	4200 U	ug/kg	4200	2.9 U	ug/kg	2.9	29 U	ug/kg	29
Endrin ketone		420 U	ug/kg	420	4200 U	ug/kg	4200	2.9 U	ug/kg	2.9	29 U	ug/kg	29
Chlordane		2200 UJ	ug/kg		22000 UJ	ug/kg		15 UJ	ug/kg		150 UJ	ug/kg	
Chlorobenzilate		6400 U	ug/kg	6400	64000 U	ug/kg	64000	45 U	ug/kg	45	450 U	ug/kg	450
Diallate		13000 U	ug/kg	13000	130000 U	ug/kg	130000	90 U	ug/kg	90	900 U	ug/kg	900
Toxaphene		11000 U	ug/kg	11000	110000 U	ug/kg	110000	75 U	ug/kg	75	750 U	ug/kg	750
Isodrin		220 U	ug/kg	220	2200 U	ug/kg	2200	1.5 U	ug/kg	1.5	15 U	ug/kg	15
Kepone		130 UJ	ug/kg		-	ug/kg		91 UJ	ug/kg		-	ug/kg	
Aroclor-1016		11000 U	ug/kg	11000	110000 U	ug/kg	110000	75 U	ug/kg	75	750 U	ug/kg	750
Aroclor-1221		21000 U	ug/kg	21000	210000 U	ug/kg	210000	150 U	ug/kg	150	1500 U	ug/kg	1500
Aroclor-1232		21000 U	ug/kg	21000	210000 U	ug/kg	210000	150 U	ug/kg	150	1500 U	ug/kg	1500
Aroclor-1242		11000 U	ug/kg	11000	110000 U	ug/kg	110000	75 U	ug/kg	75	750 U	ug/kg	750
Aroclor-1248		11000 U	ug/kg	11000	110000 U	ug/kg	110000	75 U	ug/kg	75	750 U	ug/kg	750
Aroclor-1254		5200 U	ug/kg	5200	52000 U	ug/kg	52000	36 U	ug/kg	36	360 U	ug/kg	360
Aroclor-1260		5200 U	ug/kg	5200	52000 U	ug/kg	52000	36 U	ug/kg	36	360 U	ug/kg	360

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

APPENDIX A-10

SURFACE SOIL SAMPLE ANALYSES, SWMU 16

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:		23954001				23954002				23954003				23954009			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		16SSA4				16SS87				16SSC2				16SSC5D			
Collect Date:		30-JAN-93				30-JAN-93				30-JAN-93				01-FEB-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg																
alpha-BHC		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
beta-BHC		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
delta-BHC		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
gamma-BHC (Lindane)		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Heptachlor		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Aldrin		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Heptachlor epoxide		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Endosulfan I		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Dieldrin		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
4,4-DDE		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Endrin		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Endosulfan II		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
4,4-DDD		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Endosulfan sulfate		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
4,4-DDT		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Methoxychlor		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Endrin aldehyde		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Endrin ketone		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Chlordane		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Chlorobenzilate		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Diallate		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Toxaphene		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Isodrin		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Kepone		-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Aroclor-1016		150	U	ug/kg	150	140	U	ug/kg	140	68	U	ug/kg	68	35	U	ug/kg	35
Aroclor-1221		310	U	ug/kg	310	280	U	ug/kg	280	140	U	ug/kg	140	72	U	ug/kg	72
Aroclor-1232		310	U	ug/kg	310	280	U	ug/kg	280	140	U	ug/kg	140	72	U	ug/kg	72
Aroclor-1242		150	U	ug/kg	150	140	U	ug/kg	140	68	U	ug/kg	68	35	U	ug/kg	35
Aroclor-1248		69	J	ug/kg		140	U	ug/kg	140	68	U	ug/kg	68	35	U	ug/kg	35
Aroclor-1254		79	U	ug/kg	79	72	U	ug/kg	72	35	U	ug/kg	35	18	U	ug/kg	18
Aroclor-1260		190		ug/kg		140		ug/kg		52		ug/kg		22		ug/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:	23954004			23954005			23954010			23954006		
Site	GROUP2			GROUP2			GROUP2			GROUP2		
Locator	16SSD4			16SSD7			16SSE1D			16SSF4		
Collect Date:	30-JAN-93			30-JAN-93			01-FEB-93			30-JAN-93		
	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
PESTICIDES/PCBs ug/kg												
alpha-BHC	-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
beta-BHC	-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
delta-BHC	-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
gamma-BHC (Lindane)	-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Heptachlor	-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Aldrin	-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Heptachlor epoxide	-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Endosulfan I	-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Dieldrin	-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
4,4-DDE	-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Endrin	-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Endosulfan II	-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
4,4-DDD	-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Endosulfan sulfate	-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
4,4-DDT	-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Methoxychlor	-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Endrin aldehyde	-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Endrin ketone	-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Chlordane	-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Chlorobenzilate	-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Diallate	-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Toxaphene	-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Isodrin	-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Kepone	-	ug/kg		-	ug/kg		-	ug/kg		-	ug/kg	
Aroclor-1016	70 U	ug/kg	70	70 U	ug/kg	70	36 U	ug/kg	36	34 U	ug/kg	34
Aroclor-1221	140 U	ug/kg	140	140 U	ug/kg	140	73 U	ug/kg	73	70 U	ug/kg	70
Aroclor-1232	140 U	ug/kg	140	140 U	ug/kg	140	73 U	ug/kg	73	70 U	ug/kg	70
Aroclor-1242	70 U	ug/kg	70	70 U	ug/kg	70	36 U	ug/kg	36	34 U	ug/kg	34
Aroclor-1248	70 U	ug/kg	70	70 U	ug/kg	70	36 U	ug/kg	36	34 U	ug/kg	34
Aroclor-1254	36 U	ug/kg	36	36 U	ug/kg	36	18 U	ug/kg	18	18 U	ug/kg	18
Aroclor-1260	76	ug/kg		63	ug/kg		18 U	ug/kg	18	20	ug/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Surface Soil Data

Lab Sample Number:	23954007				23954008			
Site	GROUP2				GROUP2			
Locator	16SSF4DUP				16SSG1			
Collect Date:	30-JAN-93				30-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs ug/kg								
alpha-BHC	-		ug/kg		-		ug/kg	
beta-BHC	-		ug/kg		-		ug/kg	
delta-BHC	-		ug/kg		-		ug/kg	
gamma-BHC (Lindane)	-		ug/kg		-		ug/kg	
Heptachlor	-		ug/kg		-		ug/kg	
Aldrin	-		ug/kg		-		ug/kg	
Heptachlor epoxide	-		ug/kg		-		ug/kg	
Endosulfan I	-		ug/kg		-		ug/kg	
Dieldrin	-		ug/kg		-		ug/kg	
4,4-DDE	-		ug/kg		-		ug/kg	
Endrin	-		ug/kg		-		ug/kg	
Endosulfan II	-		ug/kg		-		ug/kg	
4,4-DDD	-		ug/kg		-		ug/kg	
Endosulfan sulfate	-		ug/kg		-		ug/kg	
4,4-DDT	-		ug/kg		-		ug/kg	
Methoxychlor	-		ug/kg		-		ug/kg	
Endrin aldehyde	-		ug/kg		-		ug/kg	
Endrin ketone	-		ug/kg		-		ug/kg	
Chlordane	-		ug/kg		-		ug/kg	
Chlorobenzilate	-		ug/kg		-		ug/kg	
Diallate	-		ug/kg		-		ug/kg	
Toxaphene	-		ug/kg		-		ug/kg	
Isodrin	-		ug/kg		-		ug/kg	
Kepone	-		ug/kg		-		ug/kg	
Aroclor-1016	35	UJ	ug/kg		34	U	ug/kg	34
Aroclor-1221	70	UJ	ug/kg		68	U	ug/kg	68
Aroclor-1232	70	UJ	ug/kg		68	U	ug/kg	68
Aroclor-1242	35	UJ	ug/kg		34	U	ug/kg	34
Aroclor-1248	35	UJ	ug/kg		34	U	ug/kg	34
Aroclor-1254	18	UJ	ug/kg		17	U	ug/kg	17
Aroclor-1260	9.8	J	ug/kg		28		ug/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

APPENDIX A-11

SUBSURFACE SOIL SAMPLE ANALYSES, SWMU 16

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:		23827004			34889004			23827005			34889005		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		MP16MS1D8			MP16MS1D8			MP16MS2S2			MP16MS2S2		
Collect Date:		14-JAN-93			14-JAN-93			14-JAN-93			14-JAN-93		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
VOLATILES	ug/kg												
Chloromethane		11 U	ug/kg	11	-	ug/kg		11 U	ug/kg	11	-	ug/kg	
Bromomethane		11 U	ug/kg	11	-	ug/kg		11 U	ug/kg	11	-	ug/kg	
Vinyl chloride		11 U	ug/kg	11	-	ug/kg		11 U	ug/kg	11	-	ug/kg	
Chloroethane		11 U	ug/kg	11	-	ug/kg		11 U	ug/kg	11	-	ug/kg	
Methylene chloride		8 U	ug/kg	8	-	ug/kg		8 U	ug/kg	8	-	ug/kg	
Acetone		54	ug/kg		-	ug/kg		11 U	ug/kg	11	-	ug/kg	
Carbon disulfide		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
1,1-Dichloroethane		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
1,1-Dichloroethene		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
1,2-Dichloroethene (total)		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
Chloroform		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
1,2-Dichloroethane		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
2-Butanone		11 U	ug/kg	11	-	ug/kg		11 U	ug/kg	11	-	ug/kg	
1,1,1-Trichloroethane		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
Carbon tetrachloride		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
Bromodichloromethane		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
1,2-Dichloropropane		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
cis-1,3-Dichloropropene		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
Trichloroethene		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
Dibromochloromethane		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
1,1,2-Trichloroethane		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
Benzene		2 J	ug/kg		-	ug/kg		6 U	ug/kg	6	-	ug/kg	
trans-1,3-Dichloropropene		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
Bromoform		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
4-Methyl-2-pentanone		11 U	ug/kg	11	-	ug/kg		11 U	ug/kg	11	-	ug/kg	
2-Hexanone		11 U	ug/kg	11	-	ug/kg		11 U	ug/kg	11	-	ug/kg	
Tetrachloroethene		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
1,1,2,2-Tetrachloroethane		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
Toluene		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
Chlorobenzene		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
Ethylbenzene		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
Styrene		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
Xylenes (total)		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
Dichlorodifluoromethane		11 U	ug/kg	11	-	ug/kg		11 U	ug/kg	11	-	ug/kg	
Trichlorofluoromethane		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
1,3-Dichlorobenzene		6 U	ug/kg	6	360 U	ug/kg	360	6 U	ug/kg	6	360 U	ug/kg	360
Acrolein		110 U	ug/kg	110	-	ug/kg		110 U	ug/kg	110	-	ug/kg	
Iodomethane		11 U	ug/kg	11	-	ug/kg		11 U	ug/kg	11	-	ug/kg	
1,4-Dichlorobenzene		6 U	ug/kg	6	360 U	ug/kg	360	6 U	ug/kg	6	360 U	ug/kg	360
Acrylonitrile		110 U	ug/kg	110	-	ug/kg		110 U	ug/kg	110	-	ug/kg	
Dibromomethane		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
1,2-Dichlorobenzene		6 U	ug/kg	6	360 U	ug/kg	360	6 U	ug/kg	6	360 U	ug/kg	360
2-Chloroethylvinylether		11 U	ug/kg	11	-	ug/kg		11 U	ug/kg	11	-	ug/kg	
Ethyl methacrylate		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
1,2,3-Trichloropropane		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
trans-1,4-Dichloro-2-butene		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
Isobutyl alcohol		220 U	ug/kg	220	-	ug/kg		220 U	ug/kg	220	-	ug/kg	
1,1,1,2-Tetrachloroethane		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	
1,2-Dibromo-3-chloropropane		11 U	ug/kg	11	-	ug/kg		11 U	ug/kg	11	-	ug/kg	
1,2-Dibromoethane		6 U	ug/kg	6	-	ug/kg		6 U	ug/kg	6	-	ug/kg	

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:	23827004				34889004				23827005				34889005			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MP16MS1D8				MP16MS1D8				MP16MS2S2				MP16MS2S2			
Collect Date:	14-JAN-93				14-JAN-93				14-JAN-93				14-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	220	R	ug/kg		-		ug/kg		220	R	ug/kg		-		ug/kg	
3-Chloropropene	6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Acetonitrile	110	U	ug/kg	110	-		ug/kg		110	U	ug/kg	110	-		ug/kg	
Chloroprene	220	U	ug/kg	220	-		ug/kg		220	U	ug/kg	220	-		ug/kg	
Methacrylonitrile	6	U	ug/kg	6	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Methyl methacrylate	11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Pentachloroethane	11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Propionitrile	110	U	ug/kg	110	-		ug/kg		110	U	ug/kg	110	-		ug/kg	
Vinyl acetate	11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:	23827006				34889006				23827007				34889007			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MP16MS2S8				MP16MS2S8				MP16MS3S2				MP16MS3S2			
Collect Date:	14-JAN-93				14-JAN-93				14-JAN-93				14-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES ug/kg																
Chloromethane	1500	U	ug/kg	1500	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Bromomethane	1500	U	ug/kg	1500	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Vinyl chloride	1500	U	ug/kg	1500	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Chloroethane	1500	U	ug/kg	1500	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Methylene chloride	740	U	ug/kg	740	-		ug/kg		8	U	ug/kg	8	-		ug/kg	
Acetone	2400	U	ug/kg	2400	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Carbon disulfide	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,1-Dichloroethane	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,1-Dichloroethene	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dichloroethene (total)	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Chloroform	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dichloroethane	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
2-Butanone	1500	U	ug/kg	1500	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
1,1,1-Trichloroethane	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Carbon tetrachloride	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Bromodichloromethane	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dichloropropane	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
cis-1,3-Dichloropropene	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Trichloroethene	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Dibromochloromethane	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,1,2-Trichloroethane	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Benzene	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
trans-1,3-Dichloropropene	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Bromoform	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
4-Methyl-2-pentanone	1500	U	ug/kg	1500	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
2-Hexanone	1500	U	ug/kg	1500	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Tetrachloroethene	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,1,2,2-Tetrachloroethane	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Toluene	740	U	ug/kg	740	-		ug/kg		2	J	ug/kg		-		ug/kg	
Chlorobenzene	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Ethylbenzene	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Styrene	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Xylenes (total)	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Dichlorodifluoromethane	1500	U	ug/kg	1500	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Trichlorofluoromethane	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,3-Dichlorobenzene	740	U	ug/kg	740	15000	UJ	ug/kg		5	U	ug/kg	5	690	U	ug/kg	690
Acrolein	15000	U	ug/kg	15000	-		ug/kg		110	U	ug/kg	110	-		ug/kg	
Iodomethane	1500	U	ug/kg	1500	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
1,4-Dichlorobenzene	740	U	ug/kg	740	15000	UJ	ug/kg		5	U	ug/kg	5	690	U	ug/kg	690
Acrylonitrile	15000	U	ug/kg	15000	-		ug/kg		110	U	ug/kg	110	-		ug/kg	

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:	23827006				34889006				23827007				34889007			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MP16MS2S8				MP16MS2S8				MP16MS3S2				MP16MS3S2			
Collect Date:	14-JAN-93				14-JAN-93				14-JAN-93				14-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dichlorobenzene	740	U	ug/kg	740	15000	UJ	ug/kg		5	U	ug/kg	5	690	U	ug/kg	690
2-Chloroethylvinylether	1500	R	ug/kg		-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Ethyl methacrylate	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2,3-Trichloropropane	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
trans-1,4-Dichloro-2-butene	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Isobutyl alcohol	30000	R	ug/kg		-		ug/kg		210	U	ug/kg	210	-		ug/kg	
1,1,1,2-Tetrachloroethane	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dibromo-3-chloropropane	1500	U	ug/kg	1500	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
1,2-Dibromoethane	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,4-Dioxane	30000	R	ug/kg		-		ug/kg		210	U	ug/kg	210	-		ug/kg	
3-Chloropropene	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Acetonitrile	15000	U	ug/kg	15000	-		ug/kg		110	U	ug/kg	110	-		ug/kg	
Chloroprene	30000	U	ug/kg	30000	-		ug/kg		210	U	ug/kg	210	-		ug/kg	
Methacrylonitrile	740	U	ug/kg	740	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Methyl methacrylate	1500	U	ug/kg	1500	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Pentachloroethane	1500	U	ug/kg	1500	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Propionitrile	15000	U	ug/kg	15000	-		ug/kg		110	U	ug/kg	110	-		ug/kg	
Vinyl acetate	1500	U	ug/kg	1500	-		ug/kg		11	U	ug/kg	11	-		ug/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:		23827008				34889008			
Site		GROUP2				GROUP2			
Locator		MP16MS3S8				MP16MS3S8			
Collect Date:		14-JAN-93				14-JAN-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/kg								
Chloromethane		11	U	ug/kg	11	-		ug/kg	
Bromomethane		11	U	ug/kg	11	-		ug/kg	
Vinyl chloride		11	U	ug/kg	11	-		ug/kg	
Chloroethane		11	U	ug/kg	11	-		ug/kg	
Methylene chloride		12	U	ug/kg	12	-		ug/kg	
Acetone		12	U	ug/kg	12	-		ug/kg	
Carbon disulfide		6	U	ug/kg	6	-		ug/kg	
1,1-Dichloroethane		6	U	ug/kg	6	-		ug/kg	
1,1-Dichloroethene		6	U	ug/kg	6	-		ug/kg	
1,2-Dichloroethene (total)		6	U	ug/kg	6	-		ug/kg	
Chloroform		6	U	ug/kg	6	-		ug/kg	
1,2-Dichloroethane		6	U	ug/kg	6	-		ug/kg	
2-Butanone		11	U	ug/kg	11	-		ug/kg	
1,1,1-Trichloroethane		6	U	ug/kg	6	-		ug/kg	
Carbon tetrachloride		6	U	ug/kg	6	-		ug/kg	
Bromodichloromethane		6	U	ug/kg	6	-		ug/kg	
1,2-Dichloropropane		6	U	ug/kg	6	-		ug/kg	
cis-1,3-Dichloropropene		6	U	ug/kg	6	-		ug/kg	
Trichloroethene		6	U	ug/kg	6	-		ug/kg	
Dibromochloromethane		6	U	ug/kg	6	-		ug/kg	
1,1,2-Trichloroethane		6	U	ug/kg	6	-		ug/kg	
Benzene		6	U	ug/kg	6	-		ug/kg	
trans-1,3-Dichloropropene		6	U	ug/kg	6	-		ug/kg	
Bromoform		6	U	ug/kg	6	-		ug/kg	
4-Methyl-2-pentanone		11	U	ug/kg	11	-		ug/kg	
2-Hexanone		11	U	ug/kg	11	-		ug/kg	
Tetrachloroethene		6	U	ug/kg	6	-		ug/kg	
1,1,2,2-Tetrachloroethane		6	U	ug/kg	6	-		ug/kg	
Toluene		6	U	ug/kg	6	-		ug/kg	
Chlorobenzene		6	U	ug/kg	6	-		ug/kg	
Ethylbenzene		6	U	ug/kg	6	-		ug/kg	
Styrene		6	U	ug/kg	6	-		ug/kg	
Xylenes (total)		6	U	ug/kg	6	-		ug/kg	
Dichlorodifluoromethane		11	U	ug/kg	11	-		ug/kg	
Trichlorofluoromethane		6	U	ug/kg	6	-		ug/kg	
1,3-Dichlorobenzene		6	U	ug/kg	6	370	U	ug/kg	370
Acrolein		110	U	ug/kg	110	-		ug/kg	
Iodomethane		11	U	ug/kg	11	-		ug/kg	
1,4-Dichlorobenzene		6	U	ug/kg	6	370	U	ug/kg	370
Acrylonitrile		110	U	ug/kg	110	-		ug/kg	

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:	23827008				34889008			
Site	GROUP2				GROUP2			
Locator	MP16MS3S8				MP16MS3S8			
Collect Date:	14-JAN-93				14-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	6	U	ug/kg	6	-		ug/kg	
1,2-Dichlorobenzene	6	U	ug/kg	6	370	U	ug/kg	370
2-Chloroethylvinylether	11	U	ug/kg	11	-		ug/kg	
Ethyl methacrylate	6	U	ug/kg	6	-		ug/kg	
1,2,3-Trichloropropane	6	U	ug/kg	6	-		ug/kg	
trans-1,4-Dichloro-2-butene	6	U	ug/kg	6	-		ug/kg	
Isobutyl alcohol	230	U	ug/kg	230	-		ug/kg	
1,1,1,2-Tetrachloroethane	6	U	ug/kg	6	-		ug/kg	
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11	-		ug/kg	
1,2-Dibromoethane	6	U	ug/kg	6	-		ug/kg	
1,4-Dioxane	230	R	ug/kg		-		ug/kg	
3-Chloropropene	6	U	ug/kg	6	-		ug/kg	
Acetonitrile	110	U	ug/kg	110	-		ug/kg	
Chloroprene	230	U	ug/kg	230	-		ug/kg	
Methacrylonitrile	6	U	ug/kg	6	-		ug/kg	
Methyl methacrylate	11	U	ug/kg	11	-		ug/kg	
Pentachloroethane	11	U	ug/kg	11	-		ug/kg	
Propionitrile	110	U	ug/kg	110	-		ug/kg	
Vinyl acetate	11	U	ug/kg	11	-		ug/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:		34889004				34889005				34889006				34889007			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		MP16MS1D8				MP16MS2S2				MP16MS2S8				MP16MS3S2			
Collect Date:		14-JAN-93				14-JAN-93				14-JAN-93				14-JAN-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg																
N-Nitrosodimethylamine		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Phenol		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Aniline		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
bis (2-Chloroethyl) ether		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Benzyl Alcohol		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
2-Methylphenol		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
bis(2-Chloroisopropyl)ether		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
N-Nitroso-di-n-propylamine		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Hexachloroethane		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Nitrobenzene		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Isophorone		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
2-Nitrophenol		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
2,4-Dimethylphenol		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Benzoic acid		1700	U	ug/kg	1700	1700	U	ug/kg	1700	74000	UJ	ug/kg		3400	U	ug/kg	3400
bis(2-Chloroethoxy)methane		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
2,4-Dichlorophenol		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
1,2,4-Trichlorobenzene		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Naphthalene		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
4-Chloroaniline		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Hexachlorobutadiene		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
4-Chloro-3-methylphenol		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
2-Methylnaphthalene		360	U	ug/kg	360	360	U	ug/kg	360	100000	J	ug/kg		690	U	ug/kg	690
Hexachlorocyclopentadiene		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
2,4,6-Trichlorophenol		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Dimethylphthalate		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
2,4,5-Trichlorophenol		1700	U	ug/kg	1700	1700	U	ug/kg	1700	74000	UJ	ug/kg		3400	U	ug/kg	3400
2-Chloronaphthalene		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
2-Nitroaniline		1700	U	ug/kg	1700	1700	U	ug/kg	1700	74000	UJ	ug/kg		3400	U	ug/kg	3400
Acenaphthylene		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
2,6-Dinitrotoluene		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
3-Nitroaniline		1700	U	ug/kg	1700	1700	U	ug/kg	1700	74000	UJ	ug/kg		3400	U	ug/kg	3400
Acenaphthene		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
2,4-Dinitrophenol		1700	U	ug/kg	1700	1700	U	ug/kg	1700	74000	UJ	ug/kg		3400	U	ug/kg	3400
4-Nitrophenol		1700	U	ug/kg	1700	1700	U	ug/kg	1700	74000	UJ	ug/kg		3400	U	ug/kg	3400
Dibenzofuran		360	U	ug/kg	360	360	U	ug/kg	360	4900	J	ug/kg		690	U	ug/kg	690
2,4-Dinitrotoluene		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Diethylphthalate		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
4-Chlorophenyl-phenylether		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Fluorene		360	U	ug/kg	360	360	U	ug/kg	360	2500	J	ug/kg		690	U	ug/kg	690
4-Nitroaniline		1700	U	ug/kg	1700	1700	U	ug/kg	1700	74000	UJ	ug/kg		3400	U	ug/kg	3400
4,6-Dinitro-2-methylphenol		1700	U	ug/kg	1700	1700	U	ug/kg	1700	74000	UJ	ug/kg		3400	U	ug/kg	3400
N-Nitrosodiphenylamine (1)		41	J	ug/kg		360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
1,2-Diphenylhydrazine		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
4-Bromophenyl-phenylether		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Hexachlorobenzene		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Pentachlorophenol		1700	U	ug/kg	1700	1700	U	ug/kg	1700	74000	UJ	ug/kg		3400	U	ug/kg	3400
Phenanthrene		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Anthracene		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Di-n-Butylphthalate		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Fluoranthene		360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:	34889004				34889005				34889006				34889007			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MP16MS1D8				MP16MS2S2				MP16MS2S8				MP16MS3S2			
Collect Date:	14-JAN-93				14-JAN-93				14-JAN-93				14-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Pyrene	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Butylbenzylphthalate	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
3,3'-Dichlorobenzidine	720	U	ug/kg	720	720	U	ug/kg	720	30000	UJ	ug/kg		1400	U	ug/kg	1400
Benzo(a)anthracene	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Chrysene	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
bis(2-Ethylhexyl)phthalate	220	J	ug/kg		360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Di-n-octylphthalate	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Benzo(b)fluoranthene	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Benzo(k)fluoranthene	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Benzo(a)pyrene	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Indeno(1,2,3-cd)pyrene	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Dibenz(a,h)anthracene	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Benzo(g,h,i)perylene	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
2-Picoline	1700	U	ug/kg	1700	1700	U	ug/kg	1700	74000	UJ	ug/kg		3400	U	ug/kg	3400
Methyl methanesulfonate	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Ethyl methanesulfonate	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Acetophenone	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
N-Nitrosopiperidine	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Phenyl-tert-butylamine	1700	U	ug/kg	1700	1700	U	ug/kg	1700	74000	UJ	ug/kg		3400	U	ug/kg	3400
2,6-Dichlorophenol	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
N-Nitroso-di-n-butylamine	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
N-Nitrosodiethylamine	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
N-Nitrosopyrrolidine	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Benzidine	1700	U	ug/kg	1700	1700	U	ug/kg	1700	74000	UJ	ug/kg		3400	U	ug/kg	3400
1,2,4,5-Tetrachlorobenzene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	74000	UJ	ug/kg		3400	U	ug/kg	3400
Pentachlorobenzene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	74000	UJ	ug/kg		3400	U	ug/kg	3400
1-Naphthylamine	1700	U	ug/kg	1700	1700	U	ug/kg	1700	74000	UJ	ug/kg		3400	U	ug/kg	3400
2-Naphthylamine	1700	U	ug/kg	1700	1700	U	ug/kg	1700	74000	UJ	ug/kg		3400	U	ug/kg	3400
2,3,4,6-Tetrachlorophenol	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Phenacetin	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
4-Aminobiphenyl	1700	U	ug/kg	1700	1700	U	ug/kg	1700	74000	UJ	ug/kg		3400	U	ug/kg	3400
Pentachloronitrobenzene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	74000	UJ	ug/kg		3400	U	ug/kg	3400
Pronamide	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
p-(Dimethylamino)azobenzene	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
7,12-Dimethylbenz(A)Anthracene	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
3-Methylcholanthrene	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Pyridine	1700	U	ug/kg	1700	1700	U	ug/kg	1700	74000	UJ	ug/kg		3400	U	ug/kg	3400
N-Nitrosomethylethylamine	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
N-Nitrosomorpholine	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
o-Toluidine	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Hexachloropropene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	74000	UJ	ug/kg		3400	U	ug/kg	3400
p-Phenylenediamine	17000	R	ug/kg		17000	R	ug/kg		740000	R	ug/kg		34000	R	ug/kg	
Safrole	1700	U	ug/kg	1700	1700	U	ug/kg	1700	74000	UJ	ug/kg		3400	U	ug/kg	3400
Isosafrole	1700	U	ug/kg	1700	1700	U	ug/kg	1700	74000	UJ	ug/kg		3400	U	ug/kg	3400
1,4-Naphthoquinone	35000	U	ug/kg	35000	35000	U	ug/kg	35000	1500000	UJ	ug/kg		70000	U	ug/kg	70000
1,3-Dinitrobenzene	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
5-Nitro-o-toluidine	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
1,3,5-Trinitrobenzene	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
4-Nitroquinoline-1-oxide	17000	U	ug/kg	17000	17000	U	ug/kg	17000	740000	UJ	ug/kg		34000	U	ug/kg	34000
Methapyrilene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	74000	UJ	ug/kg		3400	U	ug/kg	3400
3,3'-Dimethylbenzidine	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
Hexachlorophene	17000	U	ug/kg	17000	17000	U	ug/kg	17000	740000	UJ	ug/kg		34000	U	ug/kg	34000

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:	34889004				34889005				34889006				34889007			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MP16MS1D8				MP16MS2S2				MP16MS2S8				MP16MS3S2			
Collect Date:	14-JAN-93				14-JAN-93				14-JAN-93				14-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Aramite	1700	R	ug/kg		1700	R	ug/kg		74000	R	ug/kg		3400	R	ug/kg	
2-Chlorophenol	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690
3- & 4-Methylphenol (2)	-		ug/kg		-		ug/kg		-		ug/kg		-		ug/kg	
Hexachloropropene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	74000	UJ	ug/kg		3400	U	ug/kg	3400
2-Acetylaminofluorene	360	U	ug/kg	360	360	U	ug/kg	360	15000	UJ	ug/kg		690	U	ug/kg	690

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:	34889008
Site	GROUP2
Locator	MP16MS3S8
Collect Date:	14-JAN-93

		VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg				
N-Nitrosodimethylamine		370	U	ug/kg	370
Phenol		370	U	ug/kg	370
Aniline		370	U	ug/kg	370
bis (2-Chloroethyl) ether		370	U	ug/kg	370
Benzyl Alcohol		370	U	ug/kg	370
2-Methylphenol		370	U	ug/kg	370
bis(2-Chloroisopropyl)ether		370	U	ug/kg	370
N-Nitroso-di-n-propylamine		370	U	ug/kg	370
Hexachloroethane		370	U	ug/kg	370
Nitrobenzene		370	U	ug/kg	370
Isophorone		370	U	ug/kg	370
2-Nitrophenol		370	U	ug/kg	370
2,4-Dimethylphenol		370	U	ug/kg	370
Benzoic acid		1800	U	ug/kg	1800
bis(2-Chloroethoxy)methane		370	U	ug/kg	370
2,4-Dichlorophenol		370	U	ug/kg	370
1,2,4-Trichlorobenzene		370	U	ug/kg	370
Naphthalene		370	U	ug/kg	370
4-Chloroaniline		370	U	ug/kg	370
Hexachlorobutadiene		370	U	ug/kg	370
4-Chloro-3-methylphenol		370	U	ug/kg	370
2-Methylnaphthalene		370	U	ug/kg	370
Hexachlorocyclopentadiene		370	U	ug/kg	370
2,4,6-Trichlorophenol		370	U	ug/kg	370
Dimethylphthalate		370	U	ug/kg	370
2,4,5-Trichlorophenol		1800	U	ug/kg	1800
2-Chloronaphthalene		370	U	ug/kg	370
2-Nitroaniline		1800	U	ug/kg	1800
Acenaphthylene		370	U	ug/kg	370
2,6-Dinitrotoluene		370	U	ug/kg	370
3-Nitroaniline		1800	U	ug/kg	1800
Acenaphthene		370	U	ug/kg	370
2,4-Dinitrophenol		1800	U	ug/kg	1800
4-Nitrophenol		1800	U	ug/kg	1800
Dibenzofuran		370	U	ug/kg	370
2,4-Dinitrotoluene		370	U	ug/kg	370
Diethylphthalate		370	U	ug/kg	370
4-Chlorophenyl-phenylether		370	U	ug/kg	370
Fluorene		370	U	ug/kg	370
4-Nitroaniline		1800	U	ug/kg	1800

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:	34889008
Site	GROUP2
Locator	MP16MS3S8
Collect Date:	14-JAN-93

	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	1800	U	ug/kg	1800
N-Nitrosodiphenylamine (1)	370	U	ug/kg	370
1,2-Diphenylhydrazine	370	U	ug/kg	370
4-Bromophenyl-phenylether	370	U	ug/kg	370
Hexachlorobenzene	370	U	ug/kg	370
Pentachlorophenol	1800	U	ug/kg	1800
Phenanthrene	370	U	ug/kg	370
Anthracene	370	U	ug/kg	370
Di-n-Butylphthalate	370	U	ug/kg	370
Fluoranthene	370	U	ug/kg	370
Pyrene	370	U	ug/kg	370
Butylbenzylphthalate	370	U	ug/kg	370
3,3'-Dichlorobenzidine	750	U	ug/kg	750
Benzo(a)anthracene	370	U	ug/kg	370
Chrysene	370	U	ug/kg	370
bis(2-Ethylhexyl)phthalate	370	U	ug/kg	370
Di-n-octylphthalate	370	U	ug/kg	370
Benzo(b)fluoranthene	370	U	ug/kg	370
Benzo(k)fluoranthene	370	U	ug/kg	370
Benzo(a)pyrene	370	U	ug/kg	370
Indeno(1,2,3-cd)pyrene	370	U	ug/kg	370
Dibenz(a,h)anthracene	370	U	ug/kg	370
Benzo(g,h,i)perylene	370	U	ug/kg	370
2-Picoline	1800	U	ug/kg	1800
Methyl methanesulfonate	370	U	ug/kg	370
Ethyl methanesulfonate	370	U	ug/kg	370
Acetophenone	370	U	ug/kg	370
N-Nitrosopiperidine	370	U	ug/kg	370
Phenyl-tert-butylamine	1800	U	ug/kg	1800
2,6-Dichlorophenol	370	U	ug/kg	370
N-Nitroso-di-n-butylamine	370	U	ug/kg	370
N-Nitrosodiethylamine	370	U	ug/kg	370
N-Nitrosopyrrolidine	370	U	ug/kg	370
Benzidine	1800	U	ug/kg	1800
1,2,4,5-Tetrachlorobenzene	1800	U	ug/kg	1800
Pentachlorobenzene	1800	U	ug/kg	1800
1-Naphthylamine	1800	U	ug/kg	1800
2-Naphthylamine	1800	U	ug/kg	1800
2,3,4,6-Tetrachlorophenol	370	U	ug/kg	370
Phenacetin	370	U	ug/kg	370
4-Aminobiphenyl	1800	U	ug/kg	1800
Pentachloronitrobenzene	1800	U	ug/kg	1800
Pronamide	370	U	ug/kg	370
p-(Dimethylamino)azobenzene	370	U	ug/kg	370
7,12-Dimethylbenz(A)Anthracene	370	U	ug/kg	370
3-Methylcholanthrene	370	U	ug/kg	370
Pyridine	1800	U	ug/kg	1800
N-Nitrosomethylethylamine	370	U	ug/kg	370
N-Nitrosomorpholine	370	U	ug/kg	370
o-Toluidine	370	U	ug/kg	370
Hexachloropropene	1800	U	ug/kg	1800
p-Phenylenediamine	17000	R	ug/kg	

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:	34889008			
Site	GROUP2			
Locator	MP16MS3S8			
Collect Date:	14-JAN-93			
	VALUE	QUAL	UNITS	DL
Safrole	1800	U	ug/kg	1800
Isosafrole	1800	U	ug/kg	1800
1,4-Naphthoquinone	34000	U	ug/kg	34000
1,3-Dinitrobenzene	370	U	ug/kg	370
5-Nitro-o-toluidine	370	U	ug/kg	370
1,3,5-Trinitrobenzene	370	U	ug/kg	370
4-Nitroquinoline-1-oxide	17000	U	ug/kg	17000
Methapyrilene	1800	U	ug/kg	1800
3,3'-Dimethylbenzidine	370	U	ug/kg	370
Hexachlorophene	17000	U	ug/kg	17000
Aramite	1800	R	ug/kg	
2-Chlorophenol	370	U	ug/kg	370
3- & 4-Methylphenol (2)	-		ug/kg	
Hexachloropropene	1800	U	ug/kg	1800
2-Acetylaminofluorene	370	U	ug/kg	370

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:		23750004				23750005				23750006				23750007			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		MP16MS1D8				MP16MS2S2				MP16MS2S8				MP16MS3S2			
Collect Date:		14-JAN-93				14-JAN-93				14-JAN-93				14-JAN-93			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg																
alpha-BHC		.74	U	ug/kg	.74	.74	U	ug/kg	.74	3.9	U	ug/kg	3.9	1.4	U	ug/kg	1.4
beta-BHC		1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	7.6	U	ug/kg	7.6	2.8	U	ug/kg	2.8
delta-BHC		.74	U	ug/kg	.74	.74	U	ug/kg	.74	3.9	U	ug/kg	3.9	1.4	U	ug/kg	1.4
gamma-BHC (Lindane)		.74	U	ug/kg	.74	.74	U	ug/kg	.74	3.9	U	ug/kg	3.9	1.4	U	ug/kg	1.4
Heptachlor		.74	U	ug/kg	.74	.74	U	ug/kg	.74	3.9	U	ug/kg	3.9	1.4	U	ug/kg	1.4
Aldrin		.74	U	ug/kg	.74	.74	U	ug/kg	.74	3.9	U	ug/kg	3.9	1.4	U	ug/kg	1.4
Heptachlor epoxide		.74	U	ug/kg	.74	.74	U	ug/kg	.74	3.9	U	ug/kg	3.9	1.4	U	ug/kg	1.4
Endosulfan I		.74	U	ug/kg	.74	.74	U	ug/kg	.74	3.9	U	ug/kg	3.9	1.4	U	ug/kg	1.4
Dieldrin		.74	U	ug/kg	.74	.74	U	ug/kg	.74	3.9	U	ug/kg	3.9	1.4	U	ug/kg	1.4
4,4-DDE		.74	U	ug/kg	.74	.74	U	ug/kg	.74	3.9	U	ug/kg	3.9	1.4	U	ug/kg	1.4
Endrin		1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	7.6	U	ug/kg	7.6	2.8	U	ug/kg	2.8
Endosulfan II		1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	7.6	U	ug/kg	7.6	2.8	U	ug/kg	2.8
4,4-DDD		1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	7.6	U	ug/kg	7.6	2.8	U	ug/kg	2.8
Endosulfan sulfate		1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	7.6	U	ug/kg	7.6	2.8	U	ug/kg	2.8
4,4-DDT		1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	7.6	U	ug/kg	7.6	2.8	U	ug/kg	2.8
Methoxychlor		3	U	ug/kg	3	3	U	ug/kg	3	16	U	ug/kg	16	5.8	U	ug/kg	5.8
Endrin aldehyde		1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	7.6	U	ug/kg	7.6	2.8	U	ug/kg	2.8
Endrin ketone		1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	7.6	U	ug/kg	7.6	2.8	U	ug/kg	2.8
Chlordane		7.4	U	ug/kg	7.4	7.4	U	ug/kg	7.4	39	U	ug/kg	39	45		ug/kg	
Chlorobenzilate		22	U	ug/kg	22	22	U	ug/kg	22	120	U	ug/kg	120	43	U	ug/kg	43
Diallate		44	U	ug/kg	44	44	U	ug/kg	44	230	U	ug/kg	230	86	U	ug/kg	86
Toxaphene		36	U	ug/kg	36	36	U	ug/kg	36	190	U	ug/kg	190	71	U	ug/kg	71
Isodrin		.88	U	ug/kg	.88	.88	U	ug/kg	.88	4.6	U	ug/kg	4.6	1.7	U	ug/kg	1.7
Kepone		44	U	ug/kg	44	40	U	ug/kg	40	220	U	ug/kg	220	93	U	ug/kg	93
Aroclor-1016		36	U	ug/kg	36	36	U	ug/kg	36	190	U	ug/kg	190	71	U	ug/kg	71
Aroclor-1221		74	U	ug/kg	74	74	U	ug/kg	74	390	U	ug/kg	390	140	U	ug/kg	140
Aroclor-1232		74	U	ug/kg	74	74	U	ug/kg	74	390	U	ug/kg	390	140	U	ug/kg	140
Aroclor-1242		36	U	ug/kg	36	36	U	ug/kg	36	190	U	ug/kg	190	71	U	ug/kg	71
Aroclor-1248		36	U	ug/kg	36	36	U	ug/kg	36	190	U	ug/kg	190	71	U	ug/kg	71
Aroclor-1254		19	U	ug/kg	19	19	U	ug/kg	19	99	U	ug/kg	99	36	U	ug/kg	36
Aroclor-1260		19	U	ug/kg	19	19	U	ug/kg	19	99	U	ug/kg	99	17	J	ug/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:	23750008
Site	GROUP2
Locator	MP16MS3S8
Collect Date:	14-JAN-93

		VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg				
alpha-BHC		.76	U	ug/kg	.76
beta-BHC		1.5	U	ug/kg	1.5
delta-BHC		.76	U	ug/kg	.76
gamma-BHC (Lindane)		.76	U	ug/kg	.76
Heptachlor		.76	U	ug/kg	.76
Aldrin		.76	U	ug/kg	.76
Heptachlor epoxide		.76	U	ug/kg	.76
Endosulfan I		.76	U	ug/kg	.76
Dieldrin		.76	U	ug/kg	.76
4,4-DDE		.76	U	ug/kg	.76
Endrin		1.5	U	ug/kg	1.5
Endosulfan II		1.5	U	ug/kg	1.5
4,4-DDD		1.5	U	ug/kg	1.5
Endosulfan sulfate		1.5	U	ug/kg	1.5
4,4-DDT		1.5	U	ug/kg	1.5
Methoxychlor		3.1	U	ug/kg	3.1
Endrin aldehyde		1.5	U	ug/kg	1.5
Endrin ketone		1.5	U	ug/kg	1.5
Chlordane		7.6	U	ug/kg	7.6
Chlorobenzilate		23	U	ug/kg	23
Diallate		45	U	ug/kg	45
Toxaphene		38	U	ug/kg	38
Isodrin		.91	U	ug/kg	.91
Kepone		43	U	ug/kg	43
Aroclor-1016		38	U	ug/kg	38
Aroclor-1221		76	U	ug/kg	76
Aroclor-1232		76	U	ug/kg	76
Aroclor-1242		38	U	ug/kg	38
Aroclor-1248		38	U	ug/kg	38
Aroclor-1254		19	U	ug/kg	19
Aroclor-1260		19	U	ug/kg	19

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:	34889004				34889005				34889006				34889007			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	MP16MS1D8				MP16MS2S2				MP16MS2S8				MP16MS3S2			
Collect Date:	14-JAN-93				14-JAN-93				14-JAN-93				14-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	2.6	U	mg/kg	2.6	2.6	U	mg/kg	2.6	2.8	U	mg/kg	2.8	2.7	J	mg/kg	
Arsenic	.78	J	mg/kg		.68	J	mg/kg		3.5		mg/kg		.66	J	mg/kg	
Barium	3.9	J	mg/kg		5.6	J	mg/kg		7.7	J	mg/kg		15.8	J	mg/kg	
Beryllium	.11	U	mg/kg	.11	.13	J	mg/kg		.28	J	mg/kg		.11	U	mg/kg	.11
Cadmium	.26	UJ	mg/kg		.26	UJ	mg/kg		.28	UJ	mg/kg		.35	J	mg/kg	
Chromium	1.8	J	mg/kg		1.8	J	mg/kg		9.7	J	mg/kg		6.5	J	mg/kg	
Cobalt	1.3	U	mg/kg	1.3	1.3	U	mg/kg	1.3	1.4	J	mg/kg		1.2	U	mg/kg	1.2
Copper	.79	J	mg/kg		1	J	mg/kg		1.9	J	mg/kg		6.5		mg/kg	
Cyanide	1		mg/kg		.16	U	mg/kg	.16	.17	U	mg/kg	.17	.16	U	mg/kg	.16
Lead	.7		mg/kg		1.1		mg/kg		2.5		mg/kg		9.9		mg/kg	
Mercury	.03	R	mg/kg		.05	J	mg/kg		1.1	J	mg/kg		.04	J	mg/kg	
Nickel	1.7	U	mg/kg	1.7	1.7	U	mg/kg	1.7	2.1	J	mg/kg		4.3	J	mg/kg	
Selenium	.11	U	mg/kg	.11	.11	U	mg/kg	.11	.36	J	mg/kg		.14	J	mg/kg	
Silver	.46	U	mg/kg	.46	.46	U	mg/kg	.46	.49	U	mg/kg	.49	.44	U	mg/kg	.44
Thallium	.15	J	mg/kg		.15	U	mg/kg	.15	.23	J	mg/kg		.15	U	mg/kg	.15
Tin	3		mg/kg		2.5	U	mg/kg	2.5	2.7	U	mg/kg	2.7	2.5	U	mg/kg	2.5
Vanadium	1.8	J	mg/kg		3.5	J	mg/kg		10.6	J	mg/kg		13.5	J	mg/kg	
Zinc	4.7	J	mg/kg		5.3	J	mg/kg		11.2	J	mg/kg		19.3	J	mg/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Sub-Surface Soil Data

Lab Sample Number:	34889008
Site	GROUP2
Locator	MP16MS3S8
Collect Date:	14-JAN-93

		VALUE	QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg				
Antimony		3.3	J	mg/kg	
Arsenic		.57	J	mg/kg	
Barium		4	J	mg/kg	
Beryllium		.11	U	mg/kg	.11
Cadmium		.27	UJ	mg/kg	
Chromium		.85	UJ	mg/kg	
Cobalt		1.3	U	mg/kg	1.3
Copper		.63	J	mg/kg	
Cyanide		.17	U	mg/kg	.17
Lead		.46	J	mg/kg	
Mercury		.13	J	mg/kg	
Nickel		1.8	U	mg/kg	1.8
Selenium		.12	J	mg/kg	
Silver		.48	U	mg/kg	.48
Thallium		.18	J	mg/kg	
Tin		2.7	U	mg/kg	2.7
Vanadium		1.6	J	mg/kg	
Zinc		3.3	J	mg/kg	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

APPENDIX A-12

GROUNDWATER SOIL SAMPLE ANALYSES, SWMU 16

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	M7424001				23904009				35072007				GN-0126100			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	16MW001I				16MW1D				16MW1D				16MW1D			
Collect Date:	29-JUN-94				29-JAN-93				29-JAN-93				29-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES ug/l																
Chloromethane	10	UJ	ug/l		-		ug/l		10	U	ug/l	10	1	U	ug/l	1
Bromomethane	10	UJ	ug/l		-		ug/l		10	U	ug/l	10	1	U	ug/l	1
Vinyl chloride	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	1	U	ug/l	1
Chloroethane	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	1	U	ug/l	1
Methylene chloride	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	1	U	ug/l	1
Acetone	10	U	ug/l	10	-		ug/l		15	U	ug/l	15	-		ug/l	
Carbon disulfide	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
1,1-Dichloroethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	1	U	ug/l	1
1,1-Dichloroethene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	1	U	ug/l	1
1,2-Dichloroethene (total)	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Chloroform	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	1	U	ug/l	1
1,2-Dichloroethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	1	U	ug/l	1
2-Butanone	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	-		ug/l	
1,1,1-Trichloroethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	1	U	ug/l	1
Carbon tetrachloride	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	1	U	ug/l	1
Bromodichloromethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	1	U	ug/l	1
1,2-Dichloropropane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	1	U	ug/l	1
cis-1,3-Dichloropropene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	1	U	ug/l	1
Trichloroethene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	1	U	ug/l	1
Dibromochloromethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	1	U	ug/l	1
1,1,2-Trichloroethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	1	U	ug/l	1
Benzene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
trans-1,3-Dichloropropene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	1	U	ug/l	1
Bromoform	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	1	U	ug/l	1
4-Methyl-2-pentanone	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	-		ug/l	
2-Hexanone	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	-		ug/l	
Tetrachloroethene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	1	U	ug/l	1
1,1,2,2-Tetrachloroethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	1	U	ug/l	1
Toluene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Chlorobenzene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	1	U	ug/l	1
Ethylbenzene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Styrene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Xylenes (total)	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Dichlorodifluoromethane	10	UJ	ug/l		-		ug/l		10	U	ug/l	10	1	U	ug/l	1
Trichlorofluoromethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	1	U	ug/l	1
1,3-Dichlorobenzene	5	U	ug/l	5	10	U	ug/l	10	5	U	ug/l	5	1	U	ug/l	1
Acrolein	100	U	ug/l	100	-		ug/l		100	U	ug/l	100	-		ug/l	
Iodomethane	10	UJ	ug/l		-		ug/l		10	U	ug/l	10	-		ug/l	
1,4-Dichlorobenzene	10	U	ug/l	10	10	U	ug/l	10	5	U	ug/l	5	1	U	ug/l	1
Acrylonitrile	100	U	ug/l	100	-		ug/l		100	U	ug/l	100	-		ug/l	
Dibromomethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
1,2-Dichlorobenzene	10	U	ug/l	10	10	U	ug/l	10	5	U	ug/l	5	1	U	ug/l	1
2-Chloroethylvinylether	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	1	U	ug/l	1
Ethyl methacrylate	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
1,2,3-Trichloropropane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
trans-1,4-Dichloro-2-butene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Isobutyl alcohol	200	U	ug/l	200	-		ug/l		200	U	ug/l	200	-		ug/l	
1,1,1,2-Tetrachloroethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
1,2-Dibromo-3-chloropropane	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	-		ug/l	
1,2-Dibromoethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	M7424001				23904009				35072007				GW-0126100		
Site	GROUP2				GROUP2				GROUP2				GROUP2		
Locator	16MW001I				16MW1D				16MW1D				16MW1D		
Collect Date:	29-JUN-94				29-JAN-93				29-JAN-93				29-JAN-93		
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	200	R	ug/l		-		ug/l		200	R	ug/l		-		ug/l	
3-Chloropropene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Acetonitrile	100	U	ug/l	100	-		ug/l		100	U	ug/l	100	-		ug/l	
Chloroprene	200	U	ug/l	200	-		ug/l		200	U	ug/l	200	-		ug/l	
Methacrylonitrile	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Methyl methacrylate	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	-		ug/l	
Pentachloroethane	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	-		ug/l	
Propionitrile	100	U	ug/l	100	-		ug/l		100	U	ug/l	100	-		ug/l	
Vinyl acetate	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	-		ug/l	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23918007			23918007RE			M7410003			23904007		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		16MW2			16MW2			16MW002S			16MW3		
Collect Date:		01-FEB-93			01-FEB-93			28-JUN-94			29-JAN-93		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
VOLATILES	ug/l												
Chloromethane		10 U	ug/l	10	-	ug/l		10 U	ug/l	10	-	ug/l	
Bromomethane		10 U	ug/l	10	-	ug/l		10 UJ	ug/l		-	ug/l	
Vinyl chloride		10 U	ug/l	10	-	ug/l		10 U	ug/l	10	-	ug/l	
Chloroethane		10 U	ug/l	10	-	ug/l		10 U	ug/l	10	-	ug/l	
Methylene chloride		5 U	ug/l	5	-	ug/l		5 U	ug/l	5	-	ug/l	
Acetone		10 U	ug/l	10	-	ug/l		10 U	ug/l	10	-	ug/l	
Carbon disulfide		5 U	ug/l	5	-	ug/l		5 U	ug/l	5	-	ug/l	
1,1-Dichloroethane		5 U	ug/l	5	-	ug/l		5 U	ug/l	5	-	ug/l	
1,1-Dichloroethene		5 U	ug/l	5	-	ug/l		5 U	ug/l	5	-	ug/l	
1,2-Dichloroethene (total)		5 U	ug/l	5	-	ug/l		5 U	ug/l	5	-	ug/l	
Chloroform		5 U	ug/l	5	-	ug/l		5 U	ug/l	5	-	ug/l	
1,2-Dichloroethane		5 U	ug/l	5	-	ug/l		5 U	ug/l	5	-	ug/l	
2-Butanone		10 U	ug/l	10	-	ug/l		10 U	ug/l	10	-	ug/l	
1,1,1-Trichloroethane		5 U	ug/l	5	-	ug/l		5 U	ug/l	5	-	ug/l	
Carbon tetrachloride		5 U	ug/l	5	-	ug/l		5 U	ug/l	5	-	ug/l	
Bromodichloromethane		5 U	ug/l	5	-	ug/l		5 U	ug/l	5	-	ug/l	
1,2-Dichloropropane		5 U	ug/l	5	-	ug/l		5 U	ug/l	5	-	ug/l	
cis-1,3-Dichloropropene		5 U	ug/l	5	-	ug/l		5 U	ug/l	5	-	ug/l	
Trichloroethene		5 U	ug/l	5	-	ug/l		5 U	ug/l	5	-	ug/l	
Dibromochloromethane		5 U	ug/l	5	-	ug/l		5 U	ug/l	5	-	ug/l	
1,1,2-Trichloroethane		5 U	ug/l	5	-	ug/l		5 U	ug/l	5	-	ug/l	
Benzene		5 U	ug/l	5	-	ug/l		5 U	ug/l	5	-	ug/l	
trans-1,3-Dichloropropene		5 U	ug/l	5	-	ug/l		5 U	ug/l	5	-	ug/l	
Bromoform		5 U	ug/l	5	-	ug/l		5 U	ug/l	5	-	ug/l	
4-Methyl-2-pentanone		10 U	ug/l	10	-	ug/l		10 U	ug/l	10	-	ug/l	
2-Hexanone		10 U	ug/l	10	-	ug/l		10 U	ug/l	10	-	ug/l	
Tetrachloroethene		5 U	ug/l	5	-	ug/l		5 U	ug/l	5	-	ug/l	
1,1,2,2-Tetrachloroethane		5 U	ug/l	5	-	ug/l		5 U	ug/l	5	-	ug/l	
Toluene		5 U	ug/l	5	-	ug/l		5 U	ug/l	5	-	ug/l	
Chlorobenzene		5 U	ug/l	5	-	ug/l		5 U	ug/l	5	-	ug/l	
Ethylbenzene		5 U	ug/l	5	-	ug/l		5 U	ug/l	5	-	ug/l	
Styrene		5 U	ug/l	5	-	ug/l		5 U	ug/l	5	-	ug/l	
Xylenes (total)		5 U	ug/l	5	-	ug/l		5 U	ug/l	5	-	ug/l	
Dichlorodifluoromethane		10 U	ug/l	10	-	ug/l		10 UJ	ug/l		-	ug/l	
Trichlorofluoromethane		5 U	ug/l	5	-	ug/l		5 U	ug/l	5	-	ug/l	
1,3-Dichlorobenzene		10 U	ug/l	10	10 R	ug/l		5 U	ug/l	5	10 U	ug/l	10
Acrolein		100 U	ug/l	100	-	ug/l		100 U	ug/l	100	-	ug/l	
Iodomethane		10 U	ug/l	10	-	ug/l		10 UJ	ug/l		-	ug/l	
1,4-Dichlorobenzene		10 U	ug/l	10	10 R	ug/l		5 U	ug/l	5	10 U	ug/l	10
Acrylonitrile		100 U	ug/l	100	-	ug/l		100 U	ug/l	100	-	ug/l	

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23918007				23918007RE				M7410003				23904007			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	16MW2				16MW2				16MW002S				16MW3			
Collect Date:	01-FEB-93				01-FEB-93				28-JUN-94				29-JAN-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
1,2-Dichlorobenzene	10	U	ug/l	10	10	R	ug/l		5	U	ug/l	5	10	U	ug/l	10
2-Chloroethylvinylether	10	R	ug/l		-		ug/l		10	U	ug/l	10	-		ug/l	
Ethyl methacrylate	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
1,2,3-Trichloropropane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
trans-1,4-Dichloro-2-butene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Isobutyl alcohol	200	R	ug/l		-		ug/l		200	U	ug/l	200	-		ug/l	
1,1,1,2-Tetrachloroethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
1,2-Dibromo-3-chloropropane	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	-		ug/l	
1,2-Dibromoethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
1,4-Dioxane	200	R	ug/l		-		ug/l		200	R	ug/l		-		ug/l	
3-Chloropropene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Acetonitrile	100	U	ug/l	100	-		ug/l		100	U	ug/l	100	-		ug/l	
Chloroprene	200	U	ug/l	200	-		ug/l		200	U	ug/l	200	-		ug/l	
Methacrylonitrile	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	-		ug/l	
Methyl methacrylate	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	-		ug/l	
Pentachloroethane	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	-		ug/l	
Propionitrile	100	U	ug/l	100	-		ug/l		100	U	ug/l	100	-		ug/l	
Vinyl acetate	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	-		ug/l	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	35072005				23904008				35072006				M7410004			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	16MW3				16MW3D				16MW3D				16MW003S			
Collect Date:	29-JAN-93				29-JAN-93				29-JAN-93				28-JUN-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES ug/l																
Chloromethane	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Bromomethane	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Vinyl chloride	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Chloroethane	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Methylene chloride	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Acetone	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Carbon disulfide	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	1	J	ug/l	
1,1-Dichloroethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,1-Dichloroethene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloroethene (total)	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Chloroform	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloroethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
2-Butanone	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
1,1,1-Trichloroethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Carbon tetrachloride	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Bromodichloromethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloropropane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
cis-1,3-Dichloropropene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Trichloroethene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Dibromochloromethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,1,2-Trichloroethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Benzene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
trans-1,3-Dichloropropene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Bromoform	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
4-Methyl-2-pentanone	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
2-Hexanone	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Tetrachloroethene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,1,2,2-Tetrachloroethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Toluene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Chlorobenzene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Ethylbenzene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Styrene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Xylenes (total)	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Dichlorodifluoromethane	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	UJ	ug/l	
Trichlorofluoromethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,3-Dichlorobenzene	5	U	ug/l	5	10	U	ug/l	10	5	U	ug/l	5	10	U	ug/l	10
Acrolein	100	U	ug/l	100	-		ug/l		100	U	ug/l	100	100	U	ug/l	100
Iodomethane	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	UJ	ug/l	
1,4-Dichlorobenzene	5	U	ug/l	5	10	U	ug/l	10	5	U	ug/l	5	5	U	ug/l	5
Acrylonitrile	100	U	ug/l	100	-		ug/l		100	U	ug/l	100	100	U	ug/l	100

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Group2 Ground Water Data

Lab Sample Number:	35072005				23904008				35072006				M7410004			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	16MW3				16MW3D				16MW3D				16MW003S			
Collect Date:	29-JAN-93				29-JAN-93				29-JAN-93				28-JUN-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,2-Dichlorobenzene	5	U	ug/l	5	10	U	ug/l	10	5	U	ug/l	5	10	U	ug/l	10
2-Chloroethylvinylether	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Ethyl methacrylate	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,2,3-Trichloropropane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
trans-1,4-Dichloro-2-butene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Isobutyl alcohol	200	U	ug/l	200	-		ug/l		200	U	ug/l	200	200	U	ug/l	200
1,1,1,2-Tetrachloroethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,2-Dibromo-3-chloropropane	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
1,2-Dibromoethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
1,4-Dioxane	200	R	ug/l		-		ug/l		200	R	ug/l		200	R	ug/l	
3-Chloropropene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Acetonitrile	100	U	ug/l	100	-		ug/l		100	U	ug/l	100	100	U	ug/l	100
Chloroprene	200	U	ug/l	200	-		ug/l		200	U	ug/l	200	200	U	ug/l	200
Methacrylonitrile	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5	U	ug/l	5
Methyl methacrylate	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Pentachloroethane	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
Propionitrile	100	U	ug/l	100	-		ug/l		100	U	ug/l	100	100	U	ug/l	100
Vinyl acetate	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		M7472002				M7472002		
Site		GROUP2				GROUP2		
Locator		16MW004S				16MW004S		
Collect Date:		07-JUL-94				07-JUL-94		
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES	ug/l								
Chloromethane		10	U	ug/l	10	1	U	ug/l	1
Bromomethane		10	UJ	ug/l		1	U	ug/l	1
Vinyl chloride		10	U	ug/l	10	1	U	ug/l	1
Chloroethane		10	U	ug/l	10	1	U	ug/l	1
Methylene chloride		5	U	ug/l	5	1	U	ug/l	1
Acetone		10	U	ug/l	10	-		ug/l	
Carbon disulfide		5	U	ug/l	5	-		ug/l	
1,1-Dichloroethane		5	U	ug/l	5	1	U	ug/l	1
1,1-Dichloroethene		5	U	ug/l	5	1	U	ug/l	1
1,2-Dichloroethene (total)		5	U	ug/l	5	-		ug/l	
Chloroform		5	U	ug/l	5	1	U	ug/l	1
1,2-Dichloroethane		5	U	ug/l	5	1	U	ug/l	1
2-Butanone		10	U	ug/l	10	-		ug/l	
1,1,1-Trichloroethane		5	U	ug/l	5	1	U	ug/l	1
Carbon tetrachloride		5	U	ug/l	5	1	U	ug/l	1
Bromodichloromethane		5	U	ug/l	5	1	U	ug/l	1
1,2-Dichloropropane		5	U	ug/l	5	1	U	ug/l	1
cis-1,3-Dichloropropene		5	U	ug/l	5	1	U	ug/l	1
Trichloroethene		5	U	ug/l	5	1	U	ug/l	1
Dibromochloromethane		5	U	ug/l	5	1	U	ug/l	1
1,1,2-Trichloroethane		5	U	ug/l	5	1	U	ug/l	1
Benzene		5	U	ug/l	5	-		ug/l	
trans-1,3-Dichloropropene		5	U	ug/l	5	1	U	ug/l	1
Bromoform		5	U	ug/l	5	1	U	ug/l	1
4-Methyl-2-pentanone		10	U	ug/l	10	-		ug/l	
2-Hexanone		10	U	ug/l	10	-		ug/l	
Tetrachloroethene		5	U	ug/l	5	1	U	ug/l	1
1,1,2,2-Tetrachloroethane		5	U	ug/l	5	1	U	ug/l	1
Toluene		5	U	ug/l	5	-		ug/l	
Chlorobenzene		5	U	ug/l	5	1	U	ug/l	1
Ethylbenzene		5	U	ug/l	5	-		ug/l	
Styrene		5	U	ug/l	5	-		ug/l	
Xylenes (total)		5	U	ug/l	5	-		ug/l	
Dichlorodifluoromethane		10	UJ	ug/l		1	U	ug/l	1
Trichlorofluoromethane		5	U	ug/l	5	5	U	ug/l	5
1,3-Dichlorobenzene		5	U	ug/l	5	1	U	ug/l	1
Acrolein		100	U	ug/l	100	-		ug/l	
Iodomethane		10	UJ	ug/l		-		ug/l	
1,4-Dichlorobenzene		5	U	ug/l	5	1	U	ug/l	1
Acrylonitrile		100	U	ug/l	100	-		ug/l	

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	M7472002				M7472002			
Site	GROUP2				GROUP2			
Locator	16MW004S				16MW004S			
Collect Date:	07-JUL-94				07-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/l	5	-		ug/l	
1,2-Dichlorobenzene	5	U	ug/l	5	1	U	ug/l	1
2-Chloroethylvinylether	10	U	ug/l	10	-		ug/l	
Ethyl methacrylate	5	U	ug/l	5	-		ug/l	
1,2,3-Trichloropropane	5	U	ug/l	5	-		ug/l	
trans-1,4-Dichloro-2-butene	5	U	ug/l	5	-		ug/l	
Isobutyl alcohol	200	U	ug/l	200	-		ug/l	
1,1,1,2-Tetrachloroethane	5	U	ug/l	5	-		ug/l	
1,2-Dibromo-3-chloropropane	10	U	ug/l	10	-		ug/l	
1,2-Dibromoethane	5	U	ug/l	5	-		ug/l	
1,4-Dioxane	200	R	ug/l		-		ug/l	
3-Chloropropene	5	U	ug/l	5	-		ug/l	
Acetonitrile	100	U	ug/l	100	-		ug/l	
Chloroprene	200	U	ug/l	200	-		ug/l	
Methacrylonitrile	5	U	ug/l	5	-		ug/l	
Methyl methacrylate	10	UJ	ug/l		-		ug/l	
Pentachloroethane	10	U	ug/l	10	-		ug/l	
Propionitrile	100	U	ug/l	100	-		ug/l	
Vinyl acetate	10	U	ug/l	10	-		ug/l	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	M7424001			23904009			23918007			23918007RE		
Site	GROUP2			GROUP2			GROUP2			GROUP2		
Locator	16MW001I			16MW1D			16MW2			16MW2		
Collect Date:	29-JUN-94			29-JAN-93			01-FEB-93			01-FEB-93		
	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES ug/l												
N-Nitrosodimethylamine	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Phenol	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Aniline	10 UJ	ug/l		10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
bis (2-Chloroethyl) ether	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Benzyl Alcohol	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
2-Methylphenol	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
bis(2-Chloroisopropyl)ether	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
N-Nitroso-di-n-propylamine	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Hexachloroethane	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Nitrobenzene	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Isophorone	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
2-Nitrophenol	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
2,4-Dimethylphenol	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Benzoic acid	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 R	ug/l	
bis(2-Chloroethoxy)methane	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
2,4-Dichlorophenol	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
1,2,4-Trichlorobenzene	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Naphthalene	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
4-Chloroaniline	10 UJ	ug/l		10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Hexachlorobutadiene	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
4-Chloro-3-methylphenol	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
2-Methylnaphthalene	10 U	ug/l	10	10 U	ug/l	10	5 J	ug/l		13 R	ug/l	
Hexachlorocyclopentadiene	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
2,4,6-Trichlorophenol	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Dimethylphthalate	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
2,4,5-Trichlorophenol	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 R	ug/l	
2-Chloronaphthalene	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
2-Nitroaniline	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 R	ug/l	
Acenaphthylene	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
2,6-Dinitrotoluene	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
3-Nitroaniline	50 UJ	ug/l		50 U	ug/l	50	50 U	ug/l	50	50 R	ug/l	
Acenaphthene	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
2,4-Dinitrophenol	50 UJ	ug/l		50 U	ug/l	50	50 U	ug/l	50	50 R	ug/l	
4-Nitrophenol	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 R	ug/l	
Dibenzofuran	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
2,4-Dinitrotoluene	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Diethylphthalate	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
4-Chlorophenyl-phenylether	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Fluorene	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
4-Nitroaniline	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 R	ug/l	
4,6-Dinitro-2-methylphenol	50 UJ	ug/l		50 U	ug/l	50	50 U	ug/l	50	50 R	ug/l	
N-Nitrosodiphenylamine (1)	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
1,2-Diphenylhydrazine	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
4-Bromophenyl-phenylether	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Hexachlorobenzene	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Pentachlorophenol	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 R	ug/l	
Phenanthrene	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Anthracene	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Di-n-Butylphthalate	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	
Fluoranthene	10 U	ug/l	10	10 U	ug/l	10	10 U	ug/l	10	10 R	ug/l	

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Group2 Ground Water Data

Lab Sample Number:	M7424001				23904009				23918007				23918007RE			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	16MW0011				16MW1D				16MW2				16MW2			
Collect Date:	29-JUN-94				29-JAN-93				01-FEB-93				01-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Butylbenzylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
3,3'-Dichlorobenzidine	20	U	ug/l	20	20	U	ug/l	20	20	U	ug/l	20	20	R	ug/l	
Benzo(a)anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Chrysene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
bis(2-Ethylhexyl)phthalate	5	J	ug/l		3	J	ug/l		3	J	ug/l		27	R	ug/l	
Di-n-octylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Benzo(b)fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Benzo(k)fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Benzo(a)pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Indeno(1,2,3-cd)pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Dibenz(a,h)anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Benzo(g,h,i)perylene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
2-Picoline	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
Methyl methanesulfonate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Ethyl methanesulfonate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Acetophenone	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
N-Nitrosopiperidine	10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Phenyl-tert-butylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
2,6-Dichlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
N-Nitroso-di-n-butylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
N-Nitrosodiethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
N-Nitrosopyrrolidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Benzidine	50	UJ	ug/l		50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
1,2,4,5-Tetrachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
Pentachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
1-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
2-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
2,3,4,6-Tetrachlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Phenacetin	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
4-Aminobiphenyl	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
Pentachloronitrobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
Pronamide	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
p-(Dimethylamino)azobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
7,12-Dimethylbenz(A)Anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
3-Methylcholanthrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Pyridine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
N-Nitrosomethylethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
N-Nitrosomorpholine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
o-Toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Hexachloropropene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
p-Phenylenediamine	500	UJ	ug/l		50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
Safrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
Isosafrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
1,4-Naphthoquinone	1000	U	ug/l	1000	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
1,3-Dinitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
5-Nitro-o-toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
1,3,5-Trinitrobenzene	10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
4-Nitroquinoline-1-oxide	500	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Methapyrilene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
3,3'-Dimethylbenzidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
Hexachlorophene	500	UJ	ug/l		50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	

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Group2 Ground Water Data

Lab Sample Number:	M7424001				23904009				23918007				23918007RE			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	16MW001I				16MW1D				16MW2				16MW2			
Collect Date:	29-JUN-94				29-JAN-93				01-FEB-93				01-FEB-93			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Aramite	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
2-Chlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	
3- & 4-Methylphenol (2)	10	U	ug/l	10	-		ug/l		-		ug/l		-		ug/l	
Hexachloropropene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	R	ug/l	
2-Acetylaminofluorene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	ug/l	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	M7410003				23904007				23904008				M7410004			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	16MW002S				16MW3				16MW3D				16MW003S			
Collect Date:	28-JUN-94				29-JAN-93				29-JAN-93				28-JUN-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/l																
N-Nitrosodimethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Aniline	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
bis (2-Chloroethyl) ether	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzyl Alcohol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Methylphenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
bis(2-Chloroisopropyl)ether	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitroso-di-n-propylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachloroethane	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Nitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Isophorone	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Nitrophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4-Dimethylphenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzoic acid	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
bis(2-Chloroethoxy)methane	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4-Dichlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,2,4-Trichlorobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Naphthalene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Chloroaniline	10	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10	10	UJ	ug/l	
Hexachlorobutadiene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Chloro-3-methylphenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Methylnaphthalene	6	J	ug/l		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorocyclopentadiene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4,6-Trichlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Dimethylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4,5-Trichlorophenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Chloronaphthalene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Nitroaniline	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Acenaphthylene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,6-Dinitrotoluene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3-Nitroaniline	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Acenaphthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4-Dinitrophenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
4-Nitrophenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Dibenzofuran	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4-Dinitrotoluene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Diethylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Chlorophenyl-phenylether	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Fluorene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Nitroaniline	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50

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Group2 Ground Water Data

Lab Sample Number:	M7410003				23904007				23904008				M7410004			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	16MW002S				16MW3				16MW3D				16MW003S			
Collect Date:	28-JUN-94				29-JAN-93				29-JAN-93				28-JUN-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
N-Nitrosodiphenylamine (1)	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,2-Diphenylhydrazine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Bromophenyl-phenylether	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pentachlorophenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Phenanthrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Di-n-Butylphthalate	10	U	ug/l	10	14	U	ug/l	14	10	U	ug/l	10	10	U	ug/l	10
Fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Butylbenzylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3,3'-Dichlorobenzidine	20	U	ug/l	20	20	U	ug/l	20	20	U	ug/l	20	20	U	ug/l	20
Benzo(a)anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Chrysene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
bis(2-Ethylhexyl)phthalate	10	U	ug/l	10	10	U	ug/l	10	3	J	ug/l		10	U	ug/l	10
Di-n-octylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(b)fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(k)fluoranthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(a)pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Indeno(1,2,3-cd)pyrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Dibenz(a,h)anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo(g,h,i)perylene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Picoline	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Methyl methanesulfonate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Ethyl methanesulfonate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Acetophenone	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopiperidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenyl-tert-butylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2,6-Dichlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitroso-di-n-butylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosodiethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopyrrolidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzidine	50	UJ	ug/l		50	U	ug/l	50	50	U	ug/l	50	50	UJ	ug/l	
1,2,4,5-Tetrachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pentachlorobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Naphthylamine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2,3,4,6-Tetrachlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenacetin	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Aminobiphenyl	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pentachloronitrobenzene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pronamide	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
p-(Dimethylamino)azobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
7,12-Dimethylbenz(A)Anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3-Methylcholanthrene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pyridine	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
N-Nitrosomethylethylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosomorpholine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
o-Toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachloropropene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
p-Phenylenediamine	500	UJ	ug/l		50	U	ug/l	50	50	U	ug/l	50	500	UJ	ug/l	

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	M7410003				23904007				23904008				M7410004			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	16MW002S				16MW3				16MW3D				16MW003S			
Collect Date:	28-JUN-94				29-JAN-93				29-JAN-93				28-JUN-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Isosafrole	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1,4-Naphthoquinone	1000	U	ug/l	1000	50	U	ug/l	50	50	U	ug/l	50	1000	U	ug/l	1000
1,3-Dinitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
5-Nitro-o-toluidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,3,5-Trinitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Nitroquinoline-1-oxide	500	UJ	ug/l		10	U	ug/l	10	10	U	ug/l	10	500	UJ	ug/l	
Methapyrilene	50	UJ	ug/l		50	U	ug/l	50	50	U	ug/l	50	50	UJ	ug/l	
3,3'-Dimethylbenzidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorophene	500	UJ	ug/l		50	U	ug/l	50	50	U	ug/l	50	500	UJ	ug/l	
Aramite	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Chlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3- & 4-Methylphenol (2)	10	U	ug/l	10	-		ug/l		-		ug/l		10	U	ug/l	10
Hexachloropropene	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Acetylaminofluorene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	M7472002
Site	GROUP2
Locator	16MW004S
Collect Date:	07-JUL-94

		VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/l				
N-Nitrosodimethylamine		10	U	ug/l	10
Phenol		10	U	ug/l	10
Aniline		10	UJ	ug/l	
bis (2-Chloroethyl) ether		10	U	ug/l	10
Benzyl Alcohol		10	U	ug/l	10
2-Methylphenol		10	U	ug/l	10
bis(2-Chloroisopropyl)ether		10	U	ug/l	10
N-Nitroso-di-n-propylamine		10	U	ug/l	10
Hexachloroethane		10	U	ug/l	10
Nitrobenzene		10	U	ug/l	10
Isophorone		10	U	ug/l	10
2-Nitrophenol		10	U	ug/l	10
2,4-Dimethylphenol		10	U	ug/l	10
Benzoic acid		50	U	ug/l	50
bis(2-Chloroethoxy)methane		10	U	ug/l	10
2,4-Dichlorophenol		10	U	ug/l	10
1,2,4-Trichlorobenzene		10	U	ug/l	10
Naphthalene		10	U	ug/l	10
4-Chloroaniline		10	UJ	ug/l	
Hexachlorobutadiene		10	U	ug/l	10
4-Chloro-3-methylphenol		10	U	ug/l	10
2-Methylnaphthalene		10	U	ug/l	10
Hexachlorocyclopentadiene		10	U	ug/l	10
2,4,6-Trichlorophenol		10	U	ug/l	10
Dimethylphthalate		10	U	ug/l	10
2,4,5-Trichlorophenol		50	U	ug/l	50
2-Chloronaphthalene		10	U	ug/l	10
2-Nitroaniline		50	U	ug/l	50
Acenaphthylene		10	U	ug/l	10
2,6-Dinitrotoluene		10	U	ug/l	10
3-Nitroaniline		50	UJ	ug/l	
Acenaphthene		10	U	ug/l	10
2,4-Dinitrophenol		50	UJ	ug/l	
4-Nitrophenol		50	U	ug/l	50
Dibenzofuran		10	U	ug/l	10
2,4-Dinitrotoluene		10	U	ug/l	10
Diethylphthalate		10	U	ug/l	10
4-Chlorophenyl-phenylether		10	U	ug/l	10
Fluorene		10	U	ug/l	10
4-Nitroaniline		50	U	ug/l	50

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number: M7472002
Site GROUP2
Locator 16MW004S
Collect Date: 07-JUL-94

	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	50	UJ	ug/l	
N-Nitrosodiphenylamine (1)	10	U	ug/l	10
1,2-Diphenylhydrazine	10	U	ug/l	10
4-Bromophenyl-phenylether	10	U	ug/l	10
Hexachlorobenzene	10	U	ug/l	10
Pentachlorophenol	50	U	ug/l	50
Phenanthrene	10	U	ug/l	10
Anthracene	10	U	ug/l	10
Di-n-Butylphthalate	10	U	ug/l	10
Fluoranthene	10	U	ug/l	10
Pyrene	10	U	ug/l	10
Butylbenzylphthalate	10	U	ug/l	10
3,3'-Dichlorobenzidine	20	U	ug/l	20
Benzo(a)anthracene	10	U	ug/l	10
Chrysene	10	U	ug/l	10
bis(2-Ethylhexyl)phthalate	10	U	ug/l	10
Di-n-octylphthalate	10	U	ug/l	10
Benzo(b)fluoranthene	10	U	ug/l	10
Benzo(k)fluoranthene	10	U	ug/l	10
Benzo(a)pyrene	10	U	ug/l	10
Indeno(1,2,3-cd)pyrene	10	U	ug/l	10
Dibenz(a,h)anthracene	10	U	ug/l	10
Benzo(g,h,i)perylene	10	U	ug/l	10
2-Picoline	50	U	ug/l	50
Methyl methanesulfonate	10	U	ug/l	10
Ethyl methanesulfonate	10	U	ug/l	10
Acetophenone	10	U	ug/l	10
N-Nitrosopiperidine	10	UJ	ug/l	
Phenyl-tert-butylamine	50	U	ug/l	50
2,6-Dichlorophenol	10	U	ug/l	10
N-Nitroso-di-n-butylamine	10	U	ug/l	10
N-Nitrosodiethylamine	10	U	ug/l	10
N-Nitrosopyrrolidine	10	U	ug/l	10
Benzidine	50	UJ	ug/l	
1,2,4,5-Tetrachlorobenzene	50	U	ug/l	50
Pentachlorobenzene	50	U	ug/l	50
1-Naphthylamine	50	U	ug/l	50
2-Naphthylamine	50	U	ug/l	50
2,3,4,6-Tetrachlorophenol	10	U	ug/l	10
Phenacetin	10	UJ	ug/l	
4-Aminobiphenyl	50	U	ug/l	50
Pentachloronitrobenzene	50	U	ug/l	50
Pronamide	10	U	ug/l	10
p-(Dimethylamino)azobenzene	10	U	ug/l	10
7,12-Dimethylbenz(A)Anthracene	10	U	ug/l	10
3-Methylcholanthrene	10	U	ug/l	10
Pyridine	50	U	ug/l	50
N-Nitrosomethylethylamine	10	U	ug/l	10
N-Nitrosomorpholine	10	U	ug/l	10
o-Toluidine	10	U	ug/l	10
Hexachloropropene	50	U	ug/l	50
p-Phenylenediamine	500	U	ug/l	500

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	M7472002
Site	GROUP2
Locator	16MW004S
Collect Date:	07-JUL-94

	VALUE	QUAL	UNITS	DL
Safrole	50	U	ug/l	50
Isosafrole	50	U	ug/l	50
1,4-Naphthoquinone	1000	UJ	ug/l	
1,3-Dinitrobenzene	10	U	ug/l	10
5-Nitro-o-toluidine	10	U	ug/l	10
1,3,5-Trinitrobenzene	10	UJ	ug/l	
4-Nitroquinoline-1-oxide	500	UJ	ug/l	
Methapyrilene	50	UJ	ug/l	
3,3'-Dimethylbenzidine	10	U	ug/l	10
Hexachlorophene	500	UJ	ug/l	
Aramite	50	U	ug/l	50
2-Chlorophenol	10	U	ug/l	10
3- & 4-Methylphenol (2)	10	U	ug/l	10
Hexachloropropene	50	U	ug/l	50
2-Acetylaminofluorene	10	U	ug/l	10

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		M7424001				23904009				23918007				M7410003			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		16MW001I				16MW1D				16MW2				16MW002S			
Collect Date:		29-JUN-94				29-JAN-93				01-FEB-93				28-JUN-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/l																
alpha-BHC		.02	U	ug/l	.02	.02	U	ug/l	.02	.1	U	ug/l	.1	.02	U	ug/l	.02
beta-BHC		.04	U	ug/l	.04	.04	U	ug/l	.04	.2	U	ug/l	.2	.04	U	ug/l	.04
delta-BHC		.02	U	ug/l	.02	.02	U	ug/l	.02	.1	U	ug/l	.1	.02	U	ug/l	.02
gamma-BHC (Lindane)		.02	UJ	ug/l		.02	U	ug/l	.02	.1	U	ug/l	.1	.02	UJ	ug/l	
Heptachlor		.02	UJ	ug/l		.02	U	ug/l	.02	.1	U	ug/l	.1	.02	UJ	ug/l	
Aldrin		.02	U	ug/l	.02	.02	U	ug/l	.02	.1	U	ug/l	.1	.02	U	ug/l	.02
Heptachlor epoxide		.02	U	ug/l	.02	.02	U	ug/l	.02	.1	U	ug/l	.1	.02	U	ug/l	.02
Endosulfan I		.02	U	ug/l	.02	.02	U	ug/l	.02	.1	U	ug/l	.1	.02	U	ug/l	.02
Dieldrin		.02	U	ug/l	.02	.02	U	ug/l	.02	.1	U	ug/l	.1	.02	U	ug/l	.02
4,4-DDE		.02	U	ug/l	.02	.02	U	ug/l	.02	.1	U	ug/l	.1	.02	U	ug/l	.02
Endrin		.04	U	ug/l	.04	.04	U	ug/l	.04	.2	U	ug/l	.2	.04	U	ug/l	.04
Endosulfan II		.04	U	ug/l	.04	.04	U	ug/l	.04	.2	U	ug/l	.2	.04	U	ug/l	.04
4,4-DDD		.04	U	ug/l	.04	.04	U	ug/l	.04	.2	U	ug/l	.2	.04	U	ug/l	.04
Endosulfan sulfate		.04	U	ug/l	.04	.04	U	ug/l	.04	.2	U	ug/l	.2	.04	U	ug/l	.04
4,4-DDT		.04	U	ug/l	.04	.04	U	ug/l	.04	.2	U	ug/l	.2	.04	U	ug/l	.04
Methoxychlor		.08	U	ug/l	.08	.08	U	ug/l	.08	.4	U	ug/l	.4	.08	U	ug/l	.08
Endrin aldehyde		.04	U	ug/l	.04	.04	U	ug/l	.04	.2	U	ug/l	.2	.04	U	ug/l	.04
Endrin ketone		.04	U	ug/l	.04	.02	U	ug/l	.02	.2	U	ug/l	.2	.04	U	ug/l	.04
Chlordane		.2	U	ug/l	.2	.2	U	ug/l	.2	1	U	ug/l	1	.2	U	ug/l	.2
Chlorobenzilate		.5	U	ug/l	.5	.5	U	ug/l	.5	2.5	U	ug/l	2.5	.5	U	ug/l	.5
Diallate		1	U	ug/l	1	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Toxaphene		1	U	ug/l	1	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Isodrin		.02	U	ug/l	.02	.02	U	ug/l	.02	.1	U	ug/l	.1	.02	U	ug/l	.02
Kepone		1	U	ug/l	1	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Aroclor-1016		1	U	ug/l	1	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Aroclor-1221		2	U	ug/l	2	2	U	ug/l	2	10	U	ug/l	10	2	U	ug/l	2
Aroclor-1232		2	U	ug/l	2	2	U	ug/l	2	10	U	ug/l	10	2	U	ug/l	2
Aroclor-1242		1	U	ug/l	1	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Aroclor-1248		1	U	ug/l	1	1	U	ug/l	1	5	U	ug/l	5	1	U	ug/l	1
Aroclor-1254		.5	U	ug/l	.5	.5	U	ug/l	.5	2.5	U	ug/l	2.5	.5	U	ug/l	.5
Aroclor-1260		.5	U	ug/l	.5	.5	U	ug/l	.5	2.5	U	ug/l	2.5	.5	U	ug/l	.5

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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23904007				23904008				M7410004				M7472002			
Site	GROUP2				GROUP2				GROUP2				GROUP2			
Locator	16MW3				16MW3D				16MW003S				16MW004S			
Collect Date:	29-JAN-93				29-JAN-93				28-JUN-94				07-JUL-94			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs ug/l																
alpha-BHC	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.04	U	ug/l	.04
beta-BHC	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.08	U	ug/l	.08
delta-BHC	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
gamma-BHC (Lindane)	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	UJ	ug/l		.04	UJ	ug/l	
Heptachlor	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	UJ	ug/l		.02	UJ	ug/l	
Aldrin	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Heptachlor epoxide	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Endosulfan I	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Dieldrin	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
4,4-DDE	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Endrin	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endosulfan II	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
4,4-DDD	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endosulfan sulfate	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
4,4-DDT	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Methoxychlor	.08	U	ug/l	.08	.08	U	ug/l	.08	.08	U	ug/l	.08	.08	U	ug/l	.08
Endrin aldehyde	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04
Endrin ketone	.02	U	ug/l	.02	.02	U	ug/l	.02	.04	U	ug/l	.04	.04	U	ug/l	.04
Chlordane	.2	U	ug/l	.2	.2	U	ug/l	.2	.2	U	ug/l	.2	.2	U	ug/l	.2
Chlorobenzilate	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5
Diallate	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Toxaphene	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Isodrin	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02
Kepone	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1016	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1221	2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2	4	U	ug/l	4
Aroclor-1232	2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2
Aroclor-1242	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1248	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1254	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5
Aroclor-1260	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		M7425001			23904009			23905009			23918007		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		16MW001I			16MW1D			16MW1D			16MW2		
Collect Date:		29-JUN-94			29-JAN-93			29-JAN-93			01-FEB-93		
		VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL
INORGANICS (WATER)	ug/l												
Antimony		2.2	U ug/l	2.2	16.4	U ug/l	16.4	-	ug/l		16.4	U ug/l	16.4
Arsenic		1.36	U ug/l	1.36	.76	J ug/l		-	ug/l		29.6	ug/l	
Barium		1.4	U ug/l	1.4	3.1	U ug/l	3.1	-	ug/l		32.8	J ug/l	
Beryllium		.15	U ug/l	.15	.26	U ug/l	.26	-	ug/l		1.8	J ug/l	
Cadmium		2.7	U ug/l	2.7	2.8	U ug/l	2.8	-	ug/l		2.8	U ug/l	2.8
Calcium		58600	ug/l		42000	ug/l		-	ug/l		-	ug/l	
Chromium		2.8	U ug/l	2.8	2.8	U ug/l	2.8	-	ug/l		46.5	ug/l	
Cobalt		3.6	U ug/l	3.6	2.6	U ug/l	2.6	-	ug/l		10.6	J ug/l	
Copper		3.5	J ug/l		1.2	U ug/l	1.2	-	ug/l		9	J ug/l	
Cyanide		.89	J ug/l		-	ug/l		5	U ug/l	5	-	ug/l	
Iron		29.2	J ug/l		301	J ug/l		-	ug/l		-	ug/l	
Lead		.97	U ug/l	.97	1.7	U ug/l	1.7	-	ug/l		28.3	ug/l	
Magnesium		10200	ug/l		19800	ug/l		-	ug/l		-	ug/l	
Manganese		7	J ug/l		9.8	U ug/l	9.8	-	ug/l		-	ug/l	
Mercury		.08	U ug/l	.08	.07	U ug/l	.07	-	ug/l		.28	ug/l	
Nickel		9.7	U ug/l	9.7	9.4	U ug/l	9.4	-	ug/l		19.2	J ug/l	
Selenium		1.3	UJ ug/l		1.8	U ug/l	1.8	-	ug/l		2.8	J ug/l	
Silver		2.7	U ug/l	2.7	2	U ug/l	2	-	ug/l		2.8	J ug/l	
Sodium		7500	J ug/l		-	ug/l		-	ug/l		-	ug/l	
Thallium		1.3	U ug/l	1.3	2.3	U ug/l	2.3	-	ug/l		2.3	U ug/l	2.3
Tin		9.5	U ug/l	9.5	12.7	U ug/l	12.7	-	ug/l		12.7	UJ ug/l	
Vanadium		2.1	U ug/l	2.1	2.6	U ug/l	2.6	-	ug/l		59.7	ug/l	
Zinc		8.7	U ug/l	8.7	34.6	J ug/l		-	ug/l		140	ug/l	

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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	23921006			M7411003			R8820003			23904007		
Site	GROUP2			GROUP2			GROUP2			GROUP2		
Locator	16MW2			16MW002S			16MW002S			16MW3		
Collect Date:	01-FEB-93			28-JUN-94			27-SEP-94			29-JAN-93		
	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
INORGANICS (WATER) ug/l												
Antimony	-	ug/l		2.2 U	ug/l	2.2	-	ug/l		16.4 U	ug/l	16.4
Arsenic	-	ug/l		.9 U	ug/l	.9	-	ug/l		21.3	ug/l	
Barium	-	ug/l		3.2 J	ug/l		-	ug/l		25.7 J	ug/l	
Beryllium	-	ug/l		.15 U	ug/l	.15	-	ug/l		.94 J	ug/l	
Cadmium	-	ug/l		2.7 U	ug/l	2.7	-	ug/l		2.8 U	ug/l	2.8
Calcium	-	ug/l		111000	ug/l		-	ug/l		113000	ug/l	
Chromium	-	ug/l		2.8 U	ug/l	2.8	-	ug/l		33.1	ug/l	
Cobalt	-	ug/l		3.6 U	ug/l	3.6	-	ug/l		4.4 J	ug/l	
Copper	-	ug/l		3.2 U	ug/l	3.2	-	ug/l		2.8 J	ug/l	
Cyanide	5 U	ug/l	5	.81 U	ug/l	.81	2.7 UJ	ug/l		-	ug/l	
Iron	-	ug/l		499	ug/l		-	ug/l		21600 J	ug/l	
Lead	-	ug/l		.97 U	ug/l	.97	-	ug/l		12.3 U	ug/l	12.3
Magnesium	-	ug/l		12000	ug/l		-	ug/l		10300	ug/l	
Manganese	-	ug/l		37.7	ug/l		-	ug/l		194	ug/l	
Mercury	-	ug/l		.08 U	ug/l	.08	-	ug/l		.07 U	ug/l	.07
Nickel	-	ug/l		9.7 U	ug/l	9.7	-	ug/l		9.4 U	ug/l	9.4
Selenium	-	ug/l		1.3 UJ	ug/l		-	ug/l		1.8 U	ug/l	1.8
Silver	-	ug/l		2.7 U	ug/l	2.7	-	ug/l		2 U	ug/l	2
Sodium	-	ug/l		21500 J	ug/l		-	ug/l		-	ug/l	
Thallium	-	ug/l		1.3 U	ug/l	1.3	-	ug/l		2.3 U	ug/l	2.3
Tin	-	ug/l		9.5 U	ug/l	9.5	-	ug/l		12.7 U	ug/l	12.7
Vanadium	-	ug/l		2.1 U	ug/l	2.1	-	ug/l		39.4 J	ug/l	
Zinc	-	ug/l		6.9 J	ug/l		-	ug/l		57.6 J	ug/l	

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J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23905007			23904008			23905008			M7411004		
Site		GROUP2			GROUP2			GROUP2			GROUP2		
Locator		16MW3			16MW3D			16MW3D			16MW003S		
Collect Date:		29-JAN-93			29-JAN-93			29-JAN-93			28-JUN-94		
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	
INORGANICS (WATER)	ug/l												
Antimony	-		ug/l		16.4	U	ug/l	16.4	-		ug/l	2.2	U ug/l 2.2
Arsenic	-		ug/l		23.7		ug/l		-		ug/l	8.2	J ug/l
Barium	-		ug/l		31	J	ug/l		-		ug/l	2.9	J ug/l
Beryllium	-		ug/l		1.2	J	ug/l		-		ug/l	.15	U ug/l .15
Cadmium	-		ug/l		2.8	U	ug/l	2.8	-		ug/l	2.7	U ug/l 2.7
Calcium	-		ug/l		118000		ug/l		-		ug/l	102000	ug/l
Chromium	-		ug/l		42.4		ug/l		-		ug/l	2.8	U ug/l 2.8
Cobalt	-		ug/l		7.3	J	ug/l		-		ug/l	3.6	U ug/l 3.6
Copper	-		ug/l		2	J	ug/l		-		ug/l	3.2	U ug/l 3.2
Cyanide	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	.81 U ug/l .81
Iron	-		ug/l		26600	J	ug/l		-		ug/l	41.3	U ug/l 41.3
Lead	-		ug/l		195		ug/l		-		ug/l	.97	U ug/l .97
Magnesium	-		ug/l		11300		ug/l		-		ug/l	7200	ug/l
Manganese	-		ug/l		237		ug/l		-		ug/l	8.4	J ug/l
Mercury	-		ug/l		.07	U	ug/l	.07	-		ug/l	.08	U ug/l .08
Nickel	-		ug/l		14.6	J	ug/l		-		ug/l	9.7	U ug/l 9.7
Selenium	-		ug/l		1.8	U	ug/l	1.8	-		ug/l	1.9	J ug/l
Silver	-		ug/l		2	U	ug/l	2	-		ug/l	2.7	U ug/l 2.7
Sodium	-		ug/l		-		ug/l		-		ug/l	8450	J ug/l
Thallium	-		ug/l		2.3	U	ug/l	2.3	-		ug/l	1.3	U ug/l 1.3
Tin	-		ug/l		56	J	ug/l		-		ug/l	9.5	U ug/l 9.5
Vanadium	-		ug/l		48.9	J	ug/l		-		ug/l	5.6	J ug/l
Zinc	-		ug/l		76.9	J	ug/l		-		ug/l	11.7	J ug/l

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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:	R8820001			M7473003		
Site	GROUP2			GROUP2		
Locator	16MW003S			16MW004S		
Collect Date:	27-SEP-94			07-JUL-94		
	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
INORGANICS (WATER) ug/l						
Antimony	-	ug/l		2.2 U	ug/l	2.2
Arsenic	-	ug/l		4.9 J	ug/l	
Barium	-	ug/l		7.9 J	ug/l	
Beryllium	-	ug/l		.15 U	ug/l	.15
Cadmium	-	ug/l		2.7 U	ug/l	2.7
Calcium	-	ug/l		93300	ug/l	
Chromium	-	ug/l		2.8 U	ug/l	2.8
Cobalt	-	ug/l		3.6 U	ug/l	3.6
Copper	-	ug/l		3.2 U	ug/l	3.2
Cyanide	2.7 UJ	ug/l		.43 J	ug/l	
Iron	-	ug/l		312	ug/l	
Lead	-	ug/l		1.3 J	ug/l	
Magnesium	-	ug/l		6350	ug/l	
Manganese	-	ug/l		89.5	ug/l	
Mercury	-	ug/l		.08 U	ug/l	.08
Nickel	-	ug/l		9.7 U	ug/l	9.7
Selenium	-	ug/l		1.3 UJ	ug/l	
Silver	-	ug/l		2.7 U	ug/l	2.7
Sodium	-	ug/l		14100 J	ug/l	
Thallium	-	ug/l		1.3 UJ	ug/l	
Tin	-	ug/l		9.5 U	ug/l	9.5
Vanadium	-	ug/l		2.1 U	ug/l	2.1
Zinc	-	ug/l		7.9 U	ug/l	7.9

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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		M7427001				23905009				23921006				M7412001			
Site		GROUP2				GROUP2				GROUP2				GROUP2			
Locator		16MW001I				16MW1D				16MW2				16MW002S			
Collect Date:		29-JUN-94				29-JAN-93				01-FEB-93				28-JUN-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
GROUND WATER QUALITY	mg/l																
Alkalinity as CaCO3		172		mg/l		213		mg/l		477		mg/l		328		mg/l	
Ammonia-N		.9		mg/l		1.1		mg/l		1.9		mg/l		.7		mg/l	
Chloride		10.8		mg/l		16.6		mg/l		21.7		mg/l		27.7		mg/l	
Hardness as CaCO3		182		mg/l		194		mg/l		526		mg/l		320		mg/l	
Nitrate/Nitrite-N		.1	U	mg/l	.1	.05	U	mg/l	.05	.05	U	mg/l	.05	.1	U	mg/l	.1
Oil and Grease		5	U	mg/l	5	.3		mg/l		541		mg/l		5	U	mg/l	5
Phosphorous-P, Total		.16		mg/l		.53		mg/l		1.44		mg/l		.2		mg/l	
Sulfate		1		mg/l		1	U	mg/l	1	27		mg/l		1.8		mg/l	
Sulfide		6.4		mg/l		1.6		mg/l		2.2		mg/l		1		mg/l	
Total Dissolved Solids		283		mg/l		270		mg/l		541		mg/l		484		mg/l	
Total Kjeldahl Nitrogen		.8		mg/l		1.6		mg/l		7.5		mg/l		1.6		mg/l	
Total Organic Carbon		1.9		mg/l		6.1		mg/l		17		mg/l		10.9		mg/l	
COLOR	APHA																
Color		15		APHA		40		APHA		25		APHA		25		APHA	
pH	units																
pH		7.8		units		7.5		units		7		units		7.1		units	
TOTAL PETROLEUM HYDROCARBONS	mg/l																
Total petroleum hydrocarbon		-		mg/l		-		mg/l		-		mg/l		-		mg/l	

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THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

AR01 - Trend Report
Group2 Ground Water Data

Lab Sample Number:		23905007				M7474002			
Site		GROUP2				GROUP2			
Locator		16MW3				16MW004S			
Collect Date:		29-JAN-93				07-JUL-94			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
GROUND WATER QUALITY	mg/l								
Alkalinity as CaCO3		262		mg/l		343		mg/l	
Ammonia-N		.6	U	mg/l	.6	.3	U	mg/l	.3
Chloride		10.8		mg/l		18.9		mg/l	
Hardness as CaCO3		376		mg/l		490		mg/l	
Nitrate/Nitrite-N		.12		mg/l		.1	U	mg/l	.1
Oil and Grease		.1		mg/l		5	U	mg/l	5
Phosphorous-P, Total		1.22		mg/l		2.4		mg/l	
Sulfate		69.5		mg/l		57.9		mg/l	
Sulfide		.2		mg/l		1	U	mg/l	1
Total Dissolved Solids		368		mg/l		341		mg/l	
Total Kjeldahl Nitrogen		4.3		mg/l		.9		mg/l	
Total Organic Carbon		3.7		mg/l		6.6		mg/l	
COLOR	APHA								
Color		25		APHA		20		APHA	
pH	units								
pH		7.3		units		7.5		units	
TOTAL PETROLEUM HYDROCARBONS	mg/l								
Total petroleum hydrocarbon		-		mg/l		-		mg/l	

U = NOT DETECTED R = RESULT IS REJECTED
J = ESTIMATED VALUE UJ = REPORTED QUANTITATION LIMIT IS ESTIMATED
THE ADDITIONAL LISTINGS OF RESULTS FOR 1,2-; 1,3-; AND 1,4-DICHLOROBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

APPENDIX B

SAMPLE SUMMARIES AND CROSS-REFERENCE TABLES

Table B-1
1993 Sample Identifier and Sample Location Cross-reference

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Sample Identifier	Sample Location	SWMU	Medium
11MW3	MPT-11-MW03S	12	Groundwater
11MW3D	MPT-11-MW03S	12	Groundwater
15MW1	MPT-15-MW01S	15	Groundwater
15SS11	MPT-15-SS01	15	Surface Soil
15SS12	MPT-15-SS01	15	Subsurface Soil
15SS21	MPT-15-SS02	15	Surface Soil
15SS22	MPT-15-SS02	15	Subsurface Soil
15SS31	MPT-15-SS03	15	Surface Soil
15SS32	MPT-15-SS03	15	Subsurface Soil
15SS41	MPT-15-SS04	15	Surface Soil
15SS42	MPT-15-SS04	15	Subsurface Soil
15SS51	MPT-15-SS05	15	Surface Soil
15SS52	MPT-15-SS05	15	Subsurface Soil
15SS61	MPT-15-SS06	15	Surface Soil
15SS62	MPT-15-SS06	15	Subsurface Soil
15SS71	MPT-15-SS07	15	Surface Soil
15SS72	MPT-15-SS07	15	Subsurface Soil
15SS81	MPT-15-SS08	15	Surface Soil
15SS81D	MPT-15-SS08	15	Surface Soil
15SS82	MPT-15-SS08	15	Subsurface Soil
15SS82D	MPT-15-SS08	15	Subsurface Soil
16MW1D	MPT-16-MW01I	16	Groundwater
16MW2	MPT-16-MW02S	16	Groundwater
16MW3	MPT-16-MW03S	16	Groundwater
16MW3D	MPT-16-MW03S	16	Groundwater
16SSA4	MPT-16-SSA4	16	Surface Soil
16SSB7	MPT-16-SSB7	16	Surface Soil
16SSC2	MPT-16-SSC2	16	Surface Soil
16SSC5D	MPT-16-SSC5	16	Subsurface Soil
16SSD4	MPT-16-SSD4	16	Surface Soil
16SSD7	MPT-16-SSD7	16	Surface Soil
16SSE1D	MPT-16-SSE1	16	Subsurface Soil
16SSF4	MPT-16-SSF4	16	Surface Soil
16SSF4DUP	MPT-16-SSF4	16	Surface Soil
16SSG1	MPT-16-SSG1	16	Surface Soil
2BS85DD79	MPT-8-MW05D	OWTP area	Subsurface Soil
2BS85S02	MPT-8-MW05S	OWTP area	Subsurface Soil
8BS1-9	MPT-8-T4/0	OWTP area	TerraProbe, Soil

See notes at end of table.

Table B-1 (Continued)
1993 Sample Identifier and Sample Location Cross-reference

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Sample Identifier	Sample Location	SWMU	Medium
8BS10	MPT-8-T29/-15	OWTP area	TerraProbe™, Soil
8BS11	MPT-8-T6/-12	OWTP area	TerraProbe™, Soil
8BS12	MPT-8-T6/-12	OWTP area	TerraProbe™, Soil
8BS13	MPT-8-T-5/2	OWTP area	TerraProbe™, Soil
8BS14	MPT-8-T2/-19	OWTP area	TerraProbe™, Soil
8BS14D	MPT-8-T2/-19	OWTP area	TerraProbe™, Soil
8BS2-9	MPT-8-T8/-2	OWTP area	TerraProbe™, Soil
8BS3-7	MPT-8-T11/-4	OWTP area	TerraProbe™, Soil
8BS4-6	MPT-8-T17/-7	OWTP area	TerraProbe™, Soil
8BS5-9	MPT-8-T17/-7	OWTP area	TerraProbe™, Soil
8BS6-10	MPT-8-T-12/-4	OWTP area	TerraProbe™, Soil
8BS7-9	MPT-8-T8/-20	OWTP area	TerraProbe™, Soil
8BS8	MPT-8-T-6/-12	OWTP area	TerraProbe™, Soil
8BS9	MPT-8-T19/-22	OWTP area	TerraProbe™, Soil
8GW1	MPT-8-T4/0	OWTP area	TerraProbe™, Water
8GW2	MPT-8-T-5/2	OWTP area	TerraProbe™, Water
8GW3	MPT-8-T21/-17	OWTP area	TerraProbe™, Water
8GW4	MPT-8-T21/-10	OWTP area	TerraProbe™, Water
8GW5	MPT-8-T10/-8	OWTP area	TerraProbe™, Water
8GW5D	MPT-8-T10/-8	OWTP area	TerraProbe™, Water
8GW6	MPT-8-T14/6	OWTP area	TerraProbe™, Water
8GW7	MPT-8-T5/3	OWTP area	TerraProbe™, Water
8GW8	MPT-8-T0/-10	OWTP area	TerraProbe™, Water
8GW9	MPT-8-T19/-22	OWTP area	TerraProbe™, Water
8MW1	MPT-8-MW01S	OWTP area	Groundwater
8MW4	MPT-8-MW04S	OWTP area	Groundwater
8MW5DD	MPT-8-MW05D	OWTP area	Groundwater
8MW5S	MPT-8-MW05S	OWTP area	Groundwater
8MW7	MPT-8-MW07S	OWTP area	Groundwater
8MW8	MPT-8-MW08S	OWTP area	Groundwater
8SL1A	MPT-8-SL01A	OWTP area	Sludge
8SL1AD	MPT-8-SL01A	OWTP area	Sludge
9MW1	MPT-9-MW01S	OWTP area	Groundwater
9MW2	MPT-9-MW02S	OWTP area	Groundwater
9MW3	MPT-9-MW03S	OWTP area	Groundwater
MP15MS1S2	MPT-15-MW01S	15	Subsurface Soil
MP15MS1S6	MPT-15-MW01S	15	Subsurface Soil
MP16MS1D8	MPT-16-MW01I	16	Subsurface Soil

See notes at end of table.

Table B-1 (Continued)
1993 Sample Identifier and Sample Location Cross-reference

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Sample Identifier	Sample Location	SWMU	Medium
MP16MS2S2	MPT-16-MW02S	16	Subsurface Soil
MP16MS2S8	MPT-16-MW02S	16	Subsurface Soil
MP16MS3S2	MPT-16-MW03S	16	Subsurface Soil
MP16MS3S8	MPT-16-MW03S	16	Subsurface Soil
MPT-11-1	MPT-11-MW01S	12	Groundwater
MPT-11-2	MPT-11-MW02S	12	Groundwater
MPT6MS1D2	MPT-16-MW01I	16	Subsurface Soil
MPT8BS357	MPT-8-T3/0	OWTP area	Subsurface Soil
MPT8BS3S7	PT-8-T3/0	OWTP area	Subsurface Soil
MPT8MS4S2	MPT-8-MW04S	OWTP area	Subsurface Soil
MPT8MS4S8	MPT-8-MW04S	OWTP area	Subsurface Soil
MPT8MS6S2	MPT-8-MW06S	OWTP area	Subsurface Soil
MPT8MS6S7	MPT-8-MW06S	OWTP area	Subsurface Soil
MPT8MS7S2	MPT-8-MW07S	OWTP area	Subsurface Soil
MPT8MS7S9	MPT-8-MW07S	OWTP area	Subsurface Soil
MPT8MS8S2	MPT-8-MW08S	OWTP area	Subsurface Soil
MPT8MS8S9	MPT-8-MW08S	OWTP area	Subsurface Soil
MPT8SL1	MPT-8-SL01	OWTP area	Sludge
MPT8SL2	MPT-8-SL02	OWTP area	Sludge
MPT8SL3	MPT-8-SL03	OWTP area	Sludge
MPT8SW1	MPT-8-SW01	OWTP area	Surface Water
MPT8SW1	MPT-8-SW01	OWTP area	Surface Water
MPT8SW1D	MPT-8-SW01	OWTP area	Surface Water
MPT8SW2	MPT-8-SW02	OWTP area	Surface Water
MPT8SW2	MPT-8-SW02	OWTP area	Surface Water
S-2	MPT-S-MW02S	OWTP area	Groundwater
S-3	MPT-S-MW03S	OWTP area	Groundwater

Notes: SWMU = solid waste management unit.
OWTP = oily waste treatment plant.

Table B-2
1994 Sample Identifier and Sample Location Cross-reference

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Sample Identifier	Sample Location	SWMU	Medium
08BS01316	MPT-8-BS13	OWTP area	Subsurface Soil
08BS01511	MPT-8-BS15	OWTP area	Subsurface Soil
08BS01511D	MPT-8-BS15	OWTP area	Subsurface Soil
08MW001S	MPT-8-MW01S	OWTP area	Groundwater
08MW001SF	MPT-8-MW01S	OWTP area	Groundwater
08MW004S	MPT-8-MW04S	OWTP area	Groundwater
08MW006S	MPT-8-MW06S	OWTP area	Groundwater
08MW006SD	MPT-8-MW06S	OWTP area	Groundwater
08MW008S	MPT-8-MW08S	OWTP area	Groundwater
08MW009S	MPT-8-MW09S	OWTP area	Groundwater
08MW010S	MPT-8-MW10S	OWTP area	Groundwater
08MW010SD	MPT-8-MW10S	OWTP area	Groundwater
08MW010SRE	MPT-8-MW10S	OWTP area	Groundwater
08MW012S	MPT-8-MW12S	OWTP area	Groundwater
08MW012S	MPT-8-MW12S	OWTP area	Groundwater
08MW013I	MPT-8-MW13I	OWTP area	Groundwater
08MW013S	MPT-8-MW13S	OWTP area	Groundwater
08MW014S	MPT-8-MW14S	OWTP area	Groundwater
08MW015I	MPT-8-MW15I	OWTP area	Groundwater
08MW015IRE	MPT-8-MW15I	OWTP area	Groundwater
08MW016S	MPT-8-MW16S	OWTP area	Groundwater
08MW016SD	MPT-8-MW16S	OWTP area	Groundwater
08MW017S	MPT-8-MW17S	OWTP area	Groundwater
08MW018S	MPT-8-MW18S	OWTP area	Groundwater
08MW019S	MPT-8-MW19S	OWTP area	Groundwater
08MW019SD	MPT-8-MW19S	OWTP area	Groundwater
08MW020S	MPT-8-MW20S	OWTP area	Groundwater
08MW020SD	MPT-8-MW20S	OWTP area	Groundwater
08SL00401	MPT-8-SL04	OWTP area	Sludge
08SL00401D	MPT-8-SL04	OWTP area	Sludge
08SL00401DRE	MPT-8-SL04	OWTP area	Sludge
08SL00401RE	MPT-8-SL04	OWTP area	Sludge
08SL00501	MPT-8-SL05	OWTP area	Sludge
08SL00501DL	MPT-8-SL05	OWTP area	Sludge
08SL00501RE	MPT-8-SL05	OWTP area	Sludge
08SL00505	MPT-8-SL05	OWTP area	Sludge
08SL00505DL	MPT-8-SL05	OWTP area	Sludge
08SL00601	MPT-8-SL06	OWTP area	Sludge

See notes at end of table.

Table B-2 (Continued)
1994 Sample Identifier and Sample Location Cross-reference

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Sample Identifier	Sample Location	SWMU	Medium
08SL00601DL	MPT-8-SL06	OWTP area	Sludge
08SL00605	MPT-8-SL06	OWTP area	Sludge
08SL00605DL	MPT-8-SL06	OWTP area	Sludge
08SL00701	MPT-8-SL07	OWTP area	Sludge
08SL00701D	MPT-8-SL07	OWTP area	Sludge
08SL00701DRE	MPT-8-SL07	OWTP area	Sludge
08SL00705	MPT-8-SL07	OWTP area	Sludge
08SL00705DL	MPT-8-SL07	OWTP area	Sludge
08SL00801	MPT-8-SL08	OWTP area	Sludge
08SL00801RE	MPT-8-SL08	OWTP area	Sludge
08SL00806	MPT-8-SL08	OWTP area	Sludge
08SL00806DL	MPT-8-SL08	OWTP area	Sludge
08SL00901	MPT-8-SL09	OWTP area	Sludge
08SL00906	MPT-8-SL09	OWTP area	Sludge
08SL00906DL	MPT-8-SL09	OWTP area	Sludge
08SL01001	MPT-8-SL10	OWTP area	Sludge
08SL01001D	MPT-8-SL10	OWTP area	Sludge
08SL01006	MPT-8-SL10	OWTP area	Sludge
08SL01006DL	MPT-8-SL10	OWTP area	Sludge
08SL01006RE	MPT-8-SL10	OWTP area	Sludge
08SL01101	MPT-8-SL11	OWTP area	Sludge
08SL01102	MPT-8-SL11	OWTP area	Sludge
08SL01102RE	MPT-8-SL11	OWTP area	Sludge
08SL01201	MPT-8-SL12	OWTP area	Sludge
08SL01202	MPT-8-SL12	OWTP area	Sludge
08SL01202RE	MPT-8-SL12	OWTP area	Sludge
08SL01301	MPT-8-SL13	OWTP area	Sludge
08SL01302	MPT-8-SL13	OWTP area	Sludge
09MW002S	MPT-9-MW02S	OWTP area	Groundwater
09MW003S	MPT-9-MW03S	OWTP area	Groundwater
09MW003SF	MPT-9-MW03S	OWTP area	Groundwater
0SMW002S	MPT-S-MW02S	OWTP area	Groundwater
0SMW003S	MPT-S-MW03S	OWTP area	Groundwater
0SMW003SF	MPT-S-MW03S	OWTP area	Groundwater
10OP001	MPT-10-P01	OWTP area	Groundwater
11MW001S	MPT-11-MW01S	12	Groundwater
11MW001SF	MPT-11-MW01S	12	Groundwater
11MW002S	MPT-11-MW02S	12	Groundwater

See notes at end of table.

Table B-2 (Continued)
1994 Sample Identifier and Sample Location Cross-reference

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Sample Identifier	Sample Location	SWMU	Medium
15E01601	MPT-15-SS16	15	Worm Tissue
15E01701	MPT-15-SS17	15	Worm Tissue
15E02001	MPT-15-SS20	15	Worm Tissue
15E02301	MPT-15-SS23	15	Worm Tissue
15E02301DL	MPT-15-SS23	15	Worm Tissue
15E03001	MPT-15-SS30	15	Worm Tissue
15E03001DL	MPT-15-SS30	15	Worm Tissue
15MW001S	MPT-15-MW01S	15	Groundwater
15MW001S	MPT-15-MW01S	15	Groundwater
15MW002S	MPT-15-MW02S	15	Groundwater
15MW002S	MPT-15-MW02S	15	Groundwater
15MW003S	MPT-15-MW03S	15	Groundwater
15MW003S	MPT-15-MW03S	15	Groundwater
15MW003SRE	MPT-15-MW03S	15	Groundwater
15MW004S	MPT-15-MW04S	15	Groundwater
15MW004S	MPT-15-MW04S	15	Groundwater
15MW004SRE	MPT-15-MW04S	15	Groundwater
15MW005I	MPT-15-MW05I	15	Groundwater
15MW005I	MPT-15-MW05I	15	Groundwater
15MW005SD	MPT-15-MW05S	15	Groundwater
15OP001	MPT-15-P01	15	Groundwater
15SS00901	MPT-15-SS09	15	Surface Soil
15SS00901D	MPT-15-SS09	15	Surface Soil
15SS01001	MPT-15-SS10	15	Surface Soil
15SS01101	MPT-15-SS11	15	Surface Soil
15SS01201	MPT-15-SS12	15	Surface Soil
15SS01301	MPT-15-SS13	15	Surface Soil
15SS01401	MPT-15-SS14	15	Surface Soil
15SS01501	MPT-15-SS15	15	Surface Soil
15SS01601	MPT-15-SS16	15	Surface Soil
15SS01701	MPT-15-SS17	15	Surface Soil
15SS01801	MPT-15-SS18	15	Surface Soil
15SS01901	MPT-15-SS19	15	Surface Soil
15SS01901	MPT-15-SS19	15	Surface Soil
15SS01901D	MPT-15-SS19	15	Surface Soil
15SS01901D	MPT-15-SS19	15	Surface Soil
15SS02001	MPT-15-SS20	15	Surface Soil
15SS02101	MPT-15-SS21	15	Surface Soil

See notes at end of table.

Table B-2 (Continued)
1994 Sample Identifier and Sample Location Cross-reference

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Sample Identifier	Sample Location	SWMU	Medium
15SS02401	MPT-15-SS24	15	Surface Soil
15SS02501	MPT-15-SS25	15	Surface Soil
15SS02601	MPT-15-SS26	15	Surface Soil
15SS02701	MPT-15-SS27	15	Surface Soil
15SS02701D	MPT-15-SS27	15	Surface Soil
15SS02801	MPT-15-SS28	15	Surface Soil
15SS02901	MPT-15-SS29	15	Surface Soil
15SS03001	MPT-15-SS30	15	Surface Soil
15U01201	MPT-15-SS12	15	Worm Soil
15U01501	MPT-15-SS15	15	Worm Soil
15U01601	MPT-15-SS16	15	Worm Soil
15U03001	MPT-15-SS30	15	Worm Soil
16MW001I	MPT-16-MW01I	16	Groundwater
16MW002S	MPT-16-MW02S	16	Groundwater
16MW002S	MPT-16-MW02S	16	Groundwater
16MW003S	MPT-16-MW03S	16	Groundwater
16MW003S	MPT-16-MW03S	16	Groundwater
16MW004S	MPT-16-MW04S	16	Groundwater
NEG_CONTROL		15	Worm Tissue

Notes: SWMU = solid waste management unit
OWTP = oily waste treatment plant

Table B-3
1993 Samples and Analyses

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

SWMU	Sample Location	Sample Identifier	Medium	Date Collected	Analytical Parameters and Method Numbers							
					VOA 8010	Pest./ PCB 8080	VOA 8240	SVOA 8270	Metals	Cyanide	GWQ	TPH 418.1
12	MPT-11-MW01S	MPT-11-1	Groundwater	27-Jan-93	X	X	X	X	X			
12	MPT-11-MW02S	MPT-11-2	Groundwater	27-Jan-93	X	X	X	X	X			
12	MPT-11-MW03S	11MW3	Groundwater	27-Jan-93	X	X	X	X	X			
12	MPT-11-MW03S	11MW3D	Groundwater	27-Jan-93		X	X	X	X			
15	MPT-15-MW01S	15MW1	Groundwater	27-Jan-93		X	X	X	X	X	X	
15	MPT-15-MW01S	MP15MS1S2	Subsurface Soil	15-Jan-93		X	X	X	X	X		
15	MPT-15-MW01S	MP15MS1S6	Subsurface Soil	15-Jan-93		X	X	X	X	X		
15	MPT-15-SS01	15SS12	Subsurface Soil	02-Feb-93		X	X	X	X			
15	MPT-15-SS02	15SS22	Subsurface Soil	02-Feb-93		X	X	X	X			
15	MPT-15-SS03	15SS32	Subsurface Soil	02-Feb-93		X	X	X	X			
15	MPT-15-SS04	15SS42	Subsurface Soil	02-Feb-93		X	X	X	X			
15	MPT-15-SS05	15SS52	Subsurface Soil	02-Feb-93		X	X	X	X			
15	MPT-15-SS06	15SS62	Subsurface Soil	02-Feb-93		X	X	X	X			
15	MPT-15-SS07	15SS72	Subsurface Soil	02-Feb-93		X	X	X	X			
15	MPT-15-SS08	15SS82	Subsurface Soil	02-Feb-93		X	X	X	X			
15	MPT-15-SS08	15SS82D	Subsurface Soil	02-Feb-93		X	X	X	X			
15	MPT-15-SS01	15SS11	Surface Soil	02-Feb-93		X	X	X	X			
15	MPT-15-SS02	15SS21	Surface Soil	02-Feb-93		X	X	X	X			
15	MPT-15-SS03	15SS31	Surface Soil	02-Feb-93		X	X	X	X			
15	MPT-15-SS04	15SS41	Surface Soil	02-Feb-93		X	X	X	X			
15	MPT-15-SS05	15SS51	Surface Soil	02-Feb-93		X	X	X	X			
15	MPT-15-SS06	15SS61	Surface Soil	02-Feb-93		X	X	X	X			
15	MPT-15-SS07	15SS71	Surface Soil	02-Feb-93		X	X	X	X			

See notes at end of table.

Table B-3 (Continued)
1993 Samples and Analyses

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

SWMU	Sample Location	Sample Identifier	Medium	Date Collected	Analytical Parameters and Method Numbers							
					VOA 8010	Pest./ PCB 8080	VOA 8240	SVOA 8270	Metals	Cyanide	GWQ	TPH 418.1
15	MPT-15-SS08	15SS81	Surface Soil	02-Feb-93		X	X	X	X			
15	MPT-15-SS08	15SS81D	Surface Soil	02-Feb-93		X	X	X	X			
16	MPT-16-MW01I	16MW1D	Groundwater	29-Jan-93	X	X	X	X	X	X	X	
16	MPT-16-MW02S	16MW2	Groundwater	01-Feb-93		X	X	X	X	X	X	
16	MPT-16-MW03S	16MW3	Groundwater	29-Jan-93		X	X	X	X	X	X	
16	MPT-16-MW03S	16MW3D	Groundwater	29-Jan-93		X	X	X	X	X		
16	MPT-16-MW01ID	MP16MS1D8	Subsurface Soil	14-Jan-93		X	X	X	X	X		
16	MPT-16-MW01ID	MPT6MS1D2	Subsurface Soil	14-Jan-93		X	X	X	X	X		
16	MPT-16-MW02S	MP16MS2S2	Subsurface Soil	14-Jan-93		X	X	X	X	X		
16	MPT-16-MW02S	MP16MS2S8	Subsurface Soil	14-Jan-93		X	X	X	X	X		
16	MPT-16-MW03S	MP16MS3S2	Subsurface Soil	14-Jan-93		X	X	X	X	X		
16	MPT-16-MW03S	MP16MS3S8	Subsurface Soil	14-Jan-93		X	X	X	X	X		
16	MPT-16-SSC5	16SSC5D	Subsurface Soil	01-Feb-93		X						
16	MPT-16-SSE1	16SSE1D	Subsurface Soil	01-Feb-93		X						
16	MPT-16-SSA4	16SSA4	Surface Soil	30-Jan-93		X						
16	MPT-16-SSB7	16SSB7	Surface Soil	30-Jan-93		X						
16	MPT-16-SSC2	16SSC2	Surface Soil	30-Jan-93		X						
16	MPT-16-SSD4	16SSD4	Surface Soil	30-Jan-93		X						
16	MPT-16-SSD7	16SSD7	Surface Soil	30-Jan-93		X						
16	MPT-16-SSF4	16SSF4	Surface Soil	30-Jan-93		X						
16	MPT-16-SSF4	16SSF4DUP	Surface Soil	30-Jan-93		X						
16	MPT-16-SSG1	16SSG1	Surface Soil	30-Jan-93		X						
OWTP	MPT-8-MW01S	8MW1	Groundwater	01-Feb-93		X	X	X	X	X	X	

See notes at end of table.

Table B-3 (Continued)
1993 Samples and Analyses

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

SWMU	Sample Location	Sample Identifier	Medium	Date Collected	Analytical Parameters and Method Numbers							
					VOA 8010	Pest./ PCB 8080	VOA 8240	SVOA 8270	Metals	Cyanide	GWQ	TPH 418.1
OWTP	MPT-8-MW04S	8MW4	Groundwater	01-Feb-93		X	X	X	X	X	X	
OWTP	MPT-8-MW05D	8MW5DD	Groundwater	02-Feb-93	X	X	X	X	X	X	X	
OWTP	MPT-8-MW05S	8MW5S	Groundwater	27-Jan-93		X	X	X	X	X	X	
OWTP	MPT-8-MW06S	8MW6	Groundwater	28-Jan-93		X	X	X	X	X	X	
OWTP	MPT-8-MW06S	8MW6D	Groundwater	28-Jan-93		X	X	X	X	X		
OWTP	MPT-8-MW07S	8MW7	Groundwater	01-Feb-93		X	X	X	X	X	X	
OWTP	MPT-8-MW08S	8MW8	Groundwater	01-Feb-93		X	X	X	X	X	X	
OWTP	MPT-9-MW01S	9MW1	Groundwater	29-Jan-93		X	X	X	X	X	X	
OWTP	MPT-9-MW02S	9MW2	Groundwater	29-Jan-93		X	X	X	X	X	X	
OWTP	MPT-9-MW03S	9MW3	Groundwater	29-Jan-93		X	X	X	X	X	X	
OWTP	MPT-S-MW02S	S-2	Groundwater	29-Jan-93		X	X	X	X	X	X	
OWTP	MPT-S-MW03S	S-3	Groundwater	28-Jan-93		X	X	X	X	X	X	
OWTP	MPT-8-SL01	MPT8SL1	Sludge	19-Jan-93		X	X	X	X	X		
OWTP	MPT-8-SL01A	8SL1A	Sludge	02-Feb-93		X	X	X	X	X		
OWTP	MPT-8-SL01A	8SL1AD	Sludge	02-Feb-93		X	X	X	X	X		
OWTP	MPT-8-SL02	MPT8SL2	Sludge	19-Jan-93		X	X	X	X	X		
OWTP	MPT-8-SL03	MPT8SL3	Sludge	19-Jan-93		X	X	X	X	X		
OWTP	MPT-8-MW04S	MPT8MS4S2	Subsurface Soil	14-Jan-93		X	X	X	X	X		
OWTP	MPT-8-MW04S	MPT8MS4S8	Subsurface Soil	14-Jan-93		X	X	X	X	X		
OWTP	MPT-8-MW05D	2BS85DD79	Subsurface Soil	13-Jan-93		X	X	X	X	X		
OWTP	MPT-8-MW05S	2BS85S02	Subsurface Soil	13-Jan-93		X	X	X	X	X		
OWTP	MPT-8-MW06S	MPT8MS6S2	Subsurface Soil	15-Jan-93		X	X	X	X	X		
OWTP	MPT-8-MW06S	MPT8MS6S7	Subsurface Soil	15-Jan-93		X	X	X	X	X		

See notes at end of table.

Table B-3 (Continued)
1993 Samples and Analyses

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

SWMU	Sample Location	Sample Identifier	Medium	Date Collected	Analytical Parameters and Method Numbers							
					VOA 8010	Pest./ PCB 8080	VOA 8240	SVOA 8270	Metals	Cyanide	GWQ	TPH 418.1
OWTP	MPT-8-MW07S	MPT8MS7S2	Subsurface Soil	18-Jan-93		X	X	X	X	X		
OWTP	MPT-8-MW07S	MPT8MS7S9	Subsurface Soil	18-Jan-93		X	X	X	X	X		
OWTP	MPT-8-MW08S	MPT8MS8S2	Subsurface Soil	18-Jan-93		X	X	X	X	X		
OWTP	MPT-8-MW08S	MPT8MS8S9	Subsurface Soil	18-Jan-93		X	X	X	X	X		
OWTP	MPT-8-T3/0	MPT8BS357	Subsurface Soil	15-Jan-93		X						
OWTP	MPT-8-T3/0	MPT8BS3S7	Subsurface Soil	15-Jan-93			X	X	X	X		
OWTP	MPT-8-SW01	MPT8SW1	Surface Water	19-Jan-93		X		X	X	X		
OWTP	MPT-8-SW01	MPT8SW1	Surface Water	18-Feb-93			X					
OWTP	MPT-8-SW01	MPT8SW1D	Surface Water	18-Feb-93			X					
OWTP	MPT-8-SW02	MPT8SW2	Surface Water	19-Jan-93		X		X	X	X		
OWTP	MPT-8-SW02	MPT8SW2	Surface Water	18-Feb-93			X					
OWTP	MPT-8-T-12/-4	8BS6-10	TerraProbe™, Soil	11-Dec-92								X
OWTP	MPT-8-T-5/2	8BS13	TerraProbe™, Soil	12-Dec-92								X
OWTP	MPT-8-T-6/-12	8BS8	TerraProbe™, Soil	14-Dec-92								X
OWTP	MPT-8-T11/-4	8BS3-7	TerraProbe™, Soil	10-Dec-92								X
OWTP	MPT-8-T17/-7	8BS4-6	TerraProbe™, Soil	10-Dec-92								X
OWTP	MPT-8-T17/-7	8BS5-9	TerraProbe™, Soil	10-Dec-92								X
OWTP	MPT-8-T19/-22	8BS9	TerraProbe™, Soil	13-Dec-92								X
OWTP	MPT-8-T2/-19	8BS14	TerraProbe™, Soil	14-Dec-92								X
OWTP	MPT-8-T2/-19	8BS14D	TerraProbe™, Soil	14-Dec-92								X
OWTP	MPT-8-T29/-15	8BS10	TerraProbe™, Soil	13-Dec-92								X
OWTP	MPT-8-T4/0	8BS1-9	TerraProbe™, Soil	09-Dec-92								X
OWTP	MPT-8-T6/-12	8BS11	TerraProbe™, Soil	15-Dec-92								X

See notes at end of table.

Table B-3 (Continued)
1993 Samples and Analyses

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

SWMU	Sample Location	Sample Identifier	Medium	Date Collected	Analytical Parameters and Method Numbers							
					VOA 8010	Pest./ PCB 8080	VOA 8240	SVOA 8270	Metals	Cyanide	GWQ	TPH 418.1
OWTP	MPT-8-T6/-12	8BS12	TerraProbe™, Soil	15-Dec-92								X
OWTP	MPT-8-T8/-2	8BS2-9	TerraProbe™, Soil	10-Dec-92								X
OWTP	MPT-8-T8/-20	8BS7-9	TerraProbe™, Soil	11-Dec-92								X
OWTP	MPT-8-T-5/2	8GW2	TerraProbe™, Water	12-Dec-92								X
OWTP	MPT-8-T0/-10	8GW8	TerraProbe™, Water	15-Dec-92								X
OWTP	MPT-8-T10/-8	8GW5	TerraProbe™, Water	15-Dec-92								X
OWTP	MPT-8-T10/-8	8GW5D	TerraProbe™, Water	15-Dec-92								X
OWTP	MPT-8-T14/6	8GW6	TerraProbe™, Water	12-Dec-92								X
OWTP	MPT-8-T19/-22	8GW9	TerraProbe™, Water	13-Dec-92								X
OWTP	MPT-8-T21/-10	8GW4	TerraProbe™, Water	13-Dec-92								X
OWTP	MPT-8-T21/-17	8GW3	TerraProbe™, Water	13-Dec-92								X
OWTP	MPT-8-T4/0	8GW1	TerraProbe™, Water	09-Dec-92								X
OWTP	MPT-8-T5/3	8GW7	TerraProbe™, Water	13-Dec-92								X

Notes: VOA = volatile organic analyses.
Pest./PCB = pesticide and polychlorinated biphenyls.
SVOA = semivolatile organic analyses.
TPH = total petroleum hydrocarbons.
GWQ = groundwater quality parameters (pH, alkalinity, ammonia- nitrogen, chloride, color, hardness, phosphorus(total), sulfate, sulfide, total dissolved solids, total kjeldahl nitrogen, total organic carbon, and TPH).
OWTP = Oily Waste Treatment Plant Area (SWMUs 6, 7, 8, 9, 10, and 11).
SWMU = solid waste management unit.

Table B-4
1994 Samples and Analyses

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

SWMU	Sample Location	Sample Identifier	Medium	Date Collected	Analytical Parameters and Method Numbers										
					VOA 8010	Pest./ PCB 8080	PAH 8100	OPP 8140	Herb. 8150	VOA 8240	SVOA 8270	Metals	CN	GWQ	T PH
12	MPT-11-MW01S	11MW001S	G	07-Jul-94		X				X	X	X	X		
12	MPT-11-MW01S	11MW001SF	G	07-Jul-94								X			
12	MPT-11-MW02S	11MW002S	G	06-Jul-94		X				X	X	X	X		
12	MPT-11-MW02S	11MW002SF	G	06-Jul-94								X			
12	MPT-11-MW03S	11MW003S	G	06-Jul-94		X				X	X	X	X		
12	MPT-11-MW03S	11MW003SF	G	06-Jul-94								X			
15	MPT-15-MW01S	15MW001S	G	24-Aug-94		X		X	X	X	X	X	X		
15	MPT-15-MW01S	15MW001S	G	25-Aug-94										X	
15	MPT-15-MW02S	15MW002S	G	25-Jul-94		X				X	X	X	X	X	
15	MPT-15-MW02S	15MW002S	G	02-Aug-94				X	X						
15	MPT-15-MW03S	15MW003S	G	25-Jul-94		X				X	X	X	X	X	
15	MPT-15-MW03S	15MW003S	G	02-Aug-94				X	X						
15	MPT-15-MW03S	15MW003SRE	G	25-Jul-94							X				
15	MPT-15-MW04S	15MW004S	G	26-Jul-94		X				X	X	X	X	X	
15	MPT-15-MW04S	15MW004S	G	02-Aug-94				X	X						
15	MPT-15-MW04S	15MW004SRE	G	26-Jul-94							X				
15	MPT-15-MW05I	15MW005I	G	28-Jul-94		X				X	X	X	X	X	
15	MPT-15-MW05I	15MW005I	G	02-Aug-94				X	X						
15	MPT-15-MW05S	15MW005S	G	24-Aug-94		X		X	X	X	X	X	X	X	
15	MPT-15-MW05S	15MW005SD	G	24-Aug-94		X		X	X	X	X	X	X		
15	MPT-15-P01	15OP001	G	24-Aug-94		X				X	X	X	X	X	
15	MPT-15-SS10	15SS01001	SS	13-Sep-94		X		X	X						
15	MPT-15-SS11	15SS01101	SS	13-Sep-94		X		X	X						

See notes at end of table.

Table B-4 (Continued)
1994 Samples and Analyses

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

SWMU	Sample Location	Sample Identifier	Medium	Date Collected	Analytical Parameters and Method Numbers										
					VOA 8010	Pest./ PCB 8080	PAH 8100	OPP 8140	Herb. 8150	VOA 8240	SVOA 8270	Metals	CN	GWQ	T PH
15	MPT-15-SS12	15SS01201	SS	13-Sep-94		X		X	X						
15	MPT-15-SS13	15SS01301	SS	13-Sep-94		X		X	X						
15	MPT-15-SS14	15SS01401	SS	13-Sep-94		X		X	X						
15	MPT-15-SS15	15SS01501	SS	13-Sep-94		X		X	X						
15	MPT-15-SS16	15SS01601	SS	13-Sep-94		X		X	X						
15	MPT-15-SS17	15SS01701	SS	13-Sep-94		X		X	X						
15	MPT-15-SS18	15SS01801	SS	13-Sep-94		X		X	X						
15	MPT-15-SS19	15SS01901	SS	13-Sep-94		X		X	X						
15	MPT-15-SS19	15SS01901	SS	20-Sep-94		X		X	X						
15	MPT-15-SS19	15SS01901D	SS	13-Sep-94		X		X	X						
15	MPT-15-SS19	15SS01901D	SS	20-Sep-94		X		X	X						
15	MPT-15-SS20	15SS02001	SS	13-Sep-94		X		X	X						
15	MPT-15-SS21	15SS02101	SS	13-Sep-94		X		X	X						
15	MPT-15-SS22	15SS02201	SS	13-Sep-94		X		X	X						
15	MPT-15-SS23	15SS02301	SS	13-Sep-94		X		X	X						
15	MPT-15-SS24	15SS02401	SS	13-Sep-94		X		X	X						
15	MPT-15-SS25	15SS02501	SS	13-Sep-94		X		X	X						
15	MPT-15-SS26	15SS02601	SS	13-Sep-94		X		X	X						
15	MPT-15-SS27	15SS02701	SS	22-Sep-94		X		X	X						
15	MPT-15-SS27	15SS02701D	SS	22-Sep-94		X		X	X						
15	MPT-15-SS28	15SS02801	SS	13-Sep-94		X		X	X						
15	MPT-15-SS29	15SS02901	SS	13-Sep-94		X		X	X						
15	MPT-15-SS30	15SS03001	SS	13-Sep-94		X		X	X						

See notes at end of table.

Table B-4 (Continued)
1994 Samples and Analyses

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

SWMU	Sample Location	Sample Identifier	Medium	Date Collected	Analytical Parameters and Method Numbers										
					VOA 8010	Pest./ PCB 8080	PAH 8100	OPP 8140	Herb. 8150	VOA 8240	SVOA 8270	Metals	CN	GWQ	T PH
15	MPT-15-SS09	15SS00901	SS	20-Sep-94		X		X	X						
15	MPT-15-SS09	15SS00901D	SS	20-Sep-94		X		X	X						
15	MPT-15-SS12	15U01201	U	13-Sep-94								X			
15	MPT-15-SS15	15U01501	U	13-Sep-94								X			
15	MPT-15-SS16	15U01601	U	13-Sep-94								X			
15	MPT-15-SS17	15U01701	U	13-Sep-94								X			
15	MPT-15-SS20	15U02001	U	13-Sep-94								X			
15	MPT-15-SS23	15U02301	U	13-Sep-94								X			
15	MPT-15-SS30	15U03001	U	13-Sep-94								X			
15		NEG_CONTROL	N	20-Oct-94		X					X				
15	MPT-15-SS12	15E01201	N	20-Oct-94		X					X				
15	MPT-15-SS16	15E01601	N	20-Oct-94		X					X				
15	MPT-15-SS17	15E01701	N	20-Oct-94		X					X				
15	MPT-15-SS20	15E02001	N	20-Oct-94		X					X				
15	MPT-15-SS23	15E02301	N	20-Oct-94		X					X				
15	MPT-15-SS23	15E02301DL	N	20-Oct-94		X									
15	MPT-15-SS30	15E03001	N	20-Oct-94		X					X				
15	MPT-15-SS30	15E03001DL	N	20-Oct-94		X									
16	MPT-16-MW01I	16MW001I	G	29-Jun-94		X				X	X	X	X	X	X
16	MPT-16-MW02S	16MW002S	G	28-Jun-94		X				X	X	X	X	X	X
16	MPT-16-MW02S	16MW002S	G	27-Sep-94								X	X		
16	MPT-16-MW03S	16MW003S	G	28-Jun-94		X				X	X	X	X	X	
16	MPT-16-MW03S	16MW003S	G	27-Sep-94								X	X		

See notes at end of table.

Table B-4 (Continued)
1994 Samples and Analyses

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

SWMU	Sample Location	Sample Identifier	Medium	Date Collected	Analytical Parameters and Method Numbers										
					VOA 8010	Pest./ PCB 8080	PAH 8100	OPP 8140	Herb. 8150	VOA 8240	SVOA 8270	Metals	CN	GWQ	T PH
16	MPT-16-MW04S	16MW004S	G	07-Jul-94	X	X				X	X	X	X	X	X
OWTP	MPT-10-P01	10OP001	G	24-Aug-94		X				X	X	X	X		
OWTP	MPT-8-MW01S	08MW001S	G	11-Jul-94		X				X	X	X	X	X	X
OWTP	MPT-8-MW01S	08MW001SF	G	11-Jul-94								X			
OWTP	MPT-8-MW10S	08MW010S	G	09-Sep-94	X	X				X	X	X	X	X	X
OWTP	MPT-8-MW10S	08MW010SD	G	09-Sep-94	X	X				X	X	X	X	X	X
OWTP	MPT-8-MW10S	08MW010SRE	G	09-Sep-94							X				
OWTP	MPT-8-MW12S	08MW012S	G	25-Aug-94	X					X	X	X	X	X	X
OWTP	MPT-8-MW12S	08MW012S	G	12-Sep-94		X									
OWTP	MPT-8-MW13I	08MW013I	G	22-Sep-94	X	X				X	X	X	X	X	X
OWTP	MPT-8-MW13S	08MW013S	G	25-Aug-94	X	X				X	X	X	X	X	X
OWTP	MPT-8-MW14S	08MW014S	G	25-Aug-94	X	X				X	X	X	X	X	X
OWTP	MPT-8-MW15I	08MW015I	G	22-Sep-94		X				X	X	X	X	X	X
OWTP	MPT-8-MW15I	08MW015IRE	G	22-Sep-94	X										
OWTP	MPT-8-MW16S	08MW016S	G	26-Aug-94	X	X				X	X	X	X	X	X
OWTP	MPT-8-MW16S	08MW016SD	G	26-Aug-94	X	X				X	X	X	X	X	X
OWTP	MPT-8-MW17S	08MW017S	G	26-Aug-94	X	X				X	X	X	X	X	X
OWTP	MPT-8-MW18S	08MW018S	G	26-Aug-94	X	X				X	X	X	X	X	X
OWTP	MPT-8-MW19S	08MW019S	G	22-Sep-94	X	X				X	X	X	X	X	X
OWTP	MPT-8-MW19S	08MW019SD	G	22-Sep-94	X	X				X	X	X	X	X	X
OWTP	MPT-8-MW20S	08MW020S	G	08-Nov-94		X				X	X	X	X	X	X
OWTP	MPT-8-MW20S	08MW020SD	G	08-Nov-94		X				X	X	X	X	X	X
OWTP	MPT-8-MW04S	08MW004S	G	26-Aug-94		X				X	X	X	X	X	X

See notes at end of table.

Table B-4 (Continued)
1994 Samples and Analyses

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

SWMU	Sample Location	Sample Identifier	Medium	Date Collected	Analytical Parameters and Method Numbers										
					VOA 8010	Pest./ PCB 8080	PAH 8100	OPP 8140	Herb. 8150	VOA 8240	SVOA 8270	Metals	CN	GWQ	T PH
OWTP	MPT-8-MW06S	08MW006S	G	10-Jul-94		X				X	X	X	X	X	X
OWTP	MPT-8-MW06S	08MW006SD	G	10-Jul-94		X				X	X	X	X	X	X
OWTP	MPT-8-MW08S	08MW008S	G	09-Jul-94		X				X	X	X	X	X	X
OWTP	MPT-8-MW09S	08MW009S	G	26-Aug-94	X	X				X	X	X	X	X	X
OWTP	MPT-9-MW01S	09MW001S	G	09-Jul-94		X				X	X	X	X	X	X
OWTP	MPT-9-MW02S	09MW002S	G	11-Jul-94		X				X	X	X	X	X	X
OWTP	MPT-9-MW03S	09MW003S	G	11-Jul-94		X				X	X	X	X	X	X
OWTP	MPT-9-MW03S	09MW003SF	G	11-Jul-94								X			
OWTP	MPT-S-MW02S	0SMW002S	G	09-Jul-94		X				X	X	X	X		
OWTP	MPT-S-MW03S	0SMW003S	G	11-Jul-94		X				X	X	X	X		
OWTP	MPT-S-MW03S	0SMW003SF	G	11-Jul-94								X			
OWTP	MPT-8-SL04	08SL00401	SL	27-Oct-94		X				X	X	X	X		
OWTP	MPT-8-SL04	08SL00401D	SL	27-Oct-94		X				X	X	X	X		
OWTP	MPT-8-SL04	08SL00401DRE	SL	27-Oct-94		X				X					
OWTP	MPT-8-SL04	08SL00401RE	SL	27-Oct-94		X				X					
OWTP	MPT-8-SL10	08SL01001	SL	09-Aug-94		X				X	X	X	X		
OWTP	MPT-8-SL10	08SL01001D	SL	09-Aug-94		X				X	X	X	X		
OWTP	MPT-8-SL10	08SL01006	SL	09-Aug-94		X				X	X	X	X		
OWTP	MPT-8-SL10	08SL01006DL	SL	09-Aug-94							X				
OWTP	MPT-8-SL10	08SL01006RE	SL	09-Aug-94						X					
OWTP	MPT-8-SL11	08SL01101	SL	08-Aug-94		X				X	X	X	X		
OWTP	MPT-8-SL11	08SL01102	SL	08-Aug-94		X				X	X	X	X		
OWTP	MPT-8-SL11	08SL01102RE	SL	08-Aug-94						X					

See notes at end of table.

Table B-4 (Continued)
1994 Samples and Analyses

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

SWMU	Sample Location	Sample Identifier	Medium	Date Collected	Analytical Parameters and Method Numbers										
					VOA 8010	Pest./ PCB 8080	PAH 8100	OPP 8140	Herb. 8150	VOA 8240	SVOA 8270	Metals	CN	GWQ	T PH
OWTP	MPT-8-SL12	08SL01201	SL	08-Aug-94		X				X	X	X	X		
OWTP	MPT-8-SL12	08SL01202	SL	08-Aug-94		X				X	X	X	X		
OWTP	MPT-8-SL12	08SL01202RE	SL	08-Aug-94						X					
OWTP	MPT-8-SL13	08SL01301	SL	08-Aug-94		X				X	X	X	X		
OWTP	MPT-8-SL13	08SL01302	SL	08-Aug-94		X				X	X	X	X		
OWTP	MPT-8-SL13	08SL01302RE	SL	08-Aug-94						X					
OWTP	MPT-8-SL05	08SL00501	SL	09-Aug-94		X				X	X	X	X		
OWTP	MPT-8-SL05	08SL00501DL	SL	09-Aug-94							X				
OWTP	MPT-8-SL05	08SL00501RE	SL	09-Aug-94						X					
OWTP	MPT-8-SL05	08SL00505	SL	09-Aug-94		X				X	X	X	X		
OWTP	MPT-8-SL05	08SL00505DL	SL	09-Aug-94						X					
OWTP	MPT-8-SL06	08SL00601	SL	09-Aug-94		X				X	X	X	X		
OWTP	MPT-8-SL06	08SL00601DL	SL	09-Aug-94						X					
OWTP	MPT-8-SL06	08SL00605	SL	09-Aug-94		X				X	X	X	X		
OWTP	MPT-8-SL06	08SL00605DL	SL	09-Aug-94						X					
OWTP	MPT-8-SL07	08SL00701	SL	09-Aug-94		X				X	X	X	X		
OWTP	MPT-8-SL07	08SL00701D	SL	09-Aug-94		X				X	X	X	X		
OWTP	MPT-8-SL07	08SL00701DRE	SL	09-Aug-94						X					
OWTP	MPT-8-SL07	08SL00705	SL	09-Aug-94		X				X	X	X	X		
OWTP	MPT-8-SL07	08SL00705DL	SL	09-Aug-94						X					
OWTP	MPT-8-SL08	08SL00801	SL	09-Aug-94		X				X	X	X	X		
OWTP	MPT-8-SL08	08SL00801RE	SL	09-Aug-94						X					
OWTP	MPT-8-SL08	08SL00806	SL	09-Aug-94		X				X	X	X	X		

See notes at end of table.

Table B-4 (Continued)
1994 Samples and Analyses

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

SWMU	Sample Location	Sample Identifier	Medium	Date Collected	Analytical Parameters and Method Numbers										
					VOA 8010	Pest./ PCB 8080	PAH 8100	OPP 8140	Herb. 8150	VOA 8240	SVOA 8270	Metals	CN	GWQ	T PH
OWTP	MPT-8-SL08	08SL00806DL	SL	09-Aug-94						X	X				
OWTP	MPT-8-SL09	08SL00901	SL	09-Aug-94		X				X	X	X	X		
OWTP	MPT-8-SL09	08SL00906	SL	09-Aug-94		X				X	X	X	X		
OWTP	MPT-8-SL09	08SL00906DL	SL	09-Aug-94						X	X				
OWTP	MPT-8-BS13	08BS01316	SB	26-Aug-94	X		X								
OWTP	MPT-8-BS15	08BS01511	SB	30-Aug-94	X		X								
OWTP	MPT-8-BS15	08BS01511D	SB	30-Aug-94	X		X								

Notes: VOA = volatile organic analyses.
Pest./PCB = pesticide and polychlorinated biphenyls.
OPP = organophosphate pesticides.
Herb. = herbicides.
SVOA = semivolatile organic analyses.
CN = cyanide.
TPH = total petroleum hydrocarbons (418.1).
GWQ = groundwater quality parameters (pH, alkalinity, ammonia- nitrogen, chloride, color, hardness, phosphorus(total), sulfate, sulfide, total dissolved solids, total. kjeldahl nitrogen, total organic carbon, and TPH).
OWTP = Oily Waste Treatment Plant Area (SWMUs 6, 7, 8, 9, 10, and 11).
SWMU = solid waste management unit.
G = groundwater.
SS = surface soil.
SB = subsurface soil.
SL = sludge.
N = worm tissue.
U = worm soil.

APPENDIX C

1993 PARCCs REPORT

PRECISION, ACCURACY, REPRESENTATIVENESS, COMPARABILITY, AND COMPLETENESS FOR PHASE II RCRA FACILITY INVESTIGATION

U.S. NAVAL STATION
MAYPORT, FLORIDA

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July 1993

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1.0 INTRODUCTION

Prior to evaluating the data for precision, accuracy, representativeness, comparability, and completeness (PARCC) criteria the laboratory reviewed the data package and the data also were independently reviewed and validated using the Naval Energy and Environmental and Support Activity (NEESA) guidance document 20.2-047B (1988) entitled, Sampling and Chemical Analysis Quality Assurance Requirements for the Navy Installation Program. Before the laboratory released the chemical analytical results, both the sample and laboratory QC data were carefully reviewed in order to verify sample identity, instrument calibration, detection limits, dilution factors, numerical computations, accuracy of transcriptions, and chemical interpretations. Additionally, the QC data were reduced and spike recoveries were included in control charts, and the resulting data were reviewed to ascertain whether they were within the laboratory defined limits for accuracy and precision. The data were compiled into a NEESA Level C data package and any nonconforming data were discussed in the data package cover letter and case narrative.

The Level C data packages were then reviewed and validated by Heartland Environmental Services, Inc., Missouri (Heartland). Data validation is the technical review of a data package using criteria established in the data quality objectives, the quality assurance project plan and guidance documents prepared by the United States Environmental Protection Agency (USEPA) for the validation of organic and inorganic analytical data (USEPA 1990a and 1990b) as specified by NEESA document 20.2-047B. The data review and validation process is independent of the laboratory's checks because it is impossible to repeat the laboratory's review as not all the raw data were included in the Level C data packages.

Samples that did not meet the acceptance limit criteria were qualified with a flag; single letter abbreviations that indicate a problem with the data. Data qualifiers used by the validators when amending the data include the following.

U — Undetected. The analyte was not detected above the contract required quantitation limit (CRQL). The "U" designator also is used to qualify common laboratory contaminants. The "U" designator is applied to an environmental sample when the common laboratory contaminant is detected in an environmental sample at a concentration less than 10 times the value of the concentration detected in any corresponding field QC blank, method blank or preparation blanks.

J — Estimated. The analyte was present, but the reported value may not be accurate or precise. The "J" designator is used to qualify an analyte that was present at a concentration between the CRQL and method detection limit (MDL) or the data "failed" some of the analytical validation criteria but not sufficient to reject the data and when combined with the U designator the quantitation limit is estimated.

R Rejected. Data was rejected by the data validator during comparison of the NEESA Level D data package with the analytical functional guideline criteria. The "R" designator indicates a significant variance in acceptable laboratory performance. Either re-analysis or re-sampling and analysis would be necessary to determine the presence or absence of the target analyte(s).

Once the data were reviewed and validated according to the guidance presented in NEESA document 20.2-047B, the data were evaluated by Heartland using the PARCCs criteria included in the Data Quality Objectives (DQOs) of Volume II of the Resource Conservation and Recovery Act Feasibility Investigation (RFI) Work Plan for Naval Station (NAVSTA) Mayport, dated 1991. The following sections present a brief description of PARCCs criteria.

Precision. Precision is a measure of the agreement or repeatability of a set of replicate results obtained from duplicate laboratory analyses of samples collected from the same location/depth interval. Precision was calculated from laboratory analytical data and cannot be measured directly. Precision is expressed as the Relative Percent Difference (RPD) between analytical values for two samples divided by the average of their analytical values. Precision is calculated using the expression:

$$RPD = (D1-D2) / (\tfrac{1}{2}(D1+D2)) \times 100$$

D1 and D2 are the reported values for the duplicate sample pair. Precision was evaluated using field duplicate samples and laboratory split samples (for example, MS/MSD samples).

Precision for environmental samples and their duplicate was assessed using a maximum RPD of 20 percent for water matrices and 35 percent for soil and sludge matrices. Precision for MS/MSD samples was assessed by using the target analyte specific RPD criteria for the spiked compounds.

Accuracy. Accuracy is a measure of the agreement between an experimental determination and the true value of the parameter being measured. Accuracy can be calculated from the analytical data and was not measured directly. Accuracy is used to identify the bias in a given measurement system (i.e. laboratory conditions, sample matrix, and sampling conditions). Accuracy is assessed by reviewing the Percent Recovery (%R) between the true value of the spike analyte and the actual analytical value. Accuracy is calculated using the equation:

$$\%R = ((A-B)/C) \times 100$$

A = Measured concentration of the spiked analyte.
B = Measured concentration of the spiked compound in the unspiked sample.
C = True concentration of the spiked analyte.

For the organic analyses, each of the samples was spiked with a surrogate compound; and for inorganic analyses, each sample was spiked with a known reference material before digestion. Each of these approaches provides a measure of the matrix effects on the analytical accuracy.

Representativeness. Representativeness is a qualitative measure of the degree to which sample data accurately and precisely represent a characteristic environmental condition. Representativeness is a subjective parameter and is used to evaluate the efficacy of the sampling plan design. Representativeness was evaluated using the field and laboratory QC blank sample results. QC blank samples are equipment rinseate blanks, field blanks, trip blanks, laboratory method blanks for organic analysis and laboratory preparation blanks for inorganic analysis. Positive detection of target analytes in the QC blank samples identify contaminants that possibly were introduced to the associated environmental sample during sample collection, transport or laboratory analysis.

Comparability. Comparability is qualitative measure designed to express the confidence with which one data set may be compared to another. Factors that affect comparability are: sample collection and handling techniques, sample matrix type, and analytical method. Comparability is limited by the other PARCC parameters because only when precision and accuracy are known can data sets be compared with confidence.

Completeness. Completeness is defined as the percentage of measurements that are judged to be valid compared to the total number of measurements made. Valid usable data are values that were not qualified as rejected (R qualifier) during data validation. A goal of 95 percent usable data was established in the RFI Work Plan for NAVSTA Mayport, dated October 1991. Completeness equals the total number of analytes for each matrix minus the total number of rejected analytes divided by the total number of analytes multiplied by 100.

2.0 PRECISION

The following section describes the evaluation of precision for volatile organic compounds, semivolatile organic compounds, pesticides and polychlorinated biphenyls (PCBs), kepone and inorganics and cyanide. Duplicate samples are evaluated for precision only when contaminants are detected in both the environmental sample and the sample's duplicate. Environmental samples and their respective duplicates may not exhibit positive results for all compounds found at or near the contract required quantitation limit (CRQL) because of low levels of contamination found at a site. Duplicates with Relative Percent Differences (RPDs) within control limits indicate adequate sampling practices and/or good analytical precision. Duplicates with RPDs outside the control limits may result from inappropriate sampling procedures, matrix interferences, or non-homogeneity of the sample matrix. In addition, poor precision can be attributed to deviation(s) from the analytical methodology or to poor reproducibility of target analyte concentrations at or near the instrument detection limit (IDL). The acceptance criteria for evaluating precision of field duplicates analytical results is a RPD of 20 for water matrices and a RPD of 35 for soil matrices.

The percent of duplicate samples collected for the analytical parameters and sample matrices was greater than ten percent for soil, sediment, surface water, groundwater and sludge matrices as specified in the RFI Work Plan for NAVSTA Mayport. The following Sections summarize the evaluation of analytical precision for the water matrices (groundwater and surface water samples), soil\sediment matrices (soil samples and sediment samples) and sludge matrix for the following analytical groups:

- GC/MS volatile organic compounds (GC/MS VOCs);
- GC volatile organic compounds (GC/VOCs), (only groundwater samples);
- semivolatile organic compounds (SVOCs);
- pesticides, PCBs, and kepone; and
- inorganics and cyanide.

Duplicate precision was assessed using both environmental sample and associated duplicates and matrix spike (MS) and matrix spike duplicates (MSDs).

Tabulation of the results of assessing duplicate precision and duplicate frequency are presented in Tables 2-1 through 2-6 for the water matrices, 2-7 through 2-11 for the soil matrices, and 2-12 through 2-16 for the sludge matrices. The results of the evaluation of precision for MS/MSD samples is provided in Tables 2-17 through 2-20 for water matrix, Tables 2-21 through 2-24 for soil\sediment matrix and 2-25 through 2-28 for the sludge matrix.

In addition, to assess whether instrument calibration for volatile, semivolatile and pesticide and PCB analytical methods resulted in non-compliant duplicate precision, tables were made of continuing calibration for each sample delivery group (SDG) and are included in Appendix A. To assess whether dilution of the samples resulted in non-compliant precision for inorganic analytical methods, tables were made of serial dilutions that were

TABLE 2 - 1

GC/MS VOLATILE ORGANIC COMPOUNDS
WATER SAMPLE AND DUPLICATE PRECISION
NAVSTA MAYPORT, FLORIDA

SDG	SAMPLE ID	MATRIX	NO. ASSC. SAMPLES	COMPOUND	SAMPLE CONC.	DUP CONC	MAX RPD	RPD
23884	11MW3	WATER	4	NO COMPOUNDS DETECTED			20%	
23886	8MW6	WATER	4	2-BUTANONE	0	1	20%	200%
				TETRACHLOROETHENE	0	1	20%	200%
				ACETONE	6	0	20%	200%
23904	16MW3	WATER	6	NO COMPOUNDS DETECTED			20%	
23916		WATER	5					
23944		WATER	2					
35168	MPTBSW7	WATER	3	NO COMPOUNDS DETECTED			20%	
35196	MPT8SW1	WATER	3	ACETONE	190	180	20%	5%
				CARBON DISULFIDE	11	10	20%	10%
				2-BUTANONE	10	11	20%	10%
				BENZENE	21	18	20%	15%
				TOLUENE	53	48	20%	10%
				ETHYLBENZENE	14	13	20%	7%
				XYLENE (TOTAL)	86	77	20%	11%
34923		WATER	2					
	TOTAL SAMPLES		29					

% OF DUPLICATES COLLECTED	RPD IN	RPD OUT	% WITHIN RPD LIMIT
17.2%	7	3	70.0%

TABLE 2 - 2

GC VOLATILE ORGANIC COMPOUNDS
WATER SAMPLE AND DUPLICATE PRECISION
NAVSTA MAYPORT, FLORIDA

SDG	SAMPLE ID	MATRIX	NO. ASSC. SAMPLES	COMPOUND	SAMPLE CONC.	DUP CONC	MAX RPD	RPD
23885	11MW3	WATER	2	NO COMPOUNDS DETECTED			20%	
23887	8MW6	WATER	3	NO COMPOUNDS DETECTED			20%	
23905		WATER	1	NO COMPOUNDS DETECTED			20%	
	TOTAL SAMPLES		6					

% OF DUPLICATES COLLECTED	RPD IN	RPD OUT	% WITHIN RPD LIMIT
33.3%	3	0	100.0%

TABLE 2 - 3
SEMIVOLATILE ORGANIC COMPOUNDS
WATER SAMPLE AND DUPLICATE PRECISION
NAVSTA MAYPORT, FLORIDA

SDG	SAMPLE ID	MATRIX	NO. ASSC. SAMPLES	COMPOUND	SAMPLE CONC.	DUP CONC	MAX RPD	RPD
23884	11MW3	WATER	4	NO COMPOUNDS DETECTED			20%	
23886	8MW6	WATER	4	NO COMPOUNDS DETECTED			20%	
23904	16MW3	WATER	7	NO COMPOUNDS DETECTED			20%	
23918		WATER	5					
23943		WATER	1					
34923		WATER	2					
35168	MPTBSW7	WATER	2	NO COMPOUNDS DETECTED			20%	
35196		WATER	1					
	TOTAL SAMPLES		26					

% OF DUPLICATES COLLECTED	RPD IN	RPD OUT	% WITHIN RPD LIMIT
15.4%	4	0	100.0%

TABLE 2 - 4

PESTICIDE/PCB COMPOUNDS
WATER SAMPLE AND DUPLICATE PRECISION
NAVSTA MAYPORT, FLORIDA

SDG	SAMPLE ID	MATRIX	NO. ASSC. SAMPLES	COMPOUND	SAMPLE CONC.	DUP CONC	MAX RPD	RPD
23884	11MW3	WATER	4	NO COMPOUNDS DETECTED			20%	
23886	8MW6	WATER	4	NO COMPOUNDS DETECTED			20%	
23904	16MW3	WATER	6	NO COMPOUNDS DETECTED			20%	
34293		WATER	2					
23918		WATER	5					
23943		WATER	1					
34884		WATER	2					
35168	MPTBSW7	WATER	2	NO COMPOUNDS DETECTED			20%	
	TOTAL SAMPLES		26					

% OF DUPLICATES COLLECTED	RPD IN	RPD OUT	% WITHIN RPD LIMIT
15.4%	4	0	100.0%

TABLE 2 - 5

KEPONE
WATER SAMPLE AND DUPLICATE PRECISION
NAVSTA MAYPORT, FLORIDA

SDG	SAMPLE ID	MATRIX	NO. ASSC. SAMPLES	COMPOUND	SAMPLE CONC.	DUP CONC	MAX RPD	RPD
23884	11MW3	WATER	2	NO COMPOUNDS DETECTED			20%	
23886	8MW6	WATER	3	NO COMPOUNDS DETECTED			20%	
23904	16MW3	WATER	5	NO COMPOUNDS DETECTED			20%	
23918		WATER	5					
34923		WATER	2					
23943		WATER	1					
34884		WATER	2					
35168	MPTBSW7	WATER	2	NO COMPOUNDS DETECTED			20%	
	TOTAL SAMPLES		22					

% OF DUPLICATES COLLECTED	RPD IN	RPD OUT	% WITHIN RPD LIMIT
18.2%	0	0	100.0%

TABLE 2 - 6

METALS AND CYANIDE
WATER SAMPLE AND DUPLICATE PRECISION
NAVSTA MAYPORT, FLORIDA

SDG	SAMPLE ID	MATRIX	NO. ASSC. SAMPLES	COMPOUND	SAMPLE CONC.	DUP CONC	MAX RPD	RPD
23886	8MW8	WATER	5	ARSENIC	2.5	2.8	20%	11%
				BARIUM	5.9	6.6	20%	11%
				CHROMIUM	4.2	6.7	20%	46%
				COPPER	5.8	14.5	20%	86%
				VANADIUM	5.7	8.3	20%	37%
				ZINC	97.5	35.1	20%	94%
				TIN	34.9	0	20%	200%
				CALCIUM	62200	62300	20%	0%
				IRON	2340	2750	20%	16%
				MAGNESIUM	13300	12400	20%	7%
				MANGANESE	36.1	36.8	20%	2%
23884	11MW3	WATER	6	ARSENIC	2.7	3.2	20%	17%
				BARIUM	8.6	9.5	20%	8%
				CHROMIUM	4.6	5.2	20%	12%
				COPPER	9	12.9	20%	36%
				VANADIUM	8.1	8.3	20%	2%
				ZINC	33.2	19.3	20%	53%
				TIN	0	2950	20%	200%
				CALCIUM	191000	189000	20%	1%
				IRON	2510	3070	20%	20%
				MAGNESIUM	44300	43500	20%	2%
				MANGANESE	86.8	88.7	20%	2%
	TOTAL SAMPLES		11					

TABLE 2 - 6 (CONTINUED)

METALS AND CYANIDE
WATER SAMPLE AND DUPLICATE PRECISION
NAVSTA MAYPORT, FLORIDA

SDG	SAMPLE ID	MATRIX	NO. ASSC. SAMPLES	COMPOUND	SAMPLE CONC.	DUP CONC	MAX RPD	RPD
23904	16MW3	WATER	9	ARSENIC	21.3	23.7	20%	11%
				BARIUM	25.7	31	20%	19%
				BERYLLIUM	0.94	1.2	20%	24%
				CHROMIUM	33.1	42.4	20%	25%
				COBALT	4.4	7.3	20%	50%
				COPPER	2.8	2	20%	33%
				LEAD	12.3	195	20%	176%
				NICKEL	0	14.6	20%	200%
				VANADIUM	39.4	48.9	20%	22%
				ZINC	57.6	76.9	20%	29%
				TIN	0	56	20%	200%
				CALCIUM	11300	11800	20%	4%
				IRON	21600	26600	20%	21%
				MAGNESIUM	10300	11300	20%	9%
				MANGANESE	194	237	20%	20%
35168	MPTBSW7	WATER	7	ARSENIC	5.1	4.8	20%	6%
				BARIUM	6.8	7.6	20%	11%
				CALCIUM	71600	71100	20%	1%
				IRON	92.5	85.7	20%	8%
				MAGNESIUM	54600	54000	20%	1%
				MANGANESE	94	98.7	20%	5%
				SODIUM	386000	380000	20%	2%
				VANADIUM	3.5	0	20%	200%
				ZINC	0	3.2	20%	200%
	TOTAL SAMPLES		27					

% DUPLICATES COLLECTED	RPD IN	RPD OUT	% WITHIN RPD LIMIT
10.5%	25	21	54.3%

TABLE 2 - 7

GC/MS VOLATILE ORGANIC COMPOUNDS
SOIL SAMPLE AND DUPLICATE PRECISION
NAVSTA MAYPORT, FLORIDA

SDG	SAMPLE ID	MATRIX	NO. ASSC. SAMPLES	COMPOUND	SAMPLE CONC.	DUP CONC	MAX RPD	RPD
35083	15SS81	SOIL	14	NO COMPOUNDS DETECTED				
	15SS82	SOIL		NO COMPOUNDS DETECTED				
34884		SOIL	2					
34889		SOIL	8					
34901		SOIL	5					
34915		SOIL	4					
35163	MPTBSS1	SOIL	5	NO COMPOUNDS DETECTED				
35168	MPTBSD7	SOIL	2	NO COMPOUNDS DETECTED				
	TOTAL SAMPLES		40					

% OF DUPLICATE COLLECTED	RPD IN	RPD OUT	% WITHIN RPD LIMIT
10.0%	0	0	100.0%

TABLE 2 - 8

SEMIVOLATILE ORGANIC COMPOUNDS
SOIL SAMPLE AND DUPLICATE PRECISION
NAVSTA MAYPORT, FLORIDA

SDG	SAMPLE ID	MATRIX	NO. ASSC. SAMPLES	COMPOUND	SAMPLE CONC.	DUP CONC	MAX RPD	RPD
35083	15SS81	SOIL	14	BUTYLBENZYLPHTHALATE	180	250	35%	32.6%
	15SS82	SOIL		NO COMPOUNDS DETECTED				
34884		SOIL	2					
34889		SOIL	8					
34901		SOIL	5					
34915		SOIL	4					
35163	MPTBSS1	SOIL	5	NO COMPOUNDS DETECTED				
35168	MPTBSB7	SOIL	2	PYRENE	99	0	35%	200%
				BIS(2-ETHYLHEXYL)PHTHALATE	140	200	35%	35.3%
	TOTAL SAMPLES		40					

% OF DUPLICATE COLLECTED	RPD IN	RPD OUT	% WITHIN RPD LIMIT
10.0%	1	2	33.3%

TABLE 2 - 9

PESTICIDE AND PCB COMPOUNDS
SOIL SAMPLE AND DUPLICATE PRECISION
NAVSTA MAYPORT, FLORIDA

SDG	SAMPLE ID	MATRIX	NO. ASSC. SAMPLES	COMPOUND	SAMPLE CONC.	DUP CONC	MAX RPD	RPD
23953	15SS81	SOIL	14	4,4'-DDE	260	230	35%	12%
				4,4'-DDT	110	140	35%	24%
				CHLORDANE	1000	710	35%	34%
	15SS82	SOIL		NO COMPOUNDS DETECTED			35%	
34889		SOIL	8					
34901		SOIL	5					
23471	2SSH7	SOIL	6	AR1260	150	160	35%	6%
	2SSQ2	SOIL		AR 1260	170	140	35%	19%
34884		SOIL	2					
23472		SOIL	10					
34915		SOIL	4					
35163	MPTBSS1	SOIL	5	NO COMPOUNDS DETECTED			35%	
35168	MPTBSD7	SOIL	2	NO COMPOUNDS DETECTED			35%	
23954	MPT16SSF4	SOIL	8	AR1260	20	9.8	35%	68%
	TOTAL SAMPLES		**64**					

% OF DUPLICATES COLLECTED	RPD IN	RPD OUT	% WITHIN RPD LIMIT
10.9%	5	1	83.3%

TABLE 2 - 10

KEPONE
SOIL SAMPLE AND DUPLICATE PRECISION
NAVSTA MAYPORT, FLORIDA

SDG	SAMPLE ID	MATRIX	NO. ASSC. SAMPLES	COMPOUND	SAMPLE CONC.	DUP CONC	MAX RPD	RPD
23953	15SS81	SOIL	14	NO COMPOUNDS DETECTED			35%	
	15SS82	SOIL		NO COMPOUNDS DETECTED			35%	
34889		SOIL	8					
34901		SOIL	5					
34915		SOIL	4					
35163	MPTBSS1	SOIL	5	NO COMPOUNDS DETECTED			35%	
35168	MPTBSW7	SOIL	2	NO COMPOUNDS DETECTED			35%	
	TOTAL SAMPLES		**38**					

% OF DUPLICATES COLLECTED	RPD IN	RPD OUT	% WITHIN RPD LIMIT
10.5%	0	0	100.0%

TABLE 2 - 11

METALS AND CYANIDE
SOIL SAMPLE AND DUPLICATE PRECISION
NAVSTA MAYPORT, FLORIDA

SDG	SAMPLE ID	MATRIX	NO. ASSC. SAMPLES	COMPOUND	SAMPLE CONC.	DUP CONC	MAX RPD	RPD
35163	MPTBSS1	SOIL	7	ANTIMONY	5.3	0	35%	200.0%
				BARIUM	2.6	2.7	35%	3.8%
				CHROMIUM	0.72	1.5	35%	70.3%
				COPPER	0	2.1	35%	200.0%
				LEAD	1.2	1.5	35%	22.2%
				SELENIUM	0.59	0.72	35%	19.8%
				VANADIUM	1.2	1.7	35%	34.5%
				ZINC	0.35	1.7	35%	131.7%
35168	MPTBSD7	SOIL	4	ARSENIC	0.01	0.01	35%	0.0%
				BARIUM	4	4	35%	0.0%
				BERYLLIUM	0	0.1	35%	200.0%
				CHROMIUM	3	2.8	35%	6.9%
				COPPER	0.88	0.88	35%	0.0%
				MERCURY	0.22	0	35%	200.0%
				SELENIUM	0.65	0	35%	200.0%
				THALLIUM	0.88	0	35%	200.0%
				VANADIUM	2.7	2.2	35%	20.4%
				ZINC	9.5	7.9	35%	18.4%
	TOTAL SAMPLES		11					

TABLE 2 - 11 (CONTINUED)

METALS AND CYANIDE
SOIL SAMPLE AND DUPLICATE PRECISION
NAVSTA MAYPORT, FLORIDA

SDG	SAMPLE ID	MATRIX	NO. ASSC. SAMPLES	COMPOUND	SAMPLE CONC.	DUP CONC	MAX RPD	RPD
35083	15SS81	SOIL	18	ARSENIC	2.9	2.9	35%	0.0%
				BARIUM	27.7	21.8	35%	23.8%
				BERYLLIUM	0.09	0.09	35%	0.0%
				CADMIUM	0.8	0.84	35%	4.9%
				CHROMIUM	9.1	10.9	35%	18.0%
				COBALT	0.66	0.65	35%	1.5%
				COPPER	9.3	10.8	35%	14.9%
				LEAD	267	326	35%	19.9%
				MERCURY	0.53	0.62	35%	15.7%
				TIN	3.7	3.8	35%	2.7%
				VANADIUM	3	3.3	35%	9.5%
				ZINC	169	174	35%	2.9%
35083	15SS82	SOIL		ARSENIC	1.5	1.5	35%	0.0%
				BARIUM	5	4.7	35%	6.2%
				BERYLLIUM	0.09	0.07	35%	25.0%
				CHROMIUM	1.3	0.93	35%	33.2%
				COBALT	1.1	0	35%	200.0%
				COPPER	1.1	1.3	35%	16.7%
				LEAD	0.5	0.41	35%	19.8%
				MERCURY	0.07	0.11	35%	44.4%
				SELENIUM	0.46	0.46	35%	0.0%
				VANADIUM	1.2	1.1	35%	8.7%
				ZINC	5	2.4	35%	70.3%
	TOTAL SAMPLES		29					

% DUPLICATES COLLECTED	RPD IN	RPD OUT	% WITHIN RPD LIMIT
10.0%	30	11	73.2%

TABLE 2 - 12

GC/MS VOLATILE ORGANIC COMPOUNDS
SLUDGE SAMPLE AND DUPLICATE PRECISION
NAVSTA MAYPORT, FLORIDA

SDG	SAMPLE ID	MATRIX	NO. ASSC. SAMPLES	COMPOUND	SAMPLE CONC.	DUP CONC	MAX RPD	RPD
35074	8SL1A	SOIL	2	ACETONE	2	3	35%	40%
34923		SOIL	3					
	TOTAL SAMPLES		5					

% OF DUPLICATE COLLECTED	RPD IN	RPD OUT	% WITHIN RPD LIMIT
20.0%	0	1	0.0%

TABLE 2 - 13

SEMIVOLATILE ORGANIC COMPOUNDS
SLUDGE SAMPLE AND DUPLICATE PRECISION
NAVSTA MAYPORT, FLORIDA

SDG	SAMPLE ID	MATRIX	NO. ASSC. SAMPLES	COMPOUND	SAMPLE CONC.	DUP CONC	MAX RPD	RPD
34923		SLUDGE	3				35%	
35074	8SL1A	SLUDGE	1	ANTHRACENE	100	91	35%	9%
				CHRYSENE	220	170	35%	26%
				PYRENE	0	170	35%	200%
				BUTYLBENZYLPHTHALATE	0	85	35%	200%
				BIS(2-ETHYLHEXYL)PHTHALATE	0	1200	35%	200%
				BENZO(B)FLUORANTHENE	0	76	35%	200%
				BENZO(G,H,I)PERYLENE	0	85	35%	200%

TOTAL SAMPLES 4

% OF DUPLICATES COLLECTED	RPD IN	RPD OUT	% WITHIN RPD LIMIT
25.0%	2	5	28.6%

TABLE 2 - 14

PESTICIDE/PCB COMPOUNDS
SLUDGE SAMPLE AND DUPLICATE PRECISION
NAVSTA MAYPORT, FLORIDA

SDG	SAMPLE ID	MATRIX	NO. ASSC. SAMPLES	COMPOUND	SAMPLE CONC.	DUP CONC	MAX RPD	RPD
34923		SLUDGE	3					
35074	8SL1A	SLUDGE	1	NO COMPOUNDS DETECTED			35%	
	TOTAL SAMPLES		4					

% OF DUPLICATE COLLECTED	RPD IN	RPD OUT	% WITHIN RPD LIMIT
25.0%	0	0	100.0%

TABLE 2 - 15

KEPONE
SLUDGE SAMPLE AND DUPLICATE PRECISION
NAVSTA MAYPORT, FLORIDA

SDG	SAMPLE ID	MATRIX	NO. ASSC. SAMPLES	COMPOUND	SAMPLE CONC.	DUP CONC	MAX RPD	RPD
34923		SLUDGE	3					
35074	8SL1A	SLUDGE	1	NO COMPOUNDS DETECTED			35%	
	TOTAL SAMPLES		4					

% OF DUPLICATE COLLECTED	RPD IN	RPD OUT	% WITHIN RPD LIMIT
25.0%	0	0	100.0%

TABLE 2 - 16

METALS AND CYANIDE
SLUDGE SAMPLE AND DUPLICATE PRECISION
NAVSTA MAYPORT, FLORIDA

SDG	SAMPLE ID	MATRIX	NO. ASSC. SAMPLES	COMPOUND	SAMPLE CONC.	DUP CONC	MAX RPD	RPD	RPD OUT
35074	8SL1A	SLUDGE	2	ANTIMONY	4	0	35%	200.0%	1
				BARIUM	8	7.1	35%	11.9%	0
				CHROMIUM	1.1	1.5	35%	30.8%	0
				COPPER	6	5.7	35%	5.1%	0
				LEAD	3.1	2.9	35%	6.7%	0
				NICKEL	2.2	4.3	35%	64.6%	1
				SELENIUM	0	0.11	35%	200.0%	1
				VANADIUM	3.2	3.3	35%	3.1%	0
				ZINC	14.7	20.6	35%	33.4%	0
				CYANIDE	0.21	0	35%	200.0%	1
	TOTAL SAMPLES		2						

% DUPLICATES COLLECTED	RPD IN	RPD OUT	% WITHIN RPD LIMIT
50.0%	6	4	60.0%

TABLE 2 - 17

GC/MS VOLATILE ORGANICS COMPOUNDS
WATER SAMPLE MATRIX SPIKE\MATRIX SPIKE DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE 8MW1*		SDG 23918		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
VOA COMPOUNDS	UNITS			
1,1-DICHLOROETHENE	ug/L	116	105	0
TRICHLOROETHENE	ug/L	102	102	-3
BENZENE	ug/L	108	111	-3
TOLUENE	ug/L	98	105	-4
CHLOROBENZENE	ug/L	101	116	-4

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

23918: 2QS008, 8MW1, 8MW8, 8MW4, 8MW7, 16MW2
23884: MPT-11-2
23904: 9MW2, 9MW3
23886: 8MW6

MS = MATRIX SPIKE *SAMPLE 11MW3D*		SDG 35071		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
VOA COMPOUNDS	UNITS			
1,1-DICHLOROETHENE	ug/L	101	96	5
TRICHLOROETHENE	ug/L	93	91	2
BENZENE	ug/L	97	96	1
TOLUENE	ug/L	101	96	5
CHLOROBENZENE	ug/L	99	95	4

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

35071: MPT-11-1, 11MW3, 21S006, 11MW3D
23904: 2QS008, S-3, S-2, 9MW1, 16MW3, 16MW3D, 16MW1D

COMPOUND	ADVISORY LIMITS		RPD
	%R WATER		WATER
1,1-DICHLOROETHENE	61%-145%		14
TRICHLOROETHENE	71%-120%		14
BENZENE	76%-127%		11
TOLUENE	76%-125%		13
CHLOROBENZENE	75%-130%		13

TABLE 2 - 17 (CONTINUED)

GC/MS VOLATILE ORGANICS COMPOUNDS
WATER SAMPLE MATRIX SPIKE\MATRIX SPIKE DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE 8MW6D*		SDG 35070		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
VOA COMPOUNDS	UNITS			
1,1-DICHLOROETHENE	ug/L	97	100	3%
TRICHLOROETHENE	ug/L	89	93	4%
BENZENE	ug/L	95	98	3%
TOLUENE	ug/L	98	96	2%
CHLOROBENZENE	ug/L	95	93	2%

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

35070: 15MW1, 8MW5S, S-1, 8MW6D

MS = MATRIX SPIKE *SAMPLE MPTBSW7D*		SDG 35168		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
VOA COMPOUNDS	UNITS			
1,1-DICHLOROETHENE	ug/L	101	105	4
TRICHLOROETHENE	ug/L	107	112	5
BENZENE	ug/L	103	112	8
TOLUENE	ug/L	102	112	9
CHLOROBENZENE	ug/L	102	113	10

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

35168: MPTBSW7, MPTBSW7D, MPTBSW6, MPTBSW4

COMPOUND	ADVISORY LIMITS	RPD
	%R WATER	WATER
1,1-DICHLOROETHENE	61%-145%	14
TRICHLOROETHENE	71%-120%	14
BENZENE	76%-127%	11
TOLUENE	76%-125%	13
CHLOROBENZENE	60%-133%	21

TABLE 2 - 17 (CONTINUED)

GC/MS VOLATILE ORGANICS COMPOUNDS
WATER SAMPLE MATRIX SPIKE\MATRIX SPIKE DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE MPT8SW2*		SDG 35196		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
VOA COMPOUNDS	UNITS			
1,1-DICHLOROETHENE	ug/L	102	121	*17
TRICHLOROETHENE	ug/L	106	111	5
BENZENE	ug/L	*130	110	*17
TOLUENE	ug/L	114	*130	13
CHLOROBENZENE	ug/L	102	104	2

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

35196: MPT8SW1, MPT8SW1D, MPT8SW2, MPTSW5

COMPOUND	ADVISORY LIMITS	RPD
	%R WATER	WATER
1,1-DICHLOROETHENE	61%-145%	14
TRICHLOROETHENE	71%-120%	14
BENZENE	76%-127%	11
TOLUENE	76%-125%	13
CHLOROBENZENE	60%-133%	13

TABLE 2 - 18

SEMIVOLATILE ORGANICS COMPOUNDS
WATER SAMPLE MATRIX SPIKE/MATRIX SPIKE DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE MSD = MATRIX SPIKE DUPLICATE RPD = RELATIVE PERCENT DIFFERENCE	*SAMPLE 8MW6D*	SDGs 23886, 23918		
		MS	MSD	
		%R	%R	%RPD
SVOA COMPOUNDS	UNITS			
PHENOL	ug/L	18	55	*101%
2-CHLOROPHENOL	ug/L	46	52	12%
1,4-DICHLOROBENZENE	ug/L	50	43	15%
N-NITROSO-DI-N-PROP.(1)	ug/L	*39	*36	8%
1,2,4-TRICHLOROBENZENE	ug/L	55	50	10%
4-CHLORO-3-METHYLPHENOL	ug/L	56	54	4%
ACENAPHTHENE	ug/L	62	59	5%
4-NITROPHENOL	ug/L	23	27	16%
2,4-DINITROTOLUENE	ug/L	73	69	6%
PENTACHLOROPHENOL	ug/L	58	58	0%
PYRENE	ug/L	68	66	3%

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

23886: 15MW1, 8MW5S, S-1, 8MW6, 8MW6D
23918: 8MW1, 8MW8, 8MW4, 8MW7, 16MW2, 2QS008

COMPOUND	ADVISORY LIMITS	RPD
	% R WATER	WATER
PHENOL	12%-89%	42
2-CHLOROPHENOL	27%-123%	40
1,4-DICHLOROBENZENE	36%-97%	28
N-NITROSO-DI-N-PROP.(1)	41%-116%	38
1,2,4-TRICHLOROBENZENE	39%-98%	28
4-CHLORO-3-METHYLPHENOL	23%-97%	42
ACENAPHTHENE	46%-118%	31
4-NITROPHENOL	10%-80%	50
2,4-DINITROTOLUENE	24%-96%	38
PENTACHLOROPHENOL	9%-103%	50
PYRENE	26%-127%	31

TABLE 2 - 18 (CONTINUED)

SEMIVOLATILE ORGANICS COMPOUNDS
WATER SAMPLE MATRIX SPIKE/MATRIX SPIKE DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE 11MW3D*		SDGs 23884, 23904		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
SVOA COMPOUNDS	UNITS			
PHENOL	ug/L	76	71	7%
2-CHLOROPHENOL	ug/L	74	72	3%
1,4-DICHLOROBENZENE	ug/L	66	58	13%
N-NITROSO-DI-N-PROP.(1)	ug/L	72	66	9%
1,2,4-TRICHLOROBENZENE	ug/L	63	57	10%
4-CHLORO-3-METHYLPHENOL	ug/L	66	64	3%
ACENAPHTHENE	ug/L	75	65	14%
4-NITROPHENOL	ug/L	*82	*85	4%
2,4-DINITROTOLUENE	ug/L	71	64	10%
PENTACHLOROPHENOL	ug/L	103	99	4%
PYRENE	ug/L	65	66	2%

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

23884: MPT-11-1, MPT-11-2, 11MW3, 11MW3D,
23904: 2QS007, S-3, S-2, 9MW1, 9MW2, 9MW3, 16MW3, 15MW3D, 16MW1D

COMPOUND	ADVISORY LIMITS	RPD
	% R WATER	WATER
PHENOL	12%-89%	42
2-CHLOROPHENOL	27%-123%	40
1,4-DICHLOROBENZENE	36%-97%	28
N-NITROSO-DI-N-PROP.(1)	41%-116%	38
1,2,4-TRICHLOROBENZENE	39%-98%	28
4-CHLORO-3-METHYLPHENOL	23%-97%	42
ACENAPHTHENE	46%-118%	31
4-NITROPHENOL	10%-80%	50
2,4-DINITROTOLUENE	24%-96%	38
PENTACHLOROPHENOL	9%-103%	50
PYRENE	26%-127%	31

TABLE 2 - 18 (CONTINUED)

SEMIVOLATILE ORGANICS COMPOUNDS
WATER SAMPLE MATRIX SPIKE/MATRIX SPIKE DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE MPT8SW2*		SDGs 34923		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
SVOA COMPOUNDS	UNITS			
PHENOL	ug/L	84	79	6%
2-CHLOROPHENOL	ug/L	78	81	4%
1,4-DICHLOROBENZENE	ug/L	74	79	7%
N-NITROSO-DI-N-PROP.(1)	ug/L	94	78	19%
1,2,4-TRICHLOROBENZENE	ug/L	77	87	12%
4-CHLORO-3-METHYLPHENOL	ug/L	88	88	0%
ACENAPHTHENE	ug/L	85	77	10%
4-NITROPHENOL	ug/L	*86	91	6%
2,4-DINITROTOLUENE	ug/L	77	78	1%
PENTACHLOROPHENOL	ug/L	78	49	46%
PYRENE	ug/L	86	66	26%

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

34923: MPT8SW1, MPT8SW2

COMPOUND	ADVISORY LIMITS	RPD
	% R WATER	WATER
PHENOL	12%-89%	42
2-CHLOROPHENOL	27%-123%	40
1,4-DICHLOROBENZENE	36%-97%	28
N-NITROSO-DI-N-PROP.(1)	41%-116%	38
1,2,4-TRICHLOROBENZENE	39%-98%	28
4-CHLORO-3-METHYLPHENOL	23%-97%	42
ACENAPHTHENE	46%-118%	31
4-NITROPHENOL	10%-80%	50
2,4-DINITROTOLUENE	24%-96%	38
PENTACHLOROPHENOL	9%-103%	50
PYRENE	26%-127%	31

TABLE 2 - 18 (CONTINUED)

SEMIVOLATILE ORGANICS COMPOUNDS
WATER SAMPLE MATRIX SPIKE/MATRIX SPIKE DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE MPTBSW7*		SDGs 35168		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
SVOA COMPOUNDS	UNITS			
PHENOL	ug/L	69	67	3%
2-CHLOROPHENOL	ug/L	70	72	3%
1,4-DICHLOROBENZENE	ug/L	56	59	5%
N-NITROSO-DI-N-PROP.(1)	ug/L	75	76	1%
1,2,4-TRICHLOROBENZENE	ug/L	59	61	3%
4-CHLORO-3-METHYLPHENOL	ug/L	80	76	5%
ACENAPHTHENE	ug/L	67	67	0%
4-NITROPHENOL	ug/L	*106	74	36%
2,4-DINITROTOLUENE	ug/L	73	73	0%
PENTACHLOROPHENOL	ug/L	86	74	15%
PYRENE	ug/L	98	93	5%

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

35168: MMPTBSW7, MPTBSW7D, MPTBSW6, MPTBSW4,

COMPOUND	ADVISORY LIMITS	RPD
	%R WATER	WATER
PHENOL	12%-89%	42
2-CHLOROPHENOL	27%-123%	40
1,4-DICHLOROBENZENE	36%-97%	28
N-NITROSO-DI-N-PROP.(1)	41%-116%	38
1,2,4-TRICHLOROBENZENE	39%-98%	28
4-CHLORO-3-METHYLPHENOL	23%-97%	42
ACENAPHTHENE	46%-118%	31
4-NITROPHENOL	10%-80%	50
2,4-DINITROTOLUENE	24%-96%	38
PENTACHLOROPHENOL	9%-103%	50
PYRENE	26%-127%	31

TABLE 2 - 19

PESTICIDES/PCBS
WATER SAMPLE MATRIX SPIKE.MATRIX SPIKE DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE 8MW6D* MSD = MATRIX SPIKE DUPLICATE RPD = RELATIVE PERCENT DIFFERENCE		SDG 23886		
		MS	MSD	
		%R	%R	%RPD
PEST COMPOUNDS	UNITS			
gamma-BHC (Lindane)	ug/L	90	84	7
Heptachlor	ug/L	72	76	5
Aldrin	ug/L	60	58	3
Dieldrin	ug/L	92	87	6
Endrin	ug/L	95	91	4
4,4'-DDT	ug/L	70	66	6

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDG AND ASSOCIATED SAMPLES

23886: 15MW1, 8MW5S, S-1, 8MW6, 8MW6D,

MS = MATRIX SPIKE *SAMPLE 11MW3D* MSD = MATRIX SPIKE DUPLICATE RPD = RELATIVE PERCENT DIFFERENCE		SDG 23884		
		MS	MSD	
		%R	%R	%RPD
PEST COMPOUNDS	UNITS			
gamma-BHC (Lindane)	ug/L	83	87	4
Heptachlor	ug/L	64	67	6
Aldrin	ug/L	46	53	16
Dieldrin	ug/L	90	92	2
Endrin	ug/L	96	98	2
4,4'-DDT	ug/L	90	92	2

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDG AND ASSOCIATED SAMPLES

23884: MPT-11-1, MPT-11-2, 11MW3, 11MW3D, 2FB005, 2QS006
23943: 8MW5DD, 2FB006

COMPOUND	ADVISORY LIMITS	RPD
	% R WATER	WATER
gamma-BHC(Lindane)	56%-123%	15
HEPTACHLOR	40%-131%	20
ALDRIN	40%-120%	22
DIELDRIN	52%-126%	18
ENDRIN	56%-121%	21
4,4'-DDT	38%-127%	27

TABLE 2 - 19 (CONTINUED)

PESTICIDES/PCBS
WATER SAMPLE MATRIX SPIKE.MATRIX SPIKE DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE MPT8SW2*		SDGs 23918, 23790, 23904		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
PEST COMPOUNDS	UNITS			
gamma-BHC (Lindane)	ug/L	ND*	ND*	ND*
Heptachlor	ug/L	ND*	ND*	ND*
Aldrin	ug/L	ND*	ND*	ND*
Dieldrin	ug/L	114	105	8
Endrin	ug/L	92	95	3
4,4'-DDT	ug/L	87	86	1

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**
ND DENOTES NOT DETERMINED BY LABORATORY DUE TO INTERFERENCES

CORRESPONDING SDGs AND ASSOCIATED SAMPLES

23918: 2QS008, 8MW1, 8MW8, 8MW4, 8MW7, 16MW2
23790: MPT8SW1, MPT8SW2, MPT8SL1, MPT8SL2, MPT8SL3
23904: 2QS007, S-3, S-2, 9MW1, 9MW2, 9MW3, 16MW3, 16MW3D, 16MW1D

MS = MATRIX SPIKE *SAMPLE MPTBSW7*		SDGs 24081		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
PEST COMPOUNDS	UNITS			
gamma-BHC (Lindane)	ug/L	78	78	0
Heptachlor	ug/L	69	79	14
Aldrin	ug/L	64	66	3
Dieldrin	ug/L	91	89	2
Endrin	ug/L	97	96	0
4,4'-DDT	ug/L	96	94	2

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**
ND DENOTES NOT DETERMINED BY LABORATORY DUE TO INTERFERENCES

CORRESPONDING SDGs AND ASSOCIATED SAMPLES

24081:

COMPOUND	ADVISORY LIMITS	RPD
	% R WATER	WATER
gamma-BHC(Lindane)	56%-123%	15
HEPTACHLOR	40%-131%	20
ALDRIN	40%-120%	22
DIELDRIN	52%-126%	18
ENDRIN	56%-121%	21
4,4'-DDT	38%-127%	27

TABLE 2 - 19 (CONTINUED)

PESTICIDES/PCBS
WATER SAMPLE MATRIX SPIKE.MATRIX SPIKE DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE MPTBSW7D*		SDGs 24081		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
PEST COMPOUNDS	UNITS			
gamma-BHC (Lindane)	ug/L	78	78	0
Heptachlor	ug/L	69	79	14
Aldrin	ug/L	66	66	3
Dieldrin	ug/L	91	89	2
Endrin	ug/L	97	96	0
4,4'-DDT	ug/L	96	94	2

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**
ND DENOTES NOT DETERMINED BY LABORATORY DUE TO INTERFERENCES

CORRESPONDING SDGs AND ASSOCIATED SAMPLES

24081 (35163): MPTBSW7, MPTBSW7D, MPTBSW6, MPTBSW4

COMPOUND	ADVISORY LIMITS	RPD
	% R WATER	WATER
gamma-BHC(Lindane)	56%-123%	15
HEPTACHLOR	40%-131%	20
ALDRIN	40%-120%	22
DIELDRIN	52%-126%	18
ENDRIN	56%-121%	21
4,4'-DDT	38%-127%	27

TABLE 2 - 20

METALS AND CYANIDE
WATER SAMPLE MATRIX SPIKE/ MATRIX DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE 11MW3D*		SDG23884	
MD = MATRIX DUPLICATE *SAMPLE 11MW3D*		MS	MD
RPD = RELATIVE PERCENT DIFFERENCE		%R	RPD
METALS COMPOUNDS	**UNITS**		
TIN	ug/L	61.6*	200.0*
ANTIMONY	ug/L	95.1	NC
ARSENIC	ug/L	98.4	9.4
BARIUM	ug/L	93.2	1.4
BERYLLIUM	ug/L	97.7	NC
CADMIUM	ug/L	96.4	NC
CHROMIUM	ug/L	91.6	6.5
COBALT	ug/L	92.0	NC
COPPER	ug/L	88.8	32.1
LEAD	ug/L	95.4	45.8
MERCURY	ug/L	84.0	NC
NICKEL	ug/L	84.9	NC
SELENIUM	ug/L	67.7*	NC
SILVER	ug/L	92.7	NC
THALLIUM	ug/L	76.4	NC
VANADIUM	ug/L	93.0	7.9
ZINC	ug/L	93.7	8.8
IRON	ug/L	120.7	6.4
CALCIUM	ug/L	NR	NC
MAGNESIUM	ug/L	NR	0.5
MANGANESE	ug/L	91.1	0.0

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

NC DENOTES THAT BOTH SAMPLES ARE NON-DETECT AND A RPD CANNOT BE CALCULATED.
NR DENOTES THAT A MATRIX SPIKE RECOVERY CALCULATION IS NOT REQUIRED.

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES
23884: MPT-11-1,MPT-11-2,11MW3,11MW3D,
2FB005 AND 2QS006
23918: 2QS008,8MW1,8MW8,8MW4,8MW7 AND 16MW2

COMPOUND	ADVISORY LIMITS			RPD
	%R WATER	%R SOIL		WATER/SOIL
ALL COMPOUNDS	75%-125%	75%-125%		+/-20/35% OR +/-CRDL

+/- CRDL = RPD Limits applicable only on values 3 times the Contract Required Detection Limit (CRDL)

TABLE 2 - 20 (CONTINUED)

METALS AND CYANIDE
WATER SAMPLE MATRIX SPIKE/ MATRIX DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE 8MW6D*		SDG23886	
MD = MATRIX DUPLICATE *SAMPLE 8MW6D*		MS	MD
RPD = RELATIVE PERCENT DIFFERENCE		%R	RPD
METALS COMPOUNDS	UNITS		
TIN	ug/L	97.8	NC
ANTIMONY	ug/L	100.5	NC
ARSENIC	ug/L	99.6	11.5
BARIUM	ug/L	98.8	0.9
BERYLLIUM	ug/L	104.9	NC
CADMIUM	ug/L	100.5	NC
CHROMIUM	ug/L	100.2	0.0
COBALT	ug/L	99.2	NC
COPPER	ug/L	92.2	58.5
LEAD	ug/L	77.0	82.5
MERCURY	ug/L	84.4	NC
NICKEL	ug/L	91.7	NC
SELENIUM	ug/L	106.1	NC
SILVER	ug/L	101.3	NC
THALLIUM	ug/L	92.0	NC
VANADIUM	ug/L	98.5	2.2
ZINC	ug/L	96.1	94.1*
CALCIUM	ug/L	NR	2.8
MAGNESIUM	ug/L	NR	3.1
IRON	ug/L	139.8*	3.9
MANGANESE	ug/L	98.6	4.7

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

NC DENOTES THAT BOTH SAMPLES ARE NON-DETECT AND A RPD CANNOT BE CALCULATED.
NR DENOTES THAT A MATRIX SPIKE RECOVERY CALCULATION IS NOT REQUIRED.

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES
23886: 15MW1, 8MW5S, S-1, 8MW6 AND 8MW6D

COMPOUND	ADVISORY LIMITS			RPD
	%R WATER	%R SOIL		WATER/SOIL
ALL COMPOUNDS	75%-125%	75%-125%		+/-20/35% OR +/-CRDL

+/- CRDL = RPD Limits applicable only on values 3 times the Contract Required Detection Limit (CRDL)

TABLE 2 - 20 (CONTINUED)

METALS AND CYANIDE
WATER SAMPLE MATRIX SPIKE/ MATRIX DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE MPT8SW2*		SDG34923	
MD = MATRIX DUPLICATE *SAMPLE MPT8SW2*		MS	MD
RPD = RELATIVE PERCENT DIFFERENCE		%R	RPD
METALS COMPOUNDS	UNITS		
TIN	ug/L	92.1	NC
ANTIMONY	ug/L	95.7	200.0
ARSENIC	ug/L	124.5	NC
BARIUM	ug/L	98.3	3.0
BERYLLIUM	ug/L	98.1	NC
CADMIUM	ug/L	108.1	NC
CHROMIUM	ug/L	97.2	NC
COBALT	ug/L	95.4	200.0
COPPER	ug/L	96.5	82.1
LEAD	ug/L	40.5*	NC
MERCURY	ug/L	105.0	200.0
NICKEL	ug/L	92.5	16.1
SELENIUM	ug/L	77.8	NC
SILVER	ug/L	99.0	NC
THALLIUM	ug/L	72.0*	NC
VANADIUM	ug/L	95.1	8.0
ZINC	ug/L	95.8	NC
CYANIDE	ug/L	89.0	NC

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

NC DENOTES THAT BOTH SAMPLES ARE NON-DETECT AND A RPD CANNOT BE CALCULATED.
NR DENOTES THAT A MATRIX SPIKE RECOVERY CALCULATION IS NOT REQUIRED.

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES
34923: MPT8SW1 AND MPT8SW2

COMPOUND	ADVISORY LIMITS			RPD
	%R WATER	%R SOIL		WATER/SOIL
ALL COMPOUNDS	75%-125%	75%-125%		+/-20/35% OR +/-CRDL

+/- CRDL = RPD Limits applicable only on values 3 times the Contract Required Detection Limit (CRDL)

TABLE 2 - 20 (CONTINUED)

METALS AND CYANIDE
WATER SAMPLE MATRIX SPIKE/ MATRIX DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE MPTBSW7*		SDG01528	
MD = MATRIX DUPLICATE *SAMPLE MPTBSW7*		MS	MD
RPD = RELATIVE PERCENT DIFFERENCE		%R	RPD
METALS COMPOUNDS	UNITS		
TIN	ug/L	95	NC
ANTIMONY	ug/L	109	NC
ARSENIC	ug/L	NR	22
BARIUM	ug/L	95	4
BERYLLIUM	ug/L	92.50	NC
CADMIUM	ug/L	97.30	NC
CHROMIUM	ug/L	94.20	NC
COBALT	ug/L	94.60	NC
COPPER	ug/L	96.50	200.00
LEAD	ug/L	3.7*	200*
MERCURY	ug/L	112.00	NC
NICKEL	ug/L	91.40	NC
SELENIUM	ug/L	114.60	NC
SILVER	ug/L	82.70	NC
THALLIUM	ug/L	13.7*	NC
VANADIUM	ug/L	94.00	6.90
ZINC	ug/L	96	NC
CYANIDE	ug/L	87.80	NC

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

NC DENOTES THAT BOTH SAMPLES ARE NON-DETECT AND A RPD CANNOT BE CALCULATED.
NR DENOTES THAT A MATRIX SPIKE RECOVERY CALCULATION IS NOT REQUIRED.

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES
35168: MPTBSW4, MPTBSW6, MPTBSW7, MPTBSW7D, 2QS011,
AND 2QS012

COMPOUND	ADVISORY LIMITS			RPD
	%R WATER	%R SOIL		WATER/SOIL
ALL COMPOUNDS	75%-125%	75%-125%		+/-20/35% OR +/-CRDL

+/- CRDL = RPD Limits applicable only on values 3 times the Contract Required Detection Limit (CRDL)

TABLE 2 - 21

GC/MS VOLATILE ORGANIC COMPOUNDS
SOIL SAMPLE MATRIX SPIKE/MATRIX SPIKE DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE MP16MS2S8*		SDG 34889		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
VOA COMPOUNDS	UNITS			
1,1-DICHLOROETHENE	ug/Kg	122	131	7
TRICHLOROETHENE	ug/Kg	83	91	9
BENZENE	ug/Kg	98	105	7
TOLUENE	ug/Kg	94	100	6
CHLOROBENZENE	ug/Kg	93	102	9

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

34889: MPT8MS4S2, MPT8MS4S8, MPT8MS4S8RE, MPT8MS4S8MS, MPT8MS4S8MSD, MP16MS1D2, MP16MS1D8, MP16MS2S2, MP16MS2S8, MP16MS2S8MS, MP16MS2S8MSD, MP16MS3S2, MP16MS3S8

MS = MATRIX SPIKE *SAMPLE MPT8SM4S8*		SDG 34889		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
VOA COMPOUNDS	UNITS			
1,1-DICHLOROETHENE	ug/Kg	132	111	17
TRICHLOROETHENE	ug/Kg	84	81	4
BENZENE	ug/Kg	101	95	6
TOLUENE	ug/Kg	93	83	11
CHLOROBENZENE	ug/Kg	95	90	5

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

34889: MPT8MS4S2, MPT8MS4S8, MPT8MS4S8RE, MPT8MS4S8MS, MPT8MS4S8MSD, MP16MS1D2, MP16MS1D8, MP16MS2S2, MP16MS2S8, MP16MS2S8MS, MP16MS2S8MSD, MP16MS3S2, MP16MS3S8

COMPOUND	ADVISORY LIMITS		RPD
	%R SOIL		SOIL
1,1-DICHLOROETHENE	59%-172%		22
TRICHLOROETHENE	62%-137%		24
BENZENE	66%-142%		21
TOLUENE	59%-139%		21
CHLOROBENZENE	60%-133%		21

TABLE 2 - 21 (CONTINUED)

GC/MS VOLATILE ORGANIC COMPOUNDS
SOIL SAMPLE MATRIX SPIKE/MATRIX SPIKE DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE MP15MS1S6*		SDG 34901		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
VOA COMPOUNDS	UNITS			
1,1-DICHLOROETHENE	ug/Kg	114	117	3
TRICHLOROETHENE	ug/Kg	93	96	3
BENZENE	ug/Kg	97	100	3
TOLUENE	ug/Kg	85	87	2
CHLOROBENZENE	ug/Kg	89	92	3

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

34901: MPT8BS3S7, MPT8BS6S2, MPT8BS6S7, MP15BS1S2, MP15BS1S6, MP15BS1S6MS, MP15BS1S6MSD, TRIPBLANK

MS = MATRIX SPIKE SAMPLE 15SS81		SDG 35083		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
VOA COMPOUNDS	UNITS			
1,1-DICHLOROETHENE	ug/Kg	117	99	17
TRICHLOROETHENE	ug/Kg	87	87	0
BENZENE	ug/Kg	102	101	1
TOLUENE	ug/Kg	112	114	2
CHLOROBENZENE	ug/Kg	100	102	2

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

35083: 15SS11, 15SS12, 15SS21, 15SS22, A5SS31, 15SS32, 15SS41, 15SS42, 152251, 15SS52, 15SS61, 15SS62, 15SS71, 15SS72, 15SS81, 15SS82, 15SS81D, 15SS82D

COMPOUND	ADVISORY LIMITS		RPD
	%R SOIL		SOIL
1,1-DICHLOROETHENE	59%-172%		22
TRICHLOROETHENE	62%-137%		24
BENZENE	66%-142%		21
TOLUENE	59%-139%		21
CHLOROBENZENE	60%-133%		21

TABLE 2 - 21 (CONTINUED)

GC/MS VOLATILE ORGANIC COMPOUNDS
SOIL SAMPLE MATRIX SPIKE/MATRIX SPIKE DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE SAMPLE MPT8MS4S8		SDG 23827		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
VOA COMPOUNDS	UNITS			
1,1-DICHLOROETHENE	ug/Kg	132	111	17
TRICHLOROETHENE	ug/Kg	84	81	4
BENZENE	ug/Kg	101	95	6
TOLUENE	ug/Kg	93	83	11
CHLOROBENZENE	ug/Kg	95	90	5

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

SDG 23827:
SDG 23883: MPT8SL2

MS = MATRIX SPIKE SAMPLE MPTBSS1		SDG 35163		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
VOA COMPOUNDS	UNITS			
1,1-DICHLOROETHENE	ug/Kg	89	96	8
TRICHLOROETHENE	ug/Kg	102	94	8
BENZENE	ug/Kg	95	87	9
TOLUENE	ug/Kg	93	95	2
CHLOROBENZENE	ug/Kg	95	89	7

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

SDG 35163: MPTBSS1, MPTBSS1D, MPTBSS2, MPTBSS3, MPTBSS4, MPTBSS6, MPTBSS5

COMPOUND	ADVISORY LIMITS		RPD
	%R SOIL		SOIL
1,1-DICHLOROETHENE	59%-172%		22
TRICHLOROETHENE	62%-137%		24
BENZENE	66%-142%		21
TOLUENE	59%-139%		21
CHLOROBENZENE	60%-133%		21

TABLE 2 - 21 (CONTINUED)

GC/MS VOLATILE ORGANIC COMPOUNDS
SOIL SAMPLE MATRIX SPIKE/MATRIX SPIKE DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE SAMPLE MPTBSD7		SDG 35168		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
VOA COMPOUNDS	UNITS			
1,1-DICHLOROETHENE	ug/Kg	89	82	8
TRICHLOROETHENE	ug/Kg	108	94	14
BENZENE	ug/Kg	110	89	21
TOLUENE	ug/Kg	109	88	21
CHLOROBENZENE	ug/Kg	115	88	*27

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

SDG 35168: MPTBSD7, MPTBSD7D, MPTBSD6, MPTBSD4

COMPOUND	ADVISORY LIMITS		RPD
	%R SOIL		SOIL
1,1-DICHLOROETHENE	59%-172%		22
TRICHLOROETHENE	62%-137%		24
BENZENE	66%-142%		21
TOLUENE	59%-139%		21
CHLOROBENZENE	60%-133%		21

TABLE 2 - 22

SEMIVOLATILE ORGANICS COMPOUNDS
SOIL SAMPLE MATRIX SPIKE/MATRIX SPIKE DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE MP16MS4S8*		SDG 34889		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
SVOA COMPOUNDS	UNITS			
PHENOL	ug/Kg	*0	*0	0
2-CHLOROPHENOL	ug/Kg	*0	*0	0
1,4-DICHLOROBENZENE	ug/Kg	*0	*0	0
N-NITROSO-DI-N-PROPYLAMINE	ug/Kg	*0	*0	0
1,2,4-TRICHLOROBENZENE	ug/Kg	*117	102	14
4-CHLORO-3-METHYLPHENOL	ug/Kg	*155	*0	*200
ACENAPHTHENE	ug/Kg	*350	101	*110
4-NITROPHENOL	ug/Kg	*0	*0	0
2,4-DINITROTOLUENE	ug/Kg	*0	*0	0
PENTACHLOROPHENOL	ug/Kg	*0	*0	0
PYRENE	ug/Kg	*240	*185	26

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

34889: MPT8MS4S2, MPT8MS4S8, MPT8MS4S8MS, MPT8MS4S8MSD, MP16MS1D2, MP16MS1D8, MP16MS2S2, MP16MS2S8, MP16MS2S8MS, MP16MS2S8MSD, MP16MS3S2, MP16MS3S8

COMPOUND	ADVISORY LIMITS	RPD
	%R SOIL	SOIL
PHENOL	26%-90%	35
2-CHLOROPHENOL	25%-102%	50
1,4-DICHLOROBENZENE	28%-104%	27
N-NITROSO-DI-N-PROP	41%-126%	38
1,2,4-TRICHLOROBENZENE	38%-107%	23
4-CHLORO-3-METHYLPHENOL	26%-103%	33
ACENAPHTHENE	31%-137%	19
4-NITROPHENOL	11%-114%	50
2,4-DINITROTOLUENE	28%-89%	47
PENTACHLOROPHENOL	17%-109%	47
PYRENE	35%-142%	36

TABLE 2 - 22 (CONTINUED)

SEMIVOLATILE ORGANICS COMPOUNDS
SOIL SAMPLE MATRIX SPIKE/MATRIX SPIKE DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE MP16MS2S8*		SDG 34889		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
SVOA COMPOUNDS	UNITS			
PHENOL	ug/Kg	86	84	2
2-CHLOROPHENOL	ug/Kg	90	89	1
1,4-DICHLOROBENZENE	ug/Kg	*0	81	200
N-NITROSO-DI-N-PROPYLAMINE	ug/Kg	113	105	7
1,2,4-TRICHLOROBENZENE	ug/Kg	*129	*121	6
4-CHLORO-3-METHYLPHENOL	ug/Kg	*204	*144	*34
ACENAPHTHENE	ug/Kg	*124	*159	*25
4-NITROPHENOL	ug/Kg	*0	*0	0
2,4-DINITROTOLUENE	ug/Kg	*146	*164	12
PENTACHLOROPHENOL	ug/Kg	50	57	13
PYRENE	ug/Kg	126	116	8

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

34889: MPT8MS4S2, MPT8MS4S8, MPT8MS4S8MS, MPT8MS4S8MSD, MP16MS1D2, MP16MS1D8, MP16MS2S2, MP16MS2S8, MP16MS2S8MS, MP16MS2S8MSD, MP16MS3S2, MP16MS3S8

COMPOUND	ADVISORY LIMITS	RPD
	%R SOIL	SOIL
PHENOL	26%-90%	35
2-CHLOROPHENOL	25%-102%	50
1,4-DICHLOROBENZENE	28%-104%	27
N-NITROSO-DI-N-PROP.	41%-126%	38
1,2,4-TRICHLOROBENZENE	38%-107%	23
4-CHLORO-3-METHYLPHENOL	26%-103%	33
ACENAPHTHENE	31%-137%	19
4-NITROPHENOL	11%-114%	50
2,4-DINITROTOLUENE	28%-89%	47
PENTACHLOROPHENOL	17%-109%	47
PYRENE	35%-142%	36

TABLE 2 - 22 (CONTINUED)

SEMIVOLATILE ORGANICS COMPOUNDS
SOIL SAMPLE MATRIX SPIKE/MATRIX SPIKE DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE SAMPLE 15SS81 MSD = MATRIX SPIKE DUPLICATE RPD = RELATIVE PERCENT DIFFERENCE		MS %R	MSD %R	 %RPD
SVOA COMPOUNDS	UNITS			
PHENOL	ug/Kg	85	76	11
2-CHLOROPHENOL	ug/Kg	89	79	12
1,4-DICHLOROBENZENE	ug/Kg	72	63	13
N-NITROSO-DI-N-PROP.(1)	ug/Kg	94	78	19
1,2,4-TRICHLOROBENZENE	ug/Kg	78	66	17
4-CHLORO-3-METHYLPHENOL	ug/Kg	93	89	4
ACENAPHTHENE	ug/Kg	88	78	12
4-NITROPHENOL	ug/Kg	115	107	7
2,4-DINITROTOLUENE	ug/Kg	78	72	8
PENTACHLOROPHENOL	ug/Kg	78	81	4
PYRENE	ug/Kg	95	86	10

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

35083: 15SS11, 15SS12, 15SS21, 15SS22, 15SS31, 15SS32. 15SS41, 15SS42, 15SS51, 15SS52, 15SS61, 15SS62, 15SS71, 15SS72, 15SS81, 15SS82,

COMPOUND	ADVISORY LIMITS	RPD
	%R SOIL	SOIL
PHENOL	26%-90%	35
2-CHLOROPHENOL	25%-102%	50
1,4-DICHLOROBENZENE	28%-104%	27
N-NITROSO-DI-N-PROP.	41%-126%	38
1,2,4-TRICHLOROBENZENE	38%-107%	23
4-CHLORO-3-METHYLPHENOL	26%-103%	33
ACENAPHTHENE	31%-137%	19
4-NITROPHENOL	11%-114%	50
2,4-DINITROTOLUENE	28%-89%	47
PENTACHLOROPHENOL	17%-109%	47
PYRENE	35%-142%	36

TABLE 2 - 22 (CONTINUED)

SEMIVOLATILE ORGANICS COMPOUNDS
SOIL SAMPLE MATRIX SPIKE/MATRIX SPIKE DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE SAMPLE MPTBSS1 MSD = MATRIX SPIKE DUPLICATE RPD = RELATIVE PERCENT DIFFERENCE		MS	MSD	
		%R	%R	%RPD
SVOA COMPOUNDS	UNITS			
PHENOL	ug/Kg	90	90	0
2-CHLOROPHENOL	ug/Kg	93	94	1
1,4-DICHLOROBENZENE	ug/Kg	81	83	2
N-NITROSO-DI-N-PROP.(1)	ug/Kg	92	93	1
1,2,4-TRICHLOROBENZENE	ug/Kg	85	85	0
4-CHLORO-3-METHYLPHENOL	ug/Kg	93	93	0
ACENAPHTHENE	ug/Kg	84	86	2
4-NITROPHENOL	ug/Kg	89	90	1
2,4-DINITROTOLUENE	ug/Kg	78	80	3
PENTACHLOROPHENOL	ug/Kg	94	93	1
PYRENE	ug/Kg	81	77	5

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

35163: MPTBSS1, MPTBSS1D, MPTBSS2, MPTBSS3, MPTBSS4, MPTBSS6, MPTBSS5

COMPOUND	ADVISORY LIMITS		RPD
	%R SOIL		SOIL
PHENOL	26%-90%		35
2-CHLOROPHENOL	25%-102%		50
1,4-DICHLOROBENZENE	28%-104%		27
N-NITROSO-DI-N-PROP.	41%-126%		38
1,2,4-TRICHLOROBENZENE	38%-107%		23
4-CHLORO-3-METHYLPHENOL	26%-103%		33
ACENAPHTHENE	31%-137%		19
4-NITROPHENOL	11%-114%		50
2,4-DINITROTOLUENE	28%-89%		47
PENTACHLOROPHENOL	17%-109%		47
PYRENE	35%-142%		36

TABLE 2 - 22 (CONTINUED)

SEMIVOLATILE ORGANICS COMPOUNDS
SOIL SAMPLE MATRIX SPIKE/MATRIX SPIKE DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE SAMPLE MPTBSD7 MSD = MATRIX SPIKE DUPLICATE RPD = RELATIVE PERCENT DIFFERENCE		MS	MSD	
		%R	%R	%RPD
SVOA COMPOUNDS	UNITS			
PHENOL	ug/Kg	84	83	1
2-CHLOROPHENOL	ug/Kg	90	90	0
1,4-DICHLOROBENZENE	ug/Kg	75	76	1
N-NITROSO-DI-N-PROP.(1)	ug/Kg	90	90	0
1,2,4-TRICHLOROBENZENE	ug/Kg	86	88	2
4-CHLORO-3-METHYLPHENOL	ug/Kg	95	91	4
ACENAPHTHENE	ug/Kg	82	82	0
4-NITROPHENOL	ug/Kg	85	86	1
2,4-DINITROTOLUENE	ug/Kg	83	80	4
PENTACHLOROPHENOL	ug/Kg	77	82	6
PYRENE	ug/Kg	87	87	0

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

35168: MPTBSD7, MPTBSD7D, MPTBSD6, MPTBSD4

COMPOUND	ADVISORY LIMITS	RPD
	%R SOIL	SOIL
PHENOL	26%-90%	35
2-CHLOROPHENOL	25%-102%	50
1,4-DICHLOROBENZENE	28%-104%	27
N-NITROSO-DI-N-PROP.	41%-126%	38
1,2,4-TRICHLOROBENZENE	38%-107%	23
4-CHLORO-3-METHYLPHENOL	26%-103%	33
ACENAPHTHENE	31%-137%	19
4-NITROPHENOL	11%-114%	50
2,4-DINITROTOLUENE	28%-89%	47
PENTACHLOROPHENOL	17%-109%	47
PYRENE	35%-142%	36

TABLE 2 - 23

PESTICIDES/PCBS
SOIL SAMPLE MATRIX SPIKE/MATRIX SPIKE DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE MPT8MS4S8*		SDG 23750 (34889)		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
PEST COMPOUNDS	UNITS			
gamma-BHC (Lindane)	ug/Kg	ND	ND	ND
Heptachlor	ug/Kg	ND	ND	ND
Aldrin	ug/Kg	ND	ND	ND
Dieldrin	ug/Kg	90	91	1
Endrin	ug/Kg	87	90	4
4,4'-DDT	ug/Kg	ND	ND	ND

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**
ND DENOTES NOT DETERMINED BY LABORATORY DUE TO INTERFERENCES

CORRESPONDING SDGS AND ASSOCIATED SAMPLES

23749(34884): 2BS85S02, 2BS85DD79
23775(34915): MPT8MS7S2, MPT8MS7S9, MPT8MS8S2, MPT8MS8S9
23750(34889): MPT8MS4S2, MPT8MS4S8, MPT8MS4S8, MP16MS1D2, MP16MS1D8, MP16MS1D2, MP16MS2S2, MP16MS2S8, MP16MS3S2, MP15MS3S8
23763(34901): MPT8BS3S7, MPT8BS6S2, MPT8BS6S7, MPI5BS1S2, MPI5BS1S6

MS = MATRIX SPIKE *SAMPLE MP16MS2S8*		SDG 23750 (34889)		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
PEST COMPOUNDS	UNITS			
gamma-BHC (Lindane)	ug/Kg	76	61	21
Heptachlor	ug/Kg	92	78	16
Aldrin	ug/Kg	90	74	20
Dieldrin	ug/Kg	89	73	20
Endrin	ug/Kg	97	85	13
4,4'-DDT	ug/Kg	93	80	15

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDGS AND ASSOCIATED SAMPLES

23749(34884): 2BS85S02, 2BS85DD79
23775(34915): MPT8MS7S2, MPT8MS7S9, MPT8MS8S2, MPT8MS8S9
23750(34889): MPT8MS4S2, MPT8MS4S8, MPT8MS4S8, MP16MS1D2, MP16MS1D8, MP16MS1D2, MP16MS2S2, MP16MS2S8, MP16MS3S2, MP15MS3S8
23763(34901): MPT8BS3S7, MPT8BS6S2, MPT8BS6S7, MPI5BS1S2, MPI5BS1S6

COMPOUND	ADVISORY LIMITS	RPD
	%R SOIL	SOIL
gamma-BHC(LINDANE)	46%-127%	50
HEPTACHLOR	35%-130%	31
ALDRIN	34%-132%	43
DIELDRIN	31%-134%	38
ENDRIN	42%-139%	45
4,4'-DDT	23%-134%	50

TABLE 2 - 23 (CONTINUED)

PESTICIDES/PCBS
SOIL SAMPLE MATRIX SPIKE/MATRIX SPIKE DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE 15SS81D*		SDGs 23953		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
PEST COMPOUNDS	UNITS			
gamma-BHC (Lindane)	ug/Kg	81	77	5
Heptachlor	ug/Kg	92	85	8
Aldrin	ug/Kg	101	98	3
Dieldrin	ug/Kg	90	87	3
Endrin	ug/Kg	101	98	3
4,4'-DDT	ug/Kg	122	84	7

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDGs AND ASSOCIATED SAMPLES

23953: 15SS11, 15SS12, 15SS21, 15SS22, 15SS31, 15SS32, 15SS41, 15SS42, 15SS51

MS = MATRIX SPIKE *SAMPLE MPTBSD7*		SDGs 24081		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
PEST COMPOUNDS	UNITS			
gamma-BHC (Lindane)	ug/Kg	89	87	2
Heptachlor	ug/Kg	107	104	3
Aldrin	ug/Kg	90	89	2
Dieldrin	ug/Kg	98	97	1
Endrin	ug/Kg	102	102	1
4,4'-DDT	ug/Kg	99	96	3

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDGs AND ASSOCIATED SAMPLES

24081: MPTBSD7, MPTBSD7D, MPTBSD6, MPTBSD4

COMPOUND	ADVISORY LIMITS	RPD
	%R SOIL	SOIL
gamma-BHC(LINDANE)	46%-127%	50
HEPTACHLOR	35%-130%	31
ALDRIN	34%-132%	43
DIELDRIN	31%-134%	38
ENDRIN	42%-139%	45
4,4'-DDT	23%-134%	50

TABLE 2 - 23 (CONTINUED)

PESTICIDES/PCBS
SOIL SAMPLE MATRIX SPIKE/MATRIX SPIKE DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE MPTBSS1*		SDG 24082		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
PEST COMPOUNDS	UNITS			
gamma-BHC (Lindane)	ug/Kg	86	88	2
Heptachlor	ug/Kg	96	99	3
Aldrin	ug/Kg	90	90	0
Dieldrin	ug/Kg	98	97	1
Endrin	ug/Kg	99	102	3
4,4'-DDT	ug/Kg	85	85	0

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDGs AND ASSOCIATED SAMPLES

24082: MPTBSS1, MPTBSS1D, MPTBSS3, MPTBSS2, MPTBSS4, MPTBSS6, MPTBSS5

COMPOUND	ADVISORY LIMITS		RPD
	%R SOIL		SOIL
gamma-BHC(LINDANE)	46%-127%		50
HEPTACHLOR	35%-130%		31
ALDRIN	34%-132%		43
DIELDRIN	31%-134%		38
ENDRIN	42%-139%		45
4,4'-DDT	23%-134%		50

TABLE 2 - 24

METALS AND CYANIDE
SOIL SAMPLE MATRIX SPIKE/ MATRIX DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE MPT8MS4S8* MD = MATRIX DUPLICATE *SAMPLE MPT8MS4S8* RPD = RELATIVE PERCENT DIFFERENCE		SDG34889	
		MS	MD
		%R	RPD
METALS COMPOUNDS	UNITS		
TIN	mg/Kg	90.2	NC
ANTIMONY	mg/Kg	93.5	NC
ARSENIC	mg/Kg	118.5	NC
BARIUM	mg/Kg	85.4	168.1
BERYLLIUM	mg/Kg	89.5	200.0
CADMIUM	mg/Kg	77.0	*200
CHROMIUM	mg/Kg	*62.6	*200
COBALT	mg/Kg	90.3	200.0
COPPER	mg/Kg	83.9	151.1
LEAD	mg/Kg	91.4	9.5
MERCURY	mg/Kg	*347.2	0.1
NICKEL	mg/Kg	82.8	200.0
SELENIUM	mg/Kg	76.7	NC
SILVER	mg/Kg	95.7	NC
THALLIUM	mg/Kg	95.2	25.0
VANADIUM	mg/Kg	*67.0	*179.1
ZINC	mg/Kg	*74.0	*145.8
CYANIDE	mg/Kg	101.7	NC

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

NC DENOTES THAT BOTH SAMPLES ARE NON-DETECT AND A RPD CANNOT BE CALCULATED.
NR DENOTES THAT A MATRIX SPIKE RECOVERY CALCULATION IS NOT REQUIRED.

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

34889: MPT16MS1D2, MPT8MS4S2, MPT8MS4S8, MP16MS1D8, MP16MS2S3, MP16MS2S8, MP16MS3S2, MP16MS3S8, MPT8MS6S2, MPT8MS6S7, MP15MS1S2, MPT8BS357 AND MP15MS1S6

COMPOUND	ADVISORY LIMITS			RPD
	%R WATER	%R SOIL		WATER/SOIL
ALL COMPOUNDS	75%-125%	75%-125%		+/-20/35% OR +/-CRDL

+/- CRDL = RPD Limits applicable only for values 5 times the Contract Required Detection Limit (CRDL).

TABLE 2 - 24 (CONTINUED)

METALS AND CYANIDE
SOIL SAMPLE MATRIX SPIKE/ MATRIX DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE MP16MS2S8*		SDG34889	
MD = MATRIX DUPLICATE *SAMPLE MP16MS2S8*		MS	MD
RPD = RELATIVE PERCENT DIFFERENCE		%R	RPD
METALS COMPOUNDS	UNITS		
TIN	mg/Kg	90.3	NC
ANTIMONY	mg/Kg	81.4	NC
ARSENIC	mg/Kg	104.3	31.9
BARIUM	mg/Kg	93.0	6.6
BERYLLIUM	mg/Kg	89.3	19.0
CADMIUM	mg/Kg	95.3	200.0
CHROMIUM	mg/Kg	107.2	5.2
COBALT	mg/Kg	92.9	14.0
COPPER	mg/Kg	90.9	2.6
LEAD	mg/Kg	104.4	4.6
MERCURY	mg/Kg	*-51.0	*188.1
NICKEL	mg/Kg	90.8	30.9
SELENIUM	mg/Kg	90.9	32.2
SILVER	mg/Kg	97.0	NC
THALLIUM	mg/Kg	100.6	0.0
VANADIUM	mg/Kg	93.8	9.9
ZINC	mg/Kg	92.3	3.3
CYANIDE	mg/Kg	93.8	NC

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

NC DENOTES THAT BOTH SAMPLES ARE NON-DETECT AND A RPD CANNOT BE CALCULATED.
NR DENOTES THAT A MATRIX SPIKE RECOVERY CALCULATION IS NOT REQUIRED.

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

34889: MPT16MS1D2, MPT8MS4S2, MPT8MS4S8, MP16MS1D8, MP16MS2S3, MP16MS2S8, MP16MS3S2, MP16MS3S8, MPT8MS6S2, MPT8MS6S7, MP15MS1S2, MPT8BS357 AND MP15MS1S6.

COMPOUND	ADVISORY LIMITS			RPD
	%R WATER	%R SOIL		WATER/SOIL
ALL COMPOUNDS	75%-125%	75%-125%		+/-20/35% OR +/-CRDL

+/- CRDL = RPD Limits applicable only for values 5 times the Contract Required Detection Limit (CRDL).

TABLE 2 - 24 (CONTINUED)

METALS AND CYANIDE
SOIL SAMPLE MATRIX SPIKE/ MATRIX DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE 15SS81* MD = MATRIX DUPLICATE *SAMPLE 15SS81* RPD = RELATIVE PERCENT DIFFERENCE		SDG 01289	
		MS	MD
		%R	RPD
METALS COMPOUNDS	UNITS		
TIN	mg/Kg	88.0	200.0
ANTIMONY	mg/Kg	110.6	NC
ARSENIC	mg/Kg	104.9	3.3
BARIUM	mg/Kg	92.2	45.7
BERYLLIUM	mg/Kg	89.7	7.0
CADMIUM	mg/Kg	82.9	18.8
CHROMIUM	mg/Kg	91.1	5.1
COBALT	mg/Kg	87.5	25.8
COPPER	mg/Kg	101.9	1.2
LEAD	mg/Kg	-40.9	65.0*
MERCURY	mg/Kg	97.2	8.6
NICKEL	mg/Kg	90.0	NC
SELENIUM	mg/Kg	122.9	99.3*
SILVER	mg/Kg	89.6	NC
THALLIUM	mg/Kg	76.0	NC
VANADIUM	mg/Kg	87.9	2.2
ZINC	mg/Kg	40.4*	12.3
CYANIDE	mg/Kg	NR	NR

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

NC DENOTES THAT BOTH SAMPLES ARE NON-DETECT AND A RPD CANNOT BE CALCULATED.
NR DENOTES THAT A MATRIX SPIKE RECOVERY CALCULATION IS NOT REQUIRED.

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

01289: 15SS11, 15SS12, 15SS21, 15SS22, 15SS31, 15SS32, 15SS41, 15SS42, 15SS51, 15SS52, 15SS61, 15SS62, 15SS71, 15SS72, 15SS81, 15SS81D, 15SS82, 15SS82D AND 2Q099

COMPOUND	ADVISORY LIMITS			RPD
	%R WATER	%R SOIL		WATER/SOIL
ALL COMPOUNDS	75%-125%	75%-125%		+/-20/35% OR +/-CRDL

+/- CRDL = RPD Limits applicable only for values 5 times the Contract Required Detection Limit (CRDL).

TABLE 2 - 24 (CONTINUED)

METALS AND CYANIDE
SOIL SAMPLE MATRIX SPIKE/ MATRIX DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE MPTBSS1*		SDG 35163	
MD = MATRIX DUPLICATE *SAMPLE MPTBSS1*		MS	MD
RPD = RELATIVE PERCENT DIFFERENCE		%R	RPD
METALS COMPOUNDS	UNITS		
TIN	mg/Kg	90	NC
ANTIMONY	mg/Kg	95	200
ARSENIC	mg/Kg	87	30
BARIUM	mg/Kg	93	7
BERYLLIUM	mg/Kg	87.00	NC
CADMIUM	mg/Kg	91.10	NC
CHROMIUM	mg/Kg	88.70	22.20
COBALT	mg/Kg	88.80	NC
COPPER	mg/Kg	89.30	200.00
LEAD	mg/Kg	99.60	0.60
MERCURY	mg/Kg	125.5*	NC
NICKEL	mg/Kg	90.20	NC
SELENIUM	mg/Kg	82.30	33.70
SILVER	mg/Kg	77.60	NC
THALLIUM	mg/Kg	70.8*	NC
VANADIUM	mg/Kg	89.50	10.90
ZINC	mg/Kg	90	32
CYANIDE	mg/Kg	101.40	NC

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

NC DENOTES THAT BOTH SAMPLES ARE NON-DETECT AND A RPD CANNOT BE CALCULATED.
NR DENOTES THAT A MATRIX SPIKE RECOVERY CALCULATION IS NOT REQUIRED.

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES
35163: MPTBSS1, MPTBSS1D, MPTBSS2, MPTBSS3, MPTBSS4, MPTBSS5
AND MPTBSS6

COMPOUND	ADVISORY LIMITS			RPD
	%R WATER	%R SOIL		WATER/SOIL
ALL COMPOUNDS	75%-125%	75%-125%		+/-20/35% OR +/-CRDL

+/- CRDL = RPD Limits applicable only for values 5 times
the Contract Required Detection Limit (CRDL).

TABLE 2 - 24 (CONTINUED)

METALS AND CYANIDE
SOIL SAMPLE MATRIX SPIKE/ MATRIX DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE MPTBSD7* MD = MATRIX DUPLICATE *SAMPLE MPTBSD7* RPD = RELATIVE PERCENT DIFFERENCE		SDG 35168	
		MS	MD
		%R	RPD
METALS COMPOUNDS	UNITS		
TIN	mg/Kg	91	NC
ANTIMONY	mg/Kg	99	NC
ARSENIC	mg/Kg	NR	2
BARIUM	mg/Kg	95	30
BERYLLIUM	mg/Kg	88.50	200.00
CADMIUM	mg/Kg	91.60	NC
CHROMIUM	mg/Kg	93.50	17.40
COBALT	mg/Kg	92.80	NC
COPPER	mg/Kg	95.70	15.20
LEAD	mg/Kg	107.40	21.60
MERCURY	mg/Kg	116.80	200.*
NICKEL	mg/Kg	94.20	NC
SELENIUM	mg/Kg	91.20	11.70
SILVER	mg/Kg	82.90	NC
THALLIUM	mg/Kg	71.2*	11.00
VANADIUM	mg/Kg	92.40	19.60
ZINC	mg/Kg	95	12
CYANIDE	mg/Kg	89.60	NC

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

NC DENOTES THAT BOTH SAMPLES ARE NON-DETECT AND A RPD CANNOT BE CALCULATED.
NR DENOTES THAT A MATRIX SPIKE RECOVERY CALCULATION IS NOT REQUIRED.

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES
35168: MPTBSD4, MPTBSD6, MPTBSD7 AND MPTBSD7D.

COMPOUND	ADVISORY LIMITS		RPD
	%R WATER	%R SOIL	WATER/SOIL
ALL COMPOUNDS	75%-125%	75%-125%	+/-20/35% OR +/-CRDL

+/- CRDL = RPD Limits applicable only for values 5 times the Contract Required Detection Limit (CRDL).

TABLE 2 - 25

GC/MS VOLATILE ORGANIC COMPOUNDS
SLUDGE SAMPLE MATRIX SPIKE/MATRIX SPIKE DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE 8SL1AD*		SDG 35074		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
VOA COMPOUNDS	UNITS			
1,1-DICHLOROETHENE	ug/Kg	87	96	10
TRICHLOROETHENE	ug/Kg	86	93	8
BENZENE	ug/Kg	111	114	3
TOLUENE	ug/Kg	120	128	6
CHLOROBENZENE	ug/Kg	106	113	6

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

35074: TRIP BLANK, 8SL1A, 8SL1AD

COMPOUND	ADVISORY LIMITS		RPD
	%R SOIL		SOIL
1,1-DICHLOROETHENE	59%-172%		22
TRICHLOROETHENE	62%-137%		24
BENZENE	66%-142%		21
TOLUENE	59%-139%		21
CHLOROBENZENE	60%-133%		21

TABLE 2 - 26

SEMIVOLATILE ORGANICS COMPOUNDS
SLUDGE SAMPLE MATRIX SPIKE/MATRIX SPIKE DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE 8SL1AD*		SDG 35074		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
SVOA COMPOUNDS	UNITS			
1,4-DICHLOROBENZENE	ug/Kg	86	85	1
N-NITRO-DI-N-PROPYLAMINE	ug/Kg	94	94	0
1,2,4-TRICHLOROBENZENE	ug/Kg	87	90	3
ACENAPHTHENE	ug/Kg	82	84	2
2,4-DINITROTOLUENE	ug/Kg	*99	*96	3
PYRENE	ug/Kg	82	86	5
PHENOL	ug/Kg	86	88	2
2-CHLOROPHENOL	ug/Kg	90	89	1
4-CHLORO-3-METHYLPHENOL	ug/Kg	100	*110	2
4-NITROPHENOL	ug/Kg	*126	*125	1
PENTACHLOROPHNEOL	ug/Kg	103	96	7

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

35074: 8SL1A, 8SL1AD

COMPOUND	ADVISORY LIMITS	RPD
	%R SOIL	SOIL
PHENOL	26%-90%	35
2-CHLOROPHENOL	25%-102%	50
1,4-DICHLOROBENZENE	28%-104%	27
N-NITROSO-DI-N-PROP.	41%-126%	38
1,2,4-TRICHLOROBENZENE	38%-107%	23
4-CHLORO-3-METHYLPHENOL	26%-103%	33
ACENAPHTHENE	31%-137%	19
4-NITROPHENOL	11%-114%	50
2,4-DINITROTOLUENE	28%-89%	47
PENTACHLOROPHENOL	17%-109%	47
PYRENE	35%-142%	36

TABLE 2 - 27

PESTICIDES/PCBS
SLUDGE SAMPLE MATRIX SPIKE/MATRIX SPIKE DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE 8SL1AD*		SDG 23967 (35074)		
MSD = MATRIX SPIKE DUPLICATE		MS	MSD	
RPD = RELATIVE PERCENT DIFFERENCE		%R	%R	%RPD
PEST COMPOUNDS	UNITS			
gamma-BHC (Lindane)	ug/Kg	46	56	21
Heptachlor	ug/Kg	42	62	38
Aldrin	ug/Kg	73	78	7
Dieldrin	ug/Kg	*ND	*ND	ND
Endrin	ug/Kg	*ND	*ND	ND
4,4'-DDT	ug/Kg	*ND	*ND	ND

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**
ND DENOTES NOT DETERMINED BY LABORATORY DUE TO INTERFERENCES

CORRESPONDING SDG AND ASSOCIATED SAMPLES

23967: 8SL1A, 8SL1AD

COMPOUND	ADVISORY LIMITS		RPD
	%R SOIL		SOIL
gamma-BHC(LINDANE)	46%-127%		50
HEPTACHLOR	35%-130%		31
ALDRIN	34%-132%		43
DIELDRIN	31%-134%		38
ENDRIN	42%-139%		45
4,4'-DDT	23%-134%		50

TABLE 2 - 28

METALS AND CYANIDE
SLUDGE SAMPLE MATRIX SPIKE/ MATRIX DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE 8SL1AD* MD = MATRIX DUPLICATE *SAMPLE 8SL1AD* RPD = RELATIVE PERCENT DIFFERENCE		SDG 35074	
		MS	MD
		%R	RPD
METALS COMPOUNDS	UNITS		
TIN	mg/Kg	87.8	NC
ANTIMONY	mg/Kg	90.1	200.0
ARSENIC	mg/Kg	98.3	200.0
BARIUM	mg/Kg	91.5	6.3
BERYLLIUM	mg/Kg	86.4	200.0
CADMIUM	mg/Kg	106.4	NC
CHROMIUM	mg/Kg	87.6	39.5
COBALT	mg/Kg	89.3	NC
COPPER	mg/Kg	95.6	28.3
LEAD	mg/Kg	87.6	51.2*
MERCURY	mg/Kg	101.0	NC
NICKEL	mg/Kg	88.3	32.9
SELENIUM	mg/Kg	60.0*	200.0
SILVER	mg/Kg	86.7	NC
THALLIUM	mg/Kg	100.0	NC
VANADIUM	mg/Kg	90.4	11.2
ZINC	mg/Kg	92.4	29.9*
CYANIDE	mg/Kg	NR	NR

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

NC DENOTES THAT BOTH SAMPLES ARE NON-DETECT AND A RPD CANNOT BE CALCULATED.
NR DENOTES THAT A MATRIX SPIKE RECOVERY CALCULATION IS NOT REQUIRED.

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES
35074: 8SL1A, 8SL1AD, 8SL1ADMS AND 8SL1ADD.

COMPOUND	ADVISORY LIMITS			RPD
	%R WATER	%R SOIL		WATER/SOIL
ALL COMPOUNDS	75%-125%	75%-125%		+/-20/35% OR +/-CRDL

+/- CRDL = RPD Limits applicable only for values 5 times the Contract Required Detection Limit (CRDL).

TABLE 2 - 28 (CONTINUED)

METALS AND CYANIDE
SLUDGE SAMPLE MATRIX SPIKE/ MATRIX DUPLICATES
NAVSTA MAYPORT, FLORIDA

MS = MATRIX SPIKE *SAMPLE MPT8SL1*		SDG 34923	
MD = MATRIX DUPLICATE *SAMPLE MPT8SL1*		MS	MD
RPD = RELATIVE PERCENT DIFFERENCE		%R	RPD
METALS COMPOUNDS	UNITS		
TIN	mg/Kg	95.5	6.4
ANTIMONY	mg/Kg	114.5	56.2
ARSENIC	mg/Kg	85.5	58.2
BARIUM	mg/Kg	141.0*	56.0
BERYLLIUM	mg/Kg	101.6	200.0
CADMIUM	mg/Kg	131.5*	13.8
CHROMIUM	mg/Kg	800.3*	51.6*
COBALT	mg/Kg	97.7	NC
COPPER	mg/Kg	834.8	8.1
LEAD	mg/Kg	-379.	81.3*
MERCURY	mg/Kg	100.7	71.6*
NICKEL	mg/Kg	146.2*	7.6
SELENIUM	mg/Kg	83.5	200.0
SILVER	mg/Kg	124.2	7.1
THALLIUM	mg/Kg	87.0	NC
VANADIUM	mg/Kg	470.0*	62.6*
ZINC	mg/Kg	308.3*	15.7
CYANIDE	mg/Kg	NR	NR

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

NC DENOTES THAT BOTH SAMPLES ARE NON-DETECT AND A RPD CANNOT BE CALCULATED.
NR DENOTES THAT A MATRIX SPIKE RECOVERY CALCULATION IS NOT REQUIRED.

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES
34923: MPT8SL1, MPT8SL2 AND MPT8SL3.

COMPOUND	ADVISORY LIMITS			RPD
	%R WATER	%R SOIL		WATER/SOIL
ALL COMPOUNDS	75%-125%	75%-125%		+/-20/35% OR +/-CRDL

+/- CRDL = RPD Limits applicable only for values 5 times the Contract Required Detection Limit (CRDL).

provided for each sample delivery group and are included in Appendix B. It should be noted that the laboratory did not perform serial dilutions on SDGs 23884, 23886 and 23904.

2.1 Water Matrix

One groundwater sample, 8MW6, exhibited non-compliant RPDs for three GC/MS VOCs, tetrachloroethene, 2-butanone, and acetone (Table 2-1). However, these RPDs were considered "in-control" because the compounds were detected at or below the CRQLs in the water sample and not the associated duplicate. Assessment of the initial and continuing calibration criteria for these three compounds, associated with SDG 23886, indicate that they were "in-compliance" (Appendix A, Table A-1).

No target analytes were detected in either the water samples or associated duplicates for GC/VOCs, SVOCs,pesticides, PCBs, or kepone (Tables 2-2 through 2-5).

Nine inorganic target analytes exhibited non-compliant RPDs for four water samples and associated duplicates (Table 2-6). The target analytes with non-compliant RPDs were beryllium, chromium, cobalt, copper, lead, nickel, tin, vanadium and zinc. The non-compliance is attributed to the water sample or associated duplicate analytical results being at or near the instrument detection limits (IDL). Assessment of serial dilution results for these target analytes indicate that they were within the RPD criteria for serial dilution (Appendix B, Tables B-8).

The evaluation of precision of the water matrix for the MS/MSD samples is provided in Tables 2-17 through 2-20. One MS/MSD sample pair analyzed for GC/MS volatile organics had non-compliant RPDs for 1,1-dichloroethene and benzene (Table 2-17). These two compounds, which were associated with SDG 35196, were "in-compliance" with initial and continuing calibration criteria (Appendix A, Table A-1).

One MS/MSD sample pair analyzed for semivolatile organic compounds had a non-compliant RPD for 2-chlorophenol (Table 2-18). This compound, which was associated with SDG 34923, was "in-compliance" with initial and continuing calibration criteria (Appendix A, Table A-2).

One MS/MSD sample pair analyzed for pesticides and PCBs had non-compliant RPDs for gamma-BHC (lindane), heptachlor and aldrin (Table 2-19). The non-compliance is attributed to matrix and/or target analyte interference. These compounds, which were associated with samples from SDGs 23918, 23790, and 23904, were "in-compliance" with initial and continuing calibration criteria (Appendix A, Table A-3).

Three MS/MSD sample pairs analyzed for inorganic analytes had a singular occurrence of non-compliant RPDs for one target analyte. The non-compliant target analytes were tin in the MS sample from well 11MW3D, zinc in the MS sample from well 8MW6D, and lead in the MS sample from MPTBSW7 (Table 2-20). These target analytes, which were associated with SDGs 23884, 23886, and 35168 were "in-compliance" with serial dilution criteria (Appendix B, Table B-8).

Based on assessment of duplicate precision evaluation criteria, the water matrix analytical data was acceptable for each SDG.

2.2 Soil\Sediment Matrix

The assessment of soil\sediment matrix environmental and associated duplicate samples for precision is provided in Tables 2-7 through 2-11. No GC/MS volatile organic target analytes were detected in either the environmental samples or associated duplicates (Table 2-7), therefore no assessment of precision was conducted.

One soil sample, MPTBSB7, and its associated duplicate contained positive results for pyrene and bis(2-ethylhexyl)phthalate, both of which were found at a concentration less than the analytical method CRQL (Table 2-8). Pyrene was detected in the sample but not in the associated duplicate and bis(2-ethylhexyl)phthalate was detected in both the sample and the associated duplicate. These two compounds are non-compliant with the RPD criteria for precision. The non-compliance is attributed to the environmental sample's or associated duplicate's analytical results being at or near the contract required quantitation detection limits (CRQLs). Assessment of the initial and continuing calibration criteria samples for these two compounds, analyzed in SDG 35168, indicate that they were "in-compliance" (Appendix A, Table A-2).

Pesticides and PCBs detected in the soil samples and associated duplicates consisted of three pesticides, 4,4'-DDT, 4,4-DDE and chlordane and one PCB, Aroclor-1260 (Table 2-9). The three pesticide compounds, which were detected in both the soil sample and associated duplicate, were "in-compliance" with the precision evaluation criteria. The PCB compound was detected in three soil samples and associated duplicates. Assessment of the duplicated precision criteria indicate that the PCB compound was "in-compliance" in two samples and associated duplicate and non-compliant in one sample, MPT16SSF4, and associated duplicate, MPT16SSF4DUP. The non-compliance is attributed to the environmental sample's or associated duplicate's analytical results being at or near the CRQL. Assessment of the initial and continuing calibrations for AR-1260, analyzed in SDG 23954, indicate that the target compound was "in-compliance" (Appendix A, Table A-3).

Nine inorganic target analytes exhibited non-compliant RPDs for three environmental samples and associated duplicates (Table 2-11). The target analytes with non-compliant RPDs were antimony, beryllium, chromium, cobalt, copper, mercury, selenium, thallium, and zinc. The non-compliance is attributed to the environmental sample's or associated duplicate's analytical results being at or near the instrument detection limits (IDL). Assessment of serial dilution results for these target analytes indicate that they were within the RPD criteria for serial dilution (Appendix B, Tables B-1, B-6, and B-7).

The assessment of precision of the soil\sediment matrix for the MS/MSD samples is provided in Tables 2-21 through 2-24. One MS/MSD sample pair analyzed for GC/MS volatile organics had a non-compliant RPD for chlorobenzene (Table 2-21). This compound, which was associated with SDG 35168, was "in-compliance" with initial and continuing calibration criteria (Appendix A, Table A-1).

Two MS/MSD sample pairs analyzed for semivolatile organic compounds had non-compliant RPDs for one or more of the following compounds, 1,4-dichlorobenzene, n-nitro-di-n-propylamine, 1,2,4-trichlorobenzene, acenaphthene, 2,4-dinitrotoluene, pyrene, phenol, 2-chlorophenol, 4-chloro-3-methylphenol, 4-nitrophenol and pentachlorophenol (Table 2-22). These compounds, which were associated with SDG 34889, were "in-compliance" with initial and continuing calibration criteria (Appendix A, Table A-2).

The MS/MSD sample pairs analyzed for pesticides and PCBs were "in-compliance" with RPD precision criteria (Table 2-23).

Four MS/MSD sample pairs analyzed for inorganic analytes had non-compliant RPDs for some of the target analytes. The non-compliant target analytes were cadmium, chromium, vanadium, and zinc in the MS soil sample MPT8MS4S8, mercury in the MS soil samples MP16MS2S8 and MPTBSD7, and lead and selenium in the MS soil sample 15SS81 (Table 2-24). The target analytes in soil samples MPT8MS4S8 and MP16MS2S8 were associated with SDGs 34889. The target analytes in soil samples 15SS81 and MPTBSD7 were associated with SDGs 35083 and 35168, respectively. Each of these target analytes were "in-compliance" with serial dilution criteria (Appendix B, Tables B-1 and B-3).

Based on assessment of duplicate precision evaluation criteria, the soil\sediment matrix analytical data was acceptable for each SDG.

2.3 Sludge Matrix

The assessment of sludge matrix environmental and associated duplicate samples for precision is provided in Tables 2-12 through 2-16. One sludge sample, 8SL1A, exhibited a non-compliant RPD for one GC/MS VOC, acetone (Table 2-12). However, the RPD was considered to be "in-control" because the compound was detected below the CRQL in the sludge sample and associated duplicate. Assessment of the initial and continuing calibration criteria for acetone in SDG 35074 indicate that they were "in-compliance" (Appendix A, Table A-1).

The assessment of sludge samples and associated duplicates for precision of semivolatile organic analysis indicate that one sludge sample, 8SL1A, and its associated duplicate, exhibited positive results for two coinciding compounds. The duplicate analysis also contained five additional compounds, of which, four of the five compounds were detected below the CRQL. The four compounds detected below the detection limit were butylbenzylphthalate, benzo(b)fluoranthene, benzo(g,h,i)perylene and pyrene. The one compound detected at a concentration greater than the CRQL was bis(2-ethyl-hexyl)phthalate, which is a common laboratory contaminant. The non-compliance is attributed to the sludge samples analytical results being below the CRQL. These compounds, which were associated with SDG 34889, were "in-compliance" with initial and continuing calibration criteria (Appendix A, Table A-2).

No target analytes were detected in either the sludge samples and associated duplicates for pesticides and PCBs (Tables 2-14 and 2-15).

Four inorganic target analytes exhibited non-compliant RPDs for one sludge sample and associated duplicate (Table 2-16). The target analytes with non-compliant RPDs were antimony, nickel, selenium, and cyanide. The non-compliance is attributed to the sludge sample and associated duplicate analytical results being at or near the instrument detection limits (IDL). Assessment of serial dilution results for these target analytes indicate that they were within the RPD criteria for serial dilution (Appendix B, Tables B-2).

The evaluation of precision of the sludge matrix for the MS/MSD samples is provided in Tables 2-25 through 2-28. The MS/MSD sample pairs analyzed for GC/MS volatiles organics, semivolatile organics and pesticides/PCBs were "in-compliance" with RPD precision criteria (Tables 2-25, 2-26 and 2-27, respectively).

Two MS/MSD sample pairs analyzed for inorganic analytes had non-compliant RPDs for some of the target analytes. The non-compliant target analytes were chromium, lead, mercury, and vanadium in the MS sludge sample MPT8SL1, and lead and zinc in the MS sludge sample 8SL1AD. The target analytes in soil samples MPT8SL1 and 8SL1AD were associated with SDGs 34923 and 35074, respectively. Each of these target analytes were "in-compliance" with serial dilution criteria (Appendix B, Tables B-2 and B-5).

Based on assessment of duplicate precision evaluation criteria, the sludge matrix analytical data was acceptable for each SDG.

3.0 ACCURACY

The assessment of accuracy is evaluated by comparison of the %R computed from the known concentration of analyte spikes and their recovered concentration versus the analytical method acceptance criteria. Spike recoveries provide an indication of bias, where the reported data may either overestimate or underestimate the actual concentration of detected compounds and/or the detection limits. Recoveries outside acceptable criteria may be caused by factors such as matrix interference, poor analytical precision, or instrument calibration.

The following Sections summarize the evaluation of analytical accuracy for the water matrices (groundwater and surface water samples), soil\sediment matrices (soil samples and sediment samples) and sludge matrix for the following analytical groups:

- GC/MS volatile organic compounds (GC/MS VOCs);
- GC volatile organic compounds (GC/VOCs), (only groundwater samples);
- semivolatile organic compounds (SVOCs);
- pesticides, PCBs, and kepone; and
- inorganics and cyanide.

Accuracy was assessed using MS and MSD samples for organic analyses and MS samples for inorganic analyses for each matrix. The results of the evaluation of accuracy for the MS/MSD samples is provided in Tables 2-17 through 2-20 for water matrix, Tables 2-21 through 2-24 for soil\sediment matrix and 2-25 through 2-28 for the sludge matrix.

3.1 Water Matrix

One MS/MSD sample pair analyzed for GC/MS volatile organics had non-compliant %Rs for benzene and toluene (Table 2-17). The %Rs for these two compounds exceeded the maximum criteria for accuracy, which indicates that the quantified values of detected target analytes with similar instrument performance, ethylbenzene, styrene and xylene (total) in samples associated with SDG 35196 may be overestimated.

Four MS/MSD sample pairs analyzed for semivolatile organics had non-compliant %Rs. The compounds were n-nitroso-di-n-propylamine and 4-nitrophenol (Table 2-18). The %Rs for N-nitroso-di-n-propylamine was less than the minimum criteria for accuracy, which indicates that the quantified values of detected target compounds with similar instrument performance, N-nitrosodiphenylamine, in samples associated with SDGs 23884 and 23904 may be underestimated. The %Rs for 4-nitrophenol exceeded the maximum criteria for accuracy, which indicates that the quantified values of detected target compounds with similar instrument performance, 2-nitrophenol, 4-nitrophenol, 2,4-dinitrophenol, and 4,6-dinitro-2-methylphenol, in samples associated with SDGs 23884, 23904, 34923 and 35168 may be overestimated.

One MS/MSD sample pair analyzed for pesticides and PCBs had non-compliant %Rs for gamma-BHC (lindane), heptachlor and aldrin (Table 2-19). The non-

compliance is attributed to matrix and/or target analyte interference. These compounds were associated with samples from SDGs 23918, 23790, and 23904.

Four MS/D sample pairs analyzed for inorganic analytes had one or more non-compliant %Rs. The non-compliant target analytes were tin and selenium in the MS sample from well 11MW3D, iron in the MS sample from well 8MW6D, lead in the sample from MPT8SW2, and lead and thallium in the MS sample from MPTBSW7 (Table 2-20). The %Rs for tin, selenium, lead and thallium were less than the minimum criteria for accuracy, which indicates that the quantified values for these detected target analytes associated with SDGs 23884, 32943, and 01528 may be underestimated. The %R for lead exceeded the maximum criteria for accuracy, which indicates that the quantified values for this detected target analyte in samples associated with SDG 23886 may be overestimated.

Based on assessment of MS/MSD sample accuracy evaluation criteria, the soil\sediment matrix analytical data was acceptable for each SDG. However, some of the analytical results may be overestimated or underestimated.

3.2 Soil\Sediment Matrix

The assessment of precision for soil\sediment matrix MS/MSD samples is provided in Tables 2-21 through 2-24. One MS/MSD sample pair analyzed for GC/MS volatile organics had non-compliant %Rs for chlorobenzene (Table 2-21). The %R for this compounds was less than the minimum criteria for accuracy, which indicates that the quantified values of chlorobenzene in samples associated with SDG 35168 may be underestimated.

Two MS/MSD sample pairs, MP16M4S8 and MP16M2S8, analyzed for semivolatile organics had non-compliant %Rs for different combinations of the following compounds, 4-dichlorobenzene, n-nitro-di-n-propylamine, 1,2,4-trichlorobenzene, acenaphthene, 2,4-dinitrotoluene, pyrene, phenol, 2-chlorophenol, 4-chloro-3-methylphenol, 4-nitrophenol and pentachlorophenol (Table 2-22). The non-compliant %Rs in samples MP16M4S8 and MP16M2S8 strongly suggest matrix interference, based upon poor recovery of the spike compounds. All positive results associated with these two samples were qualified as estimated, J qualifier, and the detection limits for all non-detects were qualified as estimated, UJ qualifier. The analytical results for these two samples should be considered useable but are possibly underestimated as a result of matrix interference.

The MS/MSD samples for pesticides and PCB were generally "in-compliance" with the accuracy evaluation criteria (Table 2-23). Matrix interference was exhibited by one MS/MSD sample pair, MPT8MSS4S8, by the non-detection of spiked compounds gamma-BHC (lindane), aldrin, and heptachlor. The analytical results for this sample are possibly underestimated as a result of matrix interference.

Each of the soil MS samples had one or more target analytes with non-compliant %Rs (Table 2-24). The target analytes were chromium, mercury, thallium, vanadium, and zinc. Analytical results for chromium, vanadium and zinc in sample number MPT8MS4S8 from SDG 34889 are possibly underestimated. Analytical results for mercury in sample numbers MPT8MS4S8 from SDG 34889 and

MPTBSS1 from SDG 35163 are possibly overestimated, and are underestimated in sample MPT16MS2S8, from SDG 34889. Analytical results for thallium in sample number MPTBSD7 are possibly underestimated.

3.3 Sludge Matrix

The MS/MSD sludge samples analyzed for GC/MS volatile and semivolatile organic compounds were "in-compliance" with the accuracy evaluation criteria (Tables 2-25 and 2-26, respectively. The MS/MSD samples for pesticides and PCB exhibited possible matrix interference in sample pair, 8SL1AD, by the non-detection of spiked compounds dieldrin, endrin and 4,4'-DDT (Table 2-27). The analytical results for the pesticide/PCBs in SDG 23967 are possibly underestimated as a result of matrix interference.

Each of the two sludge MS samples had one or more target analytes with non-compliant %Rs (Table 2-28). The target analytes were selenium in sample 8SL1AD from SDG 35074 are possibly underestimated, and barium, cadmium, chromium, nickel, vanadium, and zinc in sample MPT8SL1 from SDG 34923 are possibly overestimated.

Based on assessment of MS/MSD sample accuracy evaluation criteria, the sludge matrix analytical data was acceptable for each SDG. However, some of the analytical results may be overestimated or underestimated.

4.0 REPRESENTATIVENESS

Representativeness of the environmental sample analytical data was assessed using trip blanks, field blanks, equipment rinseate blanks, and laboratory method blanks. The environmental samples and associated blanks were analyzed for the following target analyte groups:

- GC/MS volatile organic compounds (GC/MS VOCs);
- GC volatile organic compounds (GC/VOCs), (only groundwater samples);
- semivolatile organic compounds (SVOCs);
- pesticides, PCBs, and kepone; and
- inorganics and cyanide.

The trip blank samples were analyzed for only GC/MS volatile organic target analytes. Field blanks, equipment rinseate blanks, and laboratory method blanks were analyzed for target analytes in each listed category. The assessment of representativeness is summarized in tabular form for each type of blank, trip blank results are summarized in Table 4-1, field blank results are summarized in Tables 4-2 through 4-7, equipment blank results are summarized in Tables 4-8 through 4-13 and method blank results are summarized in Tables 4-14 through 4-19.

If contaminants were detected in a blank, corrective actions were made for the chemical analytical data during data validation by Heartland. The corrective action consisted of amending the laboratory reported results for organic and inorganic target analytes based on the following criteria. The Validation Qualifier codes utilized in the blank summary tables are described below.

Organic Target Analytes

- CRQL Validation Qualifier. If a sample result for the blank contaminant was less than the CRQL and less than 10 times the blank value, the sample result was rejected and amended as estimated non-detected at the CRQL for the target compound.

- U Validation Qualifier. If a sample result for the blank contaminant was greater than the sample CRQL and less than 10 times the blank value, the sample result for the blank contaminant was amended as non detect at the concentration reported in the sample results.

- No Action (NA). If a sample result for the blank contaminant was greater than the CRQL and 10 times the blank value, the result was not amended.

Inorganic Target Analytes

- U Validation Qualifier. If a sample result for the blank contaminant was less than the IDL and less than 5 times the blank value, the sample result was amended as non-detected.

TABLE 4 - 1

GC/MS VOLATILES DETECTED
IN TRIP BLANKS
NAVSTA MAYPORT, FLORIDA

SDG NUMBER	BLANK ID	RELATED ENVIRONMENTAL SAMPLES	CONTAMINANT	TB CONC.	UNITS	VALIDATION QUALIFIER
34915	TRIP BLANK	2FB004, 2QS005, MTP8MS7S2, MTP8MS7S2RE, MPT8MS7S9, MPT8MS8S2, MPT8MS8S9	CHLOROFORM	18	ug/L	
34884	TRIP BLANK	2RB001	CHLOROFORM	26	ug/L	U
34901	TRIP BLANK	MPT8BS3S7	CHLOROFORM	17	ug/L	CRQL
35074	TRIP BLANK	8SL1A, 8SL1AD, 8SL1ADMS, 8SL1ADMSD	NO CONTAMINATION			
35070	TRIP BLANK	15MW1, 8MW5S, S-1, 8MW6D	METHYLENE CHLORIDE	2	ug/L	CRQL
23918	TRIP BLANK	8MW8 16MW2	ACETONE	15	ug/L	CRQL U
23884	TRIP BLANK	MPT-11-1, 11MW3	METHYLENE CHLORIDE	2	ug/L	CRQL
23904	TRIP BLANK	S-3, 16MW3	METHYLENE CHLORIDE	2	ug/L	CRQL
		S-3, S-2, 16MW3D, 16MW1D	ACETONE	11	ug/L	CRQL
		16MW1D				U
34923	TRIP BLANK	MPT8SL2, MPT8SL2RE	ACETONE CHLOROFORM	13 21	ug/L ug/L	
35083	TRIP BLANK	15SS31, 15SS71, 15SS81, 15SS81D, 15SS82, 15SS72, 15SS82D	METHYLENE CHLORIDE	2	ug/L	CRQL
35163	TRIP BLANK	MPTBSS1, MPTBSS1D, MPTBSS2, MPTBSS3, MPTBSS4, MPTBSS6, MPTBSS5	NO CONTAMINATION FOUND			
35168	TRIP BLANK	MPTBSW7, MPTBSW7D, MPTBSW MPTBSW4, MPTBSD7, MPTBSD7D MPTBSD6, MPTBSD4	METHYLENE CHLORIDE	1	ug/L	
	TRIP BLANK	MPTBSW7, MPTBSW7D, MPTBSW MPTBSW4, MPTBSD7, MPTBSD7D MPTBSD6, MPTBSD4	METHYLENE CHLORIDE	2	ug/L	
35196	TRIP BLANK	MPT8SW1, MPT8SW1D, MPT8SW2 MPT8SW5, MPTBSD5	METHYLENE CHLORIDE	2	ug/L	
35080	TRIP BLANK	8M25DD, 2FB006	METHYLENE CHLORIDE	2	ug/L	CRQL
		8MW5DD	ACETONE	3	ug/L	CRQL

TABLE 4 - 2

GC/MS VOLATILES DETECTED
IN FIELD BLANKS
NAVSTA MAYPORT, FLORIDA

SDG NUMBER	BLANK ID	RELATED ENVIRONMENTAL SAMPLES	CONTAMINANT	FB CONC.	UNITS	VALIDATION QUALIFIER
34884	2FB003	2QS004, 2RB001, 2BS85S02, 2BS85DD79	2-BUTANONE CHLOROBENZENE	14 2	ug/L ug/L	
34915	2FB004	2QS005, MPT8MS7S2, MPT8MS7S MPT8MS8S2, MPT8MS8S9	CHLOROBENZENE	2	ug/L	
35071	2FB005	MPT-11-1, 11MW3	METHYLENE CHLORIDE CHLOROBENZENE	1 2	ug/L ug/L	CRQL
35163	2FB007	MPTBSS1, MPTBSS1D, MPTBSS2, MPTBSS3, MPTBSS4, MPTBSS6, MPTBSS5	NO CONTAMINATION FOUND			
35080	2FB006	8MW5DD	METHYLENE CHLORIDE CHLOROBENZENE	2 2	ug/L ug/L	

TABLE 4 - 3

GC VOLATILES DETECTED
IN FIELD BLANKS
NAVSTA MAYPORT, FLORIDA

SDG NUMBER	BLANK ID	RELATED ENVIRONMENTAL SAMPLES	CONTAMINANT	FB CONC.	UNITS	VALIDATION QUALIFIER
23885	2FB005	MPT-11-1, 11MW3, MPT-11-2 11MW3D	CHLOROBENZENE	1.4	ug/L	
23944	2FB006	8MW5DD	NO CONTAMINATION FOUN			

TABLE 4 - 4

SEMIVOLATILE ORGANICS DETECTED
IN FIELD BLANKS
NAVSTA MAYPORT, FLORIDA

SDG NUMBER	BLANK ID	RELATED ENVIRONMENTAL SAMPLES	CONTAMINANT	FB CONC.	UNITS	VALIDATION QUALIFIER
34884	2FB003	2QS004, 2BS85S02, 2BS85DD79	NO CONTAMINATION FOUND			
34915	2FB004	2QS005, MPT8MS7S2, MPT8MS7S9, MPT8MS8S2, MPT8MS8S9	NO CONTAMINATION FOUND			
23884	2FB005	MPT-11-1, MPT-11-2, 11MW3, 11MW3D, 2QS006 11MW3DS, 11MW3DMD	NO CONTAMINATION FOUND			
35163	2FB007	MPTBSS1, MPTBSS1D, MPTBSS2, MPTBSS3, MPTBSS4, MPTBSS6, MPTBSS5	NO CONTAMINATION FOUND			
23943	2FB006	8MW5DD	NO CONTAMINATION FOUND			

TABLE 4 - 5

PESTICIDES/PCBS DETECTED IN
FIELD BLANKS
NAVSTA MAYPORT, FLORIDA

SDG NUMBER	BLANK ID	RELATED ENVIRONMENTAL SAMPLES	CONTAMINANT	FB CONC.	UNITS	VALIDATION QUALIFIER
23749 (34884)	2FB003	2RB001, 2QS004, 2BS85S02, 2BS85DD79	NO CONTAMINATION FOUND			
23775 (34915)	2FB004	2QS005 MPT8MS7S2,MPT8MS79S9 MPT8MS8S2, MPT8MS8S9	NO CONTAMINATION FOUND			
23884	2FB005	MPT-11-1, MPT-11-2, 11MW3, 11MW3D, 2QS006	NO CONTAMINATION FOUND			
35163	2FB007	MPTBSS1, MPTBSS1D, MPTBSS2, MPTBSS3, MPTBSS4, MPTBSS6, MPTBSS5	NO CONTAMINATION FOUND			
23943	2FB006	8MW5DD	NO CONTAMINATION FOUND			
34611	2FB001	2SSA1N_1A, 2SSM7_1A, 2SSB7_1A, 2SSN2N_1A, 2SSB3N_1A, 2SSF2N_1A, 2SSG7_1A, 2SSN1_1A, 2SSN1_1A, 2SSI2N_1A	NO CONTAMINATION FOUND			

TABLE 4 - 6

KEPONE DETECTED IN
FIELD BLANKS
NAVSTA MAYPORT, FLORIDA

SDG NUMBER	BLANK ID	RELATED ENVIRONMENTAL SAMPLES	CONTAMINANT	FB CONC.	UNITS	VALIDATION QUALIFIER
23749 (34884)	2FB003	2RB001, 2QS004, 2BS85S02, 2BS85DD79	NO CONTAMINATION FOUND			
23775 (34915)	2FB004	2QS005 MPT8MS7S2,MPT8MS79S9 MPT8MS8S2, MPT8MS8S9	NO CONTAMINATION FOUND			
23884	2FB005	MPT-11-1, MPT-11-2, 11MW3, 11MW3D, 2QS006	NO CONTAMINATION FOUND			
35163	2FB007	MPTBSS1, MPTBSS1D, MPTBSS2, MPTBSS3, MPTBSS4, MPTBSS6, MPTBSS5	NO CONTAMINATION FOUND			
23943	2FB006	8MW5DD	NO CONTAMINATION FOUND			

TABLE 4 - 7
INORGANICS DETECTED IN FIELD BLANKS
NAVSTA MAYPORT, FLORIDA

SDG NUMBER	BLANK ID	RELATED ENVIRONMENTAL SAMPLES	CONTAMINANT	FB CONC.	UNITS	VALIDATION QUALIFIER
34915	2FB004	MPT8MS7S2, MPT8MS7S9, MPT8MS8S2, MPT8MS8S9, AND 2QS005.	NO CONTAMINATION FOUND			
34884	2FB003	2BS85DD79 AND 2BS85S02.	LEAD	1.70	ug/L	
23884	2FB005	MPT-11-1, MPT-11-2, 11MW3, 11MW3D AND 2QS006.	ARSENIC	0.69	ug/L	
			BARIUM	3.4	ug/L	
			MAGNESIUM	34.0	ug/L	
			TIN	14.5	ug/L	
23884	2FB007	MPTBSS1, MPTBSS1D, MPTBSS2, MPTBSS3, MPTBSS4, MPTBSS5, MPTBSS6 AND 2QS010.	NO CONTAMINATION FOUND			
23943	2FB006	8MW5DD.	BARIUM	45.3	ug/L	
			CALCIUM	158000.0	ug/L	
			COBALT	3.2	ug/L	
			IRON	82.0	ug/L	
			MAGNESIUM	314000.0	ug/L	
			MANGANESE	101.0	ug/L	
			SILVER	3.7	ug/L	
			VANADIUM	2.8	ug/L	
			ZINC	15.8	ug/L	

TABLE 4 - 8

GC/MS VOLATILES DETECTED
IN EQUIPMENT RINSE BLANKS
NAVSTA MAYPORT, FLORIDA

SDG NUMBER	BLANK ID	RELATED ENVIRONMENTAL SAMPLES	CONTAMINANT	RB CONC.	UNITS	VALIDATION QUALIFIER
34884	2RB001	2FB003, 2QS004, 2BS85S02, 2BS85DD79	BROMODICHLOROMETHANE DIBROMOCHLOROMETHANE	13 16	ug/L	
	2QS004	2FB003, 2QS004, 2BS85S02, 2BS85DD79	CHLOROBENZENE	1	ug/L	
34915	2QS005	2FB004, MPT8MS7S2, MPT8MS8S MPT8MS7S9, MPT8MS8S9	CHLOROBENZENE	1	ug/L	
35071	2QS006	MPT-11-1, 11MW3	METHYLENE CHLORIDE CHLOROBENZENE	1 2	ug/L ug/L	CRQL
23904	2QS007	16MW1D, 16MW3, 16MW3D, 9MW1, S-2, S-3	2-BUTANONE ACETONE CHLOROBENZENE	1 1 4	ug/L ug/L ug/L	
23918	2QS008	8MW8 16MW2	ACETONE CHLOROBENZENE	6 3	ug/L ug/L	CRQL U
35083	2QS009	15SS31, 15SS81D, 15SS82 15SS71, 15SS72, 15SS81, 15SS82D	METHYLENE CHLORIDE CHLOROBENZENE	2 2	ug/L ug/L	CRQL
35163	2QS010	MPTBSS1, MPTBSS1D, MPTBSS2, MPTBSS3, MPTBSS4, MPTBSS5, MPTBSS6, 2FB007	CHLOROBENZENE	2	ug/L	
35168	2QS011	MPTBSW7, MPTBSW7D, MPTBSW6 MPTBSW4, MPTBSD7, MPTBSD7D, MPTBSD6, MPTBSD4	CHLOROBENZENE	2	ug/L	
	2QS012	MPTBSW7, MPTBSW7D, MPTBSW6 MPTBSW4, MPTBSD7, MPTBSD7D, MPTBSD6, MPTBSD4	CHLOROBENZENE	2	ug/L	

TABLE 4 - 9

GC VOLATILES DETECTED
IN EQUIPMENT RINSEATE BLANKS
NAVSTA MAYPORT, FLORIDA

SDG NUMBER	BLANK ID	RELATED ENVIRONMENTAL SAMPLES	CONTAMINANT	RB CONC.	UNITS	VALIDATION QUALIFIER
23885	2QS006	MPT-11-1, 11MW3, MPT-11-2, 11MW3D	CHLOROBENZENE	1.00	ug/L	
23905	2QS007	16MW1D, 16MW3, 16MW3D, 9MW1, 9MW2, 9MW3, S-2, S-3	CHLOROBENZENE	1.7	ug/L	
23921	2QS008	NONE ASSOCIATED	NO CONTAMINATION FOUND			

TABLE 4 - 10

SEMIVOLATILE ORGANICS DETECTED
IN EQUIPMENT RINSEATE BLANKS
NAVSTA MAYPORT, FLORIDA

SDG NUMBER	BLANK ID	RELATED ENVIRONMENTAL SAMPLES	CONTAMINANT	RB CONC.	UNITS	VALIDATION QUALIFIER
34884	2RB001	2FB003, 2QS004, 2BS85S02, 2BS85DD79	NO CONTAMINATION FOUND			
	2QS004	2BS85S02, 2BS85DD79,	NO CONTAMINATION FOUND			
34915	2QS005	2FB004, MPT8MS7S2, MPT8MS7S9, MPT8MS8S2, MPT8MS8S9	NO CONTAMINATION FOUND			
23884	2QS006	MPT-11-1, MPT-11-2, 11MW3, 11MW3D, 2FB005	BIS(2-ETHYLHEXYL)PHTHALATE	3	ug/L	
23904	2QS007	16MW1D, 16MW3, 16MW3D, 9MW1, S-2, S-3	NO CONTAMINATION FOUND			
23918	2QS008	8MW1, 8MW8, 8MW4, 8MW7, 16MW2	NO CONTAMINATION FOUND			
35083	2QS009	15SS11, 15SS12, 15SS21 15SS22, 15SS31, 15SS32, 15SS41, 15SS42, 15SS51, 15SS52, 15SS61, 15SS62, 15SS71, 15SS72, 15SS81 15SS81D, 15SS82, 15SS82D	NO CONTAMINATION FOUND			
35163	2QS010	MPTBSS1, MPTBSS1D, MPTBSS2, MPTBSS3, MPTBSS4, MPTBSS5, MPTBSS6, 2FB007	NO CONTAMINATION FOUND			
35168	2QS011	MPTBSW7, MPTBSW7D, MPTBSW6, MPTBSW4, MPTBSD7, MPTBSD7D, MPTBSD6, MPTBSD4	NO CONTAMINATION FOUND			
	2QS012	MPTBSW7, MPTBSW7D, MPTBSW6, MPTBSW4, MPTBSD7, MPTBSD7D, MPTBSD6, MPTBSD4	NO CONTAMINATION FOUND			

TABLE 4 - 11

PESTICIDES/PCBS DETECTED
IN EQUIPMENT RINSEATE BLANKS
NAVSTA MAYPORT, FLORIDA

SDG NUMBER	BLANK ID	RELATED ENVIRONMENTAL SAMPLES	CONTAMINANT	RB CONC.	UNITS	VALIDATION QUALIFIER
23749 (34884)	2RB001	2FB003, 2QS004, 2BS85S02, 2BS85DD79	NO CONTAMINATION FOUND			
	2QS004	2BS85S02, 2BS85DD79 2FB003	NO CONTAMINATION FOUND			
23775	2QS005	2FB004, MPT8MS7S2, MPT8MS7S9 MPT8MS8S2, MPT8MS8S9	NO CONTAMINATION FOUND			
23884	2QS006	MPT-11-1, MPT-11-2, 11MW3 11MW3D, 2FB005	NO CONTAMINATION FOUND			
23904	2QS007	16MW1D, 16MW3, 16MW3D, 9MW2, 9MW3, 9MW1, S-2, S-3	NO CONTAMINATION FOUND			
23918	2QS008	8MW1, 8MW8, 16MW2, 8MW4, 8MW7	NO CONTAMINATION FOUND			
23953	2QS009	15SS11, 15SS12, 15SS21, 15SS22, 15SS31, 15SS32, 15SS41, 15SS42, 15SS51, 15SS52, 15SS61, 15SS62, 15SS71, 15SS72, 15SS81, 15SS81D, 15SS82, 15SS82D,	NO CONTAMINATION FOUND			
35163	2QS010	MPTBSS1, MPTBSS1D, MPTBSS2, MPTBSS3, MPTBSS4, MPTBSS5, MPTBSS6, 2FB007	NO CONTAMINATION FOUND			
35168	2QS011	MPTBSW7, MPTBSW7D, MPTBSW6, MPTBSW4, MPTBSD7, MPTBSD7D, MPTBSD6, MPTBSD4	NO CONTAMINATION FOUND			
	2QS012	MPTBSW7, MPTBSW7D, MPTBSW6, MPTBSW4, MPTBSD7, MPTBSD7D, MPTBSD6, MPTBSD4	NO CONTAMINATION FOUND			
23471	2QS002A	2SSD4N_1A, 2SSII4N1A, 2SSJ4N_1A, 2SSJ5_1A, 2SSP7_1A, 2SSQ1N_1A, 2SSQ2_1A, 2SSQ2_1AD, 2SSH7_1A, 2SSH7_1AD	NO CONTAMINATION FOUND			
34611	2QS001	2SSA1N_1A, 2SSM7_1A, 2SSB7_1A, 2SSN2N_1A, 2SSB3N_1A, 2SSF2N_1A, 2SSG7_1A, 2SSA3_1A, 2SSN1_1A, 2SSI2N_1A	NO CONTAMINATION FOUND			

TABLE 4 - 12

KEPONE DETECTED IN
EQUIPMENT RINSEATE BLANKS
NAVSTA MAYPORT, FLORIDA

SDG NUMBER	BLANK ID	RELATED ENVIRONMENTAL SAMPLES	CONTAMINANT	RB CONC.	UNITS	VALIDATION QUALIFIER
23749 (34884)	2RB001	2FB003, 2QS004, 2BS85S02, 2BS85DD79	NO CONTAMINATION FOUND			
	2QS004	2BS85S02, 2BS85DD79 2FB003	NO CONTAMINATION FOUND			
23775	2QS005	2FB004, MPT8MS7S2, MPT8MS7S9 MPT8MS8S2, MPT8MS8S9	NO CONTAMINATION FOUND			
23884	2QS006	MPT-11-1, MPT-11-2, 11MW3 11MW3D, 2FB005	NO CONTAMINATION FOUND			
23904	2QS007	16MW1D, 16MW3, 16MW3D, 9MW2, 9MW3, 9MW1, S-2, S-3	NO CONTAMINATION FOUND			
23918	2QS008	8MW1, 8MW8, 16MW2, 8MW4, 8MW7	NO CONTAMINATION FOUND			
23953	2QS009	15SS11, 15SS12, 15SS21, 15SS22, 15SS31, 15SS32, 15SS41, 15SS42, 15SS51, 15SS52, 15SS61, 15SS62, 15SS71, 15SS72, 15SS81, 15SS81D, 15SS82, 15SS82D,	NO CONTAMINATION FOUND			
35163	2QS010	MPTBSS1, MPTBSS1D, MPTBSS2, MPTBSS3, MPTBSS4, MPTBSS5, MPTBSS6, 2FB007	NO CONTAMINATION FOUND			
35168	2QS011	MPTBSW7, MPTBSW7D, MPTBSW6, MPTBSW4, MPTBSD7, MPTBSD7D, MPTBSD6, MPTBSD4	NO CONTAMINATION FOUND			
	2QS012	MPTBSW7, MPTBSW7D, MPTBSW6, MPTBSW4, MPTBSD7, MPTBSD7D, MPTBSD6, MPTBSD4	NO CONTAMINATION FOUND			

TABLE 4 - 13
INORGANICS DETECTED IN EQUIPMENT RINSEATE BLANKS NAVSTA MAYPORT, FLORIDA

SDG NUMBER	BLANK ID	RELATED ENVIRONMENTAL SAMPLES	CONTAMINANT	RB CONC.	UNITS	VALIDATION QUALIFIER
34915	2QS005	MPT8MS7S2, MPT8MS7S9, MPT8MS8S2, MPT8MS8S9, AND 2FB005.	NO CONTAMINATION FOUND			
34884	2QS004	2BS85DD79 AND 2BS85S02.	ARSENIC COPPER	1.0 1.9	ug/L ug/L	
23884	2QS006	MPT-11-1, MPT-11-2, 11MW3, 11MW3D AND 2FB005.	BARIUM CHROMIUM MAGNESIUM	3.0 3.3 18.1	ug/L ug/L ug/L	
23918	2QS008	8MW1, 8MW8, 8MW4, 8MW7 AND 16MW2.	BARIUM COPPER	1.20 1.40	ug/L ug/L	
35163	2QS010	MPTBSS1, MPTBSS1D, MPTBSS2, MPTBSS3, MPTBSS4, MPTBSS5, MPTBSS6 AND 2FB007.	ARSENIC ZINC	1.60 7.50	ug/L ug/L	
35168	2QS011 2QS012	MPTBSD4, MPTBSD6, MPTBSD7, MPTBSD7D, MPTBSW4, MPTBSW6, MPTBSW7 AND MPTBSW7D.	IRON ZINC	20.20 2.90	ug/L ug/L	
35083	2QS009	15SS11, 15SS12, 15SS21, 15SS22, 15SS31, 15SS32, 15SS41, 15SS42, 15SS51, 15SS52, 15SS61, 15SS62, 15SS71, 15SS72, 15SS81, 15SS81D, 15SS82 AND 15SS82	COBALT LEAD MERCURY	2.40 4.70 0.22	ug/L ug/L ug/L	
23904	2QS007	S-3, S-2, 9MW1, 9MW2, 9MW3, 16MW3, 16MW3D AND 16MW1D.	BARIUM CALCIUM COPPER IRON MANGANESE	3.00 523.00 1.70 46.80 1.70	ug/L ug/L ug/L ug/L ug/L	

TABLE 4 - 14

GC/MS VOLATILES DETECTED
IN METHOD BLANKS
NAVSTA MAYPORT, FLORIDA

SDG NUMBER	BLANK ID	RELATED ENVIRONMENTAL SAMPLES	CONTAMINANT	MB CONC.	UNITS	VALIDATION QUALIFIER
34884	VBLKW1	TRIP BLANK	METHYLENE CHLORIDE	4	ug/L	CRQL
	VBLKW1	TRIP BLANK	ACETONE	3	ug/L	CRQL
	VBLKS1	2BS85S02	METHYLENE CHLORIDE	3	ug/Kg	CRQL
			ACTONE	4		
	VBLKS1	2BS85DD79	METHYLENE CHLORIDE	3	ug/Kg	U
			ACTONE	4		
34915	VBLKW1	TRIP BLANK	METHYLENE CHLORIDE	4	ug/L	CRQL
	VBLKW1	2QS005, TRIP BLANK	ACETONE	3	ug/L	CRQL
	VBLKS1	MPT8MS7S2	METHYLENE CHLORIDE	1	ug/Kg	U
	VBLKS1	MPT8MSS7SRE, MPT8MS8S2, MPT8MS8S9	METHYLENE CHLORIDE	1	ug/Kg	CRQL
	VBLKS1	MPT8MS7S2, MPT8MS8S2, MPT8MS8S9	ACETONE	6	ug/Kg	U
	VBLKS1	MPT8MS7S2RE	ACETONE	6	ug/Kg	CRQL
	VBLKS2	MPT8MS7S9	METHYLENE CHLORIDE	1	ug/Kg	CRQL
34889	VBLKS1	MPT8MS4S2	METHYLENE CHLORIDE	4	ug/Kg	CRQL
	VBLKS1	MP16MS1D8, MP126MS2S2 MP16MS3S2	METHYLENE CHLORIDE	4	ug/Kg	U
	VBLKS1	MP16MS2S2, MP16MS3S2	ACETONE	4	ug/Kg	CRQL
	VBLKS1	MPT8MS4S2, MP16MS1D8	ACETONE	4	ug/Kg	NA
	VBLKS2	MPT6MS1D2, MP16MS3S8	METHYLENE CHLORIDE	4	ug/Kg	U
			ACETONE	4		
	VBLKSM	MPT8MS4S8	METHYLENE CHLORORIDE	430	ug/Kg	CRQL
			CHLOROFORM	160		
	VBLKSM	MPT8MS4S8	ACETONE	1800	ug/Kg	U
	VBLKSM2	MP16MS2S8	METHYLENE CHLORORIDE	200	ug/Kg	CRQL
			CHLOROFORM	240		
	VBLKSM2	MP16MS2S8	ACETONE	1900	ug/Kg	U
	VBLKSM3	MPT8MS4S8R	METHYLENE CHLORORIDE	320	ug/Kg	CRQL
	VBLKSM3	MPT8MS4S8R	ACETONE	1900	ug/Kg	U
35074	VBLKW1	TRIP BLANK	NO CONTAMINATION			
	VBLKS1	8SL1A,8SL1AD,8SL1ADMS 8SL1ADMSD	METHYLENE CHLORIDE	2	ug/Kg	CRQL

TABLE 4 - 14 (CONTINUED)

GC/MS VOLATILES DETECTED
IN METHOD BLANKS
NAVSTA MAYPORT, FLORIDA

SDG NUMBER	BLANK ID	RELATED ENVIRONMENTAL SAMPLES	CONTAMINANT	MB CONC.	UNITS	VALIDATION QUALIFIER
34901	VBLKS1	MP15MS1S2	METHYLENE CHLORIDE	4	ug/Kg	CRQL
	VBLKS1	MP15MS1S2	ACETONE	4	ug/Kg	U
	VBLKS2	MP15MS1S6	METHYLENE CHLORIDE	4	ug/Kg	U
	VBLKS2	MP15MS1S6	ACETONE	4	ug/Kg	NA
	VBLKSM	MPT8BS3S7	METHYLENE CHLORORIDE CHLOROFORM	200 240	ug/Kg	CRQL
	VBLKSM	MPT8BS3S7	ACETONE	1900	ug/Kg	U
23918	VBLKW1	8MW4 8MW7	METHYLENE CHLORIDE	2	ug/L	CRQL U
	VBLKW2	16MW2, 2QS008, 8MW1 TRIP BLANK	METHYLENE CHLORIDE	2	ug/L	CRQL U
	VBLKW3	8MW8	NO CONTAMINATION FOUND			
35070	VBLKW1	S-1, 8MW6D, TRIP BLANK	ACETONE	1	ug/L	CRQL
23886	VBLKW1	8MW6	METHYLENE CHLORIDE	15	ug/L	U
35071	VBLK1	MPT-11-1, 11MW3, 11MW3D, 2FB005, 2QS006, TRIP BLANK	ACETONE	1	ug/L	CRQL
23884	VBLKW1	MPT-11-2	METHYLENE CHLORIDE	1	ug/L	CRQL
23904	VBLKW1	9MW2	METHYLENE CHLORIDE	1	ug/L	CRQL
	VBLKW2	9MW3	NO CONTAMINATION FOUND			
35072	VBLKW1	16MW1D, 15MW3, 15MW3D 2QS007, 9MW1, S-2, S-3 TRIP BLANK	NO CONTAMINATION FOUND			
34923	VBLKS1	MPT8SL1, MPT8SL1RE MPT8SL3, MPT8SL3RE	METHYLENE CHLORIDE	1	ug/L	CRQL U
		MPT8SL1, MPT8SL3RE MPT8SL3, MPT8SL1RE	ACETONE	6	ug/L	U CRQL
23883	VBLKW1	TRIP BLANK	METHYLENE CHLORIDE	2	ug/L	CRQL
	VBLKSM1	MPT8SL2	METHYLENE CHLORIDE ACETONE	460 2100	ug/Kg	CRQL U
	VBLKSM2	MPT8SL2_RE	METHYLENE CHLORIDE ACETONE	400 1700	ug/Kg	CRQL U
35083	VBLKS1	15SS11, 15SS12, 15SS21, 15SS22, 15SS32, 15SS21RE 15SS41, 15SS42, 15SS51, 15SS52, 15SS61, 15SS62,	METHYLENE CHLORIDE	1	ug/L	CRQL
	VBLKS2	15SS71, 15SS81D, 15SS82D, 15SS82,	ACETONE	2	ug/L	CRQL
	VBLKW1	2QS009, TRIP BLANK	ACETONE	6	ug/L	CRQL U

TABLE 4 - 14 (CONTINUED)

GC/MS VOLATILES DETECTED
IN METHOD BLANKS
NAVSTA MAYPORT, FLORIDA

SDG NUMBER	BLANK ID	RELATED ENVIRONMENTAL SAMPLES	CONTAMINANT	MB CONC.	UNITS	VALIDATION QUALIFIER
35163	VBLK2C	MPTBSS1, MPTBSS1D, MPTBSS1MS MPTBSS1MSD, MPTBSS2, MPTBSS3, MPTBSS4, MPTBSS5	NO CONTAMINATION FOUND			
	VBLK2D	MPTBSS5	NO CONTAMINATION FOUND			
	VBLK2E	2QS010, 2FB007, TRIP BLANK	NO CONTAMINATION FOUND			
35168	VBLK2D	MPTBSD4, MPTBSD6, MPTBSD7D	NO CONTAMINATION FOUND			
	VBLK2E	TRIP BLANK	NO CONTAMINATION FOUND			
	VBLK2F	2QS011, 2QS012, TRIP BLANK, MPTBSW4, MPTBSW6, MPTBSW7, MPTBSW7D, MPTBSW7DMS, MPTBSW7DMSD	NO CONTAMINATION FOUND			
	VBLK2G	MPTBSD7	ACETONE	11	ug/Kg	U
35196	VBLK2D	MPTBSD5	NO CONTAMINATION FOUND			
	VBLK2H	MPT8SW1, MPT8SW1D, MPT8SW2, MPT8SW2S, MKPT8SW2MD, MPT8SW2DL, MPTBSW5	NO CONTAMINATION FOUND			
35080	VBLKW1	2FB006, 8MW5DD, TRIP BLANK	NO CONTAMINATION FOUND			

TABLE 4 - 15

GC VOLATILES DETECTED
IN METHOD BLANKS
NAVSTA MAYPORT, FLORIDA

SDG NUMBER	BLANK ID	RELATED ENVIRONMENTAL SAMPLES	CONTAMINANT	MB CONC.	UNITS	VALIDATION QUALIFIER
23944	VBLK001	2FB006, 8MW5DD	NO CONTAMINATION FOUND			
23921	VBLK001	2QS008	NO CONTAMINATION FOUND			
23905	VBLK001	2QS007, S-3, S-2, 9MW1, 9MW2, 9MW3, 16MW3, 16MW3D, 16MW1D	NO CONTAMINATION FOUND*			
23885	VBLK001	MPT-11-1, MPT-11-2, 11MW3, 11MW3D, 2FB005, 2QS006	NO CONTAMINATION FOUND			
	VBLK002	MPT-11-1, MPT-11-2, 11MW3, 11MW3D, 2FB005, 2QS006	NO CONTAMINATION FOUND			

TABLE 4 - 16

SEMIVOLATILE ORGANICS DETECTED
IN METHOD BLANKS
NAVSTA MAYPORT, FLORIDA

SDG NUMBER	BLANK ID	RELATED ENVIRONMENTAL SAMPLES	CONTAMINANT	MB CONC.	UNITS	VALIDATION QUALIFIER
34884	SBLKW1	2FB003, 2RB001	BIS(2-ETHYLHEXYL)PHTHALATE	4	ug/L	CRQL
	SBLKS1	2BS85S02, 2BS85DD79	NO CONTAMINATION FOUND			
34915	SBLKW1	2FB004, 2QS005	NO CONTAMINATION FOUND			
	SBLKS1	MPT8MS7S2, MPT8MS7S9, MPT8MS8S2, MPT8MS8S9	NO CONTAMINATION FOUND			
34889	SBLKS2	MP16MS1D8, MP16MS2S2, MP16MS28, MP16MS3S2, MP16MS3S8, MPT6MS1D2, MPT8MS4S2, MPT8MS4S8, MP16MS2S8MS,MP16MS2S8MSD MPT8MS4S8MS, MPT8MS4S8MS	NO CONTAMINATION FOUND			
34901	SBLKS1	MPI5MS1S2, MPIMS1S6, MPT8BS3S7, MPT8MS6S2, MPT8MS6S7	NO CONTAMINATION FOUND			
35074	SBLKS1	8SL1A, 8SL1AD	NO CONTAMINATION FOUND			
	SBLKS2	8SL1ADMS, 8SL1ADMSD	NO CONTAMINATION FOUND			
23884	SBLKW	MPT-11-1, MPT-11-2 11MW3D, 2FB005, 11MW3DMS 11MW3DMSD	DI-N-BUTYLPHTHALATE	9	ug/L	U
		2FB005, 2QS006, 11MW3				CRQL
23886	SBLKW	15MW1, 8MW5S, S-1, 8MW6, 8MW6D, 8MW6DMS, 8MW6DMSD	NO CONTAMINATION FOUND			
23918	SBLKW	2QS008, 8MW1, 8MW8, 8MW4, 8MW7	NO CONTAMINATION FOUND			
	SBLKW2	16MW2	NO CONTAMINATION FOUND			
	SBLKW3	16MW2_RE, 2QS008RE, 8MW1_R 8MW4RE, 8MW7_RE, 8MW8_RE	NO CONTAMINATION FOUND			
34923	SBLKW1	MPT8SW2, MPT8SW2MS, MPT8SW2MSD	NO CONTAMINATION FOUND			
	SBLKW2	MPT8SW1	NO CONTAMINATION FOUND			
	SBLKS1	MPT8SL1, MPT8SL2	NO CONTAMINATION FOUND			
23904	SBLKW1	2QS007, S-3, 9MW1, 9MW2, 16MW3D,	DI-N-BUTYL PHTHALATE	8	ug/L	CRQL
		16MW3, 9MW3, S-2				U
	SBLKW2	16MW1D	DI-N-BUTLY-PHTHALATE	9	ug/L	CRQL
35083	SBLKS1	15SS21, 15SS31, 15SS41, 15SS51, 15SS61, 15SS81 15SS81D	NO CONTAMINATION FOUND			
	SBLKS2	15SS22, 15SS32, 15SS42, 15SS52, 15SS62, 15SS72, 15SS82, 15SS82D	NO CONTAMINATION FOUND			
	SBLK3S	15SS81_MS, 15SS81_MSD	NO CONTAMINATION FOUND			
	SBLK4S	15SS12, 15SS51DL	NO CONTAMINATION FOUND			
	SBLKS5	15SS11	NO CONTAMINATION FOUND			
	SBLKW1	2QS009	NO CONTAMINATION FOUND			

TABLE 4 - 16 (CONTINUED)

SEMIVOLATILE ORGANICS DETECTED
IN METHOD BLANKS
NAVSTA MAYPORT, FLORIDA

SDG NUMBER	BLANK ID	RELATED ENVIRONMENTAL SAMPLES	CONTAMINANT	MB CONC.	UNITS	VALIDATION QUALIFIER
35163	SBLKW1	2FB007, 2QS010	NO CONTAMINATION FOUND			
	SBLKS1	MPTBSS2, MPTBSS1_MS, MPTBSS1_MSD	BIS(2-ETHYLHEXYL)PHTHALATE	57	ug/Kg	CRQL
			METHAPYRILENE	20	ug/Kg	
35168	SBLKW1	2QS011, 2QS012, MPTBSW4, MPTBSW6, MPTBSW7, MPTBSW7 MPTBSW7MS, MPTBSW7MSD	NO CONTAMINATION FOUND			
	SBLKS2	MPTBSD4, MPTBSD6, MPTBSD7, MPTBSD7D, MPTBSD7MS, MPTBSD7MSD	NO CONTAMINATION FOUND			
35196	SBLKW1	MPTBSW5	BIS(2-ETHYLHEXYL)PHTHALATE	14	ug/L	CRQL
	SBLKS1	MPTBSD5	BIS(2-ETHYLHEXYL)PHTHALATE	57	ug/Kg	CRQL
			METHAPYRILENE	70	ug/Kg	
23943	SBLKW1	2FB006, 8MW5DD	NO CONTAMINATION FOUND			
	SBLKW2	8MW5DDRE	NO CONTAMINATION FOUND			

TABLE 4 - 17

PESTICIDES/PCBs DETECTED
IN METHOD BLANKS
NAVSTA MAYPORT, FLORIDA

SDG NUMBER	BLANK ID	RELATED ENVIRONMENTAL SAMPLES	CONTAMINANT	MB CONC.	UNITS	VALIDATION QUALIFIER
23749 (34884)	PBLK01 (W01193B1)	2FB003, 2QS004, 2RB001	NO CONTAMINATION FOUND			
	PBLK02 (S01193B1)	2BS85S02, 2BS85DD79	NO CONTAMINATION FOUND			
23775 (34915)	PBLK01 (W01203B1)	2FB004, 2QS005	NO CONTAMINATION FOUND			
	PBLK02 (S01203B1)	MPT8MS7S2, MPT8MS7S9, MPT8MS8S2, MPT8MS8S9	NO CONTAMINATION FOUND			
23750 (34889)	PBLK19 (S01193B1)	MPT8MS4S2, MPT8MS4S8, MPT6MS1D2, MP16MS2S2, MP16MS2S8, MP16MS3S8, MPT8MS4S8MS/MSD MP16MS2S8MS/MSD	NO CONTAMINATION FOUND			
23763 (34901)	PBLK19 (S01193B1)	MPT8BS4S7, MPT8MS6S2, MPT8MS6S7, MP15MS1S2, MP15MS1S6	NO CONTAMINATION FOUND			
23967 (35074)	PBLK10 (S02103B1)	8SL1A, 8SL1AD, 8SL1ADMS, 8SL1ADMSD	NO CONTAMINATION FOUND			
23884	PBLK02 (W02023B2)	MPT-11-1, MPT-11-2 11MW3, 11MW3D, 2FB005 11MW3DMS, 11MW3DMSD	NO CONTAMINATION FOUND			
	PBLK04 (W02042B1)	2QS006	NO CONTAMINATION FOUND			
23886	PBLK02 (W02023B2)	15MW1, 8MW5S, S-1, 8MW6, 8MW6D, 8MW6DMS, 8MW6DMSD	NO CONTAMINATION FOUND			
23918	PBLK03 (W02033B1)	2QS008, 8MW1, 8MW8, 8MW4, 8MW7, 16MW2	NO CONTAMINATION FOUND			
23790	PBLK01 (W01213B1)	MPT8SW1, MPT8SW2, MPT8SW2MS, MPT8SW2MSD	NO CONTAMINATION FOUND			
	PBLK02 (S01213B1)	MPT8SL1, MPT8SL2, MPT8SL3	NO CONTAMINATION FOUND			
23904	PBLK02 (W02023B2)	2QS007, S-3, S-2, 9MW1, 9MW2, 9MW3, 16MW3, 16MW3D, 16MW1D	NO CONTAMINATION FOUND			
23953	PBLK17 (W02173B1)	2QS007	NO CONTAMINATION FOUND			
	PBLK08 (S02083B3)	15SS11, 15SS12, 15SS21, 15SS22, 15SS31, 15SS32, 15SS41, 15SS42, 15SS51, 15SS52, 15SS61, 15SS62, 15SS71, 15SS72, 15SS81, 15SS81D, 15SS82, 15SS82D	NO CONTAMINATION FOUND			
	PBLK09 (S02083B5)	15SS81DMS, 15SS81DMSD	NO CONTAMINATION FOUND			

TABLE 4 - 17 (CONTINUED)

PESTICIDES/PCBs DETECTED
IN METHOD BLANKS
NAVSTA MAYPORT, FLORIDA

SDG NUMBER	BLANK ID	RELATED ENVIRONMENTAL SAMPLES	CONTAMINANT	MB CONC.	UNITS	VALIDATION QUALIFIER
35163 (24082)	PBLK01 (W02193B1)	2QS010, 2FB007	NO CONTAMINATION FOUND			
	PBLK02 (S02223B1)	MPTBSS1, MPTBSS1D, MPTBSS2, MPTBSS3, MPTBSS4, MPTBSS6, MPTBSS5, MPTBSS5MS, MPTBSS5MSD	NO CONTAMINATION FOUND			
35168 (24081)	PBLK01 (W02193B1)	2QS011, MPTBSW7, MPTBSW7D, MPTBS26, MPTBSW4, 2QS012, MPTBSW7MS, MPTBSW7MSD	NO CONTAMINATION FOUND			
	PBLK02 (S02223B1)	MPTBSD7, MPTBSD7D, MPTBSD6, MPTBSD4, MPTBSD7MS, MPTBSD7MSD	NO CONTAMINATION FOUND			
35196 (24099)	PBLK01 (WO2233B1)	MPTBSW5	NO CONTAMINATION FOUND			
	PBLK02 (S02233B2)	MPTBSD5	NO CONTAMINATION FOUND			
23943	PBLK05 (W02053B1)	2FB006, 8MW5DD	NO CONTAMINATION FOUND			
23954	PBLK01 (S02093B1)	16SSA4, 16SSB7, 16SSC2, 16SSD4, 16SSD7, 16SSF4, 16SSG1, 16SSC5D, 16SSE1D	NO CONTAMINATION FOUND			
	PBLK02 (S02103B1)	16SSF4D	NO CONTAMINATION FOUND			
	PBLK03 (S02173B1)	16SSF4DMS, 16SSF4DMSD	NO CONTAMINATION FOUND			
34610	WBLK12-09	2QS002A	NO CONTAMINATION FOUND			
	SBLK12-13	2SSD4N_1A, 2SSI4N1A, 2SSJ4N_1A, 2SSJ5_1A, 2SSP7, 2SSQ1N_1A, 2SSQ2_1A, 2SSQ2D_1A, 2SSH7_1A, 2SSH7D_1A	NO CONTAMINATION FOUND			
34611	WBLK12-09	2FB001, 2QS001	NO CONTAMINATION FOUND			
	SBLK12-13	2SSA1N_1A, 2SSM7_1A, 2SSB7_1A, 2SSN2N_1A, 2SSB3N_1A, 2SSF2N_1A, 2SSG7_1A, 2SSA3_1A, 2SSN1_1A, 2SSI2N_1A	NO CONTAMINATION FOUND			

TABLE 4 - 18

KEPONE DETECTED
IN METHOD BLANKS
NAVSTA MAYPORT, FLORIDA

SDG NUMBER	BLANK ID	RELATED ENVIRONMENTAL SAMPLES	CONTAMINANT	MB CONC.	UNITS	VALIDATION QUALIFIER
23749 (34884)	PBLK01 (W01193B1)	2FB003, 2QS004, 2RB001	NO CONTAMINATION FOUND			
	PBLK02 (S01193B1)	2BS85S02, 2BS85DD79	NO CONTAMINATION FOUND			
23775 (34915)	PBLK01 (W01203B1)	2FB004, 2QS005	NO CONTAMINATION FOUND			
	PBLK02 (S01203B1)	MPT8MS7S2, MPT8MS7S9, MPT8MS8S2, MPT8MS8S9	NO CONTAMINATION FOUND			
23750 (34889)	PBLK19 (S01193B1)	MPT8MS4S2, MPT8MS4S8, MPT6MS1D2, MP16MS2S2, MP16MS2S8, MP16MS3S8,	NO CONTAMINATION FOUND			
23763 (34901)	PBLK19 (S01193B1)	MPT8BS4S7, MPT8MS6S2, MPT8MS6S7, MP15MS1S2, MP15MS1S6	NO CONTAMINATION FOUND			
23967 (35074)	PBLK10 (S02103B1)	8SL1A, 8SL1AD	NO CONTAMINATION FOUND			
23884	PBLK02 (W02023B2)	MPT-11-1, MPT-11-2 11MW3, 11MW3D, 2FB005	NO CONTAMINATION FOUND			
	PBLK04 (W02042B1)	2QS006	NO CONTAMINATION FOUND			
23886	PBLK02 (W02023B2)	15MW1, 8MW5S, S-1, 8MW6, 8MW6D,	NO CONTAMINATION FOUND			
23918	PBLK03 (W02033B1)	2QS008, 8MW1, 8MW8, 8MW4, 8MW7, 16MW2	NO CONTAMINATION FOUND			
23790	PBLK01 (W01213B1)	MPT8SW1, MPT8SW2,	NO CONTAMINATION FOUND			
	PBLK02 (S01213B1)	MPT8SL1, MPT8SL2, MPT8SL3	NO CONTAMINATION FOUND			
23904	PBLK02 (W02023B2)0	2QS007, S-3, S-2, 9MW1, 9MW2, 9MW3, 16MW3, 16MW3D, 16MW1D	NO CONTAMINATION FOUND			
23953	PBLK17 (W02173B1)	2QS007	NO CONTAMINATION FOUND			
	PBLK08 (S02083B3)	15SS11, 15SS12, 15SS21, 15SS22, 15SS31, 15SS32, 15SS41, 15SS42, 15SS51, 15SS52, 15SS61, 15SS62, 15SS71, 15SS72, 15SS81, 15SS81D, 15SS82, 15SS82D	NO CONTAMINATION FOUND			

TABLE 4 - 18 (CONTINUED)

KEPONE DETECTED
IN METHOD BLANKS
NAVSTA MAYPORT, FLORIDA

SDG NUMBER	BLANK ID	RELATED ENVIRONMENTAL SAMPLES	CONTAMINANT	MB CONC.	UNITS	VALIDATION QUALIFIER
35163 (24082)	PBLK01 (W02193B1)	2QS010, 2FB007	NO CONTAMINATION FOUND			
	PBLK02 (S02223B1)	MPTBSS1, MPTBSS1D, MPTBSS2, MPTBSS3, MPTBSS4, MPTBSS6, MPTBSS5, MPTBSS5MS, MPTBSS5MSD	NO CONTAMINATION FOUND			
35168 (24081)	PBLK01 (W02193B1)	2QS011, MPTBSW7, MPTBSW7D, MPTBS26, MPTBSW4, 2QS012, MPTBSW7MS, MPTBSW7MSD	NO CONTAMINATION FOUND			
	PBLK02 (S02223B1)	MPTBSD7, MPTBSD7D, MPTBSD6, MPTBSD4, MPTBSD7MS, MPTBSD7MSD	NO CONTAMINATION FOUND			
35196 (24099)	PBLK01 (WO2233B1)	MPTBSW5	NO CONTAMINATION FOUND			
	PBLK02 (S02233B2)	MPTBSD5	NO CONTAMINATION FOUND			
23943	PBLK05 (W02053B1)	8MW5DD, 2FB006	NO CONTAMINATION FOUND			

TABLE 4 - 19
INORGANICS DETECTED IN METHOD BLANKS NAVSTA MAYPORT, FLORIDA

SDG NUMBER	RELATED ENVIRONMENTAL SAMPLES	CONTAMINANT	MB CONC.	UNITS	VALIDATION QUALIFIER
23884	MPT-11-1, MPT-11-2, 11MW3, 11MW3D, 2FB005 AND 2QS006.	CALCIUM	156.0	ug/L	U
		IRON	23.6	ug/L	U
		MANGANESE	0.92	ug/L	U
		LEAD	1.38	ug/L	U
		COPPER	-20.6	ug/L	UJ/J
23918	2QS008, 8MW1, 8MW8, 8MW4, 8MW7 AND 16MW2.	LEAD	1.38	ug/L	U
		COPPER	-20.6	ug/L	UJ/J
23886	15MW1, 8MW5S, S-1, 8MW6 AND 8MW6D.	BARIUM	0.88	ug/L	U
		CALCIUM	159.0	ug/L	U
		IRON	22.6	ug/L	U
		LEAD	2.8	ug/L	U
		MAGNESIUM	19.8	ug/L	U
		MANGANESE	0.95	ug/L	U
		MERCURY	0.086	ug/L	U
34923	MPT8SW1 AND MPT8SW2.	BARIUM	0.25	ug/L	U
		CADMIUM	1.89	ug/L	U
		COPPER	4.85	ug/L	U
		ZINC	2.5	ug/L	U
23904	2QS007, S-3, S-2, 9MW1, 9MW2, 9MW3, 16MW3, 16MW3D AND 16MW1D.	BARIUM	0.88	ug/L	U
		CALCIUM	159.0	ug/L	U
		IRON	22.6	ug/L	U
		LEAD	2.8	ug/L	U
		MAGNESIUM	19.8	ug/L	U
		MANGANESE	0.95	ug/L	U
34899	MPT6MS1D2, MPT8MS4S2, MPT8MS4SBD, MPT8MS4S8S, MPT8MS4S8, MP16MS1D8, MP16MS2S2, MP16MS2S8, MP16MS3S8D, MP16MS3S8S, MP16MS2, MP16MS3S8, MPT8BS357, MPT8MS6S2, MPT8MS6S7, MP15MS1S2 AND MP15MS1S6.	NO CONTAMINATION FOUND			
34923	MPT8SL1, MPT8SL2 AND MPT8SL3.	THALLIUM	-0.22	ug/Kg	UJ\J
01289	15SS11, 15SS12, 15SS21, 15SS22, 15SS31, 15SS32, 15SS41, 15SS42, 15SS51, 15SS52, 15SS61, 15SS62, 15SS71, 15SS72, 15SS81, 15SS81D, 15SSD82, 15SS82D AND 2QS009.	MERCURY	0.96	ug/Kg	U
		BARIUM	0.56	ug/Kg	U
		ARSENIC	-.324	ug/Kg	UJ\J
		COPPER	-0.19	ug/Kg	UJ\J
		ZINC	-.594	ug/Kg	UJ/J

TABLE 4 - 19 (CONTINUED)
INORGANICS DETECTED
IN METHOD BLANKS
NAVSTA MAYPORT, FLORIDA

SDG NUMBER	RELATED ENVIRONMENTAL SAMPLES	CONTAMINANT	MB CONC.	UNITS	VALIDATION QUALIFIER
34884	2FB003, 2QS004 AND 2RB001.	BARIUM	0.25	ug/L	U
		CADMIUM	1.89	ug/L	U
		COPPER	4.85	ug/L	U
		VANADIUM	2.50	ug/L	U
34884	2BS85DD79 AND 2BS85S02.	NO CONTAMINATION FOUND			
34915	2FB004 AND 2QS005.	BARIUM	0.25	ug/L	U
		CADMIUM	1.89	ug/L	U
		COPPER	4.85	ug/L	U
		VANADIUM	2.50	ug/L	U
34915	MPT8MS7S2, MPT8MS7S9, MPT8MS8S2 AND MPT8MS8S9.	NO CONTAMINATION FOUND			
35163	2FB007 AND 2QS010.	ARSENIC	1.58	ug/L	U
		ZINC	-5.67	ug/L	UJ/J
35163	MPTBSS1, MPTBSS1, MPTBSS2, MPTBSS3, MPTBSS4, MPTBSS5, AND MPTBSS6.	ANTIMONY	4.97	ug/Kg	U
		ARSENIC	0.99	ug/Kg	U
		LEAD	0.36	ug/Kg	U
		ZINC	-1.70	ug/Kg	UJ/J
35168	MPTBSW4 AND MPTBSW6.	ARSENIC	1.58	ug/L	U
		ZINC	-5.67	ug/L	UJ/J
		CALCIUM	-826	ug/L	UJ/J
35168	MPTBSD4, MPTBSD6 MPTBSD7 AND MPTBSD7D.	ANTIMONY	4.97	ug/Kg	U
		ARSENIC	0.99	ug/Kg	U
		LEAD	0.36	ug/Kg	U
		IRON	3.40	ug/Kg	U
		MAGNESIUM	8.41	ug/Kg	U
		SODIUM	25.50	ug/Kg	U
		CALCIUM	-155.	ug/Kg	UJ/J
		ZINC	-1.7	ug/Kg	UJ/J
35196	MPTBSW5.	ARSENIC	-5.47	ug/L	UJ/J
		BARIUM	1.90	ug/L	U
		IRON	99.00	ug/L	U
		LEAD	-.88	ug/L	UJ/J
		MANGANESE	1.53	ug/L	U
		SODIUM	83.30	ug/L	U
		ZINC	1.74	ug/L	U
35196	MPTBSD5.	ARSENIC	-.27	ug/Kg	UJ/J
		BARIUM	0.10	ug/Kg	U
		CALCIUM	9.66	ug/Kg	U
		COPPER	-.62	ug/Kg	UJ/J
		IRON	2.59	ug/Kg	U
		LEAD	-0.30	ug/Kg	UJ/J
		MAGNESIUM	8.03	ug/Kg	U
		SELENIUM	0.50	ug/Kg	U
		THALLIUM	0.52	ug/Kg	U

- UJ Validation Qualifier. If a sample result for the blank contaminant was less than the sample IDL when the absolute value of the negative blank value was greater than the IDL, the sample result for the blank contaminant was amended as estimated non-detected.

- J Validation Qualifier. If a sample result for the blank contaminant was greater than the IDL and less than 10 times the blank value, when the absolute of the negative blank value is greater than the IDL the result was amended as estimated at the laboratory value.

4.1 Trip Blanks

Trip blanks contained ASTM Type II water and consisted of samples bottles which were similar to the environmental sample containers. The trip blanks were prepared and packaged at the laboratory prior to the sampling event and traveled with the sample bottles to the site. The trip blank bottles were not opened at the site or anytime prior to laboratory analysis. Target compounds detected in the trip blank samples (Table 4-1) consisted of:

- acetone;
- chloroform; and
- methylene chloride.

Acetone and methylene chloride are attributed to laboratory contamination. Chloroform, a trihalomethane, can be formed when "free" chloride ions are present and may be an artifact from the ASTM Type II water source or the laboratory.

Target analytes were detected in some of the trip blanks, however, the analytical results were not qualified. Based on assessment of trip blanks for representativeness the analytical data was acceptable for each SDG.

4.2 Field Blanks

The field blank is a sample of the ASTM Type II water that was used as a source for the equipment rinseate blanks. The field blank was made at the site and placed in containers that were similar to those used for the environmental samples. Semivolatile organics, pesticides/PCBs, and Kepone target compounds were not detected in field blank samples (Tables 4-4, 4-5, and 4-6). Target compounds and analytes detected in the field blank samples (Table 4-2 through 4-7) consisted of:

- GC/MS Volatiles (Table 4-2)

  2-butanone
  chlorobenzene
  methylene chloride

- GC Volatiles (Table 4-3)
  chlorobenzene

- Inorganics (Table 4-7)

arsenic	magnesium
barium	manganese
calcium	silver
cobalt	tin
iron	vanadium
lead	zinc

The detected 2-butanone and methylene chloride results are attributed to laboratory contamination. Chlorobenzene and the inorganic analytes can be attributed to the water source, the water treatment system that was used to make the ASTM Type II water or laboratory artifacts.

Target analytes were detected in some of the field blanks; however, the analytical results were not qualified. Based on assessment of field blanks for representativeness the analytical data was acceptable for each SDG.

4.3 Equipment Rinseate Blanks

The equipment rinseate blank was a piece of sampling equipment that which was decontaminated, then rinsed with ASTM Type II water. A sample of this water was collected and placed in sample containers similar to those used for the environmental samples. Pesticides/PCBs and Kepone target compounds were not detected in equipment rinseate blank samples (Tables 4-11 and 4-12). Target analytes detected in the equipment rinseate blank samples consisted of:

- GC/MS Volatiles (Table 4-8)

  bromodichloromethane
  dibromochloromethane
  2-butanone
  acetone
  chlorobenzene
  methylene chloride

- GC Volatiles (Table 4-9)

  chlorobenzene

- Semivolatile Organics (Table 4-10)

  bis(2-ethylhexyl)phthalate
  di-n-butylphthalate

- Inorganics (Table 4-13)

arsenic	iron
barium	lead
calcium	manganese
cobalt	zinc
copper	magnesium

The detected acetone, 2-Butanone, and methylene chloride, bis(2-ethylhexyl)phthalate, and di-n-butylphthalate results are attributed to laboratory contamination. Bromodichloromethane and dibromochloromethane are

trihalomethanes and can be formed when "free" chloride ions are present and may be an artifact from the ASTM Type II water source or the laboratory. Chlorobenzene and the inorganic analytes can be attributed to the water source, the water treatment system that was used to make the ASTM Type II water or laboratory artifacts.

Target analytes were detected in some of the equipment rinseate blanks; however, the analytical results were not qualified. Based on assessment of equipment rinseate blanks for representativeness the analytical data was acceptable for each SDG.

4.4 Method Blanks

The method blanks were a sample of ASTM Type II water that is prepared by the laboratory at the time of analysis. Method blanks undergo the same analytical process as the corresponding environmental samples and associated field blanks. The purpose of the method blank is to assess the potential for target analytes to "contaminate" the sample during analysis. GC Volatiles, Pesticides/PCBs and Kepone target compounds were not detected in method blank samples (Tables 4-15, 4-17 and 4-18). Target analytes detected in the method blank samples consisted of:

- GC/MS Volatiles (Table 4-14)
  - acetone
  - methylene chloride
- Semivolatile Organics (Table 4-16)
  - bis(2-ethylhexyl)phthalate
  - di-n-butylphthalate
- Inorganics (Table 4-19)

antimony	calcium	magnesium	sodium
arsenic	copper	manganese	thallium
barium	iron	mercury	vanadium
cadmium	lead	selenium	zinc

The detected acetone and methylene chloride, bis(2-ethylhexyl)phthalate, and di-n-butylphthalate results are attributed to laboratory contamination. Chlorobenzene and the inorganic analytes can be attributed to the water source, the water treatment system that was used to make the ASTM Type II water or laboratory artifacts.

Because target analytes were detected in some of the method blanks, some of the analytical results were qualified. However, based on assessment of method blanks for representativeness the analytical data was acceptable for each SDG.

5.0 COMPARABILITY

Comparability is qualitative measure designed to express the confidence with which one data set may be compared to another. The analytical data was collected and transported to the chemical analytical laboratory in accordance with standard procedures and were analyzed in conformance with acceptable USEPA procedures (Refer to Table 5-1 below). The analytical data are reported in standard units (micrograms per liter, micrograms per kilogram, etc.).

The methods used to collect the environmental samples and the methods used to analyze the samples should assure comparability of the analytical data.

TABLE 5-1
USEPA Procedures (SW-846 Methodologies)

U.S. EPA Method	Description
Method 8240	GC/MS for Volatile Organics
Method 8270	GC/MS for Semivolatile Organics
Method 8080	Organochlorine Pesticides and PCBs
Method 8010/8020	GC for Volatile Organics
Method 8080 Mod.	Kepone
Method 6010	Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Silver, Vanadium, and Zinc
Method 9010	Cyanide
Method 7470	Mercury
Method 8010	Thallium
Method 7870	Tin

6.0 COMPLETENESS

Completeness is the quantitative measure of the amount of data obtained from a measurement process compared with the amount expected to be obtained under the conditions of measurement. The completeness goal for laboratory analysis for this project was 95 percent useable data. Unusable analytical data are those results reported by the laboratory but rejected during the data validation process. A summary of the completeness goal for NAVSTA Mayport is provided in Table 6-1. For more detailed completeness goal tables, please refer to Appendix C.

TABLE 6-1
COMPLETION GOAL (>95 Percent)

	QC	MW	MS	SL
GC/MS Volatiles	96.1	95.9	96.9	96.9
GC Volatiles	100.0	100.0	100.0	100.0
Semivolatiles	98.5	99.3	98.0	98.4
Pesticide/PCBs	100.0	99.3	100.0	100.0
Kepone	100.0	100.0	100.0	100.0
Inorganics	98.7	98.7	99.8	100.0

MATRIX KEY
QC = QC Samples
MW = Water Samples
MS = Soil/Sediment Samples
SL = Sludge Samples

The analytical data met the 95 percent completeness goal. For each analytical group with rejected data the following provides a brief narrative that describes the conditions upon which the data were rejected.

GC/MS Volatiles. The calibration results for the volatile analyses were not in control throughout the duration of the project. Calibration compounds did not meet the 30 percent Relative Standard Deviation (RSD) and 25 Percent Difference (%D) criteria in the initial and continuing calibrations. Therefore, the GC/MS volatile calibrations exhibited increases and decreases in sensitivity for a range of compounds. USEPA Contract Laboratory Program (CLP) target compounds did meet calibration criteria, with the exception of the ketones, the heavy gases, and common laboratory contaminants (i.e. acetone and carbon disulfide). The USEPA Appendix IX compounds constituted the majority of the compounds that did not meet calibration criteria. Six Appendix IX compounds, 1,4-dioxane, isobutyl alcohol, 2-chloroethyl-vinylether, chloroprene, acrolein, and acetonitrile, did not meet initial and continuing calibration Relative Response Factor (RRF) criteria requirements of 0.05. These compounds were found throughout the calibrations and varied in frequency of non compliance. Positive results for these six compounds were not noted in any of the data packages. Therefore, all samples results associated with the initial and continuing calibrations that exhibited the any of the six compounds with non-compliant RRFs are rejected, R data qualifier (refer to Table 6-1 and Appendix C). It must be noted that these Appendix IX compounds are not typical of the CLP target compound list and are difficult to evaluate based on the criteria of the Functional Guidelines.

Non-detect results that are rejected for the six compounds must also be evaluated by adjusting the CRQL to the concentration level of the continuing calibration standard and qualifying the results as non detect (U). The non-detect qualification at the concentration of the continuing calibration standard insures that the instrumentation is capable of detecting the compound at a known concentration. All results qualified for calibration % RSD and % D deficiencies (J/UJ) are considered to be useable. For the compounds in the GC/MS volatile analysis that did not meet calibration criteria, all positive results are qualified as estimated (J) (%Ds >25%) and all non detect results are qualified as estimated (UJ) (>50% D <90%) due to calibration deficiencies.

Semivolatiles. The calibration results for the semivolatile analyses were not in control throughout the duration of the project. Calibration compounds did not meet the 30 percent RSD and 25 %D criteria in the initial and continuing calibrations. Therefore, the semivolatile calibrations exhibited increases and decreases in sensitivity for a range of compounds. Semivolatile CLP and Appendix IX target compounds exceeded RSD and %D calibration criteria. The Appendix IX compounds constituted the majority of the compounds that did not meet calibration criteria. Eight Appendix IX compounds, p-phenylenediamine, aramite, 4-nitroquinoline-1-oxide, 1-naphthyl-amine, phenyl-tert-butylamine, 5-nitro-o-toluidine, hexachlorophene, and pentachloronitrobenzene, did not meet initial and continuing calibration RRF criteria requirements of 0.05 and continuing calibration %D criteria of <90% D. These compounds were found throughout the calibrations and varied in frequency of non-compliance. Positive results for these eight compounds were not noted in any of the data packages. Therefore, all samples results associated with the initial and continuing calibrations that exhibited the any of the eight compounds with non-compliant RRFs or non-compliant %Ds are rejected, R data Qualifier (refer to Table 6-1 or Appendix C). It must be noted that these compounds are not typical of the CLP target compound list and are difficult to evaluate based on the criteria of the Functional Guidelines.

Non-detect results that are rejected based on non compliant RRFs for the eight compounds must also be evaluated by adjusting the CRQL to the concentration level of the continuing calibration standard and qualifying the results as non detect (U). The non-detect qualification at the concentration of the continuing calibration standard insures that the instrumentation is capable of detecting the compound at a known concentration. All results qualified for calibration % RSD and % D deficiencies (J/UJ) are considered to be useable. For the compounds in the semivolatile analysis that did not meet calibration criteria, all positive results are qualified as estimated (J) (%Ds >25%) and all non detect results are qualified as estimated (UJ) (>50% D <90%) due to calibration deficiencies.

Pesticides/PCBs. For SDG 34923, chemical interferences were noted for the pesticide/PCB analysis and the laboratory was unable to determine recoveries for α-BHC, β-BHC, δ-BHC, lindane, Heptachlor, and Aldrin. Non-detects were rejected for sample MPT8SW2 and the detection limit for sample MPT8SW1 was qualified as estimated. Many peaks were noted in sample chromatography, however, there were no positive results. Extracts of the samples in SDG 34923 required dilution because of chemical interferences. The chromatogram peaks could effectively interfere with the identification and quantitation of target

analytes; therefore, the CRQLs should be considered as underestimated for this SDG.

For SDG 35074, chemical interferences also were noted for the pesticide and PCB analysis and the laboratory was unable to determine recoveries for 4,4'-DDD, 4,4'-DDT, Chlorobenzilate, Dieldrin, Endrin, Endosulfan II, Endrin ketone, Endrin aldehyde, Endosulfan sulfate, and Methoxychlor. The chromatogram peaks could effectively interfere with the identification and quantitation of target analytes, therefore the CRQLs should be considered as underestimated for this SDG.

Inorganics. Inorganics data was rejected for SDGs 01528, 34889 and 34901 because of matrix spike recoveries less than 30 percent for lead and thallium in SDG 01528 and mercury in SDGs 34889 and 34901. Positive results were designated as estimated, J data qualifier, and non-detect results were rejected, R data qualifier.

7.0 PARCC SUMMARY

The purpose of evaluating the quality of the analytical data using the PARCC criteria was to address the qualification of the data in regards to evaluation of the presence, magnitude and characteristics of hazardous substances at NAVSTA Mayport. Overall, the chemical analytical data are acceptable and met or exceeded the completion goal of 95 percent, however, some of the data was qualified as unusable (R data qualifier). Tables 7-1 through 7-4 provides a tabulation of the assessment of PARCC criteria each SDG for water samples, soil/sediment samples, sludge samples and quality control samples, respectively.

TABLE 7-1
PARCC CRITERIA SUMMARY
WATER SAMPLES
NAVSTA MAYPORT, FLORIDA

SDGs	PRECISION	ACCURACY	REPRESENT-ATIVENESS	COMPARABILITY	COMPLETENESS
23884	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (3)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
23885	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
23886	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (3)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
23900	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
23904	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (3)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
23918	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (3)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
23943	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
23944	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
34923	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (4)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
35168	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (3,5)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE

(3) Semivolatile acid and/or base/neutral surrogate recoveries less than 10%. (J/R)

(4) Single component pesticides rejected (R) due to interference.

(5) Metal spike recvoery <30%, reject (R).

TABLE 7-2
PARCC CRITERIA SUMMARY
SOIL/SEDIMENT SAMPLES
NAVSTA MAYPORT, FLORIDA

SDGs	PRECISION	ACCURACY	REPRESENT-ATIVENESS	COMPARABILITY	COMPLETENESS
23887	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
23905	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
23954	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
34610	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
34611	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
34884	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (6)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
34889	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (6,7)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
34901	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (6,7)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
34915	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (6)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
35083	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (6)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
35163	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (6)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
35167	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (6)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
35168	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (6)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
35196	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (6)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE

(6) Appendix IX volatile and semivolatile compounds rejected (R) due to RRF <0.05.

(7) Metal spike recovery <30%, reject (R).

TABLE 7-3
PARCC CRITERIA SUMMARY
SLUDGE SAMPLES
NAVSTA MAYPORT, FLORIDA

SDGs	PRECISION	ACCURACY	REPRESENT-ATIVENESS	COMPARABILITY	COMPLETENESS
34923	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (8)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
35074	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (8)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE

(8) Appendix IX volatile and semivolatile compounds rejected (R) due to RRF <0.05.

TABLE 7-4
PARCC CRITERIA SUMMARY
QUALITY CONTROL SAMPLES
NAVSTA MAYPORT, FLORIDA

SDGs	PRECISION	ACCURACY	REPRESENT-ATIVENESS	COMPARABILITY	COMPLETENESS
23884	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (1)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
23885	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
23886	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (1)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
23900	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
23904	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (1)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
23918	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (1)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
23921	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
23943	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
23944	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
34610	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
34611	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
34884	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (1)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
34901	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (1)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
34915	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (1)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
34923	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (1)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
35074	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (1)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
35083	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (1)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
35163	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (1)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
35168	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (1,2)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
35196	ACCEPTABLE	ACCEPTABLE WITH REJECTIONS (1)	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE

(1) Appendix IX volatile and semivolatile compounds rejected (R) due to RRF <0.05.

(2) Metal spike recovery <30%, reject (R)

REFERENCES

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APPENDIX A

CALIBRATION SUMMARY

INITIAL CALIBRATION RESULTS

AND

CONTINUING CALIBRATION RESULTS

LIST OF TABLES

Precision, Accuracy, Representativeness,
Comparability, and Completeness
Phase II RCRA Facility Investigation

Appendix A

Tables	Title	
A-1	GC/MS Volatile Organic Compounds, Initial and Continuing Calibration Outlier Summary	Appendix A
A-2	GC/MS Semivolatile Organic Compounds, Initial and Continuing Calibration Outlier Summary	Appendix A
A-3	Pesticide/PCBs, Initial and Continuing Calibration Outlier Summary	Appendix A

TABLE A - 1

INITIAL AND CONTINUING CALIBRATION
VOLATILE ORGANIC COMPOUNDS
NAVSTA MAYPORT, FLORIDA

ICAL = INITIAL CALIBRATION = %RSD	SDG 34884			SDG 34915	
CCAL = CONTINUING CALIBRATION = %D	ICAL	CCAL1	CCAL2	ICAL1	CCAL1
DATE	011393	012093	012193	011393	012093
INSTRUMENT ID	5100B	5100B	5100B	5100B	5100B
CALIBRATION CRITERIA	RRF	%D/ RRF	%D/ RRF	RRF	%D/ RRF
1,4-DIOXANE	0.010	0.008	0.008	0.010	0.008
ISOBUTANOL	0.029		0.021	0.029	
1,2-DICHLOROETHANE		32.8			32.8
1,1,1-TRICHLOROEHTNAE		37.0			37.0
CARBON TETRACHLORIDE		39.0			39.0
BROMODICHLOROMETHANE		28.9			28.9
DIBROMOCHLOROMETHANE		28.8			28.8
BROMOFORM		27.7	26.0		27.7
1,2-DICHLOROETHANE-D4		26.0			26.0
TRICHLOROFLUOROMETHANE		53.6			53.6
1,4-DIOXANE			43.4		
ACETONITRILE			-47.9		
METHACRYLONITRILE			-25.8		
1,2-DIBROMO-3-CHLOROPROPANE			29.5		
CHLOROPRENE			-30.9		

SDGS, STANDARDS, AND ASSOCIATED SAMPLES

SDG 34884
CCAL1: TRIP BLANK, 2FB003, 2QS004, 2RB001
CCAL2: 2BS85DD79, 2BS85S02
SDG 34915
CCAL1: TRIP BLANK, 2FB004, 2QS005

TABLE A - 1 (CONTINUED)

INITIAL AND CONTINUING CALIBRATION
VOLATILE ORGANIC COMPOUNDS
NAVSTA MAYPORT, FLORIDA

ICAL = INITIAL CALIBRATION = %RSD	SDG 34915 - CONTINUED				SDG 34889		
CCAL = CONTINUING CALIBRATION = %D	ICAL2	CCAL2	ICAL3	CCAL3	ICAL1	CCAL1	CCAL2
DATE	012993	020193	123192	020193	113092	012893	012793
INSTRUMENT ID	5100B	5100B	4500	4500	4500	4500	4500
CALIBRATION CRITERIA	%RSD/ RRF	%D/ RRF	%RSD/ RRF	%D/ RRF	%RSD/ RRF	%D/ RRF	%D/ RRF
ACETONE	34.7			41.0			
PROPIONITRILE	34.3						
1,2-DIBROMO-3-CHLOROPROPANE	35.5						
ISOBUTANOL	50.1		40.9		40.9		0.037
1,4-DIOXANE	0.008		0.004	0.004	0.003/34.4	0.003	0.003
BROMOFORM		31.1					
2-CHLOROEHTYLVINYLETHER		0.037/79.8			0.043	0.033	0.047
BROMOMETHANE			36.3		31.8	-32.4	-33.3
1,2-DICHLOROETHANE				44.2			
1,1,1-TRICHLOROETHNAE				34.9			
CARBON TETRACHLOROETHANE				33.3			
BROMODICHLOROMETHANE				26.7			
CARBON DISULFIDE				29.9			
1,2-DICHLOROETHANE-D4				39.0			
ACROLEIN				32.2		34.4	29.6
TRANS-1,4-DICHLORO-2-BUTENE				33.3			
3-CHLOROPROPENE				37.2			
STYRENE					34.1		
XYLENE (TOTAL)					34.9		
1,3-DICHLOROBENZENE					45.2		
1,4-DICHLOROBENZENE					55.6	30.6	
1,2-DICHLOROBENZENE					44.1		
ETHYLMETHACRYLATE					32.5		
1,2,3-TRICHLOROPROPANE					31.20		
IODOMETHANE						-26.3	-37.2
2-BUTANONE							30.1

SDGS, STANDARDS, AND ASSOCIATED SAMPLES

SDG 34915
CCAL2: MPT8MS7S2, MPT8MS8S2, MPT8MS8S9, MPT8MS7S2RE
CCAL3: MPT8MS7S9
SDG 34889
CCAL1: VBLKSM, MPT8MS4S8
CCAL2: VBLKSM2, MPT8MS4S8MS, MPT8MS4S8MSD, MP16MS2S8, MP16MS2S8MS,MP16MS2S8MSD

TABLE A - 1 (CONTINUED)

INITIAL AND CONTINUING CALIBRATION
VOLATILE ORGANIC COMPOUNDS
NAVSTA MAYPORT, FLORIDA

ICAL = INITIAL CALIBRATION = %RSD	SDG 34889 - CONTINUED				SDG 34901		
CCAL = CONTINUING CALIBRATION = %D	CCAL3	ICAL2	CCAL4	CCAL5	ICAL1	CCAL1	CCAL2
DATE	020493	123192	012593	012693	011393	012093	012193
INSTRUMENT ID	4500	4500	4500	4500	5100	5100	5100
CALIBRATION CRITERIA	%D/ RRF	%RSD/ RRF	%D/ RRF	%D/ RRF	%RSD/ RRF	%D/ RRF	%D/ RRF
BROMOMETHANE	-26.7	36.3	-28.4	-39.1			
ACROLIEN	32.0						
1,4-DIOXANE	0.002/33.0	0.004	0.004	0.004	0.010	0.008	0.006
ISOBUTANOL	0.033/28.3	0.046		-41.4	0.029	0.028	0.021
2-CHLOROETHYLVINYLETHER	0.045						
ACETONITRILE	30.2			-26.5			
METHYL METHACRYLATE	29.4						
1,2-DIBROMO-3-CHLOROPROPANE	25.9						
CHLOROETHANE			-40.6	-47.2			
1,2-DICHLOROETHANE						32.6	
1,1,1'-TRICHLOROETHANE						37.0	
CARBON TETRACHLORIDE						39.0	
BROMODICHLOROMETHANE						28.9	
DIBROMOCHLOROMETHANE						28.6	
BROMOFORM						27.7	26.0
1,2-DICHLOROETHANE-D4						26.0	

SDGS, STANDARDS, AND ASSOCIATED SAMPLES

SDG 34889
CCAL4: VBLKS, MPT8MS4S2, MP16MS1D8, MP16MS2S2, MP16MS3S2
CCAL5: VBLKS2, MPT6MS1D2, MP16MS3S6
SDG 34901
CCAL1: VBLKW1, TRIPBLANK
CCAL2: VBLKS1, MPT8MS6S7, MPT8MS6S2

TABLE A - 1 (CONTINUED)

INITIAL AND CONTINUING CALIBRATION
VOLATILE ORGANIC COMPOUNDS
NAVSTA MAYPORT, FLORIDA

ICAL = INITIAL CALIBRATION = %RSD	SDG 34901 - CONTINUED					SDG 35074	
CCAL = CONTINUING CALIBRATION = %D	ICAL2	CCAL3	ICAL3	CCAL4	CCAL5	ICAL1	CCAL1
DATE	113092	012793	123192	012593	012693	020593	021193
INSTRUMENT ID	4500	4500	4500	4500	4500	5100	5100
CALIBRATION CRITERIA	%RSD/ RRF	%D/ RRF	%RSD/ RRF	%D/ RRF	%D/ RRF	%RSD/ RRF	%D/ RRF
ISOBUTANOL	40.9	0.037	0.046		-41.4		
1,4-DIOXANE	0.003/34.4	0.003/-33.3	0.004	0.004	0.004	0.011	0.013
2-CHLOROEHTYLVINYLETHER	0.043	0.047					
BROMOMETHANE	31.8	-33.3	36.3	-28.4	-39.1		
STYRENE	34.1						
XYLENE (TOTAL)	34.9						
1,3-DICHLOROBENZENE	45.2						
1,4-DICHLOROBENZENE	55.6						
1,2-DICHLOROBENZENE	44.1						
ETHYLMETHACRYLATE	32.5						
1,2,3-TRICHLOROPROPANE	31.2						
ACROLIEN		29.8					-41.5
IODOMETHANE		-37.2					26.9
2-BUTANONE		30.1					
CHLOROETHANE				-40.6	-47.2		
ACETONITRILE					-28.5		
DICHLORODIFLUOROMETHANE						35.0	

SDGS, STANDARDS, AND ASSOCIATED SAMPLES

SDG 34901
CCAL3: VBLKSM, MPT8BS3S7
CCAL4: VBLKS, MP15MS1S2
CCAL5: VBLKS2, MP15MS1S6, MP15MS1S6MS, MP15MS1S6MSD
SGD 35074
CCAL1: VBLKW1, TRIP BLANK, VBLKS1, 8SL1A, 8SL1AD, 8SL1ADMS, 8SL1ADMSD

TABLE A - 1 (CONTINUED)

INITIAL AND CONTINUING CALIBRATION
VOLATILE ORGANIC COMPOUNDS
NAVSTA MAYPORT, FLORIDA

ICAL = INITIAL CALIBRATION = %RSD	SDG 35070		SDG 23886		SDG 35071		SDG 23884	
CCAL = CONTINUING CALIBRATION = %D	ICAL	CCAL1	ICAL	CCAL1	ICAL	CCAL1	ICAL	CCAL1
DATE	020593/ 020893	020893	113092/ 011293	020393	020593/ 020893	020893	113092/ 011293	020393
INSTRUMENT ID	5100	5100	4500	4500	5100	5100	4500	4500
CALIBRATION CRITERIA	RRF/%RSD	RRF/%D	RRF/%RSD	RRF/%D	RRF/%RSD	RRF/%D	RRF/%D	RRF/%D
BROMOMETHANE			31.8	33.6			31.8	33.6
1,4-DIOXANE	0.011	0.009	0.003/34.4	0.002/33.3	0.011	0.009	0.003/34.4	0.002/33.3
STYRENE			34.1				34.1	
XYLENE (TOTAL)			34.9				34.9	
DICHLORODIFLUOROMETHANE	35.0				35.0			
1,1-DICHLOROETHENE		-27.7				-27.7		
ACETONE		-88.2				-88.2		
2-BUTANONE		-55.9				-55.9		
CHLOROETHANE		-29.9				-29.9		
1,2-DICHLOROETHANE		-27.6				-27.6		
1,3-DICHLOROBENZENE			45.2				45.2	
1,2-DICHLOROBENZENE			55.6				55.6	
1,4-DICHLOROBENZENE			44.1				44.1	
ETHYL METHACRYLATE			32.5				32.5	
1,2,3-TRICHLOROPROPANE			31.5				31.5	
ISOBUTYL ALCOHOL			0.046	0.036			0.046	0.036
2-HEXANONE		-43.4	35.7			-43.4	35.7	
TRICHLOROFLUOROMETHANE				-25.5				-25.5
2-CHLOROETHYLVINYLETHER			0.043	0.044				0.044
ACROLEIN		-35.6		26.4		-35.8		26.4

SDGS, STANDARDS, AND SAMPLES ASSOCIATED:

SDG 35070
ICAL 2/5-8/93: NONE ASSOCIATED
CCAL1: 15MW1, 8MW5S, S-1, 8MW6D, TRIP BLANK, 8MW6DMS, 8MW6DMSD
SDG 23886
ICAL 11/30/92 & 01/12/93: NONE ASSOCIATED
CCAL1: 8MW6
SDG 35071
ICAL 02/05/93 & 02/08/93: NONE ASSOCIATED
CCAL1: MPT-11-1, 11MW3, 11MW6D, 2FB005, 2QS006, TRIP BLANK, 11MW3DMS, 11MW3DMSD
SDG 23884
ICAL 11/20/92 & 01/12/93: NONE ASSOCIATED
CCAL1: MPT-11-2

TABLE A - 2

INITIAL AND CONTINUING CALIBRATION
SEMIVOLATILE ORGANIC COMPOUNDS
NAVSTA MAYPORT, FLORIDA

ICAL = INITIAL CALIBRATION = %RSD	SDG 34884				SDG 34915	
CCAL = CONTINUING CALIBRATION = %D	ICAL	CCAL1	CCAL2	CCAL3	ICAL	CCAL1
DATE	012993	012993	020293	020393	012993	020193
INSTRUMENT ID	4600	4600	4600	4600	4600	4600
CALIBRATION CRITERIA	%RSD/ RRF	%D/ RRF	%D/ RRF	%D/ RRF	%RSD/ RRF	%D/ RRF
PHENYL-TERT-BUTLYAMINE	39.5	-25.6	-54.2	-61.8	39.5	-28.6
BENZIDINE	37.5		-55.7		37.5	
HEXACHLOROPROPENE	74.6				74.6	
3,3'-DIMETHYLBENZIDINE	36.2				36.2	
ARAMITE	0.019	0.018	0.021	0.024	0.019	0.020
PHENYL-TERT-BUTLYAMINE	0.028				0.028	
1-NAPHTHYLAMINE		36.1	29.0	30.1		41.1
2-NAPHTHYLAMINE		33.2				
O-TOLUIDINE		32.0	29.0			42.1
P-PHENYLENEAMINE		89.3/0.003	82.1/0.005	82.1/0.005		75/0.007
2,4-DINITROPHENOL			31.4			44.6
4-NITROQUINOLINE-1-OXIDE				33.3/0.024		38.9/0.044
BENZOIC ACID				45.4		25.6
5-NITRO-O-TOLUIDINE						34.0

SDGS, CALIBRATIONS AND ASSOCIATED SAMPLES:

SDG 34884
CCAL1: 2QS004, 2RB001
CCAL2: 2FB003, 2BS85S02, 2BS85DD79
SDG 34915
CCAL1: MPT8MS7S2, MPT8MS8S2

ICAL = INITIAL CALIBRATION = %RSD	SDG 34915		SDG 34889			
CCAL = CONTINUING CALIBRATION = %D	CCAL2	CCAL3	ICAL1	CCAL1	CCAL2	CCAL3
DATE	020293	020393	012993	013093	020193	020293
INSTRUMENT ID	4600	4600	4600	4600	4600	4600
CALIBRATION CRITERIA	%D/ RRF	%D/ RRF	%RSD/ RRF	%D/ RRF	%D/ RRF	%D/ RRF
PHENYL-TERT-BUTLYAMINE	-54.2	-61.8	39.5	-46.4	-28.6	-54.2
BENZIDINE	-55.7		37.0			-55.7
3,3'-DIMETHYLBENZIDINE			36.2			
ARAMITE	0.021	0.024		0.020	0.020	0.021
1-NAPHTHYLAMINE	29.0	30.1		39.0	41.1	29.0
O-TOLUIDINE	29.0			30.4	42.1	29.0
P-PHENYLENEAMINE	82.1/0.005	82.1/0.005	74.6/0.028	78.6/0.006	75.0/0.007	82.1/0.005
2,4-DINITROPHENOL	31.4				44.6	31.4
4-NITROQUINOLINE-1-OXIDE		33.3/0.024			38.9/0.044	
BENZOIC ACID		45.4			25.6	
5-NITRO-O-TOLUIDINE					34.0	

SDGS, CALIBRATIONS AND ASSOCIATED SAMPLES:

SDG 34915
CCAL2: 2FB004, 2QS005, MPT8MS7S9
CCAL3: MPT8MS8S9
SDG 34889
CCAL1: SBLKS1, MPT8MS4S2, MPT6MS1D2, MP16MS1D8, MP16MS2S2, MP16MS3S8
CCAL2: MPT8MS4S8, MPT8MS4S8MS, MPT8MS4S8MSD
CCAL3: MP16MS2S8, MP16MS2S8MS, MP16MS2S8MSD, MP16MS3S2

TABLE A - 2 (CONTINUED)

INITIAL AND CONTINUING CALIBRATION
SEMIVOLATILE ORGANIC COMPOUNDS
NAVSTA MAYPORT, FLORIDA

ICAL = INITIAL CALIBRATION = %RSD	SDG 34901				SDG 35074	
CCAL = CONTINUING CALIBRATION = %D	ICAL1	CCAL1	CCAL2	CCAL3	ICAL1	CCAL1
DATE	012993	012993	020193	020393	021993	021993
INSTRUMENT ID	4600	4600	4600	4600	4600	4600
CALIBRATION CRITERIA	%RSD/ RRF	%D/ RRF	%D/ RRF	%D/ RRF	%RSD/ RRF	%D/ RRF
PHENYL-TERT-BUTLYAMINE	39.5	-25.6	-28.6	-61.8	61.0	-35.7
BENZIDINE	37.0					
HEXACHLOROPROPENE						27.1
3,3'-DIMETHYLBENZIDINE	36.2				32.6	
ARAMITE		0.018	0.020	0.024	0.022	0.019
1-NAPHTHYLAMINE		36.1	41.1	30.1		37.0
2-NAPHTHYLAMINE		33.2				37.2
O-TOLUIDINE		32.0	42.1			31.9
P-PHENYLENEAMINE	74.6/0.028	89.3/0.003	75.0/0.007	82.1/0.005	45.0/0.013	97.1/0.005
2,4-DINITROPHENOL			44.6			
4-NITROQUINOLINE-1-OXIDE			38.9/0.044	33.3/0.024		27.4/0.037
BENZOIC ACID			25.6	45.4		
5-NITRO-O-TOLUIDINE			34.0			
4-AMINIOBIPHENYL						34.6

SDGS, CALIBRATIONS AND ASSOCIATED SAMPLES:

SDG 34901
CCAL1: MPT8MS6S2, MPT8MS6S7, MPI5MS1S2, MPI5MS1S6
CCAL2: MPT8BS3S7
CCAL3: SBLKS1

SDG 35074
CCAL1: 8SL1A, 8SL1AD

ICAL = INITIAL CALIBRATION = %RSD	SDG 35074	
CCAL = CONTINUING CALIBRATION = %D	ICAL2	CCAL2
DATE	02193	022193
INSTRUMENT ID	4600	4600
CALIBRATION CRITERIA	%RSD/ RRF	%D/ RRF
BENZIDINE	39.1	
N-NITROSOPIPERIDINE		-25.9
PHENYL-TERT-BUTYLAMINE		-44.7
1-NAPHTHYLAMINE		52.0
2-NAPHTHYLAMINE		45.9
PHENACETIN		29.7
4-AMINOBIPHENYL		37.3
7,12-DIMETHYLBENZ(A)ANTHRACE		26.6
O-TOLUIDINE		49.1
P-PHENYLENEDIAMINE		-99.9
1,4-NAPTHOQUINONE		27.8
5-NITRO-O-TOLUIDINE		26.1
4-NITROQUINOLINE-1-OXIDE		45.1/0.028
METHAPYRILENE		40.6
ARAMITE		40.9/0.013
3,3'-DIMETHYLBENZIDINE		44.4
HEXACHLOROPHENE		37.0
2-ACETYLAMINOFLUORENE		25.8

SDGS, CALIBRATIONS AND ASSOCIATED SAMPLES:

SDG 35074
CCAL2: 8SL1ADMS, 8SL1ADMSD

TABLE A - 2 (CONTINUED)

INITIAL AND CONTINUING CALIBRATION
SEMIVOLATILE ORGANIC COMPOUNDS
NAVSTA MAYPORT, FLORIDA

ICAL = INITIAL CALIBRATION = %RSD	SDG 23886		SDG 23884		SDG 23918		
CCAL = CONTINUING CALIBRATION = %D	ICAL	CCAL1	ICAL	CCAL1	ICAL	CCAL1	CCAL2
DATE	022793	022893	012793	030193	022793	022893	030293
INSTRUMENT ID	5100	5100	4000	4000	5100	5100	5100
CALIBRATION CRITERIA	%RSD	%D	%RSD	%D	%RSD	%D	%D
PENTACHLOROPHENOL				27.4			-45.3
4-METHYLPHENOL				26.2			
HEXACHLOROETHANE				28.8			
IDENO(1,2,3-cd)PYRENE							-54.4
DIBENZO(a,h)ANTHRACENE		-38.4				-38.4	-35.6
BENZO(g,h,i)PERYLENE		-30.2		34.9		-30.2	-64.5
PHENOL-d5				27.6			
HEXACHLOROCYCLOPENTADIENE				29.8			-35.1
2-NITROANILINE							-36.4
BIS(2-CHLOROISOPROPYL)ETHER							-67.8
2-PICOLINE				83.5			
BENZOIC ACID	52.7	28.1		42.7	52.7	28.1	-30.7
1,2-DIPHENYLHYDRAZINE							-31.5
ETHYLMETHANESULFONATE							-28.6
p-DIMETHYLAMINEAZOBENZENE							-28.7
n-NITROSOPYROLIDINE							28.7
n-NITROSOMORPHOLINE							-56.1
n-NITROSOPIPERIDINE	65.8				65.8		
2-NAPHTHYLAMINE				-40.9			
PHENYL-TERT-BUTYLAMINE				-51.5			
N-NITROSOMETHYLETHYLAMINE				-26.3			
3,3'-DIMETHYLBENZIDINE				-37.4			
2,4-DINITROPHENOL		33.5		66.9		33.5	
4,6-DINITRO-2-METHYLPHENOL				57.1			
2,4,6-TRIBROMOPHENOL		32.1				32.1	
7,12-DIMETHYLBENZ(a)ANTHRACENE			32.5				
HEXACHLOROPHENE	68.2				68.2		-127.9
1,3-DINITROBENZENE							-42.5
BIS(2-ETHYLHEXYL)PHTHALATE							-33.3
1,3,5-TRINITROBENZENE							-37.4
4-NITROQUINOLINE-1-OXIDE							-98.7
METHAPYRILENE							-54.4
ARAMITE							-28.6
2-ACETAMIDOFLUORENE							-36.0
ARAMITE (2 PEAK)							-32.8

SDGS, CALIBRATIONS AND ASSOCIATED SAMPLES:

SDG 23886
ICAL 02/27/93: NONE ASSOCIATED
CCAL1: 8MW8, 8MW8D, 15MW1, 8MW5S, 8M26DMS, 8MW6DMSD, 2-1
SDG 23884
ICAL 1/27/93: NONE ASSOCIATED
CCAL1: MPT-11-1, MPT-11-2, 11MW3, 11MW3D, 11MW3DMS, 11MW3DMSD, 2QS006
SDG 23918
ICAL 2/27/93: 2QS008, 8MW1, 8MW8, 8MW4, 8MW7
CCAL1: 16MW2
CCAL2: 2QS008RE, 8MW8RE, 8MW4RE, 8MW7RE, 8MW1RE, 16MW2RE

TABLE A - 2 (CONTINUED)

INITIAL AND CONTINUING CALIBRATION
SEMIVOLATILE ORGANIC COMPOUNDS
NAVSTA MAYPORT, FLORIDA

ICAL = INITIAL CALIBRATION = %RSD	SDG 23904		
CCAL = CONTINUING CALIBRATION = %D	ICAL	CCAL1	CCAL2
DATE	012793	022893	030193
INSTRUMENT ID	4000	4000	4000
CALIBRATION CRITERIA	%RSD	%D	%D
PENTACHLOROPHENOL			27.4
4-METHYLPHENOL		27.8	26.2
HEXACHLOROETHANE		31.2	28.8
BENZO(k)FLUORANTHENE		37.	
BENZO(g,h,i)PERYLENE			34.9
PHENOL-d5		28.1	27.6
HEXACHLOROCYCLOPENTADIENE			29.8
2-PICOLINE			83.5
1-NAPHTHYLAMINE		-33.3	
O-TOLUIDINE			
4-AMINOBIPHENYL		-25.7	
BENZOIC ACID			42.7
2-NAPHTHYLAMINE			-40.9
PHENYL-TERT-BUTYLAMINE		-29.7	-51.5
1,4-NAPHTHOQUINONE		28.8	
N-NITROSOMETHYLETHYLAMINE			-26.3
3,3'-DIMETHYLBENZIDINE			-37.4
2,4-DINITROPHENOL			66.9
4,6-DINITRO-2-METHYLPHENOL			57.1
7,12-DIMETHYLBENZ(a)ANTHRACENE	32.5		

SDGS, CALIBRATIONS AND ASSOCIATED SAMPLES:

SDG 23904
ICAL 01/27/93: NONE ASSOCIATED
CCAL1: 2QS007, S-3, S-2, 9MW1, 9MW2, 9MW3, 16MW3, 16MW3D
CCAL2: 16MW1D

ICAL = INITIAL CALIBRATION = %RSD	SDG 34923				
CCAL = CONTINUING CALIBRATION = %D	ICAL	CCAL1	CCAL2	CCAL3	CCAL4
DATE	012993	013093	020193	020293	020393
INSTRUMENT ID	4600	4600	4600	4600	4600
CALIBRATION CRITERIA	RRF/%RSD	RRF/%D	RRF/%D	RRF/%D	RRF/%D
1-NAPHTHYLAMINE		39.4	41.1	29.0	
O-TOLUIDINE		30.4	42.1	29.0	
BENZOIC ACID			25.6		45.4
2-NAPHTHYLAMINE				25.7	30.1
BENZIDINE	37.0			-55.7	
PHENYL-TERT-BUTYLAMINE	39.5	-46.4	-28.6	-54.2	-61.8
P-PHENYLENEDIAMINE	0.028/74.6	0.006/78.6	0.007/75.0	0.005/82.1	0.005/82.1
5-NITRO-O-TOLUIDINE			34.0		
3,3'DIMETHYLBENZIDINE	36.2				
3,3'-DIMETHYLBENZIDINE					-31.1
2,4-DINITROPHENOL			44.6	31.4	
7,12-DIMETHYLBENZ(a)ANTHRACENE	32.5				
4-NITROQUINOLINE-1-OXIDE			0.044/38.9		0.048/33.3
ARAMITE	0.019	0.020	0.020	0.021	0.024/-26.3

SDGS, CALIBRATIONS AND ASSOCIATED SAMPLES:

SDG 34923
ICAL 1/29/93: NONE ASSOCIATED
CCAL1: MPT8SW2
CCAL2: NONE ASSOCIATED
CCAL3: MPT8SW1
CCAL4: MPT8SW2_MS, MPT8SW2_MSD

TABLE A - 2 (CONTINUED)

INITIAL AND CONTINUING CALIBRATION
SEMIVOLATILE ORGANIC COMPOUNDS
NAVSTA MAYPORT, FLORIDA

ICAL = INITIAL CALIBRATION = %RSD	SDG 34923, CONTINUED			SDG 35083		
CCAL = CONTINUING CALIBRATION = %D	ICAL	CCAL1	CCAL2	ICAL	CCAL1	CCAL2
DATE	021893	022293	022493	021893	021993	022093
INSTRUMENT ID	4600	4600	4600	4600	4600	4600
CALIBRATION CRITERIA	RRF/%RSD	RRF/%D	RRF/%D	RRF/%RSD	RRF/%D	RRF/%D
4-CHLOROANILINE		28.7				
1-NAPHTHYLAMINE					37.0	36.1
O-TOLUIDINE					31.9	
4-AMINOBIPHENYL					34.6	
2-NAPHTHYLAMINE					37.2	35.8
BIS(2-CHLOROISOPROPYL)ETHER						66.4
BENZIDINE	39.1			39.1		50.8
PHENYL-TERT-BUTYLAMINE	61.0			61.0	-35.7	-42.4
HEXACHLOROPROPENE					27.1	
P-PHENYLENEDIAMINE	0.013/45.0			0.013/45.0	0.00	-98.9
3,3'DIMETHYLBENZIDINE	32.6			32.6		
2,4-DINITROPHENOL		33.1				
4-NITROPHENOL		33.0				
4-NITROQUINOLINE-1-OXIDE		0.047	0.027		0.037	0.035/31.4
ARAMITE	0.022	0.043	0.010	0.022	0.019	0.015/31.8

SDGS, CALIBRATIONS AND ASSOCIATED SAMPLES:

SDG 34923 CONTINUED
ICAL 02/18/93: NONE ASSOCIATED
CCAL1: MPT8SL1, MPT8SL2
CCAL2: MPT8SL3
SDG 35083
ICAL 02/18-19/93: NONE ASSOCIATED
CCAL1: 15SS21, 15SS31, 15SS41, 15SS51, 15SS61, 15SS71, 15SS81, 15SS81D
CCAL2: 15SS22, 15SS32, 15SS42, 15SS52, 15SS62, 15SS72, 15SS82, 15SS82D

ICAL = INITIAL CALIBRATION = %RSD	SDG 35083, CONTINUED			
CCAL = CONTINUING CALIBRATION = %D	CCAL3	ICAL	CCAL1	CCAL2
DATE	022193	022193	022293	022393
INSTRUMENT ID	4600	4600	4600	4600
CALIBRATION CRITERIA	RRF/%D	RRF/%D	RRF/%D	RRF/%D
4-CHLOROANILINE			28.7	34.6
2-PICOLINE			-30.8	
METHYLMETHANESULFONATE			-25.7	
ETHYLMATHANESULFONATE			-33.9	
ACETOPHERONE			-30.2	
NITROSOPIPERIDINE			-43.8	
1-NAPHTHYLAMINE				33.8
4-AMINOBIPHENYL				33.7
2-NAPHTHYLAMINE				39.5
BENZIDINE		39.1		-43.0
PHENYL-TERT-BUTYLAMINE			64.8	-43.7
2,4-DINITROPHENOL			33.1	
4-NITROPHENOL			33.0	
4-NITROQUINOLINE-1-OXIDE			0.047	0.036
ARAMITE			0.043	0.014

SDGS, CALIBRATIONS AND ASSOCIATED SAMPLES:

SDG 35083
CCAL3: 15SS81_MS, 15SS81_MSD
ICAL 02/21/93: NONE ASSOCIATED
CCAL1: 15SS12, 15SS51DL
CCAL2: 15SS11, 2QS009

TABLE A - 2 (CONTINUED)

INITIAL AND CONTINUING CALIBRATION
SEMIVOLATILE ORGANIC COMPOUNDS
NAVSTA MAYPORT, FLORIDA

ICAL = INITIAL CALIBRATION = %RSD	SDG 35163			SDG 35168		
CCAL = CONTINUING CALIBRATION = %D	ICAL	CCAL1	CCAL2	ICAL	CCAL1	CCAL2
DATE	022193/	030193	030993	022193/	030193	031093
	030193			030193		
INSTRUMENT ID	4600	4600	4600	4600	4600	4600
CALIBRATION CRITERIA	RRF/%D	RRF/%D	RRF/%D	RRF/%D	RRF/%D	RRF/%D
BENZIDINE	39.1			39.1		
BENZOIC ACID		56.4			56.4	
2-PICOLINE			-26.8			
N-NITROSOPIPERIDINE			-65.9			
N-NITROSODI-N-BUTYLAMINE			-31.1			
1-NAPHTHYLAMINE	39.5	0.041/94.8	29.1	39.5	0.041/94.8	
2-NAPHTHYLAMINE	36.2	33.1		36.2	33.1	
4-AMINOBIPHENYL	45.6	87.6		45.6	87.6	
P-(DIMETHYLAMINO)AZOBENZENE	35.6			35.6		
P-PHENYLENEDIAMINE		40.7			40.7	
5-NITRO-O-TOLUIDINE		31.2			31.2	
4-NITROQUINOLINE-1-OXIDE		0.038/29.6			0.038/29.6	
4-NITROANILINE		-26.4			-26.4	
7,12-DIMETHYLBENZ(A)ANTRACENE	39.3			39.3		
3-METHYLCHOLANTHRENE	38.3			38.3		
3,3-DICHLOROBENZIDINE						25.6
ARAMITE	0.044	0.036	0.040	0.044	0.036	0.044

SDGS, CALIBRATIONS AND ASSOCIATED SAMPLES:

SDG 35163
ICAL 2/21/93 & 3/01/93: NONE ASSOCIATED
CCAL1: 2QS010, 2FB007
CCAL2: MPTBSS1, MPTBSS1D, MPTBSS2, MPTBSS3, MPTBSS4, MPTBSS5, MPTBSS6, MPTBSS1_MS, MPTBSS1_MSD
SDG 35168
ICAL 2/21/93 & 3/01/93: NONE ASSOCIATED
CCAL1: 2QS011, MPTBSW7, MPTBSW7D, MPTBSW6, MPTBSW4, 2QS012, MKPTBSW7MS, MPTBSW7MSD
CCAL2: MPTSD7, MPTBSD7D, MPTBSD6, MPTBSD4, MPTBSD7MS, MPTBSD7MSD

TABLE A - 2 (CONTINUED)

INITIAL AND CONTINUING CALIBRATION
SEMIVOLATILE ORGANIC COMPOUNDS
NAVSTA MAYPORT, FLORIDA

ICAL = INITIAL CALIBRATION = %RSD	SDG 35196			SDG 23943			
CCAL = CONTINUING CALIBRATION = %D	ICAL	CCAL1	CCAL2	ICAL	CCAL1	ICAL	CCAL1
DATE	022193/	030493	030993	022793/	031093	032493	032593
	030193			030993			
INSTRUMENT ID	4600	4600	4600	5100D	5100D	5100D	5100D
CALIBRATION CRITERIA	RRF/%RSD	RRF/%D	RRF/%D	RRF/%RSD	RRF/%D	RRF/%RSD	RRF/%D
BENZIDINE	39.1	-39.6					
BENZOIC ACID		-87.3		52.7			
BENZO(G,H,I)PERYLENE		27.1					
2-PICOLINE			-26.8				
N-NITROSOPIPERIDINE			-65.9	65.8			
N-NITROSODI-N-BUTYLAMINE			-31.1				
PHENYL-TERT-BUTYLAMINE		0.006					
1-NAPHTHYLAMINE	39.5		29.1				
2-NAPHTHYLAMINE	36.2						
4-AMINOBIPHENYL	45.6						
P-(DIMETHYLAMINO)AZOBENZENE	35.6						
P-PHENYLENEDIAMINE		0.011					
INDENO(1,2,3-CD)PYRENE					-45.8		
DIBENZO(A,H)ANTHRACENE					-34.6		
BENZO(G,H,I)PERYLENE					-48.9		
HEXACHLOROCYCLOPENTADIENE					-30.1		
2-NITROANILINE					-39.5		
BIS(2-ETHYLHEXYL)PHTHALATE					-29.5		
2,4,6-TRIBROMOPHENOL					34.5		
5-NITRO-O-TOLUIDINE		0.004					
4-NITROQUINOLINE-1-OXIDE		0.022					
4-NITROANILINE							
CHRYSENE						33.5	
BENZO(K)FLUORANTHENE						35.4	
7,12-DIMETHYLBENZ(A)ANTRACENE	39.3					34.5	
3-METHYLCHOLANTHRENE	38.3						
3,3-DICHLOROBENZIDINE							
HEXACHLOROPHENE		0.040					-101.2
PENTACHLORONITROBENZENE		0.045					
ARAMITE	0.044	0.028	0.040				

SDGS, CALIBRATIONS AND ASSOCIATED SAMPLES:

TABLE A - 3

INITIAL AND CONTINUING CALIBRATION
PESTICIDE/PCB COMPOUNDS
NAVSTA MAYPORT, FLORIDA

ICAL = INITIAL CALIBRATION = %RSD	SDG 23749(34884)	SDG 23775(34915)		SDG 23750(34889)		
CCAL = CONTINUING CALIBRATION = %D	**CCAL1**	**CCAL1**	**CCAL2**	**CCAL1**	**CCAL2**	**CCAL3**
INSTRUMENT ID	V6000A	V6000A	V6000A	V6000A/B	V6000B	V6000A/B
DATE	013193	020293	020293	020193	020193	020293
CALIBRATION CRITERIA	%D	%D	%D	%D	%D	%D
CHLOROBENZILATE	17.5	16.1	18.2	17.5		16.1
ENDRIN KETONE				-18.5	-16.5	-16.1

SDGs, STANDARDS AND SAMPLES ASSOCIATED

SDG 23749
CCAL1: 2FB003, 2QS004, 2RB001, 2BS85S02, 2B585DD79
SDG 23775
CCAL1: 2QS005, MPT8MS7S2, MPT8MS7S9, MPT8MS8S2, MPT8MS8S9, 2FB004
CCAL2: NONE ASSOCIATED, FINAL STANDARD
SDG 23750
CCAL1: MPT8MS4S2, MPT8MS4S8, MPT8MS4S8MS, MPT8MS4S8MSD, MPT6MS1D2, MP16MS1D8, MP16MS2S2, MP16MS2S8, MP16MS2S8MS, MP16MS2S8MSD
CCAL2: MP16MS3S2, MP16MS3S8
CCAL3: NONE ASSOCIATED, FINAL STANDARD

ICAL = INITIAL CALIBRATION = %RSD	SDG 23736(34901)		SDG 23967(35074)
CCAL = CONTINUING CALIBRATION = %D	**CCAL1**	**CCAL2**	**CCAL1**
INSTRUMENT ID	V6000B	V6000A/B	V6000A/B
DATE	020293	020293	022893
CALIBRATION CRITERIA	%D	%D	%D
CHLOROBENZILATE		16.1	16.4/16.4
ENDRIN KETONE	-16.5	-16.5	

SDGs, STANDARDS AND SAMPLES ASSOCIATED

SDG 23736
CCAL1: MPT8BS3S7, MPT8MS6S2, MPT8MS6S1, MPT5MS1S2, MPT5MS1S6
CCAL2: NONE ASSOCIATED, FINAL STANDARD
SDG 23967
CCAL1: NONE ASSOCIATED, FINAL STANDARD

TABLE A - 3 (CONTINUED)

INITIAL AND CONTINUING CALIBRATION
PESTICIDE/PCB COMPOUNDS
NAVSTA MAYPORT, FLORIDA

ICAL = INITIAL CALIBRATION = %RSD	SDG 23918			SDG23790	
CCAL = CONTINUING CALIBRATION = %D	**CCAL1**	**CCAL2**	**CCAL3**	**CCAL1**	**CCAL2**
INSTRUMENT ID	V6000A	V6000B	V6000A/B	V6000A/B	V6000A
DATE	022693	022793	022893	020293	020393
CALIBRATION CRITERIA	%D	%D	%D	%D	%D
CHLOROBENZILATE	17.2		16.4/16.4	18.2	17.8
ISODRIN		21.8			
ENDRIN KETONE				-15.7	

SDGs, STANDARDS AND SAMPLES ASSOCIATED

SDG 23918
CCAL1: 2QS008, 8MW1, 8MW4
CCAL2: 8MW7, 16MW2
CCAL3: NONE ASSOCIATED, FINAL STANDARD
SDG 23790
CCAL1: MPT8SL1, MPT8SL2, MPT8SL3, MPT8SW1, MPT8SW2, MPT8SW2MS, MPT8SW2MSD
CCAL2: NONE ASSOCIATED, FINAL STANDARD

ICAL = INITIAL CALIBRATION = %RSD	SDG 35163 (24082)	SDG 23943
CCAL = CONTINUING CALIBRATION = %D	**CCAL1**	**CCAL2**
INSTRUMENT ID	V6000B	V6000B
DATE	031293	030393
CALIBRATION CRITERIA	%D	%D
CHLOROBENZILATE	16.8	
METHOXYCHLOR		18.4

APPENIDIX B

SERIAL DILUTION SUMMARY

METAL SERIAL DILUTION RESULTS

LIST OF TABLES

Precision, Accuracy, Representativeness,
Comparability, and Completeness
Phase II RCRA Facility Investigation

Appendix B

Tables	Title	
B-1	Metals, Serial Dilution Summary	Appendix B
B-2	Metals, Serial Dilution Summary	Appendix B
B-3	Metals, Serial Dilution Summary	Appendix B
B-4	Metals, Serial Dilution Summary	Appendix B
B-5	Metals, Serial Dilution Summary	Appendix B
B-6	Metals, Serial Dilution Summary	Appendix B
B-7	Metals, Serial Dilution Summary	Appendix B
B-8	Metals, Serial Dilution Summary	Appendix B
B-9	Metals, Serial Dilution Summary	Appendix B
B-10	Metals, Serial Dilution Summary	Appendix B

TABLE B - 1

SERIAL DILUTION
METALS SUMMARY TABLE

NAVSTA MAYPORT, FLORIDA

SAMPLE 15SS11		SDG 35083
RPD = RELATIVE PERCENT DIFFERENCE		RPD
METALS COMPOUNDS	UNITS	
TIN	ug/L	NC
ANTIMONY	ug/L	100.0
BARIUM	ug/L	26.5*
BERYLLIUM	ug/L	171.1
CADMIUM	ug/L	NC
CHROMIUM	ug/L	15.7
COBALT	ug/L	312.6
COPPER	ug/L	14.3
NICKEL	ug/L	NC
SILVER	ug/L	NC
VANADIUM	ug/L	23.2
ZINC	ug/L	1.4

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

NC DENOTES NO CALCULATION DUE TO NON-DETECT RESULTS IN BOTH SAMPLES

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

35083: 15SS11, 15SS12, 15SS21, 15SS22, 15SS31, 15SS32, 15SS41, 15SS42, 15SS51,15SS52, 15SS61, 15SS62, 15SS71, 15SS72, 15SS81, 15SS81D, 15SS82, 15SS82D AND 2QS009.

COMPOUND	RPD
	WATER/SOIL
ALL ICP COMPOUNDS	+/-10%

+/-10% RULES ONLY APPLIES TO RESULTS GREATER THAN 50 TIMES THE IDL

TABLE B - 2

SERIAL DILUTION
METALS SUMMARY TABLE

NAVSTA MAYPORT, FLORIDA

SAMPLE 8SL1ADL		SDG 35074
RPD = RELATIVE PERCENT DIFFERENCE		RPD
METALS COMPOUNDS	UNITS	
TIN	mg/Kg	NC
ANTIMONY	mg/Kg	NC
BARIUM	mg/Kg	15.7*
BERYLLIUM	mg/Kg	NC
CADMIUM	mg/Kg	NC
CHROMIUM	mg/Kg	100.0
COBALT	mg/Kg	NC
COPPER	mg/Kg	59.5
NICKEL	mg/Kg	100.0
SILVER	mg/Kg	NC
VANADIUM	mg/Kg	12.8
ZINC	mg/Kg	61.8

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

NC DENOTES NO CALCULATION DUE TO NON-DETECT RESULTS IN BOTH SAMPLES

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES
35074: 8SL1A AND 8SL1AD.

COMPOUND	RPD
	WATER/SOIL
ALL ICP COMPOUNDS	+/-10%

+/-10% RULES ONLY APPLIES TO RESULTS GREATER THAN 50 TIMES THE IDL

TABLE B - 3

SERIAL DILUTION

METALS SUMMARY TABLE

NAVSTA MAYPORT, FLORIDA

SAMPLE MPT8MS4S8L		SDG 34889
RPD = RELATIVE PERCENT DIFFERENCE		RPD
METALS COMPOUNDS	UNITS	
TIN	mg/Kg	NC
ANTIMONY	mg/Kg	NC
BARIUM	mg/Kg	8.9
BERYLLIUM	mg/Kg	100.0
CADMIUM	mg/Kg	13.1
CHROMIUM	mg/Kg	3.8
COBALT	mg/Kg	100.0
COPPER	mg/Kg	231.9
NICKEL	mg/Kg	26.6
SILVER	mg/Kg	NC
VANADIUM	mg/Kg	2.4
ZINC	mg/Kg	39.6

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

NC DENOTES NO CALCULATION DUE TO NON-DETECT RESULTS IN BOTH SAMPLES

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

34889: MPT16MS1D2, MPT8MS4S2, MPT8MS4S8, MP16MS1D8, MP16MS2S3, MP16MS2S8, MP16MS3S2, MP16MS3S8, MPT8MS6S2, MPT8MS6S7, MP15MS1S2, MPT8BS357 AND MP15MS1S6.

COMPOUND	RPD
	WATER/SOIL
ALL ICP COMPOUNDS	+/-10%

+/-10% RULES ONLY APPLIES TO RESULTS GREATER THAN 50 TIMES THE IDL

TABLE B - 3 CONTINUED

SERIAL DILUTION

METALS SUMMARY TABLE

NAVSTA MAYPORT, FLORIDA

SAMPLE MP16MS2S8		SDG 34889
RPD = RELATIVE PERCENT DIFFERENCE		RPD
METALS COMPOUNDS	UNITS	
TIN	mg/Kg	NC
ANTIMONY	mg/Kg	NC
BARIUM	mg/Kg	*46.0
BERYLLIUM	mg/Kg	100.0
CADMIUM	mg/Kg	NA
CHROMIUM	mg/Kg	2.0
COBALT	mg/Kg	100.0
COPPER	mg/Kg	733.4
NICKEL	mg/Kg	100.0
SILVER	mg/Kg	NC
VANADIUM	mg/Kg	2.0
ZINC	mg/Kg	171.8

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

NC DENOTES NO CALCULATION DUE TO NON-DETECT RESULTS IN BOTH SAMPLES

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

34889: MPT16MS1D2, MPT8MS4S2, MPT8MS4S8, MP16MS1D8, MP16MS2S3, MP16MS2S8, MP16MS3S2, MP16MS3S8, MPT8MS6S2, MPT8MS6S7, MP15MS1S2, MPT8BS357 AND MP15MS1S6.

COMPOUND	RPD
	WATER/SOIL
ALL ICP COMPOUNDS	+/-10%

+/-10% RULES ONLY APPLIES TO RESULTS GREATER THAN 50 TIMES THE IDL

TABLE B - 4

SERIAL DILUTION

METALS SUMMARY TABLE

NAVSTA MAYPORT, FLORIDA

SAMPLE MPT8MS4S8		SDG 34915
RPD = RELATIVE PERCENT DIFFERENCE		RPD
METALS COMPOUNDS	UNITS	
TIN	ug/L	NC
ANTIMONY	ug/L	NC
BARIUM	ug/L	8.9
BERYLLIUM	ug/L	100
CADMIUM	ug/L	13.1
CHROMIUM	ug/L	3.80
COBALT	ug/L	100
COPPER	ug/L	231.9
NICKEL	ug/L	26.6
SILVER	ug/L	NC
VANADIUM	ug/L	2.40
ZINC	ug/L	40

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

NC DENOTES NO CALCULATION DUE TO NON-DETECT RESULTS IN BOTH SAMPLES

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

34915: MPT8MS7S2, MPT8MS7S9, MPT8MS8S2 AND MPT8MS8S9.,

COMPOUND	RPD
	WATER/SOIL
ALL ICP COMPOUNDS	+/-10%

+/-10% RULES ONLY APPLIES TO RESULTS GREATER THAN 50 TIMES THE IDL

TABLE B - 5

SERIAL DILUTION
METALS SUMMARY TABLE

NAVSTA MAYPORT, FLORIDA

SAMPLE MPT8SL1		SDG 34923
RPD = RELATIVE PERCENT DIFFERENCE		RPD
METALS COMPOUNDS	UNITS	
TIN	mg/Kg	0.1
ANTIMONY	mg/Kg	100.0
BARIUM	mg/Kg	25.5*
BERYLLIUM	mg/Kg	NC
CADMIUM	mg/Kg	39.2
CHROMIUM	mg/Kg	2.4
COBALT	mg/Kg	NC
COPPER	mg/Kg	0.3
NICKEL	mg/Kg	1.4
SILVER	mg/Kg	3.0
VANADIUM	mg/Kg	0.8
ZINC	mg/Kg	3.3

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

NC DENOTES NO CALCULATION DUE TO NON-DETECT RESULTS IN BOTH SAMPLES

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES
34923: MPT8SL1, MPT8SL2 AND MPT8SL3.

COMPOUND	RPD
	WATER/SOIL
ALL ICP COMPOUNDS	+/-10%

+/-10% RULES ONLY APPLIES TO RESULTS GREATER THAN 50 TIMES THE IDL

TABLE B - 5 CONTINUED

SERIAL DILUTION

METALS SUMMARY TABLE

NAVSTA MAYPORT, FLORIDA

SAMPLE MPT8SW2		SDG 34923
RPD = RELATIVE PERCENT DIFFERENCE		RPD
METALS COMPOUNDS	UNITS	
TIN	ug/L	NC
ANTIMONY	ug/L	258.1
BARIUM	ug/L	80.6*
BERYLLIUM	ug/L	NC
CADMIUM	ug/L	NC
CHROMIUM	ug/L	NC
COBALT	ug/L	100.0
COPPER	ug/L	100.0
NICKEL	ug/L	100.0
SILVER	ug/L	NC
VANADIUM	ug/L	100.0
ZINC	ug/L	NC

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

NC DENOTES NO CALCULATION DUE TO NON-DETECT RESULTS IN BOTH SAMPLES

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

34923: MPT8SW1 AND MPT8SW2.

COMPOUND	RPD
	WATER/SOIL
ALL ICP COMPOUNDS	+/-10%

+/-10% RULES ONLY APPLIES TO RESULTS GREATER THAN 50 TIMES THE IDL

TABLE B - 6

SERIAL DILUTION
METALS SUMMARY TABLE

NAVSTA MAYPORT, FLORIDA

SAMPLE MPTBSS1		SDG 35163
RPD = RELATIVE PERCENT DIFFERENCE		RPD
METALS COMPOUNDS	UNITS	
TIN	ug/L	NC
ANTIMONY	ug/L	100
BARIUM	ug/L	5
BERYLLIUM	ug/L	NC
CADMIUM	ug/L	NC
CHROMIUM	ug/L	100
COBALT	ug/L	NC
COPPER	ug/L	100
NICKEL	ug/L	NC
SILVER	ug/L	NC
VANADIUM	ug/L	131.5
ZINC	ug/L	100

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

NC DENOTES NO CALCULATION DUE TO NON-DETECT RESULTS IN BOTH SAMPLES

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES

35163: MPTBSS1, MPTBSS1D, MPTBSS2, MPTBSS3, MPTBSS4, MPTBSS5 AND MPTBSS6.

COMPOUND	RPD
	WATER/SOIL
ALL ICP COMPOUNDS	+/-10%

+/-10% RULES ONLY APPLIES TO RESULTS GREATER THAN 50 TIMES THE IDL

TABLE B - 7

SERIAL DILUTION
METALS SUMMARY TABLE
NAVSTA MAYPORT, FLORIDA

SAMPLE MPTBSD7		SDG 35168
RPD = RELATIVE PERCENT DIFFERENCE		RPD
METALS COMPOUNDS	UNITS	
TIN	ug/L	NC
ANTIMONY	ug/L	NC
BARIUM	ug/L	54
BERYLLIUM	ug/L	NC
CADMIUM	ug/L	NC
CHROMIUM	ug/L	100
COBALT	ug/L	NC
COPPER	ug/L	100
NICKEL	ug/L	NC
SILVER	ug/L	NC
VANADIUM	ug/L	53.80
ZINC	ug/L	100

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

NC DENOTES NO CALCULATION DUE TO NON-DETECT RESULTS IN BOTH SAMPLES

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES
35168: MPTBSD4, MPTBSD6, MPTBSD7 AND MPTBSD7D.

COMPOUND	RPD
	WATER/SOIL
ALL ICP COMPOUNDS	+/-10%

+/-10% RULES ONLY APPLIES TO RESULTS GREATER THAN 50 TIMES THE IDL

TABLE B - 8

SERIAL DILUTION
METALS SUMMARY TABLE

NAVSTA MAYPORT, FLORIDA

SAMPLE 2QS011		SDG 35168
RPD = RELATIVE PERCENT DIFFERENCE		RPD
METALS COMPOUNDS	UNITS	
TIN	ug/L	NC
ANTIMONY	ug/L	NC
BARIUM	ug/L	NC
BERYLLIUM	ug/L	NC
CADMIUM	ug/L	NC
CHROMIUM	ug/L	NC
COBALT	ug/L	NC
COPPER	ug/L	NC
NICKEL	ug/L	NC
SILVER	ug/L	NC
VANADIUM	ug/L	NC
ZINC	ug/L	NC

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

NC DENOTES NO CALCULATION DUE TO NON-DETECT RESULTS IN BOTH SAMPLES

CORRESPONDING SDG'S AND/ ASSOCIATED SAMPLES
35168: MPTBSW4, MPTBSW6, MPTBSW7, MPTBSW7, 2QS011 AND 2QS012.

COMPOUND	RPD
	WATER/SOIL
ALL ICP COMPOUNDS	+/-10%

+/-10% RULES ONLY APPLIES TO RESULTS GREATER THAN 50 TIMES THE IDL

TABLE B - 9

SERIAL DILUTION
METALS SUMMARY TABLE

NAVSTA MAYPORT, FLORIDA

SAMPLE MPTBSD5		SDG 35196
RPD = RELATIVE PERCENT DIFFERENCE		RPD
METALS COMPOUNDS	UNITS	
TIN	ug/L	100
ANTIMONY	ug/L	NC
BARIUM	ug/L	18.9
BERYLLIUM	ug/L	NC
CADMIUM	ug/L	NC
CHROMIUM	ug/L	100
COBALT	ug/L	NC
COPPER	ug/L	100
NICKEL	ug/L	NC
SILVER	ug/L	NC
VANADIUM	ug/L	100
ZINC	ug/L	35.8

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

NC DENOTES NO CALCULATION DUE TO NON-DETECT RESULTS IN BOTH SAMPLES

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES
35196: MPTBSD5.

COMPOUND	RPD
	WATER/SOIL
ALL ICP COMPOUNDS	+/-10%

+/-10% RULES ONLY APPLIES TO RESULTS GREATER THAN 50 TIMES THE IDL

TABLE B - 10

SERIAL DILUTION
METALS SUMMARY TABLE

NAVSTA MAYPORT, FLORIDA

SAMPLE MPTBSW5		SDG 35196
RPD = RELATIVE PERCENT DIFFERENCE		RPD
METALS COMPOUNDS	UNITS	
TIN	ug/L	81.6
ANTIMONY	ug/L	NC
BARIUM	ug/L	76.7
BERYLLIUM	ug/L	NC
CADMIUM	ug/L	NC
CHROMIUM	ug/L	11.4*
COBALT	ug/L	NC
COPPER	ug/L	100
NICKEL	ug/L	100
SILVER	ug/L	NC
VANADIUM	ug/L	100
ZINC	ug/L	32.4

*** DENOTES VALUE NOT WITHIN QA/QC ADVISORY LIMITS**

NC DENOTES NO CALCULATION DUE TO NON-DETECT RESULTS IN BOTH SAMPLES

CORRESPONDING SDG'S AND ASSOCIATED SAMPLES
35196: MPTBSW5.

COMPOUND	RPD
	WATER/SOIL
ALL ICP COMPOUNDS	+/-10%

+/-10% RULES ONLY APPLIES TO RESULTS GREATER THAN 50 TIMES THE IDL

APPENDIX C

SUMMARY OF REJECTED DATA

LIST OF TABLES

Precision, Accuracy, Representativeness,
Comparability, and Completeness
Phase II RCRA Facility Investigation

Appendix C

Tables	Title	
C-1	GC/MS Volatile Organic Compounds, Rejected Data Summary	Appendix C
C-2	GC Volatile Organic Compounds, Rejected Data Summary	Appendix C
C-3	GC/MS Semivolatile Organic Compounds, Rejected Data Summary	Appendix C
C-4	Pesticide/PCBs, Rejected Data Summary	Appendix C
C-5	Kepone, Rejected Data Summary	Appendix C
C-6	Metals and Cyanide, Rejected Data Summary	Appendix C

TABLE C-1
GC/MS VOLATILES - REJECTED DATA
NAVSTA MAYPORT, FLORIDA

					# OF COMPOUNDS REJECTED PER MATIX			
SDG	# SAMPLES/MATRIX				QC	MW	MS	SL
	QC	MW	MS	SL				
23884	3	4	0	0	3	6	0	0
23885								
23886	1	5	0	0	1	7	0	0
23887								
23900								
23904	2	8	0	0	2	12	0	0
23905								
23918	2	5	0	0	6	14	0	0
23921								
23921								
23943	1	1	0	0	0	0	0	0
23944								
23954								
34610								
34611								
34884	4	0	2	0	4	0	3	0
34889	0	0	8	0	0	0	10	0
34901	1	0	5	0	2	0	9	0
34915	3	0	4	0	3	0	7	0

TABLE C-1 CONTINUED
GC/MS VOLATILES - REJECTED DATA
NAVSTA MAYPORT, FLORIDA

					# OF COMPOUNDS REJECTED PER MATIX			
SDG	# SAMPLES/MATRIX				QC	MW	MS	SL
	QC	MW	MS	SL				
34923	1	2	0	3	3	0	0	7
35074	1	0	0	2	1	0	0	2
35083	2	0	18	0	2	0	18	0
35163	3	0	7	0	15	0	27	0
35167								
35168	4	4	4	0	20	20	13	0
35170								
35195								
35196	1	4	1	0	5	20	3	0
GRAND TOTAL	29	33	49	5	67	79	90	9
COMPLETION GOAL (>95%)					96.1%	95.9%	96.9%	96.9%

MATRIX KEY

QC = QC SAMPLES
MW = WATER SAMPLES
MS = SOIL/SEDIMENT SAMPLES
SL = SLUDGE SAMPLES

*** 59 TARGET COMPOUNDS PER SAMPLE**

TABLE C-2
GC VOLATILES - REJECTED DATA
NAVSTA MAYPORT, FLORIDA

					# OF COMPOUNDS REJECTED PER MATIX			
SDG	# SAMPLES/MATRIX				QC	MW	MS	SL
	QC	MW	MS	SL				
23884								
23885	2	4	0	0	0	0	0	0
23886								
23887								
23900	1	1	0	0	0	0	0	0
23904								
23905								
23918								
23921	1	0	0	0	0	0	0	0
23921								
23943								
23944	1	1	0	0	0	0	0	0
23954								
34610								
34611								
34884								
34889								
34901								
34915								

TABLE C-2 CONTINUED
GC VOLATILES - REJECTED DATA
NAVSTA MAYPORT, FLORIDA

					# OF COMPOUNDS REJECTED PER MATIX			
SDG	# SAMPLES/MATRIX				QC	MW	MS	SL
	QC	MW	MS	SL				
34923								
35074								
35083								
35163								
35167								
35168								
35170								
35195								
35196								
GRAND TOTAL	5	6	0	0	0	0	0	0
COMPLETION GOAL (>95%)					100.0%	100.0%	100.0%	100.0%

MATRIX KEY

QC = QC SAMPLES
MW = WATER SAMPLES
MS = SOIL/SEDIMENT SAMPLES
SL = SLUDGE SAMPLES

*** 29 TARGET COMPOUNDS PER SAMPLE**

TABLE C-3
SEMIVOLATILE ORGANICS - REJECTED DATA
NAVSTA MAYPORT, FLORIDA

					# OF COMPOUNDS REJECTED PER MATIX			
SDG	# SAMPLES/MATRIX				QC	MW	MS	SL
	QC	MW	MS	SL				
23884	2	4	0	0	0	0	0	0
23885								
23886	0	5	0	0	0	0	0	0
23887								
23900								
23904	1	8	0	0	0	0	0	0
23905								
23918	1	5	0	0	0	0	0	0
23921								
23921								
23943	1	1	0	0	0	0	0	0
23944								
23954								
34610								
34611								
34884	3	0	2	0	6	0	4	0
34889	0	0	8	0	0	0	17	0
34901	0	0	5	0	0	0	11	0
34915	2	0	4	0	4	0	11	0

TABLE C-3 CONTINUED
SEMIVOLATILE ORGANICS - REJECTED DATA
NAVSTA MAYPORT, FLORIDA

					# OF COMPOUNDS REJECTED PER MATIX			
SDG	# SAMPLES/MATRIX				QC	MW	MS	SL
	QC	MW	MS	SL				
34923	0	2	0	3	0	4	0	9
35074	0	0	0	2	0	0	0	0
35083	1	0	18	0	3	0	55	0
35163	2	0	7	0	6	0	7	0
35167								
35168	2	4	4	0	6	12	4	0
35170								
35195								
35196	0	1	1	0	0	7	1	0
GRAND TOTAL	15	30	49	5	25	23	110	9
COMPLETION GOAL (>95%)					98.5%	99.3%	98.0%	98.4%

MATRIX KEY

QC = QC SAMPLES
MW = WATER SAMPLES
MS = SOIL/SEDIMENT SAMPLES
SL = SLUDGE SAMPLES

*** 110 TARGET COMPOUNDS PER SAMPLE**

TABLE C-4
PESTICIDE/PCBs - REJECTED DATA
NAVSTA MAYPORT, FLORIDA

					# OF COMPOUNDS REJECTED PER MATIX			
SDG	# SAMPLES/MATRIX				QC	MW	MS	SL
	QC	MW	MS	SL				
23884	2	4	0	0	0	0	0	0
23885								
23886	0	5	0	0	0	0	0	0
23887								
23900								
23904	1	8	0	0	0	0	0	0
23905								
23918	1	5	0	0	0	0	0	0
23921								
23921								
23943	1	1	0	0	0	0	0	0
23944								
23954	0	0	10	0	0	0	0	0
34610	1	0	10	0	0	0	0	0
34611	2	0	10	0	0	0	0	0
34884	3	0	2	0	0	0	0	0
34889	0	0	8	0	0	0	0	0
34901	0	0	5	0	0	0	0	0
34915	2	0	4	0	0	0	0	0

TABLE C-4 CONTINUED
PESTICIDE/PCBs - REJECTED DATA
NAVSTA MAYPORT, FLORIDA

					# OF COMPOUNDS REJECTED PER MATIX			
SDG	# SAMPLES/MATRIX				QC	MW	MS	SL
	QC	MW	MS	SL				
34923	0	2	0	3	0	6	0	0
35074	0	0	0	2	0	0	0	0
35083	1	0	18	0	0	0	0	0
35163	2	0	7	0	0	0	0	0
35167								
35168	2	4	4	0	0	0	0	0
35170								
35195								
35196	0	1	1	0	0	0	0	0
GRAND TOTAL	18	30	79	5	0	6	0	0
COMPLETION GOAL (>95%)					100.0%	99.3%	100.0%	100.0%

MATRIX KEY

QC = QC SAMPLES
MW = WATER SAMPLES
MS = SOIL/SEDIMENT SAMPLES
SL = SLUDGE SAMPLES

*** 30 TARGET COMPOUNDS PER SAMPLE**

TABLE C-5
KEPONE - REJECTED DATA
NAVSTA MAYPORT, FLORIDA

					# OF COMPOUNDS REJECTED PER MATIX			
SDG	# SAMPLES/MATRIX				QC	MW	MS	SL
	QC	MW	MS	SL				
23884	2	4	0	0	0	0	0	0
23885								
23886	0	5	0	0	0	0	0	0
23887								
23900								
23904	1	8	0	0	0	0	0	0
23905								
23918	1	5	0	0	0	0	0	0
23921								
23921								
23943	1	1	0	0	0	0	0	0
23944								
23954								
34610								
34611								
34884	3	0	2	0	0	0	0	0
34889	0	0	8	0	0	0	0	0
34901	0	0	5	0	0	0	0	0
34915	2	0	4	0	0	0	0	0

TABLE C-5 CONTINUED
KEPONE - REJECTED DATA
NAVSTA MAYPORT, FLORIDA

					# OF COMPOUNDS REJECTED PER MATIX			
SDG	# SAMPLES/MATRIX				QC	MW	MS	SL
	QC	MW	MS	SL				
34923	0	2	0	3	0	0	0	0
35074	0	0	0	2	0	0	0	0
35083	1	0	18	0	0	0	0	0
35163	2	0	7	0	0	0	0	0
35167								
35168	2	4	4	0	0	0	0	0
35170								
35195								
35196	0	1	1	0	0	0	0	0
GRAND TOTAL	15	30	49	5	0	0	0	0
COMPLETION GOAL (>95%)					100.0%	100.0%	100.0%	100.0%

MATRIX KEY

QC = QC SAMPLES
MW = WATER SAMPLES
MS = SOIL/SEDIMENT SAMPLES
SL = SLUDGE SAMPLES

* 1 TARGET COMPOUND PER SAMPLE

TABLE C-6
INORGANICS/CYANIDE - REJECTED DATA
NAUSTA MAYPORT, FLORIDA

					# OF COMPOUNDS REJECTED PER MATIX			
SDG	# SAMPLES/MATRIX				QC	MW	MS	SL
	QC	MW	MS	SL				
23884	2	4	0	0	0	0	0	0
23885								
23886	0	5	0	0	0	0	0	0
23887								
23900								
23904	1	8	0	0	0	0	0	0
23905								
23918	1	5	0	0	0	0	0	0
23921								
23921								
23943	1	1	0	0	0	0	0	0
23944								
23954								
34610								
34611								
34884	3	0	2	0	0	0	0	0
34889	0	0	8	0	0	0	1	0
34901	0	0	5	0	0	0	1	0
34915	2	0	4	0	0	0	0	0

TABLE C-6 CONTINUED
INORGANICS/CYANIDE - REJECTED DATA
NAVSTA MAYPORT, FLORIDA

					# OF COMPOUNDS REJECTED PER MATIX			
SDG	# SAMPLES/MATRIX				QC	MW	MS	SL
	QC	MW	MS	SL				
34923	0	2	0	3	0	0	0	0
35074	0	0	0	2	0	0	0	0
35083	1	0	18	0	0	0	0	0
35163	2	0	7	0	0	0	0	0
35167								
35168	2	4	4	0	4	8	0	0
35170								
35195								
35196	0	1	1	0	0	0	0	0
GRAND TOTAL	15	30	49	5	4	8	2	0
COMPLETION GOAL (>95%)					98.7%	98.7%	99.8%	100.0%

MATRIX KEY

QC = QC SAMPLES
MW = WATER SAMPLES
MS = SOIL/SEDIMENT SAMPLES
SL = SLUDGE SAMPLES

*** 31 TARGET ANALYTES PER SAMPLE**

NAVSTA Mayport Administrative Record
Document Index Number

32228-000
19.04.00.0006

APPENDIX D

1994 PARCCs REPORT

Environmental Data Services, Inc.

Specializing in Laboratory Data Validation

PARCC CRITERIA EVALUATION REPORT

NAS Mayport, Mayport, Florida
Remedial Investigation/Feasibility Study

Draft Report
April 3, 1995

Prepared for:

ABB Environmental Services, Inc.
2590 Executive Center Circle East
Tallahassee, Florida 32301

Prepared by:

Environmental Data Services, Inc.
3267 S. Oneida Way
Denver, Colorado 80224

PARCC CRITERIA EVALUATION REPORT

NAS Mayport, Mayport, Florida
Remedial Investigation/Feasibility Study

Draft Report
April 3, 1995

Prepared for:

ABB Environmental Services, Inc.
2590 Executive Center Circle East
Tallahassee, Florida 32301

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1.0 Introduction

Environmental Data Services, Inc. (EDS) performed data validation and evaluation of chemical analytical data from environmental samples which consisted of groundwater, surface water, soil, sediment, and sludge samples. These samples were collected in the vicinity of Solid Waste Management Units (SWMUs) I and II, located at the U.S. Naval Station (NAVSTA) in Mayport, Florida. The purpose of the data validation was to assess the reliability of the analytical data and to create an updated database of valid analytical data which could be used for site characterization, risk assessment and remedial design.

The data validation was performed in accordance with the Naval Energy and Environmental Support (NEESA) document Sampling and Chemical Analysis Quality Assurance Requirements for the Navy Installation Restoration Program, 20.2-047B, June 1988 (NEESA). Other guidance documents used are the National Functional Guidelines for Organic Data Review, June 1991, and the Laboratory Data Validation Guidelines for Evaluating Inorganic Analyses, July 1988. This report summarizes the results of the data quality assessment according to the precision, accuracy, representativeness, completeness and comparability (PARCC) parameters relative to the project specific Data Quality Objectives (DQOs).

The data consisted of NEESA Level C data packages for the organic analyses and NEESA Level D data packages for the metals and cyanide analyses. CH2M Hill Quality Analytical Laboratories (QAL) analyzed all of the samples in their Montgomery, Alabama and Redding, California laboratories with the exception of one volatile and one semivolatile data package which was analyzed by Quanterra Laboratories. The samples were analyzed by the laboratory in batches and the batches were combined to form Sample Delivery Groups (SDGs). For the organic analyses, each batch contained QC samples for the samples in that batch and one matrix spike/matrix spike duplicate (MS/MSD) which was applied to all of the batches in the SDG. For the metals analyses, the laboratory performed at least one MS/MSD per batch, therefore, the individual batches for validated based on these individual MS/MSD samples.

The data validation was performed to assess data quality. Data quality is dependent on field sampling procedures, analytical methods and instrumentation, and sample matrices. Field sampling procedures and laboratory analysis contain potential sources of uncertainty, error, or bias which can affect the overall quality of the data. Sampling errors can occur from inadequate equipment decontamination, improper sample collection techniques, improper filtering, improper preservation, and homogenization or non-homogenization of samples. Data quality can also be affected by analytical factors such appropriate analytical method, proper equipment maintenance, quality instrumentation and software.

Quality control samples are used to determine the effects of sampling procedures and evaluate laboratory contaminants, laboratory performance, and matrix effects. Quality control samples include trip blanks, equipment rinsate blanks, field source blanks, method blanks, laboratory control samples, surrogate spikes, matrix spike/matrix spike duplicates (MS/MSDs), laboratory duplicates and field duplicates.

Before conducting the PARCC evaluation, the data were validated according to the functional guidelines for organic and inorganic data (USEPA 1991 and 1988, respectively). Samples not meeting functional guideline acceptance criteria were qualified with a data quality flag, as specified below. The qualifiers used for this project are as follows:

Organic Data Qualifiers

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Inorganic Data Qualifiers

U - The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

J - The associated value is an estimated quantity.

R - The data are unusable. (Note: Analyte may or may not be present.)

UJ - The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

Following review and qualification of the data according to the functional guidelines, the data are then evaluated using PARCC criteria. PARCC criteria provide an evaluation of overall data useability. The following section defines the PARCC criteria in general terms, followed by a specific evaluation for each analysis; volatiles, semivolatiles, pesticides/PCBs, and metals.

Precision

Definition: Precision - Precision is a measure of mutual agreement among individual measurements of the same property, usually under prescribed similar conditions. Precision is best expressed in terms of the standard deviation around the mean.

Precision is defined by the Contract Laboratory Program (CLP) as the relative percent difference of matrix spike recoveries for two matrix spikes of the same sample (matrix spike and matrix spike duplicates recoveries, MS/MSD). Precision was assessed by comparing the results for field sample duplicates and laboratory sample duplicates to provide information on homogeneity of field sampling techniques, improper handling of samples, and on laboratory sample preparation and analysis.

The relative percent difference (RPD) was calculated for the MS and MSD samples, ABB sample and associated field duplicate, and ABB sample and associated laboratory duplicate sample. Precision was quantitatively measured as the difference of the two sample results divided by the mean and multiplied by 100 in order to be reported as a percentage. The RPD was calculated by the reviewer for each of the duplicate samples and compared to the Data Quality Objectives (DQOs) for this project. Poor precision can be caused by sample heterogeneity, improper sample collection or handling, inconsistent sample preparation, and improper instrument use. An RPD above the numerical QC limit indicates imprecision which indicates that the actual concentrations may be higher or lower that the reported result.

Accuracy

Definition: Accuracy - Accuracy is the degree of conformity of a measurement (or an average of measurements of the same parameter), X, with an accepted reference or true value, T, usually expressed as the difference of the two values, X-T, or the difference as a percentage of the reference or true value 100(X-T)/T, and sometimes expressed as a ratio, X/T. Accuracy is a measurement of the bias in a system.

Accuracy is defined by the CLP as a percent recovery for a spiked sample for analyses. MS/MSD samples, surrogate recovery samples, and LCS samples are used to evaluate the data for accuracy. Recoveries outside of acceptable QC limits may be due to matrix interference, instrumentation, analyst error, or poor recovery of some of the target compounds.

Accuracy was quantitatively measured as the concentration of the spiked analyte minus the concentration of the spiked compound in the original sample, divided by the true concentration of the spiked analyte and multiplied by 100 in order to be reported as a percentage.

Accuracy was evaluated based on the results of the matrix spike/matrix spike duplicate, laboratory control sample, and surrogate spike. The reviewer calculated the percent recovery value (%R) for each spiking compound and compared the results with the DQOs for this project. Spike recoveries outside the acceptable QC limits indicate a source of bias, where the reported results may be either higher or lower than reported.

Representativeness

Definition: Representativeness - Representativeness is the degree to which data accurately and precisely represent the true value of a characteristic of a population, parameter variations at a sampling point, a process condition, or an environmental condition intended to be characterized.

Representativeness is evaluated using the QC blank sample results. QC blank samples are equipment rinsate blanks, field source blanks, trip blanks, laboratory method blanks for organic analyses and laboratory preparation blanks for inorganic analyses. The presence of target compounds in these QC blanks provide an estimate of bias to the samples due to either cross contamination in the field or laboratory.

Field QC results were used to evaluate representativeness. Positive detection of compounds in the field QC samples identify compounds that could have been introduced to the associated field samples during sample collection, transportation to the laboratory, or during analysis. Contamination should not be found in field QC samples.

Qualifications were made to the data based on field blank contamination when the sample results were below ten (10) times the maximum amount detected in the blank for compounds that are common laboratory contaminants and five (5) times the maximum amount detected in the blank for compounds that are not common contaminants. Samples that were qualified as estimated due to blank contamination were flagged by the data reviewer with a "U." Compounds that were qualified due to blank contamination that were reported below the method detection limit were raised to the detection limit and the laboratory qualifier was replaced by the reviewer with a "U."

Qualifications were made to the data based on blank contamination in the following order:

- laboratory method blank contamination;

Followed by the highest concentration of contaminant found in any of the following:

- field blank contamination;
- trip blank contamination;
- equipment blank contamination;

Representativeness was also evaluated based on laboratory QC results. Laboratory method blanks were analyzed for the organic methods and preparation blanks were analyzed for inorganics. Positive detection of compounds in the laboratory QC samples identify compounds that could have been introduced to the associated field samples during sample extraction or preparation or during analysis. Contamination should not be found in laboratory QC samples. The detection of target compounds in the laboratory QC samples provides an estimate of bias to the associated samples due to cross contamination in the laboratory.

Qualifications were made to the data based on laboratory blank contamination when the sample results were below ten (10) times the maximum amount detected in the blank for compounds that are common laboratory contaminants and five (5) times the maximum amount detected in the blank for compounds that are not common contaminants. Samples that were qualified as estimated due to laboratory blank contamination were flagged by the data reviewer with a "U." Compounds that were qualified due to blank contamination that were reported below the method detection limit were raised to the detection limit and the laboratory qualifier was replaced by the reviewer with a "U."

Comparability

Definition: Comparability - Comparability is the confidence with which one data set can be compared to another. Comparability may be assessed by comparing sampling methodology, analytical methodology, and measurement units of reported data.

The comparability parameter assessment relies almost exclusively on the results of the data validation process. Each data reviewer assessed the comparability parameter by determining whether or not the data was acquired by using standard operating procedures for sampling, standard analytical methods for analysis and by reporting analytical results in standard units.

Comparability also may be assessed by review of the analytical method practical quantitation limits. The DQOs for this project specify that the any compound detected between the detection limit and practical quantitation limit will be reported and qualified as estimated (J) flag.

Completeness

Definition: Completeness - Completeness is a measure of the amount of valid data expressed as a percentage obtained from a measurement system compared to the amount that was expected to be obtained under normal conditions.

Completeness is evaluated to determine if an acceptable level of data was obtained so that a project can be completed with valid usable data. Valid usable values are data that are not rejected (R qualifier) by comparison of the analytical procedures with Level C or Level D Data Validation Guidelines as specified by NEESA. Completeness is quantitatively measured as the total number of analytes in each sample, equipment rinsate, field and trip blanks and duplicate samples, minus the total number of rejected analytes divided by the total number of analytes. The completeness criterion should be defined to be consistent with the project data quality objectives.

2.0 Volatile Organic Compounds

A total of 44 SDGs were analyzed for this project, however, only 38 of the 44 SDGs, were analyzed for volatile organic compounds. These SDGs were comprised of groundwater, surface water, sediment, soil borings, and sludge samples. This section discusses the QC supporting documentation as defined by the PARCC criteria and evaluated based on the project specific DQOs.

2.1 Precision

MS/MSD samples and field duplicate samples were used to assess precision. MS/MSD samples were analyzed in all 38 SDGs. Volatile organic analyses were not performed for SDGs 009W and 010W, as only cyanide analyses were performed. In SDG Worms, no volatile analyses were performed, only semivolatiles, pesticide/PCB and metals. For SDG Fish, only pesticide/PCB and metals were analyzed. For SDGs 15-001 and 15-002, only pesticide/PCB, organophosphorus pesticides, and herbicides were analyzed.
The functional guidelines establishes RPD QC criteria limits for MS/MSD samples as follows:

	MS/MSD Criteria	
	Water	Soil/Sediment
	RPD	RPD
1,1-Dichloroethene	14	22
Trichloroethene	14	24
Benzene	11	21
Toluene	13	21
Chlorobenzene	13	21

MS/MSD analytical results for each SDG are presented in Appendix A. The only RPD that exceeded QC criteria for the volatile organic analyses was SDG LWW SEW. For SDG LWW SEW 1,1-dichloroethene exceeded the 14% RPD QC limit with a 17% RPD.

Duplicate Samples

One duplicate sample pair was analyzed with all SDGs except SDGs 001W, 002W, 003W, 004W, 005W, 006W, 007W, 008W, 001SW, 002SW, 001SED, 002SED, 08/SL-01, 2&4-001, 2&4-002, 28-001, 28-002, 28-003, 5-001, 5-002, 3-001. In the case of these SDGs two duplicate pairs were analyzed. All RPDs were calculated for detected compounds, regardless if they were below the CRDL. If one concentration was undetected and one concentration was reported, than an NC (not calculated) was listed in the RPD column, followed by an NA (not applicable) in the RPD QC limit column. These results are presented in Appendix A. The compounds which exceeded the RPD QC limit are summarized below for compounds which were detected above the CRDL only.

SDG No.	Duplicate Pair	Compound	Conc.	RPD	Limit
001W	02MW0090I/Duplicate	Acetone	71/23	102	40
008W	08MW019S/Duplicate	Acetone	11/23	71	40
001SED	02SD029/Duplicate	2-Butanone	420/160	90	38
002SED	02SD020/Duplicate	2-Butanone	60/70	51	38
LWW SED	LWSD005/Duplicate	Acetone	33/19	53	47

2.2 Accuracy

The percent recovery results of MS/MSDs and surrogate spikes are used to assess accuracy. Non-compliant MS/MSD recovery results are presented in Appendix A. Accuracy was assessed by calculating the percent recoveries of the five spiking compounds: 1,1-dichloroethene, trichloroethene, benzene, toluene, and chlorobenzene.

MS/MSD Samples

The functional guidelines establishes % Recovery QC criteria limits for MS/MSD samples as follows:

MS/MSD Criteria

	Water %R	Soil/Sediment %R
1,1-Dichloroethene	61-145	59-172
Trichloroethene	71-120	62-137
Benzene	76-127	60-133
Toluene	76-125	59-139
Chlorobenzene	75-130	66-142

The percent recovery (%R) values for the MS/MSD samples listed below exceeded QC acceptance criteria.

SDG No.	Compound	%R MS/MSD	QC Limits
BGROUND-BS	1,1-Dichloroethene	ok/190	59-172

Percent recoveries that exceed QC limits indicate a potential high bias in associated sample results, however, there were no positive results reported for 1,1-dichloroethene in SDG BGROUND-BS, therefore, there was no affect on the data.

Surrogate Spikes

Three surrogate compounds are used for spiking the volatile organic samples; bromofluorobenzene, 1,2-dichloroethane-d4, and toluene-d8. Surrogate spike recoveries for volatile organic analyses were compared to the QC acceptance criteria as specified in the Functional Guidelines. These criteria are summarized as follows:

System Monitoring Compound Criteria

	Water %R	Soil/Sediment %R
Toluene-d_8 (TOL)	88-110	84-138
Bromofluorobenzene (BFB)	86-115	59-113
1,2-Dichloroethane-d_4 (DCE)	76-114	70-121

The following summarizes spike recovery problems for individual SDGs:

SDG 08/SL-01

Several samples listed in Table A-3 below had surrogate-1, Toluene-d8 and surrogate-2, Bromofluorobenzene, and surrogate-3, 1,2-Dichloroethane-d4, outside of QC limits. The reanalyses were also outside limits due to the internal standards being low. These surrogates are calculated based on the areas of the internal standard; therefore, they are showing extremely high recoveries. The original sample results are to be used and have been qualified based on internal standard deficiencies.

Table A-3
Matrix Interferences (Organics)

Sample	Compound	Reported Recovery/Reanalysis	Was the Re-analysis Needed?
08SL01102 and 08SL01102RE	Surrogate 1 (TOL) Surrogate 2 (BFB)	121%/118% 387%/358%	Yes
08SL01202 and 08SL01202RE	Surrogate 1 (TOL) Surrogate 2 (BFB)	125%/128% 494%/482%	Yes
08SL01302 and 08SL01302RE	Surrogate 1 (TOL) Surrogate 2 (BFB)	142%/130% 677%/363%	Yes
08SL01001	Surrogate 1 (TOL)	121%/120%MS MSD OK	Yes
08SL00801/RE	Surrogate 1 (TOL)	118%/120%	Yes
08SL01006/RE	Surrogate 1 (TOL) Surrogate 2 (BFB)	124%/124% 359%/373%	Yes
08SL00501/RE	Surrogate 1 (TOL)	122%/OK	Yes
08SL00701D/RE	Surrogate 1 (TOL)	140%/OK	Yes
08SL00505/RE	Surrogate 1 (TOL) Surrogate 2 (BFB)	134%/DL OK 1200%/196%	Yes
08SL00601*	Surrogate 2 (BFB)	434%/None performed	Yes
08SL00605*	Surrogate 3 (DCE)	150%/OK S2=138%	Yes
08SL00906*	Surrogate 2 (BFB)	722%/None performed	Yes
08SL00806*	Surrogate 2 (BFB)	535%/None performed	Yes
08SL00705*	Surrogate 2 (BFB)	518%/None performed	Yes

* For samples with surrogates above of QC limits that do not have internal standard areas outside of QC limits, all results are qualified as estimated "J" while non-detects are not qualified.

SDG 08/SL-02

Sample 08SL00401D had Toluene-d8 (S1) recover at 121% which is above the 81-117% QC limit. There were no positive results reported for this sample, therefore, no qualifications were required. The sample was reanalyzed (08SL00401DRE) with acceptable surrogate results, however, the reanalysis was performed outside of holding times. The original results should be used for reporting purposes.

SDG LWW SED

Surrogate S1 and S2 were outside limits for sample LWSD008. The samples were reanalyzed with similar results. The results for this sample are qualified as estimated "J" for positive results and "UJ" for non-detects. The original results should be used for reporting purposes.

Initial and Continuing Calibration

Initial and continuing calibration results can be used to evaluate accuracy within an SDG. Relative response factors (RRFs), percent relative standard deviation (%RSD) and percent difference (%D) are the three parameters used to evaluate instrument calibration.

The RRF is a measure of relative response of an analyte compared to its internal standard. The %RSD is an expression of the linearity of instrument response and the %D is a comparison of the continuing calibration instrument response with its initial calibration response. The RRF is the most critical of the three parameters. This parameter can affect accuracy when it outside acceptable QC limits.

The %RSD, RRF, and %D values that exceeded QC acceptance criteria are summarized in Appendix D. There were many RRFs that exceeded the QC acceptance criteria (<0.05). These compounds were rejected "R" by the reviewer and are unacceptable for use. There are also several %D and %RSD values that exceeded QC acceptance criteria ($>25\%$ and $>30\%$, respectively). The data were qualified as estimated "UJ" for non-detects and "J" for positive results when the %D was exceeded. In the case of a %RSD exceedence, only positive results were qualified as estimated "J" and non-detects were not qualified.

2.3 Representativeness

Method blanks, equipment rinsate blanks, trip blanks, and field source blanks were used to evaluate representativeness for the volatile organic analyses. A summary of the contaminants found in these blanks can be found in Appendix B. Methylene chloride, acetone, carbon disulfide, acetonitrile, toluene, tetrachloroethene, and trichlorofluoromethane were detected in the various blanks. The laboratory method blank was applied first to the samples, followed by the highest concentration of the equipment rinsate blank, trip blank, and field source blank.

Qualifications were made to the data based on laboratory blank contamination when the sample results were below ten (10) times the maximum amount detected in the blank for compounds that are common laboratory contaminants and five (5) times the maximum amount detected in the blank for compounds that are not common contaminants. Samples that were qualified as estimated due to laboratory blank contamination were flagged by the data reviewer with a "U." Compounds that were qualified due to blank contamination that were reported below the method detection limit were raised to the detection limit and the laboratory qualifier was replaced by the reviewer with a "U." If a sample result exceeded 5X or 10X the amount in the blank, the result was not amended.

The following summarizes the method blanks, equipment rinsate blanks, trip blanks, and field source blanks.

Method Blanks

Method blanks were analyzed with each SDG for volatile organic compounds to identify contaminants that may have been introduced through analytical instrumentation or sample preparation. Methylene chloride, acetone, carbon disulfide, acetonitrile, and toluene were detected in the method blanks.

Equipment/Rinsate Blanks

Equipment rinsate blanks are used to evaluate contaminants that may have been introduced through the sampling equipment or laboratory handling of samples. Carbon disulfide, tetrachloroethene, acetone, and methylene chloride were detected in the equipment rinsate blanks.

Trip Blanks

Trip blanks are used to evaluate contaminants that may have been introduced through storage, shipping, or site conditions. Methylene chloride, acetone, and carbon disulfide were detected in the trip blanks.

Field Source Blanks

Field source blanks are used to evaluate contaminants that may have been introduced through site conditions. Field source blanks are typically prepared in the field (on-site) as opposed to a trip blank which is typically prepared at the laboratory and shipped with the cooler. Carbon disulfide, trichlorofluoromethane, and acetone were identified in the field source blanks.

2.4 Comparability

The laboratory used standard analytical methods for all of the analyses. The method detection limits were below the contract required quantitation limits except in the cases where dilutions were required. These cases are summarized below:

SDG	Sample ID
001W	02MW0035DL
005W	02MW031IDL
001SED	02SD029DL
SWMU 3-001	03BS00108DL
SWMU 08/SL-01	08SL00906DL, 08SL00806DL, 08SL00505DL, 08SL00601DL, 08SL00605DL, 08SL00705DL

2.5 Completeness

There were rejections of the data in all of the 38 SDGs that were analyzed for volatile organic compounds.

In every SDG, the data were rejected due to low RRF values (<0.05). In the case of SDG SWMU 28-003 in addition to a low RRF value, the laboratory did not perform a 5-point calibration curve, therefore, several additional compounds were also rejected.

The percent of valid data for the volatile analysis for this project is 96.6%. The data quality objective for completeness for volatile organics for this project is 95%; therefore, the completeness for the volatile organic analyses was acceptable. There were 1223 rejected compounds and 36,241 total analyses for the volatile organics. A summary of the rejected compounds can be found in Appendix C.

3.0 Semivolatile Organic Compounds

A total of 39 of the 44 SDGs, comprised of groundwater, surface water, sediment, soil borings, sludge, and tissue samples, were analyzed for semivolatile organic compounds. This section discusses the QC supporting documentation as defined by the PARCC criteria and evaluated based on the project specific DQOs.

3.1 Precision

MS/MSD Samples

MS/MSD and field duplicates were used to assess precision. MS/MSD samples were analyzed in all 39 SDGs. Semivolatile organic analyses were not performed for SDGs 009W and 010W as only cyanide analyses were performed. For SDG Fish, only pesticide/PCB and metals were analyzed. For SDGs 15-001 and 15-002, only pesticide/PCBs, organophosphorus pesticides, and herbicides were analyzed. The functional guidelines establishes RPD QC criteria limits for MS/MSD samples as follows:

MS/MSD CRITERIA

	Water RPD	Soil/Sediment RPD
Phenol	42	35
2-Chlorophenol	40	50
1,4-Dichlorobenzene	28	27
N-Nitroso-Di-n-propylamine	38	38
1,2,4-Trichlorobenzene	28	23
4-Chloro-3-methylphenol	42	33
Acenaphthene	31	19
4-Nitrophenol	50	50
2-4-Dinitrotoluene	38	47
Pentachlorophenol	50	47
Pyrene	31	36

MS/MSD analytical results for each SDG are presented in Appendix A. RPD exceedences are summarized below for the semivolatile organic analyses.

SDG	Compound	RPD	QC limit
001W	Pyrene	35	31
002W	2,4-Dinitrotoluene	67	38
003W	Phenol	80	42
003W	2-Chlorophenol	67	40
003W	1,4-Dichlorobenzene	67	28

003W	4-Chloro-3-methylphenol	59	42
003W	4-Nitrophenol	67	50
003SW	2,4-Dinitrotoluene	41	38
002SED	Phenol	54	35
002SED	2-Chlorophenol	60	50
002SED	1,4-Dichlorobenzene	61	27
002SED	N-nitroso-di-n-propylamine	64	38
002SED	1,2,4-Trichlorobenzene	57	23
002SED	4-Chloro-3-methylphenol	55	33
002SED	Acenapthene	58	19
002SED	4-Nitrophenol	68	50
002SED	2,4-Dinitrotoluene	51	47
002SED	Pentachlorophenol	64	47
002SED	Pyrene	68	36

Duplicate Samples

One duplicate sample pair was analyzed with all SDGs except SDGs 001W, 002W, 003W, 004W, 005W, 006W, 007W, 008W, 001SW, 002SW, 001SED, 002SED, 08/SL-01, 2&4-001, 2&4-002, 28-001, 28-002, 28-003, 5-001, 5-002, 3-001. In the case of these SDGs two duplicate pairs were analyzed. All RPDs were calculated for detected compounds, regardless if they were below the CRDL. If one concentration was undetected and one concentration was reported, than an NC (not calculated) was listed in the RPD column, followed by an NA (not applicable) in the RPD QC limit column. These results are presented in Appendix A. There were no compounds detected above the CRDL that exceeded the RPD QC limits for any of the semivolatile SDGs.

3.2 Accuracy

The percent recovery results of MS/MSDs and surrogate spikes are used to assess accuracy. Non-compliant MS/MSD recovery results are presented in Appendix A. Accuracy for MS/MSD samples was assessed by calculating the percent recoveries of eleven spiking compounds:

MS/MSD Samples

The functional guidelines establishes % Recovery QC criteria limits for MS/MSD samples as follows:

MS/MSD CRITERIA

Water	Soil/Sediment
%R	%R

Phenol	12-110	26-90
2-Chlorophenol	27-123	25-102
1,4-Dichlorobenzene	36-97	28-104
N-Nitroso-Di-n-propylamine	41-116	41-126
1,2,4-Trichlorobenzene	39-98	38-107
4-Chloro-3-methylphenol	23-97	26-103
Acenaphthene	46-118	31-137
4-Nitrophenol	10-80	11-114
2-4-Dinitrotoluene	24-96	28-89
Pentachlorophenol	9-103	17-109
Pyrene	26-127	35-142

The percent recovery (%R) values for the MS/MSD samples listed below exceeded QC acceptance criteria.

SDG No.	Compound	%R MS/MSD	QC Limits
001W	4-Nitrophenol	98/84	10-80
002W	4-Nitrophenol	117/116	10-80
003W	N-nitroso-di-n-propylamine	163/162	41-116
003W	4-Nitrophenol	91/85	10-80
003W	2,4-Dinitrotoluene	100/ok	24-96
003W	Pentachlorophenol	104/ok	9-103
003W	Phenol	6/ok	12-110
003W	2-Chlorophenol	14/ok	27-123
003W	1,4-Dichlorobenzene	16/8	36-97
003W	1,2,4-Trichlorobenzene	18/15	39-98
003W	Acenapthene	37/39	46-118
004W	1,2,4-Trichlorobenzene	38/ok	39-98
006W	4-Nitrophenol	102/103	10-80
007W	4-Nitrophenol	86/ok	10-80
007W	4-Nitrophenol	90/ok	10-80
008W	4-Nitrophenol	88/94	10-80
011W	Phenol	ok/90	12-89
011W	4-Nitrophenol	100/100	10-80
011W	4-Chloro-3-methylphenol	ok/101	23-97
011W	Pentachlorophenol	ok/105	9-103
001SW	4-Nitrophenol	106/98	10-80
002SW	4-Nitrophenol	88/ok	10-80
001S	2,4-Dinitrotoluene	109/105	28-89
002S	2,4-Dinitrophenol	110/111	58-89
003S	2,4-Dinitrophenol	98/91	28-89

004S	2,4-Dinitrotoluene	93/99	28-89
005S	2,4-Dinitrotoluene	95/94	28-89
001SED	2,4-Dinitrotoluene	91/ok	28-89
002SED	1,4-Dichlorobenzene	ok/24	28-104
002SED	N-Nitroso-di-n-propylamine	ok/36	41-126
002SED	1,2,4-Trichlorobenzene	ok/31	38-107
LWW SEW	4-Nitrophenol	84/99	10-80
2&4-001	2,4-Dinitrotoluene	90/ok	28-89
28-001	2,4-Dinitrotoluene	92/94	28-89
28-003	2,4-Dinitrotoluene	92/97	28-89

Percent recoveries that exceed QC limits indicate a potential high bias in associated sample results, however, there were no positive results reported for the above compounds in the associated samples, therefore, there was no affect on the data.

Surrogate Spikes

Six surrogate compounds are used for spiking the semivolatile organic samples. Surrogate spike recoveries for semivolatile organic analyses were compared to the QC acceptance criteria as specified in the Functional Guidelines. These criteria are summarized as follows:

Surrogate Recovery Limits

	Water %R	Soil %R
NBZ (Nitrobenzene-d5)	35-114	23-120
FBP (2-Fluorobiphenyl)	43-116	30-115
TPH (Terphenyl-d14)	33-141	18-137
PHL (Phenol-d5)	10-94	24-113
2FP (2-Fluorophenol)	21-100	25-121
TBP (2,4,6-Tribromophenol)	10-123	19-122

The following summarizes spike recovery problems for individual SDGs:

SDG 006W

Terphenyl recovered at 23% for sample 02MW023S which is below the 33-141 QC limits, therefore, sample 02MW023S was reanalyzed and the surrogate was acceptable. Since the reanalysis was performed outside of holding times and qualified accordingly, the original sample results should be used. Sample 02MW026I recovered high at 96% for Phenol-d5 since the QC limits are 10-94%. Qualifiers were not required as the

Functional Guidelines allow for two surrogates per fraction to exceed QC limits. The laboratory did not reanalyze this sample, stating that the 96%R was within their laboratory internal control limits.

SDG 005W

Surrogate recoveries were low (4% for 2-fluorophenol and 23% for terphenyl, respectively) for samples 15MW003S and 15MW004S. The laboratory reanalyzed the samples, however, the reanalyses were performed outside of holding times. Upon reanalysis, the surrogate recovery was acceptable for 15MW003S at 82%, however, the reanalysis for 15MW004S was 23%.

The original analysis is rejected for 15MW003S since the surrogate is <10% and the reanalysis should be used. The original analysis should be used for 15MW004S since the reanalysis exceeded holding time criteria and the reanalysis should be used for confirmation purposes only.

SDG 002SW

Samples 02SW023 and 02SW034 had Terphenyl-d14 recover outside the QC limits; however, no qualification is required for only one semivolatile surrogate outside limits.

SDG 004W

For samples 130P004, 02MW018I, 02MW018S, 26MW001S, and 26MW002S, nondetected results were qualified as estimated "UJ" for base/neutral compounds due to poor surrogate recoveries.

Samples 02MW035S, 02MW037S, 02MW036S, 02MW035I, and 02MW036I were reanalyzed due to poor surrogate recovery. Since only one surrogate was outside of QC limits and the holding times were not met for the reanalysis, only the original results should be reported, with no qualification of sample results required.

Sample 26R005 had one low surrogate recovery and 26MW001SD had two low surrogate recoveries (different fractions), however, no qualifications were required since 2 surrogates per fraction are allowed to exceed QC limits.

SDG 003W

The surrogate results for Phenol-d5 exceeded the 94% QC limit for samples 08MW008S and 0SMW002S, however, the Functional Guidelines allow for up to two surrogate compounds per fraction to exceed the QC criteria before qualifiers are required. Also, several surrogate recoveries were low for batch M7503 and are summarized as follows:

Sample ID	Surrogate Compound	%R	QC Limits	Qualifier	Comment
09MW003S	Nitrobenzene-d5 2-Fluorobiphenyl	31 18	35-114 43-116	J/UJ for base/neutral compounds	None
0SMW003S	2-Fluorobiphenyl	25	43-116	None	Not required unless 2 per fraction exceed QC limits
28MW001S	2-Fluorobiphenyl	25	43-116	None	Not required unless 2 per fraction exceed QC limits
08MW001S	2-Fluorobiphenyl 2-Fluorophenol	35 14	43-116 21-100	None	Not required unless 2 per fraction exceed QC limits
22MW002S	Nitrobenzene-d5 2-Fluorobiphenyl 2-Fluorophenol	30 20 20	35-114 43-116 21-100	J/UJ for base/neutral compounds	None
09MW002S	2-Fluorobiphenyl 2-Fluorophenol	38 19	43-116 21-100	None	Not required unless 2 per fraction exceed QC limits

SDG 011W

All samples, MS/MSD, and blanks in this SDG had Phenol-d5 (S4) recover above the QC limits of 10-94%. The Functional Guidelines allow for up to two compounds per fraction to exceed QC limits before qualifications are required, therefore, no action is taken by the reviewer.

SDG 008W

Sample 08MW010S had 2-Fluorophenol (S5) recover at 16% which is below the QC limits of 21-100%. The sample was reextracted outside of holding times and reanalyzed with acceptable surrogate recoveries. Since there are no qualifications required based on one semivolatile surrogate exceeding the QC limits and the reanalysis is qualified due to holding times, the original results should be used for reporting. Sample 13R024 had surrogate Phenol-d5 (S4) recover at 101% which is above the 10-94% QC limits. Again, since only one surrogate was outside of QC limits, no qualifications were required.

SDG 007W

1. Sample 02MW034I had surrogate S3 recover below the QC limits and S4 recover above the QC limits. The re-extraction and reanalysis showed S3 still to be low.

2. Samples 08MW005D and 08MW012S both had surrogate S4 recover outside of QC limits.

3. Samples 08MW009S, 08MW016S, 08MW016SD, 08MW017S, and 08MW018S had surrogate S4 recover above the QC limits.

4. Qualifications were not added based on items 1-3 since the Functional Guidelines allow for up to two surrogate compounds per fraction to exceed QC limits before qualifications are required.

SDG 08/SL-01

1. Several samples had all of the percent recoveries diluted out. No action was taken as all other surrogate criteria have been met.

2. Sample 08R017 had surrogates 5 & 6 below the QC limits, with surrogate 6 below 10%. The re-extraction showed 5 & 6 to be within limits, but the re-extraction was performed outside of holding times. The reanalysis will be used since the original was rejected for the acid fraction due to the low surrogate recovery.

3. Samples 08SL00906 and 08SL00806 had surrogate 1 recover at 0%, therefore, all compounds for the base/neutral fraction were rejected.

SDG 08/SL-02

Rinsate sample 08R033 had phenol-d5 (S4) recover at 97% which is above the QC limits of 10-94%. There are no qualifications required based on one semivolatile surrogate exceeding the QC limits, therefore, no action was taken by the reviewer.

SDG LWW SEW

Sample LWSW006 had S3 recover below specified criteria; however, since only one surrogate was outside limits, no action is required. The sample was re-extracted and reanalyzed with slightly better results; however, the sample was re-extracted outside holding times and all results would have to be qualified; therefore, only the original analysis will be reported.

SDG BGROUND-SW

Surrogate compound 2-fluorobiphenyl was below the QC criteria for sample 0BSW012 at 39%, however, the functional guidelines allow for up to two surrogates per fraction to exceed QC limits before qualifications are required.

SDG 002SED

1. Samples 02SD027, 02SD026, 02SD024, and 02SD035, were diluted and reanalyzed due to split peaks. The reviewer recommends that the dilution analysis be used for reporting purposes due to the uncertainty of the compounds reported in the original analysis. In addition, the dilution analysis had less qualifiers and rejected compounds.

2. Sample 02SD023 was reanalyzed outside of holding times due to five of the six surrogate compounds recovering below the QC limits. The reviewer recommends using the dilution since the surrogates were acceptable for this analysis.

3. Sample 02SD037 was diluted and reanalyzed due to water being present in the extract and matrix interferences. Since the surrogate recoveries were acceptable for the original analysis and the matrix interference did appear to be that significant, the reviewer recommends using the original analysis for reporting purposes.

SDG SWMU 2&4-001

Sample 04BS00905 was diluted due to matrix interferences, therefore, the surrogates were diluted out. Sample 04BS00405 was diluted due to a high level of bis(2-ethylhexyl)phthalate in the sample. These surrogates were also diluted out. No action was taken on the basis of either dilution. For sample 04BS00405, the original results should be used for reporting purposes for all compounds except bis(2-ethylhexyl)phthalate. The results from 04BS00405DL should be used for this compound.

SDG SWMU 5-003

Sample 05SS00301 had all surrogate recovery results below 10%, therefore, all compounds were rejected. A reanalysis was performed for this sample and all recoveries were found acceptable, however, the reextraction and reanalysis occurred outside holding times. The reanalysis should be used and all reanalysis results were qualified as estimated "J" for positive results and "UJ" for non-detects.

SDG SWMU 28-002

Samples 28BS00106, 28BS02204, 28SS01201, and 28SS01301 had surrogate S6 (2,4,6-Tribromophenol) exceed the 19-122% QC limits, however, the functional guidelines allow for up to two compounds per fraction to exceed QC limits before qualifiers are added.

SDG BGROUND-BS

Sample 0BR035 had surrogate Phenol-d5 and 2-Fluorophenol recover high at 107% and 102%, respectively. For high surrogate recoveries only positive results are qualified as estimated "J", however, there were no positive results reported for this sample, therefore, no qualifications were required.

Initial and Continuing Calibration

The %RSD, RRF, and %D values that exceeded QC acceptance criteria are summarized in Appendix D. There were many RRFs that exceeded the QC acceptance criteria (<0.05). These compounds were rejected "R" by the reviewer and are unacceptable for use. There are also several %D and %RSD values that exceeded QC acceptance criteria (>25% and >30%, respectively). The data were qualified as estimated "UJ" for non-detects and "J" for positive results when the %D was exceeded. In the case of a %RSD exceedence, only positive results were qualified as estimated "J" and non-detects were not qualified.

3.3 Representativeness

Method blanks, equipment rinsate blanks, and field source blanks were used to evaluate representativeness for the semivolatile organic analyses. A summary of the contaminants found in these blanks can be found in Appendix B. Several compounds were detected in the various blanks. The laboratory method blank was applied first to the samples, followed by the highest concentration of the equipment rinsate blank and field source blank.

Qualifications were made to the data based on laboratory blank contamination when the sample results were below ten (10) times the maximum amount detected in the blank for compounds that are common laboratory contaminants and five (5) times the maximum amount detected in the blank for compounds that are not common contaminants. Samples that were qualified as estimated due to laboratory blank contamination were flagged by the data reviewer with a "U." Compounds that were qualified due to blank contamination that were reported below the method detection limit were raised to the detection limit and the laboratory qualifier was replaced by the reviewer with a "U." If a sample result exceeded 5X or 10X the amount in the blank, the result was not amended.

The following summarizes the method blanks, equipment rinsate blanks, trip blanks, and field source blanks.

Method Blanks

Method blanks were analyzed with each SDG for semivolatile organic compounds to identify contaminants that may have been introduced through analytical instrumentation or sample preparation. N-nitrosodiphenylamine, 2,4-Dimethylphenol, 4-Chloro-3-methylphenol, Pyrene, Phenyl-tert-butylamine, 4-Nitrophenol, Bis(2-ethylhexyl)phthalate, Di-n-butylphthalate, Diethylphthalate, and Butylbenzylphthalate were detected in the method blanks.

Equipment/Rinsate Blanks

Equipment rinsate blanks are used to evaluate contaminants that may have been introduced through the sampling equipment or laboratory handling of samples. Acetophenone, N-Nitrosodiphenylamine, 4-Chloro-3-methylphenol, 4-Nitrophenol, Benzoic Acid, N-Nitrosopiperidine, Bis(2-ethylhexyl)phthalate, Di-n-butylphthalate, and Phenol were detected in the equipment rinsate blanks.

Field Source Blanks

Field source blanks are used to evaluate contaminants that may have been introduced through site conditions. Field source blanks are typically prepared in the field (on-site) as opposed to a trip blank which is typically prepared at the laboratory and shipped with the cooler. Di-n-butylphthalate, Acetophenone, and N-Nitrosodiphenylamine were identified in the field source blanks.

3.4 Comparability

The laboratory used standard analytical methods for all of the analyses. The method detection limits were below the contract required quantitation limits except in the cases where dilutions were required. These cases are summarized below:

SDG	Sample ID
SWMU 2&4-001	04BS00405DL
SWMU 08/SL-01	08SL01006DL, 08SL00806DL, 08SL00906DL, 08SL00501DL
SWMU 002SED	02SD027DL, 02SD026DL, 02SD024DL, 02SD035DL, 02SD010DL, 02SD037DL

3.5 Completeness

There were rejections of the data in all of the 39 SDGs except for SDGs 002W, 011W, 003W, 002S, 003S, 004S, LWW SEW, 08/SL-02, 49-SED.

The semivolatile compounds were rejected in all cases due to a low RRF (<0.05). Of the 57,879 total analyses, 540 compounds were rejected. The percent of valid data for these semivolatile samples for this project is 99.1%. The data quality objective for completeness for this project is 95%; therefore, the completeness for this analysis was acceptable. A summary of rejected compounds can be found in Appendix C.

4.0 Pesticide/PCB Compounds

A total of 42 of the 44 SDGs, comprised of groundwater, surface water, sediment, soil borings, sludge, and tissue samples, were analyzed for pesticide/PCB compounds. This section discusses the QC supporting documentation as defined by the PARCC criteria and evaluated based on the project specific DQOs.

4.1 Precision

MS/MSD Samples

MS/MSD and field duplicates were used to assess precision. MS/MSD samples were analyzed in all 42 SDGs except when noted below. Pesticide/PCB analyses were not performed for SDGs 009W and 010W, only cyanide analyses were performed only. For SDG Fish, no MS/MSD was performed. For SDG Worms, no MS/MSD was performed, however, an LCS/LCSD was evaluated in its place. For SDG 005W, 007W, 15-001, and 15-002, pesticide/PCBs, organophosphorus pesticides, and herbicides were analyzed. The functional guidelines establishes RPD QC criteria limits for MS/MSD samples as follows:

MS/MSD Criteria

	Water RPD	Soil RPD
gamma-BHC (Lindane)	15	50
Heptachlor	20	31
Aldrin	22	43
Dieldrin	18	38
Endrin	21	45
4,4'-DDT	27	50

MS/MSD analytical results for each SDG are presented in Appendix A. RPD exceedences are summarized below for the pesticide/PCB analyses.

SDG	Compound	RPD	QC limit
002W	4,4'-DDT	54	27
003W	Gamma-BHC	20	15
003W	Heptachlor	24	20
003W	Aldrin	25	22
008W	4,4'-DDT	35	27

001SW	Gamma-BHC	26	15
001SW	Heptachlor	24	20
001SW	Aldrin	36	22
001SW	Dieldrin	21	18
3-001	Heptachlor	47	31

Duplicate Samples

One duplicate sample pair was analyzed with all SDGs except SDGs 001W, 002W, 003W, 004W, 005W, 006W, 007W, 008W, 001SW, 002SW, 001SED, 002SED, 08/SL-01, 2&4-001, 2&4-002, 28-001, 28-002, 28-003, 5-001, 5-002, 15-001, 3-001. In the case of these SDGs two duplicate pairs were analyzed. For SDG 007W, 15-001, and 15-002, in addition to pesticide/PCBs, field duplicates were also analyzed for organophosphorus pesticides and herbicides. For SDG 005W, there were no field duplicates analyzed for organophosphorus pesticides or herbicides. For SDG Worms there were no field duplicates analyzed for pesticide/PCBs.

All RPDs were calculated for detected compounds, regardless if they were below the CRDL. If one concentration was undetected and one concentration was reported, than an NC (not calculated) was listed in the RPD column, followed by an NA (not applicable) in the RPD QC limit column. These results are presented in Appendix A. There following compounds exceeded the RPD QC limits.

SDG No.	Duplicate Pair	Compound	Conc.	RPD	Limit
002S	19BS001/19BS001D	4,4'-DDD	2.5/7.6	101	35
LWW SED	LWSD005/LWSD005D	4,4'-DDE	3.2/6.0	61	35
LWW SED	LWSD005/LWSD005D	4,4'-DDD	2.9/4.9	51	35
15-001	15SS01901/15SS01901D	4,4'-DDT	48/12	120	35
15-002	15SS02701/15SS02701D	4,4'-DDE	1.2/0.67	57	35

4.2 Accuracy

The percent recovery results of MS/MSDs and surrogate spikes are used to assess accuracy. Non-compliant MS/MSD recovery results are presented in Appendix A. Accuracy for MS/MSD samples was assessed by calculating the percent recoveries of six spiking compounds:

MS/MSD Samples

The functional guidelines establishes % Recovery QC criteria limits for MS/MSD samples as follows:

MS/MSD Criteria

	Water %R	Soil/Sediment %R
gamma-BHC (Lindane)	56-123	46-127
Heptachlor	40-131	35-130
Aldrin	40-120	34-132
Dieldrin	52-126	31-134
Endrin	56-121	42-139
4,4'-DDT	38-127	23-134

The percent recovery (%R) values for the MS/MSD samples listed below exceeded QC acceptance criteria.

SDG No.	Compound	%R MS/MSD	QC Limits
002W	4,4'-DDT	20/36	38-127
001SW	Gamma-BHC	35/46	56-123
001SW	Heptachlor	35/ok	40-131
001SW	Aldrin	32/ok	40-120
001SW	Dieldrin	41/50	52-126
001SW	Endrin	43/52	56-121
001SW	4,4'-DDT	35/ok	38-127
002SW	Aldrin	ok/36	40-120
002S	Endrin	ok/140	42-139
28-002	Endrin	143/ok	42-139
5-003	4,4'-DDT	ok/151	23-134

Percent recoveries that exceed QC limits indicate a potential high bias in associated sample results.

Surrogate Spikes

Two surrogate compounds, TCX and DCB, are used for spiking the pesticide/PCB samples. Surrogate spike recoveries for pesticide/PCB analyses were compared to the QC acceptance criteria specified for each SDG. Surrogates that exceeded QC acceptance criteria are summarized as follows:

SDG 006W

For the pesticide/PCB analysis of batch R8414, sample 02MW023I and 02MW011ID had a % recovery (%R) for TCX of 30% and 46%, respectively, while the QC limits were 47-101%. Sample results were qualified as estimated "UJ" since they were all non-detects.

For the kepone analysis of batch R8504, sample 02MW025S had a % recovery (%R) for DCB of 5.1%, while the QC limits were 7-137%. Sample results were qualified as estimated "UJ" since they were all non-detects.

For the pesticide/PCB analysis of batch R8515, sample 02MW022I had a % recovery (%R) for TCX of 44%, while the QC limits were 47-101%. Sample results were qualified as estimated "UJ" since they were all non-detects.

SDG 005W

Sample ID	TCX/DCB %R	QC limits %R TXC/DCB	Lab Conc	Lab Qual	EDS Conc	EDS Qual
02R006 Pest/PCB	45/59	47-101/0-113	0.020 0.040 0.080 0.20 1.0 2.0 0.50	U U U U U U U	0.020 0.040 0.080 0.20 1.0 2.0 0.50	UJ UJ UJ UJ UJ UJ UJ
02MW033I Kepone	141/39	47-101/0-113	1.0	U	1.0	UJ
15MW004S Kepone	46/5	47-101/0-113	1.0	U	1.0	UJ

SDG LWW SEW

Rinsate sample LWR025 recovered high at 109%/124% for TCX/DCB. High surrogate recoveries require qualification of positive results, however, since there were no positive results reported for this sample, no further action was taken.

SDG 004W

1. For batch M7503, pesticide/PCB samples 26R005, 26MW001S, and KBlk 14 all had high surrogate recoveries. In the case of high surrogate recoveries, positive results are qualified as estimated "J", however, since there were no positive results reported for these samples, no qualifications were required.

2. For batch M7513, pesticide/PCB samples 02MW018I and 02MW018S had high surrogate recoveries. In the case of high surrogate recoveries, positive results are qualified as estimated "J", however, since there were no positive results reported for this sample, no qualifications were required.

SDG 002W

1. For batch M7366, kepone samples 02R002, 02MW012I, 02MW001S, and KBlk 24 all had high surrogate recoveries. In the case of high surrogate recoveries, positive results are qualified as estimated "J", however, since there were no positive results reported for these samples, no qualifications were required.

2. For batch M7383, kepone sample 13MW003S had a high surrogate recovery of 114%. In the case of high surrogate recoveries, positive results are qualified as estimated "J", however, since there were no positive results reported for this sample, no qualifications were required.

3. For batch M7457, kepone blank KBlk07 had a high surrogate recovery of 116%. In the case of high surrogate recoveries, positive results are qualified as estimated "J", however, since there were no positive results reported for this sample, no qualifications were required.

SDG 008W

High surrogate recoveries were reported for samples 08MW010SD, 13R024, and 13K005. High surrogate recoveries require qualification of positive results, however, there were no positive results reported for these samples, therefore, no action was taken by the reviewer.

Sample 13MW008S had a low %R of 34% for TCX while the QC limits are 47-101%, therefore, all associated results were qualified as estimated "UJ" since they were all non-detects.

SDG 007W

TCX recovered low for samples 08OR019 and 08MW014S at 36% and 24%, respectively, while the QC limits are 47-101%, therefore, both pesticide/PCB samples were qualified as estimated "UJ" since all of the results were non-detects.

SDG 002S

1. TCX recovered high for pesticide/PCB sample 19BS004 at 109% while the QC limits are 51-98%, therefore, positive results reported for this sample were qualified as

estimated "J."

2. TCX recovered high for the matrix spike duplicate 19BS001MSD at 106%. Since this was the MSD sample, no action was taken.

SDG 001S

1. TCX recovered high for pesticide/PCB sample 19SS005 at 102% while the QC limits are 51-98%, therefore, positive results reported for this sample were qualified as estimated "J."

2. TCX and DCB recovered high for the kepone method blank PSB10711 at 126% and 125%, respectively, while the QC limits are 60-108% and 0-106%, respectively. Since this was the blank sample, no action was taken.

SDG 002SED

1. TCX recovered high for sample 02SD026 at 149% while the QC limits are 48-147%, however, since there were no positive results reported for this sample, no qualifications were required.

2. TCX and DCB recovered low for sample 02SD020DD at 41% and 33%, respectively, while the QC limits are 48-147% and 58-129%, respectively. All results were qualified as estimated "UJ" for this sample since they were all non-detects.

3. TCX recovered low for sample 02SD037 at 51% while the QC limits are 58-129%. All results were qualified as estimated "UJ" for this sample since they were all non-detects.

SDG 001SED

The two surrogates, TCX and DCB, did not recover for samples 02SD012 and 02SD011 due to interferences noted during analysis, therefore, the percent recoveries (%R) were reported as 0% for both surrogates in both samples. The laboratory re-extracted both samples within holding times and the %R values for 02SD012RE were acceptable, however, the recoveries for 02SD011RE could not be determined by the laboratory. The reviewer rejected the original analyses for both samples due to the 0% recoveries. Sample 02SD012RE was acceptable upon reanalysis and sample 02SD011RE was qualified as estimated "UJ" for all compounds since the detection limits were raised to the level of the interferences. The surrogate problems were also evident in the kepone analysis for the same samples. Both original analyses were rejected while the reanalyses were acceptable.

SDG 08/SL-01

1. TCX recovered high for kepone samples 08SL01102, 08SL01202, 08SL01302, and 08SL00705, at 190%, 214%, 224%, and 204%, while the QC limits are 38-189%. In addition, DCB recovered high at 166% for sample 08SL00701 while the QC limits are 26-159%. With high surrogate recoveries, positive results are qualified as estimated "J", however, since there were no positive results reported in this data package, no qualifications were required.

2. For several of the samples in M7688, the surrogate compounds were diluted out due to the dilutions required for analysis. There was no action taken on this basis.

SDG SWMU 2&4-001

For kepone analysis of 04BS01008D, DCB recovered below the 58-129 QC limits at 49%. Kepone results were qualified as estimated "UJ" for this sample.

SDG SWMU 2&4-002

TCX recovered at 139% for sample 02BS00307 which is above the QC limits of 60-108%. High surrogate recoveries require qualification of positive results, however, there were no positive results reported for this sample, therefore, no action was taken by the reviewer.

SDG SWMU 5-001

TCX recovered low for kepone sample 05SS00601 and 05BS00606D at 52% and 53%, respectively, while the QC limits are 60-108%, therefore, kepone results were qualified as estimated "UJ" since the results were non-detects. In addition, TCX recovered high at 112% and 160% for kepone samples 05BS00306 and 05BS00606. With high surrogate recoveries, positive results are qualified as estimated "J", however, since there were no positive results reported for kepone in these samples, no qualifications were required.

SDG SWMU 28-003

The kepone analysis for sample 28SS03101 had a high TCX recovery of 150% R while the QC limits are 48-147%. Qualifiers are added to positive results only for high surrogates. No positive results were reported so no qualifications were necessary.

SDG SWMU 3-001

1. TCX recovered high for pesticide/PCB samples 03BS00832 and 03BS00832D at 208% and 209%, while the QC limits are 54-118%. In addition, DCB recovered high at 136%

and 154% for the same samples, while the QC limits are 64-118%. With high surrogate recoveries, positive results are qualified as estimated "J", however, since there were no positive results reported for these samples, no qualifications were required.

2. All samples exhibited a high surrogate recovery for TCX for the kepone analysis and several samples also exceeded the percent recovery QC limits for DCB. With high surrogate recoveries, positive results are qualified as estimated "J", however, since there were no positive results reported for kepone in any of the samples, no qualifications were required.

SDG SWMU 56-001

For kepone analysis, 56BS00104, 56BS00204, and 56BS00304 had low recoveries for TCX at 59%, 41%, and 44%, respectively. The QC limits are 60-108%, however, the samples are already qualified due to calibration problems and no further action has been taken.

SDG SWMU 49-SED

1. TCX and DCB recovered low for sample 49SD015 at 23% and 23%, respectively, while the QC limits are 51-98% for TCX and 27-126% for DCB. All associated results were qualified as estimated "UJ" since they were all non-detects.

2. TCX recovered low at 30% for the kepone analysis of sample 49SD015 while the QC limits are 60-108%. Kepone was previously qualified as estimated "UJ" due to calibration problems, therefore, no further action is taken.

Initial and Continuing Calibration

The %RSD and %D QC exceedences and the compounds qualified based on those exceedences are summarized below. There were many correlation coefficients that exceeded the QC acceptance criteria (below 0.995). These compounds were qualified as estimated "UJ" for non-detects and "J" for positive results. There are also many %D values that exceeded QC acceptance criteria (>15%). The following summarizes initial and continuing calibration results for each SDG that was outside of QC acceptance criteria. Each summary refers to the pesticide/PCB analysis, including kepone, unless otherwise specified by the SDG number.

SDG 005W

The % difference for kepone was 27.5%, 30.4%, and 51.3% on 8/12, 8/12, and 8/14, respectively, therefore, all kepone results were qualified as estimated "UJ."

SDG 006W

1. For batches R8414 and R8421, the continuing calibration performed on 8/12/94 had a percent difference (%D) of 30.4% for kepone and 26.7% for surrogate compound DCB. In addition, during the continuing calibration performed on 8/13/94, DCB and kepone exceeded the 15%D QC limit with a 28.3%D and 25.9%D for DCB and 33.0%D for kepone. The kepone results for all samples in batches R8414 and R8421 were qualified as estimated "UJ" since all results were undetected.

2. For batches R8504 and R8515, the continuing calibration performed on 9/3/94 had a %D for kepone of 19.8% which exceeds the 15% D criteria, therefore, all samples in these two batches were qualified as estimated "UJ" for kepone, since all results were undetected.

3. For batch R8595, the continuing calibration performed on 9/6/94 had a %D for kepone of 20.5% which exceeds the 15%D criteria, therefore, all samples in batch R8595 were qualified as estimated "UJ" for kepone, since all results were undetected.

On 9/5/94, the coefficients of determination for kepone and DCB were 0.9913 and 0.9922, respectively. The associated samples in batch R8595 would typically be qualified for kepone due to this deficiency, however, kepone was previously qualified in these samples due to calibration problems, therefore, no further action was taken by the reviewer.

SDG 007W

The % Difference (%D) for the kepone calibrations performed on 9/6/94 and 9/9/94 were 20.5% and 37.1%, respectively, therefore, kepone was qualified as estimated "UJ" for all samples in lab batches R8608 and R8618, and R8634.

The coefficient of determination for each calibration curve was greater than 0.995 except for kepone and DCB analyzed on 9/5/94 and 9/23/94. The coefficients were 0.9913 for kepone and 0.9922 and 0.9911 for DCB, however, since kepone was previously qualified for the associated lab batches (R8608, R8618, and R8634) due to calibration problems no further action was taken by the reviewer. No action was taken based on the DCB exceedence.

SDG 007W Organophosphorus Pesticides

The % Difference (%D) for dimethoate during the calibration performed on 9/20/94 was 20.5%, therefore, dimethoate was qualified as estimated "UJ" for all samples in this SDG.

SDG 008W

Kepone had a coefficient of 0.9909 on 10/04/94, therefore, all kepone results in batches R8725 and R8783 were qualified as estimated "UJ" since they were all non-detects.

SDG 001SW

Several compounds exceeded the 15% Difference (%D) criteria. Methoxychlor had a %D of 15.6% and 18.8% on 8/22/94. On 8/23/94, alpha-BHC had a %D of 15.9% and DCB had a 16.1%D and 18.0% D. Alpha-BHC and DCB also exceeded the QC limits on 8/24/94 with a %D of 20.6% and 19.5% for alpha-BHC, and 15.4% and 17.2% for DCB. Since there were no positive results reported for the above compounds, and DCB is a surrogate compound, no qualifications were required.

SDG 003SW

All %D values were less than 15.0%, with the exception of kepone on 9/4/94 and 9/5/94 which had a %D of 23.2% and 18.7%, respectively, therefore, all kepone results were qualified as estimated "UJ" since they were all non-detects.

SDG 001S, 002S, 003S

The % Difference (%D) for kepone was 23.9% on 7/16/94, therefore, all kepone results were qualified as estimated "UJ" since they were all non-detects.

SDG 004S

The % Difference for Endrin Ketone and DCB on July 26, 1994, analyzed on column DB-5 was 1800.8% and 15.3%, respectively. In addition, the %D values for 4,4'-DDD, Endrin Ketone, and DCB on 7/26/94, analyzed on column DB-1701 were 18.9%, 17.8%, and 35.3%, respectively. Since Endrin Ketone exceeded the %D QC criteria on both columns, all associated results were qualified as estimated "UJ" since they were all non-detects. The % Difference (%D) for kepone was 23.9% on 7/16/94; therefore all kepone results were qualified as estimated "UJ" since they were all non-detects.

SDG 005S

The % Difference for Endrin Ketone and DCB on July 26, 1994, analyzed on column DB-5 was 1800.8% and 15.3%, respectively. In addition, the %D values for 4,4'-DDD, Endrin Ketone, and DCB on 7/26/94, analyzed on column DB-1701 were 18.9%, 17.8%, and 35.3%, respectively. Since Endrin Ketone exceeded the %D QC criteria on both columns, all associated results were qualified as estimated "UJ" since they were all non-detects. The % Difference (%D) for kepone was 23.9% on 7/16/94, therefore all kepone

results were qualified as estimated "UJ" since they were all non-detects.

SDG 001SED

Several compounds exceeded the 15% Difference (%D) criteria. Methoxychlor had a %D of 15.6% and 18.8% on 8/22/94. On 8/23/94, alpha-BHC had a %D of 15.9% and DCB had a 16.1%D and 18.0% D. Alpha-BHC and DCB also exceeded the QC limits on 8/24/94 with a %D of 20.6% and 19.5% for alpha-BHC, and 15.4% and 17.2% for DCB. Since there were no positive results reported for the above compounds, and DCB is a surrogate compound, no qualifications were required.

SDG 002SED

For batch M7635, the % Difference (%D) for methoxychlor and alpha-BHC on 8/28/94 were 20.0%, -24.5% and -23.6%, respectively. For batch M7645, alpha-BHC exceeded the 15% D criteria three times on 8/30/94 and 8/31/94 with a -16.1%, -17.1%, and -21.6% D. There were no positive results reported for any of these compounds, therefore, no qualifications were required.

SDG 003SED

All %D values were less than 15.0%, with the exception of kepone on 9/4/94 and 9/5/94 which had a %D of 23.2% and 18.7%, respectively, therefore, the reviewer used professional judgement and qualified all kepone samples that were analyzed before and after these failing standards as estimated "UJ" since they were all non-detects. This affects all samples in this SDG.

SDG BGROUND SW

The coefficient of determination for each calibration curve was greater than 0.995, with the exception of kepone on 9/21/94 which had a correlation coefficient of 0.9911, therefore, all kepone results were qualified as estimated "UJ" since they were all non-detects.

SDG BGROUND SED

The coefficient of determination for each calibration curve was greater than 0.995, with the exception of kepone on 9/21/94 which had a correlation coefficient of 0.9911, therefore, all kepone results were qualified as estimated "UJ" since they were all non-detects.

SDG LWW SEW

The coefficient of determination for each calibration curve was greater than 0.995 with the exception of kepone which had a coefficient of 0.9909 on 10/4/94, therefore, all kepone results were qualified as estimated "UJ" since they were all non-detects. DCB also had a low coefficient of 0.9908 on 10/4/94. Since DCB is a surrogate compound, no further action is taken.

SDG LWW SED

The coefficient of determination for each calibration curve was greater than 0.995 with the exception of kepone which had a coefficient of 0.9909 on 10/4/94, therefore, all kepone results for R8728 were qualified as estimated "UJ" since they were all non-detects. DCB also had a low coefficient of 0.9908 and 0.9911 on 10/4/94 and 9/23/94, respectively. Since DCB is a surrogate compound, no further action is taken.

SDG 08SL01

The % Difference (%D) for endrin ketone in batch M7682 was 21.9% on 9/10/94. There were no positive results reported for endrin ketone, therefore, no qualifications were required. The %D for kepone in batch M7688 was 19.2% and 21.3% on 9/17/94, therefore, all kepone results were qualified as estimated "UJ" since they were all non-detects.

The coefficient of determination for each calibration curve was greater than 0.995, with the exception of kepone. The coefficient of determination was 0.9911 on 9/21/94 for batches M7682 and M7688, therefore, all kepone results were qualified as estimated "UJ" for batch M7682 as the results were all non-detects. Sample results in batch M7688 were previously qualified for continuing calibration problems as stated in #2 above.

SDG 2&4-001

All %D values were less than 15.0% except endrin ketone on 9/10/94 for M7687. There were no positive results reported for this compound, therefore, no qualifications were required. For kepone analysis on 9/16/94 for M7687, 15.2% was reported. This affected samples 04BS00405, 04BS00905, and 04BS01008, therefore, all were qualified as "UJ" since they were all non-detects. Also, DCB on 9/7/94 for M7687 was 16.2%D. No qualifications were required since this is a surrogate compound.

The coefficient of determination for each calibration curve was greater than 0.995 except kepone on 9/21/94 which was 0.9911 for M7698. All kepone results in M7698 were qualified as estimated "UJ" since they were all non-detects.

SDG 2&4-002

All %D values were less than 15.0% except DCB on 9/22/94 and 9/23/94 which had a 15.7% and 19.5% D, respectively. No qualifications were required since this is a surrogate compound. Isodrin and diallate #2 had %D values of 22.4% and 18.2%. There were no positive results for either compound, therefore, no qualifications were required. On 9/15/94, 4,4'-DDD had a 16.8% D, therefore, positive results for this compound were qualified as estimated "J" in the associated samples 04BS00705 and 04BS00209. These samples were analyzed immediately following the failing standard.

SDG 28-001

Kepone exceeded the %D criteria on 9/4/94 and 9/5/94 with a 17.9% and 16.1%D, respectively. All kepone results, excluding samples 28SS00501, 28SS00601, 28SS00701, and 28SS00901, were qualified as estimated "UJ" since they were all non-detects. DCB also exceeded the %D criteria with a 15.4%D on 9/5/94. There was no action taken since this was a surrogate compound.

SDG 28-002

Endrin ketone and heptachlor epoxide exceeded the %D criteria on 9/10/94 and 9/11/94 with a 21.9% and 67.4%D, respectively. There were no positive results reported for either compound, therefore, no qualifications were required. DCB also exceeded the %D criteria with a 16.2%D on 9/17/94. There was no action taken since this is a surrogate compound.

SDG 28-003

Calibration criteria have been met and no action has been taken. All %D values were less than 15.0% except endrin ketone on 9/10/94 which was 21.9% on 9/10/94, 25.4% on 9/11/94, and 34.2% on 9/11/94. Also, heptachlor epoxide was 67.4% on 9/11/94. No positive results were reported for either compound no qualifications were required. Kepone exceeded the 15%D criteria on 9/16/94 with a 15.2% D so all samples in M7683 were qualified as estimated "UJ" since they were all non-detects.

The coefficient of determination for each calibration curve was greater than 0.995 except kepone on 9/21/94 was 0.9911. All results in M7705 and M7698 were qualified as estimated "UJ" since all were non-detects.

SDG 5-001

The % Difference (%D) for 4.4'-DDD was 16.8% and 15.3% on 9/15/94 and 9/09/94, respectively. Since the second column had an acceptable %D and there were no positive

results reported for 4,4'-DDD, no qualifications were required. Kepone had a %D of 19.8% and 17.4% on 9/03/94, therefore, the associated samples 05SS00501, 05SS00601, and 05SS00901, were qualified as estimated "UJ" since they were all non-detects. DCB had a 15.7% D reported on 9/22/94 for the kepone analysis. Since DCB is a surrogate compound, no action is taken.

The coefficient of determination for each calibration curve was greater than 0.995, with the exception of DCB which had a coefficient of 0.9923, 0.9922, and 0.9911 on 9/2/94, 9/5/94, and 9/23/94, respectively. Since DCB is a surrogate compound, no action is taken. Kepone had a coefficient of 0.9913 on 9/5/94 for batches R8530 and R8531, therefore, all kepone results were qualified in these batches as estimated "UJ" since they were all non-detects.

SDG 5-002

The coefficient of determination for each calibration curve was greater than 0.995, with the exception of Aroclor-1254 which had a coefficient of 0.9924 on 9/26/94, therefore, positive results for Aroclor-1254 were qualified as estimated "J." Non-detects were not qualified since the coefficient of determination was acceptable on the other column. Kepone had a coefficient of 0.9911 on 9/21/94, therefore, all kepone results were qualified as estimated "UJ" since all results were non-detects.

Retention time criteria have been met and no action has been taken, however, kepone did exceed the calculated retention time window in one of the continuing calibration runs. The retention time windows were updated and the remaining calibrations were acceptable. According to the case narrative, the retention times also shifted for sample 05BS00509, however, even though 4,4'-DDE was outside of the windows, the analyst determined that it should be reported. The reviewer qualified this result as estimated "J."

SDG 5-003

The %D for Aroclor 1260 was 27.4% on 10/07/94, therefore, associated sample 05SS01601 was qualified as estimated "J." Kepone has a %D of 17.5% on 9/26/94, however, none of the samples were affected since an additional standard was analyzed immediately following and it was acceptable. DCB had a 27.8% and 21.0% D reported on 9/26/94 and 9/27/94, respectively. Since DCB is a surrogate compound, no action is taken.

SDG 15-001

All %D values were less than 15.0%, with the exception of 4,4'-DDE on 10/20/94 which had a 15.5% and 18.7% D. These standards bracketed samples 15R030, 15SS00901,

15SS00901D, 15SS01901, and 15SS01901D, therefore, all 4,4'-DDE results were qualified as estimated "J" for positive results and "UJ" for non-detects. On 10/20/94, 4,4'-DDD had a 20.0% and 22.9% D, methoxychlor had a 16.4% and 16.1% D, and endrin ketone had a 17.52% D for column SPB-5. The %D values were acceptable on the RTX-200 column and there were no positive results reported for these compounds, therefore, no qualifications were required.

The coefficient of determination for each calibration curve was greater than 0.995 with the exception of kepone which had a coefficient of 0.9911 on 9/21/94, therefore, all kepone results in batches M7902 and M7867 were qualified as estimated "UJ" since they were all non-detects.

SDG 15-001 Organophosphorus Pesticides

All %D values were less than 15.0%, with the exception of famphur on 10/07/94 which was 52.2%. The reviewer qualified all samples analyzed before and after this failing standard as estimated "UJ" since they were all non-detects. This includes all samples in M7867 with the exception of 15SS02501 and 15SS02101. For batch M7902, phorate had a %D of 16.6% and 16.1% on 10/26/94. This affected sample 15R030 which was analyzed between these two standards, therefore, phorate was qualified as estimated "UJ" since this compound was undetected.

The coefficient of determination for each calibration curve was greater than 0.995 with the exception of methyl parathion which had a coefficient of 0.9947 on 10/26/94, therefore, all methyl parathion results in batch M7902 were qualified as estimated "UJ" since they were all non-detects.

SDG 15-001 Herbicides

The coefficient of determination for each calibration curve was greater than 0.995 with the exception of 2,4,5-T which had a coefficient of 0.9921 on 10/13/94, therefore, all samples results in batch M7867 were qualified as estimated "UJ" since they were all non-detects.

SDG 15-002

All %D values were less than 15.0%, with the exception of kepone on 10/11/94 for R8742 which had a 23.5% D. All kepone results in R8742 were qualified due to linearity problems, therefore, no further action was taken. DCB also had a 20.0%D on 10/11/94, however, since this is a surrogate compound, no action is taken.

The coefficient of determination for each calibration curve was greater than 0.995 with the exception of kepone which had a coefficient of 0.9909 on 10/4/94, therefore, all

kepone results in batch R8742 was qualified as estimated "UJ" since they were all non-detects. DCB had coefficients of 0.9908 and 0.9920 on 10/4/94 and 10/25/94, respectively. TCX had a 0.9923 coefficient on 10/25/94. Since DCB and TCX are surrogate compounds, no action is taken by the reviewer.

SDG 15-002 Organophosphorus Pesticides

All %D values were less than 15.0%, with the exception of sulfotepp on 10/07/94 which was 15.7%. The reviewer qualified all samples analyzed before and after this failing standard as estimated "UJ" since they were all non-detects. This includes all samples in R8742.

SDG 15-002 Herbicides

All %D values were less than 15.0%, with the exception of 2,4,5-TP (silvex) on 10/18/94 which had a 16.0%D, therefore, all samples analyzed following this failing standard (all samples in R8785) were qualified as estimated "UJ" since they were all non-detects.

SDG 3-001

The % Difference (%D) for alpha-BHC was 15.5% and 16.1% on 8/17/94 and 15.5% and 15.9% on 8/18/94. There were no positive results reported for alpha-BHC, therefore, no qualifications were required.

SDG 56-001

On 9/26/94, kepone exceeded the %D criteria with a 17.5%D. This affected samples 56SS00101, 56SS00101D, 56BS00104, 56SS00201, 56BS00204, 56SS00301, and 56BS00304, therefore, kepone was qualified in these samples as estimated "UJ" since they were all non-detects.

SDG BGROUND BS

The % Difference (%D) for delta-BHC was 17.5% on 12/30/94, however, since the other column was acceptable and there were no positive results reported for this compound, no qualifications were required. Kepone had a %D of 16.9% on 10/19/94. However, this date is suspicious since the initial calibration was analyzed on 12/28/94. The reviewer did not use the continuing calibration data since kepone was already qualified in all samples due to linearity problems (see #3 below).

The coefficient of determination for each calibration curve was greater than 0.995, with the exception of DCB and TCX which had coefficients of 0.9935 on 12/28/94 for DCB

and 0.9933 and 0.9949 on 12/28/94 and 12/29/94 for TCX. Since DCB and TCX are surrogate compounds, no action is taken. Kepone had a coefficient of 0.9948 on 12/29/94, therefore, all kepone results were qualified as estimated "UJ" since they were all non-detects.

SDG Worms

All %D values were less than 15.0%, with the exception of alpha-BHC and delta-BHC on 12/31/94 which had %D values of 15.6% and 19.0%, respectively. Delta-BHC also had a %D of 17.5% on 12/30/94, however, since the %D values were acceptable on the other column and there were no positive results reported for either compound, no further action was taken. DCB exceeded the %D QC limits on 12/29/94 with a 17.9% D, however, since DCB is a surrogate compound, no qualifications are required.

The coefficient of determination for each calibration curve was greater than 0.995, with the exception of TCX and DCB on 12/28/94 which had coefficients of 0.9933 and 0.9935, respectively. Since TCX and DCB are surrogate compounds, no action was taken. Chlordane had a low coefficient of 0.9919 on 12/31/94, therefore, chlordane was qualified as estimated "J" for positive results and "UJ" for non-detects.

SDG Fish

All %D values were less than 15.0%, with the exception of endrin ketone on 9/10/94 which had an 18.1%D. Since the %D was acceptable on the other column and there were no positive results reported for endrin ketone, no further action was taken.

SDG 49-SED

The % Difference (%D) for DCB was 19.7% on 10/10/94, however, since this is a surrogate compound no action is taken. Kepone had a %D of 16.6% on 10/12/94, therefore, all kepone results were qualified as estimated "UJ" since they were all non-detects.

The coefficient of determination for each calibration curve was greater than 0.995, with the exception of DCB which had a coefficient of 0.9908 on 10/04/94. Since DCB is a surrogate compound, no action is taken. Kepone had a coefficient of 0.9909 on 10/04/94, however, since kepone was previously qualified due to continuing calibration problems, no further action is taken.

4.3 Representativeness

Method blanks, equipment rinsate blanks, and field source blanks were used to evaluate representativeness for the pesticide/PCB analyses. A summary of the contaminants found

in these blanks can be found below. The laboratory method blanks were used to assess the sample data. There were no contaminants found in either the equipment rinsate blanks or the field source blanks.

The following summarizes the method blanks, equipment rinsate blanks, trip blanks, and field source blanks.

Method Blanks

Method blanks were analyzed with each SDG for pesticide/PCB compounds to identify contaminants that may have been introduced through analytical instrumentation or sample preparation. Contaminants were detected in six of the SDGs that were analyzed for pesticide/PCBs. The following summarizes method blank contamination for each of these SDGs.

SDG 008W

Pesticide blank 9WB10914 had chlorobenzilate detected at 0.52 ug/L, however, this compound was not detected in any of the samples, therefore, no qualifications were required. Pesticide and kepone blanks 9WB10916, 9WB20914, and 9WB10927, were free of contamination.

SDG 003SW

Pesticide blank PBLK05 had 4,4'-DDT detected at 0.043 ug/L. This affected sample 02SW040, therefore, 4,4'-DDT was qualified as estimated "UJ" in this sample. Kepone blank KBLK05 was free of contamination.

LWW SED

Pesticide and kepone blanks 9SB10915 and 9WB20914 were free of contamination, however, blank sample 9WB10914 had chlorobenzilate detected at 0.52 ug/L. Since chlorobenzilate was not detected in the associated samples, no further action was taken.

2&4-001

4,4'-DDT was detected in PBlk05 at 0.057 ug/l, however, this did not affect the associated sample (02R012), therefore, no qualifications were required.

28-001

Pesticide blanks PBlk12, PBlk18, and kepone blanks KBlk08, KBlk12, KBlk18 were free of contamination, however, pesticide blank PBLK08 had 4,4'-DDT detected at 0.057

ug/L. This affected the associated sample 28R016, therefore, 4,4'-DDT was qualified as undetected "U" for this sample.

SDG 5-003

Pesticide and kepone blanks 9SB20914 and 9WB20914 were free of contamination, however, chlorobenzilate was detected in water method blank 9WB10914 at 0.52 mg/L. This did not affect the water sample in this data package, therefore, no action is required.

Equipment/Rinsate Blanks

Equipment rinsate blanks are used to evaluate contaminants that may have been introduced through the sampling equipment or laboratory handling of samples. All equipment rinsate blanks were free of contamination.

Field Source Blanks

Field source blanks are used to evaluate contaminants that may have been introduced through site conditions. Field source blanks are typically prepared in the field (on-site) as opposed to a trip blank which is typically prepared at the laboratory and shipped with the cooler. All field source blanks were free of contamination.

4.4 Comparability

The laboratory used standard analytical methods for all of the analyses. The method detection limits were below the contract required quantitation limits except in the cases where dilutions were required. These cases are summarized below:

SDG	Sample ID
Worms	15E02301DL, 15E03001DL

4.5 Completeness

There were no rejections of the data in any of the SDGs for pesticide/PCB, organophosphorus pesticide or herbicide analyses. The percent of valid data for the pesticide/PCB compounds for this project is 100%. The data quality objective for completeness for this project is 95%; therefore, the completeness was acceptable. There are a total of 17,236 pesticide/PCB analyses, 626 organophosphorus analyses, and 318 herbicide analyses. There were no rejections for organophosphorus or herbicides analyses, therefore, the percent completeness for these analyses is 100%.

5.0 Metals and Cyanide

A total of 42 SDGs of the 44, comprised of groundwater, surface water, sediment, soil borings, sludge, and tissue samples, were analyzed for metals and cyanide. Two of the SDGs SWMU 15-001 and SWMU 15-002, were not analyzed for metals or cyanide. SDGs 009W and 010W were analyzed for cyanide only. This section discusses the QC supporting documentation as defined by the PARCC criteria and evaluated based on the project specific DQOs.

5.1 Precision

Metals and cyanide analyses are different from organic analyses in that no matrix spike duplicate sample is evaluated. A laboratory duplicate sample is analyzed instead. For duplicate analyte concentrations greater than 5X the CRDL, the relative percent difference (RPD) between the two reported results must be less than 20% for aqueous samples (35% for soil samples).

For duplicate analyte concentrations less than 5X the CRDL, the difference between the two reported results must be less than the CRDL value for aqueous samples, or less than 2X the CRDL value for soil samples. RPDs for samples with values less than the CRDL are not calculated.

Field Duplicates

The following field duplicate results were outside of QC acceptance criteria. A summary of samples that were qualified based on field duplicate results is presented in Appendix A.

SDG No.	Analyte	Matrix	RPD or Difference	RPD Limit
001SED	Chromium	Sediment	RPD=71.1	35
001SED	Zinc	Sediment	RPD=76.7	35
08/SL-01	Chromium	Sludge	RPD=38.5	35
08/SL-01	Copper	Sludge	RPD=40.2	35
08/SL-01	Mercury	Sludge	D=0.33	0.21
08/SL-01	Zinc	Sludge	RPD=36.5	35
28-001	Lead	Soil	D=1.8	1.29
5-001	Cadmium	Soil	D=5.7	2
5-001	Copper	Soil	RPD=161	35
5-002	Zinc	Soil	D=18.0	9.2
5-003	Lead	Soil	D=2.9	1.31

56-001	Chromium	Soil	D=10.4	4.0
56-001	Copper	Soil	D=18.9	10
56-001	Lead	Soil	RPD=94.3	35
56-001	Zinc	Soil	RPD=115	35

Field duplicates were not analyzed for SDG Worms, SDG Fish or Amended 007W. Additional RPD values that exceeded QC acceptance criteria but did not cause qualifications are summarized below.

For 001SED, the RPD for lead in field duplicate pair 02SD029 and 02SD029D was 172.2. All lead results have already been qualified for matrix spikes and duplicates.

SDG 002SED, the field duplicate pair exceeded the ±2X CRDL criteria for lead, however, the associated samples were qualified for matrix spike deficiencies, therefore, no further action was taken.

For SDG SWMU 28-003, lead and zinc exceeded duplicate acceptance criteria, however, the associated samples were previously qualified due to preparation blank contamination and matrix spike/duplicates which exceeded acceptance criteria.

For SDG SWMU3-001, manganese exceeded the 35% RPD acceptance criteria with a 42.5 RPD, however, the associated samples were previously qualified for matrix spike problems, therefore, no further action was taken.

For SDG 001S, chromium (RPD=103.8), lead (RPD=92.3), and zinc (D=21.8) exceeded acceptance criteria for field duplicates. These analytes have already been qualified for matrix spike (Pb), matrix duplicate (Cr), and serial dilution (Zn) problems.

For SDG 004S, the RPDs for lead and zinc exceeded the soils duplicate criteria of +/- 35%. The above results have already been qualified for matrix duplicate and serial dilution (respectively) results which exceed acceptance criteria.

For 003W, the field duplicate results for the pairs summarized were considerably different.

Analyte	0BMW001SF/0BMW001DF		0BMW001S/0BMW001D	
Calcium	79,300	248,000	79,000	251,000
Magnesium	11,800	412,000	12,300	419,000
Manganese	70.4	227	70.9	228
Sodium	10,600	3,280,000	10,500	3,310,000
Iron	177	151	425	609

Results for field duplicate pairs, excluding those listed in the table above, were within acceptance limits except for manganese (RPD 42.5%) in 26MW001S and 26MW001SD. Associated sample results have already been qualified due to laboratory duplicate problems. The client tracking list for SDG003W indicates that sample 02MW016S is a duplicate. This sample was collected on 7-10-94. The only sample matching this one is in SDG001W and was collected on 6-18-94. They are not considered to be duplicates.

Laboratory Duplicates

The following laboratory duplicate results were outside of QC acceptance criteria. See Appendix A for a list of associated samples that were qualified based on laboratory duplicate results.

SDG No.	Analyte	Matrix	RPD or Difference	RPD Limit
003W	Iron	Water	D=162	100
003W	Manganese	Water	RPD=42.6	15
006W	Lead	Water	RPD=186.4	3.0
001S	Chromium	Soil	D=5.79	4.0
004S	Lead	Soil	RPD=47.9	35
001SED	Lead	Sediment	RPD=73.4	35
002SED	Chromium	Sediment	D=12.3	4.0
003SED	Mercury	Sediment	RPD=53.8	35
2&4-001	Lead	Soil	D=2.16	1.4
5-002	Zinc	Soil	D=18.2	8.0
5-003	Copper	Soil	D=93.9	10.8
5-003	Zinc	Soil	D=65.4	8.6
28-003	Copper	Soil	D=18.2	10.4
28-003	Zinc	Soil	D=12.0	8.4
3-001	Manganese	Soil	RPD=78.3	35

Additional RPD values that exceeded QC acceptance criteria but did not cause qualifications are summarized below.

For SDG 5-003, duplicate analyte concentrations of copper and zinc exceeded the ±2X CRDL criteria for soils. Copper and zinc results have been qualified for matrix spike problems, and no further action will be taken by the reviewer. For SDG 3-001, duplicate RPD for manganese in 03BS00832 matrix duplicate is 78.3. Soil boring samples have been qualified for manganese spike recovery exceeding acceptance criteria and no further action is taken.

5.2 Accuracy

Matrix Spike Analysis

The matrix spike recovery QC limits are 75-125%. It should be noted that spike recovery limits do not apply when the sample concentration exceeds the spike concentration by a factor of four or more. MS analytical results for each SDG are presented in Appendix A. There were many %R exceedences for the metals analyses. One possible explanation for this is that the reviewer used the batch specific MS to evaluate the data. The individual SDGs consisted of several batches and the laboratory analyzed an MS sample for each batch. The reviewer used each MS to apply to each individual batch, however, at the end of the project the client instructed the reviewer to use the client designated MS for the entire SDG. Using only one MS would have reduced the amount of matrix spike recovery exceedences, however, the data was evaluated and qualified using all of the matrix spikes.

Initial and Continuing Calibration Results

All %RSDs and %Ds were within the QC limits for each SDG. The %RSD and %D values do not suggest any systematic analytical problem with either accuracy or precision.

5.3 Representativeness

Preparation blanks, equipment rinsate blanks, and field source blanks were analyzed for metals and cyanide to evaluate representativeness. Blank results are summarized in Appendix B.

The preparation blanks are used first to evaluate data quality, followed by the highest value of the equipment rinsate blanks or the field source blanks.

Sample results were qualified due to laboratory blanks that had target analytes where the absolute value of the reported results was greater than or equal to the corresponding IDL value; sample results were less than 5X the absolute value of the blank result. Samples that were qualified as estimated due to laboratory blank contamination were flagged by the data reviewer with a "UJ." Compounds that were qualified due to blank contamination that were reported below the blank concentration were raised to the concentration of the blank and the laboratory qualifier was replaced by the reviewer with a "UJ." The qualifier "UJ" in this case means that the compound is considered to be undetected and the value reported is an estimated detection limit because the compound was identified in the blank as well as in the sample. The laboratory QC samples are summarized in Appendix B.

Preparation Blanks

Preparation blanks were analyzed for each SDG to identify target analytes that may have been introduced through the analytical instrumentation or sample preparation. Many analytes were detected in the preparation blanks including antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, copper, cyanide, iron, lead, manganese, mercury, selenium, silver, sodium, thallium, tin, and zinc. Preparation blanks were designated with the prefix "PBW","PWB","Prep", "PBS", "WTFN", "WTIC", "SOFN", "SOIC", and "SOHG." Each preparation blank prefix was followed by the preparation date. Preparation blank contamination is summarized in Appendix B.

Equipment Rinsate Blanks

Target analytes that were found in the equipment rinsate blanks through inadequate decontamination procedures or sampling equipment were applied to associated samples. Target analytes found in the equipment rinsate blanks are aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, cobalt, copper, cyanide, lead, magnesium, manganese, mercury, nickel, selenium, sodium, tin, vanadium, and zinc. The equipment rinsate blanks associate with this project are designated as 02R001, 02R002, 02R006, 02R008, 02R010, 02R012, 02R015, 03R007, 04R020, 05R018, 05R021, 05R023, 08R017, 08R019, 08R034, 0BR003, 0BR035, 13R024, 19R004, 26R005, 28R016, 49R014, 49R027, 56R022, and LWR025,.

Field Source Blanks

Target analytes that were found in the field source blanks through background or on-site contamination were applied to associated samples. Target analytes found in the field source blanks are calcium, cyanide, copper, lead, mercury, sodium, and zinc. The field source blanks associate with this project are designated as 02K001, 02K002, 02K003, 02K004, and 13K005.

Initial and Continuing Calibration Blanks

Per the project specific scope of services, initial and continuing calibration blanks were not used to qualify the sample data for this project.

5.4 Comparability

The laboratory used standard analytical methods for all of the analyses. The method detection limits were below the CRDLs. Some samples were qualified due to blank contamination, which raised the detection limit for the blank contaminants in those samples. Overall, the comparability of the data is considered acceptable.

5.5 Completeness

There were rejections of the data in SDGs 002W, 004W, 003W, 003SED, SWMU 28-001, SWMU 5-003, SWMU 3-001 due to low percent recovery values for the matrix spike. Mercury was rejected in SDG Worms due to an excessive holding time violation. The percent of valid data for the inorganic compounds for this project is 99.6%. The data quality objective for completeness for this project is 95%; therefore, the completeness for this project was acceptable. There are a total of 10,301 inorganic analyses and 38 of these compounds were rejected. A summary of rejected compounds can be found in Appendix C.

APPENDIX A
Precision and Accuracy Tables

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 09MW009I SDG No. 001W			Acceptable Range for %R	MSD SDG No. 001W			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs 4-nitrophenol Pyrene	 ug/L ug/L	 0	 197	 98	 10-80	 0	 168	 84	 -- 35	 -- 31
Pest/PCBs (All criteria were met)										
Metals Mercury Cyanide	 ug/L ug/L	 0.10U 2.7U	 0.63 70.79	 63.0 70.8	 75-125 75-125	Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Unit	MS 09MW012I/ 16MW001IS/00MW001SS SDG No. 002W			Acceptable Range for %R	MSD SDG No. 002W			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs										
4-nitrophenol	ug/L	0	234	117	10-80	0	232	116	--	--
2,4-dinitrotoluene	ug/L								67	38
Pest/PCBs										
Gamma-BHC	ug/l	<.02	NR	NC	NA	<.02	NR	NC		
Heptachlor	ug/l	<.02	NR	NC	NA	<.02	NR	NC		
4,4'-DDT	ug/l	<.02	0.20	20	38-127	<.04	0.36	36	54	27
Metals						Not Applicable				
Antimony	ug/l	22.34U	27.70	138.5	75-125					
Beryllium	ug/l	0.146U	37.32	74.6	75-125					
Nickel	ug/l	9.72U	337.43	74.7	75-125					
Cyanide	ug/l	0.81U	13.69	13.9	75-125					
Selenium	ug/l	1.325U	6.14	61.4	75-125					
Selenium	ug/l	1.325U	4.29	42.9	75-125					

NR=Not Recoverable
NA=Not Applicable
NC=Not Calculated

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 0SMW001R/ 22MW002S/26MW001S SDG No. 003W			Accept-able Range for %R	MSD SDG No. 003W			RPD	Accept-able Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs										
N-nitroso-di-n-propylamine	ug/l	0	163	163	41-116	0	162	162	--	--
4-Nitrophenol	ug/l	16.4	199	91	10-80	16.4	187	85	--	--
2,4-dinitrotoluene	ug/l	0	100	100	24-96	--	--	--	--	--
Pentachlorophenol	ug/l	0	208	104	9-103	--	--	--	--	--
Phenol	ug/l	0	13	6	12-110	--	--	--	80	42
2-Chlorophenol	ug/l	0	29	14	27-123	--	--	--	67	40
1,4-Dichlorobenzene	ug/l	0	16	16	36-97	0	8	8	67	28
1,2,4-Trichlorobenzene	ug/l	0	18	18	39-98	0	15	15	--	--
4-Chloro-3-methylphenol	ug/l	0	--	--	--	--	--	--	59	42
Acenaphthene	ug/l	0	37	37	46-118	0	39	39	--	--
4-Nitrophenol	ug/l	0	--	--	--	--	--	--	67	50
Pest/PCBs										
Gamma-BHC									20	15
Heptachlor									24	20
Aldrin									25	22
Metals						Not Applicable				
Selenium	ug/l	1.325U	6.69	66.9	75-125					
Thallium	ug/l	1.400B	28.32	538	75-125					

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 22MW002S/ 26MS001S/02MW037I/ 02MW030S/01MW001S SDG No. 004W			Accept-able Range for %R	MSD SDG No. 004W			RPD	Accept-able Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs (For 26MW001S See 003W Above) 1,2,4-Trichlorobenzene	ug/l	0	38	38	39-98					
Pest/PCBs (For 26MW001S See 003W Above)										
Metals						Not Applicable				
Antimony	ug/l	22.3U	22.34U	0	75-125					
Barium	ug/l	40.86B	1483.3	72.1	75-125					
Beryllium	ug/l	0.184U	35.03	70.1	75-125					
Chromium	ug/l	2.04U	140.73	70.4	75-125					
Cobalt	ug/l	2.68U	354.64	70.9	75-125					
Iron	ug/l	6.9U	724.36	72.4	75-125					
Lead	ug/l	20.47U	20.47U	0	75-125					
Manganese	ug/l	138.88	505.09	73.2	75-125					
Nickel	ug/l	7.95B	341.63	66.7	75-125					
Selenium	ug/l	13.4B	13.25U	-134	75-125					
Tin	ug/l	9.4U	7425.1	74.5	75-125					
Vanadium	ug/l	1.69U	370.46	74.1	75-125					
Selenium	ug/l	13.25U	18.40B	184	75-125					
Selenium	ug/l	13.25U	6.69	66.9	75-125					

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 020P005/02MW011I SDG No. 005W			Acceptable Range for %R	MSD SDG No. 005W			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs (All criteria were met)										
Pest/PCBs/ Organophosphorus Pesticides/ Herbicides (All criteria were met)										
Metals						Not Applicable				
Barium	ug/l	49.94U	1438.3	69.4	75-125					
Beryllium	ug/l	0.30U	36.75	73.5	75-125					
Chromium	ug/l	2.60U	133.3	66.6	75-125					
Cobalt	ug/l	3.10U	370.36	74.1	75-125					
Manganese	ug/l	292.69	650.84	71.6	75-125					
Nickel	ug/l	5.90U	339.17	67.8	75-125					
Vanadium	ug/l	6.84B	373.06	73.2	75-125					

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 02MW011I/ 02MW024S/02MW022S/ 02MW019S/15MW005S SDG No. 006W			Accept-able Range for %R	MSD SDG No. 006W			RPD	Accept-able Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs 4-Nitrophenol	ug/l	0	204	102	10-80	0	206	103	--	--
Pest/PCBs (All criteria were met)										
Metals (For 02MW011I See 005W Above)						Not Applicable				
Barium	ug/l	22.89B	1338.3	65.8	75-125					
Manganese	ug/l	1489.0	1835.2	69.2	75-125					
Thallium	ug/l	6.0U	37.0B	74.0	75-125					

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 15MW005S/ 02MW038I SDG No. 007W			Accept-able Range for %R	MSD SDG No. 007W			RPD	Accept-able Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs 4-Nitrophenol 4-Nitrophenol	 ug/l ug/l	 0 0	 173 179	 86 90	 10-80 10-80					
Pest/PCBs Organophosphorus Pesticides/ Herbicides (All criteria were met)										
Metals Beryllium	 ug/l	 0.30U	 36.41	 72.8	 75-125	Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 08MW010S SDG No. 008W			Acceptable Range for %R	MSD SDG No. 008W			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs 4-Nitrophenol	ug/l	0	175	88	10-80	0	188	94		
Pest/PCBs 4,4'-DDT	ug/l								35	27
Metals (All criteria were met)						Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 02MW012I SDG No. 009W			Acceptable Range for %R	MSD SDG No. 009W			RPD	Acceptable Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
Metals (All criteria were met)						Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 26MW001S SDG No. 010W			Accept-able Range for %R	MSD SDG No. 010W			RPD	Accept-able Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
Metals (All criteria were met)						Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 08MW020S SDG No. 011W			Accept-able Range for %R	MSD SDG No. 011W			RPD	Accept-able Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs										
Phenol	ug/l	--	--	--	12-89	0	180	90		
4-Nitrophenol	ug/l	0	199	100	10-80	0	200	100		
4-Chloro-3-methylphenol	ug/l	--	--	--	23-97	0	202	101		
Pentachlorophenol	ug/l	--	--	--	9-103	0	210	105		
Pest/PCBs (All criteria were met)										
Metals (All criteria were met)						Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Unit	MS 02SW031/02SW012 SDG No. 001SW			Acceptable Range for %R	MSD SDG No. 001SW			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs 4-Nitrophenol	ug/l	0	212	106	10-80	0	197	98		
Pest/PCBs Gamma-BHC	ug/l	<0.02	0.18	35	56-123	<0.02	0.23	46	26	15
Heptachlor	ug/l	<0.02	0.18	35	40-131	<0.02	--	--	24	20
Aldrin	ug/l	<0.02	0.16	32	40-120	<0.02	--	--	36	22
Dieldrin	ug/l	<0.04	0.41	41	52-126	<0.04	0.50	50	21	18
Endrin	ug/l	<0.04	0.43	43	56-121	<0.04	0.52	52	--	--
4,4'-DDT	ug/l	<0.04	0.35	35	38-127	<0.04	--	--	--	--
Metals Arsenic	ug/l	21.44	36.91	38.7	75-125	Not Applicable				
Lead	ug/l	20.47U	46.20	231	75-125					
Selenium	ug/l	1.32U	5.89	58.9	75-125					

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Unit	MS 02SW020/02SW038 SDG No. 002SW			Accept-able Range for %R	MSD SDG No. 002SW			RPD	Accept-able Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs 4-Nitrophenol	ug/l	0	176	88	10-80					
Pest/PCBs Aldrin	ug/l				40-120	<0.02	0.18	36		
Metals Lead	ug/l	20.47U	45.0	225	75-125	Not Applicable				
Thallium	ug/l	12.98U	32.5	65	75-125					
Arsenic	ug/l	5.67	10.47	12	75-125					
Cadmium	ug/l	5.86	41.81	71.9	75-125					
Cobalt	ug/l	2.68U	367.85	73.6	75-125					
Lead	ug/l	47.50	80.40	164	75-125					
Nickel	ug/l	7.3U	353.37	70.7	75-125					

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 02SW041 SDG No. 003SW			Acceptable Range for %R	MSD SDG No. 003SW			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs 2,4-Dinitrotoluene	ug/l								41	38
Pest/PCBs (All criteria were met)										
Metals						Not Applicable				
Arsenic	ug/l	3.05B	20.91	44.6	75-125					
Lead	ug/l	15.33	18.69	16.8	75-125					
Selenium	ug/l	1.325U	7.37	73.7	75-125					
Thallium	ug/l	1.298U	29.57	59.1	75-125					

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 19SS001 SDG No. 001S			Acceptable Range for %R	MSD SDG No. 001S			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs 2,4-Dinitrotoluene	ug/kg	0	3750	109	28-89	0	3600	105		
Pest/PCBs (All criteria were met)										
Metals Chromium	ug/kg	11.39	18.32	167	75-125	Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 19BS001 SDG No. 002S			Accept-able Range for %R	MSD SDG No. 002S			RPD	Accept-able Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs 2,4-Dinitrophenol	ug/kg	0	4060	110	58-89	0	4110	111		
Pest/PCBs Endrin	ug/kg				42-139	<1.3	52	140		
Metals (All criteria were met)						Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 19SD001 SDG No. 003S			Acceptable Range for %R	MSD SDG No. 003S			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs										
2,4-Dinitrophenol	ug/kg	0	4260	98	28-89	0	3940	91		
Pest/PCBs (All criteria were met)										
Metals (All criteria were met)						Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS AASS001 SDG No. 004S			Acceptable Range for %R	MSD SDG No. 004S			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs 2,4-Dinitrotoluene	ug/kg	0	3250	93	28-89	0	3490	99		
Pest/PCBs (All criteria were met)										
Metals (All criteria were met)						Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS AABS001 SDG No. 005S			Accept-able Range for %R	MSD SDG No. 005S			RPD	Accept-able Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs 2,4-Dinitrotoluene	ug/kg	0	3380	95	28-89	0	3330	94		
Pest/PCBs (All criteria were met)										
Metals (All criteria were met)						Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 02SD031 SDG No. 001SED			Accept-able Range for %R	MSD SDG No. 001SED			RPD	Accept-able Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs 2,4-Dinitrotoluene	ug/kg	0	3850	91	28-89					
Pest/PCBs (All criteria were met)										
Metals Lead	ug/kg	8.85	11.02	35.2	75-125	Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 02SD020/02SD012 SDG No. 002SED			Acceptable Range for %R	MSD SDG No. 002SED			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs										
Phenol	ug/kg				--				54	35
2-Chlorophenol	ug/kg				--				60	50
1,4-Dichlorobenzene	ug/kg				28-104	0	2100	24	61	27
N-nitroso-di-n-propylamine	ug/kg				41.126	0	3200	36	64	38
1,2,4-Trichlorobenzene	ug/kg				38-107	0	2700	31	57	23
4-Chloro-3-methylphenol	ug/kg				--				55	33
Acenaphthene	ug/kg				--				58	19
4-Nitrophenol	ug/kg				--				68	50
2,4-Dinitrotoluene	ug/kg				--				51	47
Pentachlorophenol	ug/kg				--				64	47
Pyrene	ug/kg				--				68	36
Pest/PCBs (All criteria were met)										
Metals						Not Applicable				
Antimony	ug/kg	1.022U	3.61	39.5	75-125					
Arsenic	ug/kg	7.67	18.33	58.2	75-125					
Lead	ug/kg	12.16	11.69	-5.1	75-125					
Selenium	ug/kg	0.60U	3.01	65.8	75-125					
Thallium	ug/kg	0.61B	15.28	64.1	75-125					
Lead	ug/kg	8.84	11.01	35.2	75-125					

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 02SD041/02SW041 SDG No. 003SED			Accept-able Range for %R	MSD SDG No. 003SED			RPD	Accept-able Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs (All criteria were met)										
Pest/PCBs (All criteria were met)										
Metals						Not Applicable				
Selenium	mg/kg	0.40U	1.514	49.7	75-125					
Arsenic	mg/kg	3.05B	20.91	44.6	75-125					
Lead	mg/kg	15.33	18.69	16.8	75-125					
Thallium	mg/kg	1.298U	29.57	59.1	75-125					

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS LMSW005 SDG No. LWW SEW			Acceptable Range for %R	MSD SDG No. LWW SEW			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs 1,1-Dichloroethene	ug/l								17	14
SVOCs 4-Nitrophenol	ug/l	0	169	84	10-80	0	198	99		
Pest/PCBs (All criteria were met)										
Metals (All criteria were met)						Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS LWSD005 SDG No. LWW SED			Accept-able Range for %R	MSD SDG No. LWW SED			RPD	Accept-able Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs (All criteria were met)										
Pest/PCBs (All criteria were met)										
Metals Selenium	mg/kg	0.4088	2.1978	40.7	75-125	Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 0BSW012 SDG No. BGROUND-SW			Accept-able Range for %R	MSD SDG No. BGROUND-SW			RPD	Accept-able Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs (All criteria were met)										
Pest/PCBs (All criteria were met)										
Metals						Not Applicable				
Chromium	ug/l	2.04U	143.6	71.8	75-125					
Cobalt	ug/l	2.68U	360.39	72.1	75-125					
Nickel	ug/l	7.30U	348.81	69.8	75-125					

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 0BSD012 SDG No. BGROUND-SED			Acceptable Range for %R	MSD SDG No. BGROUND-SED			RPD	Acceptable Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs (All criteria were met)										
Pest/PCBs (All criteria were met)										
Metals (All criteria were met)						Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 08SL01001 SDG No. 08/SL-01			Accept-able Range for %R	MSD SDG No. 08/SL-01			RPD	Accept-able Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs (All criteria were met)										
Pest/PCBs (All criteria were met)										
Metals						Not Applicable				
Antimony	mg/kg	0.61B	3.70	73.6	75-125					
Arsenic	mg/kg	0.48B	4.10	43.1	75-125					
Lead	mg/kg	13.33	21.35	191.1	75-125					

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 08SL00401 SDG No. 08/SL-02			Acceptable Range for %R	MSD SDG No. 08/SL-02			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs (All criteria were met)										
Pest/PCBs (All criteria were met)										
Metals (All criteria were met)						Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 04BS01008/ 02SS00101/02SW041 SDG No. 2&4-001			Accept-able Range for %R	MSD SDG No. 2&4-001			RPD	Accept-able Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs 2,4-Dinitrotoluene	ug/kg	0	3500	90	28.89					
Pest/PCBs (All criteria were met)										
Metals						Not Applicable				
Antimony	mg/kg	0.4825	2.6436	61.2	75-125					
Selenium	mg/kg	0.286U	1.5724	72.8	75-125					
Antimony	mg/kg	1.1969	4.0832	64.1	75-125					
Arsenic	mg/kg	0.929U	4.6389	41.2	75-125					
Arsenic	mg/kg	3.050B	20.91	44.6	75-125					
Thallium	mg/kg	1.298U	29.57	59.1	75-125					
Selenium	mg/kg	1.325U	7.370	73.7	75-125					

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 04BS00111/ 56SS00101/02MW038I SDG No. 2&4-002			Accept-able Range for %R	MSD SDG No. 2&4-002			RPD	Accept-able Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs (All criteria were met)										
Pest/PCBs (All criteria were met)										
Metals						Not Applicable				
Selenium	mg/kg	0.153B	1.6303	69.0	75-125					
Beryllium	ug/l	0.300U	36.41	72.8	75-125					

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 28SS03001/ 02SW041S SDG No. 28-001			Accept-able Range for %R	MSD SDG No. 28-001			RPD	Accept-able Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs 2,4-Dinitrotoluene	ug/kg	0	3160	92	28-89	0	3220	94		
Pest/PCBs (All criteria were met)										
Metals Arsenic Lead Selenium Thallium	 ug/l ug/l ug/l ug/l	 3.05B 15.33 1.325U 1.298U	 20.91 18.69 7.37 29.57	 44.6 16.8 73.7 59.1	 75-125 75-125 75-125 75-125	Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 28SS00201 SDG No. 28-002			Acceptable Range for %R	MSD SDG No. 28-002			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs (All criteria were met)										
Pest/PCBs Endrin	ug/kg	3.4U	52.2	143	42-139					
Metals Antimony Arsenic	 mg/kg mg/kg	 0.49U 0.85	 2.50 5.04	 56.7 47.7	 85-115 75-125	Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 28BS03104/28SS03101/ 48SS03101/48SS00101 SDG No. 28-003			Accept-able Range for %R	MSD SDG No. 28-003			RPD	Accept-able Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs 2,4-dinitrotoluene	ug/kg	0	3300	92	28-89	0	3500	97		
Pest/PCBs (All criteria were met)										
Metals 28SS03101 Antimony	mg/kg	0.48U	2.4	56.1	85-115	Not Applicable				
48SS03101 Lead	mg/kg	2.0	8.0	138	75-125					
28BS03104 Lead	mg/kg	2.9	5.8	70.2	75-125					
28BS03104 Thallium	mg/kg	0.27U	6.9	66.7	85-115					
48SS00101 Selenium	mg/kg	0.28U	1.1	52.4	72-115					

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 05SS01001 SDG No. 5-001			Acceptable Range for %R	MSD SDG No. 5-001			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs (All criteria were met)										
Pest/PCBs (All criteria were met)										
Metals (All criteria were met)						Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 05BS00909/05BS02107 SDG No. 5-002			Acceptable Range for %R	MSD SDG No. 5-002			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs (All criteria were met)										
Pest/PCBs (All criteria were met)										
Metals						Not Applicable				
05BS02107										
Copper	mg/kg	1.18B	113	169	75-125					
Lead	mg/kg	1.48	8.66	135	75-125					
05BS00909										
Antimony	mg/kg	0.61U	3.09	56.3	75-125					
Copper	mg/kg	26.2	70.8	65.1	75-125					
Lead	mg/kg	5.71	9.03	60.5	75-125					
Mercury	mg/kg	0.11U	1.77	134	75-125					

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 05SS00301 SDG No. 5-003			Acceptable Range for %R	MSD SDG No. 002W			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs (All criteria were met)										
Pest/PCBs 4,4'-DDT	ug/kg				23-134	2.5	57	151		
Metals Copper Zinc	 mg/kg mg/kg	 105 73.5	 68.3 114	 -68.5 36.8	 80-120 83-114	Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 15SS0901 SDG No. 15-001			Accept-able Range for %R	MSD SDG No. 15-001			RPD	Accept-able Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
Pests/PCBs (All criteria were met)										
Organophosphorus Pesticides (All criteria were met)										
Herbicides (All criteria were met)										

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 15SS02701 SDG No. 15-002			Accept-able Range for %R	MSD SDG No. 15-002			RPD	Accept-able Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
Pests/PCBs (All criteria were met)										
Organophosphorus Pesticides (All criteria were met)										
Herbicides (All criteria were met)										

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 03BS00832/03SS00824 SDG No. 3-001			Accept-able Range for %R	MSD SDG No. 3-001			RPD	Accept-able Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs (All criteria were met)										
Pest/PCBs 03SS00824 Heptachlor 03BS00832 (All criteria were met)	ug/kg								47	31
Metals 03BS00832 Arsenic Manganese Selenium 03SS00824 Selenium Antimony Chromium Cyanide	 mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	 0.37 64.8 0.3U 0.84 0.73U 47.5 0.17	 4.6 141 1.6 2.8 1.7 130 5.6	 46.2 66.3 69.9 61.2 25.5 126 67.2	 75-125 85-111 72-115 72-115 85-115 85-110 80-104	Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 56SS00101 SDG No. 56-001			Accept-able Range for %R	MSD SDG No. 56-001			RPD	Accept-able Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs (All criteria were met)										
Pest/PCBs (All criteria were met)										
Metals Selenium	mg/kg	0.15B	1.63	69.0	72-115	Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 0BBS00104 SDG No. BGROUND-BS			Accept-able Range for %R	MSD SDG No. BGROUND-BS			RPD	Accept-able Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
VOCs 1,1-Dichloroethene	ug/kg				59-172	0	102	190		
SVOCs (All criteria were met)										
Pest/PCBs (All criteria were met)										
Metals (All criteria were met)						Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 15U01701 SDG No. WORMS			Accept-able Range for %R	MSD SDG No. WORMS			RPD	Accept-able Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
SVOCs (LCS/LCSD Analyzed - All criteria were met)										
Pest/PCBs (LCS/LCSD Analyzed - All criteria were met)										
Metals 15U01701 Lead	mg/kg	6.7	12.8	141	75-125	Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS Zone 5-1 SDG No. FISH			Acceptable Range for %R	MSD SDG No. FISH			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
Pest/PCBs (No MS/MSD analyzed)										
Metals Zone 5-1 (All criteria were met)						Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table										
Matrix Spike Summary Table	Units	MS 49SD017 SDG No. 49-SED			Acceptable Range for %R	MSD SDG No. 49-SED			RPD	Acceptable Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
VOCs (All criteria were met)										
SVOCs (All criteria were met)										
Pest/PCBs (All criteria were met)										
Metals (All criteria were met)						Not Applicable				

Field Duplicate Summary						
SDG No.: 001W	Sample ID: 13MW006S		Duplicate ID: 13MW006SD			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	Di-n-butylphthalate	ug/l	10U	2	NC	NA
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 001W	Sample ID: 02MW009I		Duplicate ID: 02MW009ID			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Acetone 1,2-Dichloroethane	ug/l	71 1J	23 5U	102 NC	40 NA
Semivolatile	None Detected					
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 002W	Sample ID: 02MW008S		Duplicate ID: 02MW008SD			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Benzene	ug/l	2	2	0	11
Semivolatile	None Detected					
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 002W	Sample ID: 02MW012I		Duplicate ID: 02MW012ID			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	None Detected					
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 003W	Sample ID: 0SMW001R		Duplicate ID: 0SMW001RD			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	Bis(2-ethylhexyl)phthalate	ug/l	10U	6J	NC	NA
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 003W	Sample ID: 08MW006S		Duplicate ID: 08MW006SD			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Acetone	ug/l	10U	9J	NC	NA
Semivolatile	None Detected					
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 003W	Sample ID: 0BMW001S		Duplicate ID: 0BMW001D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Not Applicable					
Semivolatile	Not Applicable					
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 003W	Sample ID: 0SMW001RF		Duplicate ID: 0SMW001RDF			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Not Applicable					
Semivolatile	Not Applicable					
Pest/PCBs	Not Applicable					

Field Duplicate Summary						
SDG No.: 003W	Sample ID: 0BMW001SF		Duplicate ID: 0BMW001DF			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Not Applicable					
Semivolatile	Not Applicable					
Pest/PCBs	Not Applicable					

Field Duplicate Summary						
SDG No.: 003W	Sample ID: 26MW001S		Duplicate ID: 26MW001SD			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Not Applicable					
Semivolatile	Not Applicable					
Pest/PCBs	Not Applicable					

Field Duplicate Summary						
SDG No.: 004W	Sample ID: 02MW037S		Duplicate ID: 02MW037SD			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	None Detected					
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 004W	Sample ID: 26MW001S		Duplicate ID: 26MW001SD			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	None Detected					
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 005W	Sample ID: 02MW034S		Duplicate ID: 02MW034SD			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	None Detected					
Pest/PCBs	None Detected					
Organophosphorus Pesticides	No Field Duplicates Analyzed					
Herbicides	No Field Duplicates Analyzed					

Field Duplicate Summary						
SDG No.: 005W	Sample ID: 020P005		Duplicate ID: 020P005D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	None Detected					
Pest/PCBs	None Detected					
Organophosphorus Pesticides	No Field Duplicates Analyzed					
Herbicides	No Field Duplicates Analyzed					

Field Duplicate Summary						
SDG No.: 006W	Sample ID: 02MW011I		Duplicate ID: 02MW011ID			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	None Detected					
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 006W	Sample ID: 02MW022S		Duplicate ID: 02MW022SD			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Acetone Carbon Disulfide	ug/l	8J 1J	17 5	72 133	40 40
Semivolatile	None Detected					
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 007W	Sample ID: 08MW016S		Duplicate ID: 08MW016SD			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	Naphthalene	ug/l	81	76	6.4	40
	2-Methylnaphthalene		44	41	7.1	40
	Dimethylphthalate		4	4	0	40
	Acenaphthene		2	2	0	31
	Fluorene		4	4	0	40
	Phenanthrene		10U	3	NC	NA
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 007W	Sample ID: 15MW005S		Duplicate ID: 15MW005SD			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	None Detected					
Pest/PCBs	None Detected					
Organophosphorus Pesticides	None Detected					
Herbicides	None Detected					

Field Duplicate Summary						
SDG No.: 008W	Sample ID: 08MW010S		Duplicate ID: 08MW010SD			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	None Detected					
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 008W	Sample ID: 08MW019S		Duplicate ID: 08MW019SD			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Acetone	ug/l	11	23	70.6	40
Semivolatile	Bis(2-ethylhexyl)phthalate	ug/l	3	10U	NC	NA
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 011W	Sample ID: 08MW020S		Duplicate ID: 08MW020SD			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	Dimethylphthalate 4-Chloro-3-methylphenol	ug/l	4 10U	4 3	0 NC	20 NA
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 001SW	Sample ID: 02SW031		Duplicate ID: 02SW031D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Acetone	ug/l	18	19	5	40
Semivolatile	Bis(2-ethylhexyl)phthalate	ug/l	2J	9J	127	40
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 001SW	Sample ID: 02SW029		Duplicate ID: 02SW029D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	None Detected					
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 002SW	Sample ID: 02SW038		Duplicate ID: 02SW038D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	None Detected					
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 002SW	Sample ID: 02MW020		Duplicate ID: 02MW020D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	Bis(2-ethylhexyl)phthalate Isophorone	ug/l	4 10U	3 3	28 NC	40 NA
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 003SW	Sample ID: 02SW042		Duplicate ID: 02SW042D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	Di-n-butyl-phthalate Bis(2-ethylhexyl)phthalate	ug/l	2 1	10U 10U	NC NC	NA NA
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 001S	Sample ID: 19SS001		Duplicate ID: 19SS001SD			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	Bis(2-ethylhexyl)phthalate	ug/kg	680U	72	NC	NA
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 002S	Sample ID: 19BS001		Duplicate ID: 19BS001D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	None Detected					
Pest/PCBs	4,4'-DDD Endrin Ketone	ug/kg	2.5 1.4U	7.6 16	101 NC	35 NA

Field Duplicate Summary						
SDG No.: 003S	Sample ID: 19SD001		Duplicate ID: 19SD001D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	None Detected					
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 004S	Sample ID: AASS001		Duplicate ID: AASS001D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	Fluoranthene	ug/kg	120J	1200	163	33
	Pyrene		130J	930	151	36
	Benzo(b)fluoranthene		130J	920	150	40
	Benzo(k)fluoranthene		140J	460	106	42
	Acenaphthene		690U	97	NC	NA
	Pentachlorophenol		3400U	170	NC	NA
	Anthracene		690U	680	NC	NA
	Benzo(a)anthracene		690U	130	NC	NA
	Chrysene		690U	550	NC	NA
	Benzo(a)pyrene		690U	620	NC	NA
	Indeno(1,2,3-cd)pyrene		690U	470	NC	NA
	Benzo(g,h,i)perylene		690U	290	NC	NA
Pest/PCBs	4,4'-DDE	ug/kg	17	12	34	35
	4,4'-DDT		7.9	6.3	22	35

Field Duplicate Summary						
SDG No.: 005S	Sample ID: AABS001		Duplicate ID: AABS001D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	Benzo(b)fluoranthene Pentachlorophenol	ug/kg	71J 3400U	700 220	163 NC	40 NA
Pest/PCBs	4,4-DDE	ug/kg	2.2	2.4	8.7	35

Field Duplicate Summary						
SDG No.: 001SED	Sample ID: 02SD031		Duplicate ID: 02SD031D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Carbon Disulfide	ug/kg	3	2	40	40
	2-Butanone		4	12	100	38
	Acetone		23U	56	NC	NA
Semivolatile	Fluoranthene	ug/kg	780J	290J	92	33
	Pyrene		760J	280J	92	36
	Benzo(a)anthracene		420J	860U	NC	NA
	Chrysene		470J	860U	NC	NA
	Benzo(b)fluoranthene		290J	860U	NC	NA
	Benzo(k)fluoranthene		300J	860U	NC	NA
	Benzo(a)pyrene		300J	860U	NC	NA
	Indeno(1,2,3-cd)pyrene		140J	860U	NC	NA
	Benzo(g,h,i)perylene		140J	860U	NC	NA
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 001SED	Sample ID: 02SD029		Duplicate ID: 02SD029D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Acetone	ug/kg	870	1100	23	47
	Methylene Chloride		47	59	23	39
	Carbon Disulfide		98	85	14	40
	2-Butanone		420	160	90	38
Semivolatile	Bis(2-ethylhexyl)phthalate	ug/kg	420	2700U	NC	NA
	Di-n-butylphthalate		3000U	300	NC	NA
Pest/PCBs	4,4'-DDE	ug/kg	3.0U	4.3	NC	NA
	4,4'-DDD		5.9U	11	NC	NA

Field Duplicate Summary						
SDG No.: 002SED	Sample ID: 02SD038		Duplicate ID: 02SD038D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	2-Butanone	ug/kg	11	8	31	38
Semivolatile	None Detected					
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 002SED	Sample ID: 02SD020		Duplicate ID: 02SD020D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Carbon Disulfide 2-Butanone	ug/kg	46 60	70 70	15 51	40 38
Semivolatile	3,4-Methylphenol	ug/kg	900	940	4.3	50
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 003SED	Sample ID: 02SD042		Duplicate ID: 02SD042D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	None Detected					
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: LWW SEW	Sample ID: LWSW005		Duplicate ID: LWSW005D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	None Detected					
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: LWW SED	Sample ID: LWSD005		Duplicate ID: LWSD005D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Acetone Carbon Disulfide Toluene	ug/kg	33 4 5	19 2 4	53 66 22	47 40 21
Semivolatile	None Detected					
Pest/PCBs	4,4'-DDE 4,4'-DDD	ug/kg	3.2 2.9	6.0 4.9	61 51	35 35

Field Duplicate Summary						
SDG No.: BGROUND-SED	Sample ID: 0BSD012		Duplicate ID: 0BSD012D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Carbon Disulfide 2-Butanone	ug/kg	6 5	7 3	15 50	40 38
Semivolatile	Butylbenzylphthalate	ug/kg	55	480U	NC	NA
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: BGROUND-SW	Sample ID: 0BSW012		Duplicate ID: 0BSW012D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	2-Butanone	ug/l	2	2	0	40
Semivolatile	None Detected					
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 08/SL-01	Sample ID: 08SL01001		Duplicate ID: 08SL01001D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Methylene Chloride Carbon Disulfide 2-Butanone Xylenes	ug/kg	22 5 4 8	24 2 3 5	8.7 86 29 46	39 40 38 39
Semivolatile	None Detected					
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 08/SL-01	Sample ID: 08SL00701		Duplicate ID: 08SL00701D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Xylenes Toluene	ug/kg	4 13	4 11	0 16	39 21
Semivolatile	None Detected					
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 08/SL-02	Sample ID: 08SL00401		Duplicate ID: 08SL00401D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	Fluoranthene	ug/kg	220J	900U	NC	NA
	Pyrene		320J	140J	75	36
	Benzo(a)anthracene		100J	900U	NC	NA
	Bis(2-ethylhexyl)phthalate		110J	900U	NC	NA
	Benzo(b)fluoranthene		170J	230J	30	40
Pest/PCBs	4,4'-DDD	ug/kg	6.2	5.3	16	35
	4,4'-DDT		2.2	2.1	4.7	35
	Chlordane		68	72	5.7	35

Field Duplicate Summary						
SDG No.: 2&4-001	Sample ID: 04BS01008		Duplicate ID: 04BS01008D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	2-Butanone Methylene Chloride	ug/kg	2 8	11U 8	NC 0	NA 39
Semivolatile	Bis(2-ethylhexyl)phthalate	ug/kg	46	380U	NC	NA
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 2&4-001	Sample ID: 04SS00401		Duplicate ID: 04SS00401D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	None Detected					
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 2&4-002	Sample ID: 02BS00407		Duplicate ID: 02BS00407D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Carbon Disulfide Acetone	ug/kg	2 6	2 5	0 18	40 47
Semivolatile	Di-n-butylphthalate	ug/kg	95	120	23	50
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 2&4-002	Sample ID: 04BS00111		Duplicate ID: 04BS00111D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Methylene Chloride	ug/kg	3	3	0	39
Semivolatile	Pyrene Benzoic Acid Di-n-butylphthalate 3&4-Methylphenol	ug/kg	52 76 720U 720U	770U 3800U 56 190	NC NC NC NC	NA NA NA NA
Pest/PCBs	4,4'-DDE	ug/kg	3.5	1.5U	NC	NA

Field Duplicate Summary						
SDG No.: 28-001	Sample ID: 28SS03001		Duplicate ID: 28SS03001D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	None Detected					
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 28-001	Sample ID: 28SS02101		Duplicate ID: 28SS02101D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	ug/kg	710U 710U	52 44	NC NC	NA NA
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.:28-002	Sample ID: 28SS00201		Duplicate ID: 28SS00201D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	Diethylphthalate Di-n-butylphthalate Pyrene	ug/kg	360U 360U 360U	43 41 37	NC NC NC	NA NA NA
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.:28-002	Sample ID: 28SS01401		Duplicate ID: 28SS01401D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	None Detected					
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 28-003	Sample ID: 28BS03104		Duplicate ID: 28BS03104D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	None Detected					
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 28-003	Sample ID: 48SS00401		Duplicate ID: 48SS00401D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Xylene	ug/kg	8	9	11.8	39
	Carbon Disulfide		5U	2J	NC	40
Semivolatile	Fluoranthene	ug/kg	350U	32J	NC	NA
	Pyrene		350U	32J	NC	NA
	Benzo(a)anthracene		350U	26J	NC	NA
	Benzo(b)fluoranthene		350U	21J	NC	NA
	Benzo(k)fluoranthene		350U	18J	NC	NA
	Chrysene		350U	30J	NC	NA
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 5-001	Sample ID: 05SS01001		Duplicate ID: 05SS01001D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	Bis(2-ethylhexyl)phthalate	ug/kg	40	340U	NC	NA
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 5-001	Sample ID: 05BS00606		Duplicate ID: 05BS00606D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Acetone	ug/kg	53	70	27	47
	Carbon Disulfide		4	6U	NC	NA
	2-Butanone		11	8	32	38
	Ethylbenzene		2	6U	NC	NA
	Xylenes		3	6U	NC	NA
Semivolatile	Naphthalene	ug/kg	120	6100U	NC	NA
	2-Methylphthalate		390	6100U	NC	NA
	Acenaphthene		220	6100U	NC	NA
	Dibenzofuran		200	6100U	NC	NA
	Fluorene		360	6100U	NC	NA
	Phenanthrene		1100	6100U	NC	NA
	Anthracene		390	6100U	NC	NA
	Fluoranthene		640	6100U	NC	NA
	Pyrene		370	6100U	NC	NA
	Butylbenzylphthalate		700	6100U	NC	NA
	Bis(2-ethylhexyl)phthalate		480	6100U	NC	NA
Pest/PCBs	4,4'-DDE	ug/kg	6.3	3.9U	NC	NA

Field Duplicate Summary						
SDG No.: 5-002	Sample ID: 05SS02001		Duplicate ID: 05SS02001D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	None Detected					
Semivolatile	Fluoranthene	ug/kg	22J	26J	16	33
	Pyrene		22J	32J	37	36
	Bis(2-ethylhexyl)phthalate		50J	370U	NC	NA
Pest/PCBs	4,4'-DDE	ug/kg	1.3	1.7	27	35

Field Duplicate Summary						
SDG No.: 5-002	Sample ID: 05BS00909		Duplicate ID: 05BS00909D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Carbon Disulfide	ug/kg	2	2	0	40
	2-Butanone		6	15U	NC	NA
Semivolatile	Fluoranthene	ug/kg	100J	30J	107	33
	Pyrene		140J	42J	107	36
	Benzo(a)anthracene		100J	500U	NC	NA
	Chrysene		220J	48J	128	48
	Bis(2-ethylhexyl)phthalate		46J	86J	60	40
	Benzo(b)fluoranthene		200J	42J	130	40
	Benzo(k)fluoranthene		180J	35J	134	42
	Benzo(a)pyrene		98J	500U	NC	NA
	Indeno(1,2,3-cd)pyrene		66J	500U	NC	NA
	Benzo(g,h,i)perylene		65J	500U	NC	NA
Pest/PCBs	4,4'-DDE	ug/kg	1.6	1.0U	NC	NA

Field Duplicate Summary						
SDG No.: 5-003	Sample ID: 05SS00301		Duplicate ID: 05SS00301D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Toluene	ug/kg	5U	4J	NC	NA
Semivolatile	Bis(2-ethylhexyl)phthalate	ug/kg	49J	ND	NC	NA
Pest/PCBs	4,4'-DDE 4,4'-DDT	ug/kg	6.6 2.5	6.7 2.3	1.5 8.3	35 35

Field Duplicate Summary						
SDG No.: 15-001	Sample ID: 15SS01901		Duplicate ID: 15SS01901D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Pesticides/PCBs	4,4'-DDE 4,4'-DDT Chlordane	ug/kg	4.8 48 14U	4.4 12 19	8.7 120 NC	35 35 NA
Organophosphorus Pesticides	None Detected					
Herbicides	None Detected					

Field Duplicate Summary						
SDG No.: 15-001	Sample ID: 15SS00901		Duplicate ID: 15SS00901D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Pesticides/PCBs	4,4'-DDE 4,4'-DDT	ug/kg	63 7.1	60 7.4	4.9 4.1	35 35
Organophosphorus Pesticides	None Detected					
Herbicides	None Detected					

Field Duplicate Summary						
SDG No.: 15-002	Sample ID: 15SS02701		Duplicate ID: 15SS02701D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Pesticides/PCBs	4,4'-DDE	ug/kg	1.2	0.67	57	35
Organophosphorus Pesticides	None Detected					
Herbicides	None Detected					

Field Duplicate Summary						
SDG No.: 3-001	Sample ID: 03SS00824		Duplicate ID: 03SS00824D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Methylene Chloride	ug/kg	6J	9	40	39
Semivolatile	None Detected					
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 3-001	Sample ID: 03BS00832		Duplicate ID: 03BS00832D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Methylene Chloride	ug/kg	7	7	0	39
Semivolatile	None Detected					
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: 56-001	Sample ID: 56SS00101		Duplicate ID: 56SS00101D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Acetone	ug/kg	11U	8J	NC	NA
Semivolatile	None Detected					
Pest/PCBs	4,4'-DDE	ug/kg	1.0	0.7U	NC	NA

Field Duplicate Summary						
SDG No.: BGROUND-BS	Sample ID: 0BBS00104		Duplicate ID: 0BBS00104D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Acetone	ug/kg	3J	11U	NC	NA
Semivolatile	Diethylphthalate	ug/kg	350U	64BJ	NC	NA
Pest/PCBs	None Detected					

Field Duplicate Summary						
SDG No.: WORMS	Sample ID: None		Duplicate ID: None			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Semivolatile	None Analyzed					
Pest/PCBs	None Analyzed					

Field Duplicate Summary						
SDG No.: FISH	Sample ID: Zone 5-1		Duplicate ID: Zone 5-1D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Pest/PCBs	4,4'-DDE	ug/kg	8.1	10	21	35

Field Duplicate Summary						
SDG No.: 49-SED	Sample ID: 49SD017		Duplicate ID: 49SD017D			
Analysis	Parameter	Units	Sample Conc.	Duplicate Conc.	RPD	RPD QC Limit
Volatile	Carbon Disulfide Acetonitrile	ug/kg	13 260U	11J 16J	16 NC	40 NA
Semivolatile	Bis(2-ethylhexyl)phthalate	ug/kg	440J	180J	83.9	40
Pest/PCBs	None Detected					

SDG No.	Sample	Analyte	RPD	Qualifier
001SED	02SD012	Chromium	71.1	J
001SED	02SD011	Chromium	71.1	J
001SED	02SD014	Chromium	71.1	J
001SED	02SD013	Chromium	71.1	J
001SED	02SD016	Chromium	71.1	J
001SED	02SD018	Chromium	71.1	J
001SED	02SD019	Chromium	71.1	J
001SED	02SD022	Chromium	71.1	J
001SED	02SD031	Chromium	71.1	J
001SED	02SD031D	Chromium	71.1	J
001SED	02SD017	Chromium	71.1	J
001SED	02SD032	Chromium	71.1	J
001SED	02SD039	Chromium	71.1	J
001SED	02SD030	Chromium	71.1	J
001SED	02SD029	Chromium	71.1	J
001SED	02SD029D	Chromium	71.1	J
001SED	02SD015	Chromium	71.1	J
001SED	02SD012	Zinc	76.7	J
001SED	02SD011	Zinc	76.7	J
001SED	02SD014	Zinc	76.7	J
001SED	02SD013	Zinc	76.7	J
001SED	02SD016	Zinc	76.7	J
001SED	02SD018	Zinc	76.7	J
001SED	02SD019	Zinc	76.7	J
001SED	02SD022	Zinc	76.7	J
001SED	02SD031	Zinc	76.7	J
001SED	02SD031D	Zinc	76.7	J
001SED	02SD017	Zinc	76.7	J

001SED	02SD032	Zinc	76.7	J
001SED	02SD039	Zinc	76.7	J
001SED	02SD030	Zinc	76.7	J
001SED	02SD029	Zinc	76.7	J
001SED	02SD029D	Zinc	76.7	J
001SED	02SD015	Zinc	76.7	J

SDG No.	Sample	Analyte	RPD or Difference	EDS Qualifier
08/SL-01	08SL01101	Chromium	38.5%	J
08/SL-01	08SL01102	Chromium	38.5%	J
08/SL-01	08SL01201	Chromium	38.5%	J
08/SL-01	08SL01202	Chromium	38.5%	J
08/SL-01	08SL01301	Chromium	38.5%	J
08/SL-01	08SL01302	Chromium	38.5%	J
08/SL-01	08SL00801	Chromium	38.5%	J
08/SL-01	08SL00901	Chromium	38.5%	J
08/SL-01	08SL01001	Chromium	38.5%	J
08/SL-01	08SL01001D	Chromium	38.5%	J
08/SL-01	08SL01006	Chromium	38.5%	J
08/SL-01	08SL00906	Chromium	38.5%	J
08/SL-01	08SL00806	Chromium	38.5%	J
08/SL-01	08SL00501	Chromium	38.5%	J
08/SL-01	08SL00505	Chromium	38.5%	J
08/SL-01	08SL00601	Chromium	38.5%	J
08/SL-01	08SL00605	Chromium	38.5%	J
08/SL-01	08SL00701	Chromium	38.5%	J
08/SL-01	08SL00701D	Chromium	38.5%	J
08/SL-01	08SL00705	Chromium	38.5%	J
08/SL-01	08SL01101	Copper	40.2%	J
08/SL-01	08SL01201	Copper	40.2%	J
08/SL-01	08SL01301	Copper	40.2%	J
08/SL-01	08SL00801	Copper	40.2%	J
08/SL-01	08SL00901	Copper	40.2%	J
08/SL-01	08SL01001	Copper	40.2%	J
08/SL-01	08SL01001D	Copper	40.2%	J
08/SL-01	08SL01006	Copper	40.2%	J

08/SL-01	08SL00906	Copper	40.2%	J
08/SL-01	08SL00806	Copper	40.2%	J
08/SL-01	08SL00501	Copper	40.2%	UJ
08/SL-01	08SL00505	Copper	40.2%	UJ
08/SL-01	08SL00601	Copper	40.2%	J
08/SL-01	08SL00701	Copper	40.2%	J
08/SL-01	08SL00701D	Copper	40.2%	J
08/SL-01	08SL00705	Copper	40.2%	J
08/SL-01	08SL01101	Mercury	D=0.33 (±0.21)	J
08/SL-01	08SL01102	Mercury	D=0.33 (±0.21)	J
08/SL-01	08SL01201	Mercury	D=0.33 (±0.21)	UJ
08/SL-01	08SL01202	Mercury	D=0.33 (±0.21)	J
08/SL-01	08SL01301	Mercury	D=0.33 (±0.21)	UJ
08/SL-01	08SL01302	Mercury	D=0.33 (±0.21)	UJ
08/SL-01	08SL00801	Mercury	D=0.33 (±0.21)	J
08/SL-01	08SL00901	Mercury	D=0.33 (±0.21)	J
08/SL-01	08SL01001	Mercury	D=0.33 (±0.21)	J
08/SL-01	08SL01001D	Mercury	D=0.33 (±0.21)	J
08/SL-01	08SL01006	Mercury	D=0.33 (±0.21)	UJ
08/SL-01	08SL00906	Mercury	D=0.33 (±0.21)	J
08/SL-01	08SL00806	Mercury	D=0.33 (±0.21)	UJ
08/SL-01	08SL00501	Mercury	D=0.33 (±0.21)	UJ
08/SL-01	08SL00505	Mercury	D=0.33 (±0.21)	UJ
08/SL-01	08SL00601	Mercury	D=0.33 (±0.21)	J
08/SL-01	08SL00605	Mercury	D=0.33 (±0.21)	J
08/SL-01	08SL00701	Mercury	D=0.33 (±0.21)	J
08/SL-01	08SL00701D	Mercury	D=0.33 (±0.21)	J
08/SL-01	08SL00705	Mercury	D=0.33 (±0.21)	UJ
08/SL-01	08SL01101	Zinc	36.5%	J
08/SL-01	08SL01201	Zinc	36.5%	J

08/SL-01	08SL01202	Zinc	36.5%	J
08/SL-01	08SL01301	Zinc	36.5%	J
08/SL-01	08SL01302	Zinc	36.5%	J
08/SL-01	08SL00801	Zinc	36.5%	J
08/SL-01	08SL00901	Zinc	36.5%	J
08/SL-01	08SL01001	Zinc	36.5%	J
08/SL-01	08SL01001D	Zinc	36.5%	J
08/SL-01	08SL01006	Zinc	36.5%	J
08/SL-01	08SL00906	Zinc	36.5%	J
08/SL-01	08SL00806	Zinc	36.5%	J
08/SL-01	08SL00505	Zinc	36.5%	J
08/SL-01	08SL00601	Zinc	36.5%	J
08/SL-01	08SL00605	Zinc	36.5%	J
08/SL-01	08SL00701	Zinc	36.5%	J
08/SL-01	08SL00701D	Zinc	36.5%	J
08/SL-01	08SL00705	Zinc	36.5%	J

SDG No.	Sample	Analyte	RPD or Difference	EDS Qualifier
28-001	28SS03001	Lead	D=1.8 (±1.29)	UJ
28-001	28SS03001D	Lead	D=1.8 (±1.29)	J
28-001	28SS02901	Lead	D=1.8 (±1.29)	J
28-001	28SS02801	Lead	D=1.8 (±1.29)	J
28-001	28SS02701	Lead	D=1.8 (±1.29)	J
28-001	28SS02601	Lead	D=1.8 (±1.29)	J
28-001	28SS02501	Lead	D=1.8 (±1.29)	J
28-001	28SS02401	Lead	D=1.8 (±1.29)	J
28-001	28SS02301	Lead	D=1.8 (±1.29)	UJ
28-001	28SS02201	Lead	D=1.8 (±1.29)	J
28-001	28SS02101	Lead	D=1.8 (±1.29)	J
28-001	28SS02101D	Lead	D=1.8 (±1.29)	J
28-001	28SS00301	Lead	D=1.8 (±1.29)	UJ
28-001	28SS00401	Lead	D=1.8 (±1.29)	UJ
28-001	28SS00501	Lead	D=1.8 (±1.29)	UJ
28-001	28SS00601	Lead	D=1.8 (±1.29)	UJ
28-001	28SS00701	Lead	D=1.8 (±1.29)	UJ
28-001	28SS00901	Lead	D=1.8 (±1.29)	J

SDG No.	Sample	Analyte	RPD or Difference	EDS Qualifier
5-001	05BS00107	Cadmium	5.7	UJ
5-001	05BS00208	Cadmium	5.7	UJ
5-001	05BS00306	Cadmium	5.7	UJ
5-001	05BS00606	Cadmium	5.7	J
5-001	05BS00606D	Cadmium	5.7	J
5-001	05BS01307	Cadmium	5.7	UJ
5-001	05BS00107	Copper	161%	J
5-001	05BS00208	Copper	161%	J
5-001	05BS00306	Copper	161%	J
5-001	05BS00606	Copper	161%	J
5-001	05BS00606D	Copper	161%	J
5-001	05BS01307	Copper	161%	J

SDG No.	Sample	Analyte	RPD or Difference	EDS Qualifier
5-002	05BS02107	Zinc	D=18.0	J
5-002	05SS02001	Zinc	D=18.0	J
5-002	05SS02001D	Zinc	D=18.0	J
5-002	05BS02009	Zinc	D=18.0	J
5-002	05SS01901	Zinc	D=18.0	J
5-002	05BS01909	Zinc	D=18.0	J
5-002	05BS00409	Zinc	D=18.0	J
5-002	05SS00701	Zinc	D=18.0	J
5-002	05BS00704D	Zinc	D=18.0	J
5-002	05SS01101	Zinc	D=18.0	J
5-002	05BS01107	Zinc	D=18.0	J

SDG No.	Sample	Analyte	Difference	EDS Qualifier
5-003	05SS00301	Lead	2.9 (±1.31)	J
5-003	05SS00301D	Lead	2.9 (±1.31)	J
5-003	05SS01501	Lead	2.9 (±1.31)	J
5-003	05SS01601	Lead	2.9 (±1.31)	J
5-003	05SS01801	Lead	2.9 (±1.31)	J

SDG No.	Sample	Analyte	RPD or Difference	EDS Qualifier
56-001	56SS00101	Chromium	D=10.4 (±4.0)	J
56-001	56SS00101D	Chromium	D=10.4 (±4.0)	J
56-001	56SS00201	Chromium	D=10.4 (±4.0)	J
56-001	56SS00301	Chromium	D=10.4 (±4.0)	J
56-001	56SS00401	Chromium	D=10.4 (±4.0)	J
56-001	56SS00101	Copper	D=18.9 (±10)	J
56-001	56SS00101D	Copper	D=18.9 (±10)	J
56-001	56SS00201	Copper	D=18.9 (±10)	J
56-001	56SS00301	Copper	D=18.9 (±10)	J
56-001	56SS00401	Copper	D=18.9 (±10)	J
56-001	56SS00101	Lead	RPD=94.3	J
56-001	56SS00101D	Lead	RPD=94.3	J
56-001	56BS00104	Lead	RPD=94.3	J
56-001	56SS00201	Lead	RPD=94.3	J
56-001	56BS00204	Lead	RPD=94.3	J
56-001	56SS00301	Lead	RPD=94.3	J
56-001	56BS00304	Lead	RPD=94.3	J
56-001	56SS00401	Lead	RPD=94.3	J
56-001	56BS00405	Lead	RPD=94.3	J
56-001	56SS00101	Zinc	RPD=115	J
56-001	56SS00101D	Zinc	RPD=115	J
56-001	56SS00201	Zinc	RPD=115	J
56-001	56BS00204	Zinc	RPD=115	J
56-001	56SS00301	Zinc	RPD=115	J
56-001	56SS00401	Zinc	RPD=115	J
56-001	56BS00405	Zinc	RPD=115	J

SDG No.	Duplicate ID	Analyte	CRDL (ug/L)	Sample Conc. (ug/L)	Dup. Conc. (ug/L)	% RPD	Difference	Out of Limit (Y/N)
003W	26MW001S	Fe	100	89.76	251.88	NA	162	Y
003W	26MW001S	Mn	15	162.8	250.9	42.6	NA	Y

SDG No.	Duplicate	Analyte	Sample	EDS Qualifier
006W	15MW005S	Lead	02K004	UJ
006W	15MW005S	Lead	02MW028S	UJ
006W	15MW005S	Lead	020P007	UJ

SDG No.	Sample	Analyte	Difference	EDS Qualifier
001S	19SS001	Chromium	5.79	J
001S	19SS001D	Chromium	5.79	J
001S	19SS002	Chromium	5.79	J
001S	19SS003	Chromium	5.79	J
001S	19SS004	Chromium	5.79	J
001S	19SS005	Chromium	5.79	J
001S	19SS006	Chromium	5.79	J

SDG No.	Sample	Analyte	RPD	Qualifier
004S	AASS001	Lead	47.9	J
004S	AASS001D	Lead	47.9	J
004S	AASS002	Lead	47.9	J

SDG No.	Sample	Analyte	RPD	Qualifier
001SED	02SD016	Lead	73.4	J
001SED	02SD016	Lead	73.4	J
001SED	02SD016	Lead	73.4	J
001SED	02SD016	Lead	73.4	J
001SED	02SD016	Lead	73.4	J
001SED	02SD016	Lead	73.4	J
001SED	02SD016	Lead	73.4	J
001SED	02SD016	Lead	73.4	J
001SED	02SD016	Lead	73.4	J
001SED	02SD018	Lead	73.4	J
001SED	02SD019	Lead	73.4	J
001SED	02SD022	Lead	73.4	J
001SED	02SD031	Lead	73.4	J
001SED	02SD031D	Lead	73.4	J
001SED	02SD017	Lead	73.4	J
001SED	02SD032	Lead	73.4	J
001SED	02SD039	Lead	73.4	J
001SED	02SD030	Lead	73.4	J
001SED	02SD029	Lead	73.4	J
001SED	02SD029D	Lead	73.4	J
001SED	02SD015	Lead	73.4	J

SDG No.	Sample	Analyte	Difference	Qualifier
002SED	02SD027	Chromium	12.3	J
002SED	02SD026	Chromium	12.3	J
002SED	02SD024	Chromium	12.3	J
002SED	02SD023	Chromium	12.3	J
002SED	02SD021	Chromium	12.3	J
002SED	02SD033	Chromium	12.3	J
002SED	02SD034	Chromium	12.3	J
002SED	02SD035	Chromium	12.3	J
002SED	02SD020	Chromium	12.3	J
002SED	02SD020DD	Chromium	12.3	J
002SED	02SD028	Chromium	12.3	J
002SED	02SD025	Chromium	12.3	J
002SED	02SD010	Chromium	12.3	J

SDG No.	Sample	Analyte	RPD	EDS Qualifier
003SED	00SD001	Mercury	53.8	J
003SED	02SD043	Mercury	53.8	J
003SED	02SD042	Mercury	53.8	J
003SED	02SD042D	Mercury	53.8	J
003SED	02SD041	Mercury	53.8	J
003SED	02SD040	Mercury	53.8	J

SDG No.	Sample	Analyte	Difference	Qualifier
2&4-001	04BS00405	Lead	2.16 (±1.4)	J
2&4-001	04BS00905	Lead	2.16 (±1.4)	J
2&4-001	04BS01008	Lead	2.16 (±1.4)	J
2&4-001	04BS01008D	Lead	2.16 (±1.4)	J

SDG No.	Sample	Analyte	RPD or Difference	EDS Qualifier
5-002	05BS01009	Zinc	D=18.2	J
5-002	05BS00509	Zinc	D=18.2	J
5-002	05BS00909	Zinc	D=18.2	J
5-002	05BS00909D	Zinc	D=18.2	J
5-002	05BS01509	Zinc	D=18.2	J
5-002	05BS01709	Zinc	D=18.2	J
5-002	05BS01610	Zinc	D=18.2	J
5-002	05BS01807	Zinc	D=18.2	J
5-002	05SS02101	Zinc	D=18.2	J

SDG No.	Sample	Analyte	RPD or Difference	EDS Qualifier
28-003	48BS00205	Copper	18.2 (±10.4)	J
28-003	48BS00505	Copper	18.2 (±10.4)	J
28-003	48SS00301	Copper	18.2 (±10.4)	J
28-003	48SS00401D	Copper	18.2 (±10.4)	J
28-003	48BS00505	Zinc	12.0 (±8.4)	J
28-003	48SS00301	Zinc	12.0 (±8.4)	J
28-003	48SS00401	Zinc	12.0 (±8.4)	J
28-003	48SS00401D	Zinc	12.0 (±8.4)	J

APPENDIX B
Representativeness Tables

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
001W	7/02/94 02R001	Carbon Disulfide	5	25	02MW009ID 02MW009I	3	J	5	U
001W	7/07/94 02R001	Carbon Disulfide	5	25	02K001	2	J	5	U
001W	02K001	Carbon Disulfide	2	10	None Found	--	--	--	--
001W	02T002	None Found	--	--	--	--	--	--	--
001W	02T003	None Found	--	--	--	--	--	--	--
001W	02T004	None Found	--	--	--	--	--	--	--
001W	02T006	Methylene Chloride	1	10	None Found	--	--	--	--

SDG No.	Blank ID/Date	Affected Analyte	Conc ug/L	Action Level	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
002W	VBLK79 7/05/94	Methylene Chloride	6	60	16T009	2	JB	5	U
002W	VBLK79 7/05/94	Acetone	14	140	16T009	8	JB	10	U
002W	VBLK7B 7/07/94	Acetone	7	70	16MW003S	3	JB	10	U
002W	VBLK7C 7/08/94	Acetone	8	80	11MW002S	10	B	10	U
002W	VBLK7F 7/12/94	Acetone	6	60	11MW003S	6	JB	10	U
002W	VBLK7G 7/13/94	Acetone	6	60	11T012	10	B	10	U
002W	VBLK79 7/05/94	Methylene Chloride	6	60	16MW001I 16T010	4 4	JB JB	5 5	U U
002W	VBLK79 7/05/94	Acetone	14	140	16MW001I 16T010	5 10	JB B	10 10	U U
002W	VBLK74 6/30/94	Methylene Chloride	1	10	02T008 13MW002S 02T007 02T008	2 1 1 7	JB JB JB JB	5 5 5 10	U U U U
002W	VBLK74 6/30/94	Acetone	9	90	02MW015SR 13MW002S 02T007 02T008	6 4 9 7	JB JB JB JB	10 10 10 10	U U U U
002W	VBLK76 7/01/94	Methylene Chloride	No Samples Affected						
002W	VBLK76 7/01/94	Acetone	No Samples Affected						
002W	VBLK6Z 6/28/94	Acetone	10	100	02R002 22MW001S 02MW012I 02MW012ID 02MW001S 02T005	5 4 10 10 5 9	JB JB B B JB JB	10 10 10 10 10 10	U U U U U U
002W	VBLK7J	No compounds Detected							

SDG No.	Blank ID/Date	Affected Analyte	Conc ug/L	Action Level	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
002W	16T009 7/05/94	Methylene Chloride	Also found in laboratory blanks and has been previously qualified						
002W	11T012 7/13/94	Acetone	Also found in laboratory blanks and has been previously qualified						
002W	16T010 7/05/94	Methylene Chloride, Acetone	Also found in laboratory blanks and has been previously qualified						
002W	02T008 6/30/94	Methylene Chloride, Acetone	Also found in laboratory blanks and has been previously qualified						
002W	02T007 6/30/94	Methylene Chloride, Acetone	Also found in laboratory blanks and has been previously qualified						
002W	02T005 6/23/94	Methylene Chloride	4	40	02R002 22MW001S	1 1	J J	5 5	U U
002W	02T005 6/23/94	Methylene Chloride	4	40	02MW012I 02MW012S	1 1	J J	5 5	U U
002W	02T013 7/14/94	Methylene Chloride	1	10	11MW001S	1	J	5	U
002W	02T013 7/14/94	Acetone	18	180	11MW001S 16MW004S	7 4	J J	10 10	U U
002W	02R002 6/28/94	Carbon Disulfide	2	10	None-all samples were undetected				
002W	02R002 6/28/94	Tetrachlor oethene	1	5	None-all samples were undetected				

SDG No.	Blank ID	Analyte	Affected Samples	Lab Conc.	Lab Qual.	EDS Conc.	EDS Qual.
003W	09T017	Methylene chloride	09MW003S 09MW002S	2 2	J J	5 5	U U
003W	0BR003	None Found	--	--	--	--	--
003W	09T016	None Found	--	--	--	--	--
003W	09T017	Acetone	09MW003S 09MW002S 0SMW003S 08MW001S 28MW001S	12 12 6 5 6	-- -- J J J	12 12 6 5 6	U U U U U
003W	26R005	Acetone-already qualified due to trip blank contamination					
003W	26R005	Carbon Disulfide-Not detected in any of the associated samples					

SDG No.	Blank ID/Date	Affected Analyte	Conc ug/L	Action Level	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
003W	VBLK75 7/25/94	Methylene Chloride	3	30	None Found	--	--	--	--

SDG No.	Blank ID/Date	Affected Analyte	Conc ug/L	Action Level	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
004W	V0727W01-BLK 7/27/94	Carbon Disulfide	1	5	02MW030S	1	BJ	5	U
004W	VBLK7U 7/18/94	Acetone	9	90	02MW018I	11	B	11	U
004W	VBLK7U 7/18/94	Acetone	9	90	02MW027I	10	B	10	U
004W	V0727W01-BLK 7/27/94	Carbon Disulfide	1	5	02MW037SD 02MW036S	2 2	BJ BJ	5 5	U U
004W	V0727W01-BLK 7/27/94	Carbon Disulfide	1	5	02MW035I 02T022	4 11	BJ B	5 11	U -

SDG No.	Blank ID/Date	Affected Analyte	Conc ug/L	Action Level	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
004W	02T019 7/23/94	Carbon Disulfide	1	5	Compound not detected in associated samples				
004W	02T020 7/26/94	Methylene Chloride	1	10	02MW027I	2	J	10	U
004W	02T020 7/26/94	Acetone	49	490	02MW027I (previously qualified) 02MW017I	9 9	J J	10 10	U U
004W	02T023 7/26/94	Methylene Chloride	1	10	Compound not detected in associated samples				
004W	02T023 7/26/94	Acetone	55	550	02MW037I	35	--	35	U
004W	02K002 7/27/94	Trichloro fluoro methane	1	5	02MW037S 02MW037SD 02MW036S	1 2 1	J J J	5 5 5	U U U
004W	02T022 7/27/94	Methylene Chloride	1	10	Compound not detected in associated samples				
004W	02T022 7/27/94	Acetone	14	140	02MW037SD 02MW036S	9 4	J J	10 10	U U
004W	02T022 7/27/94	Carbon Disulfide	11	110	02MW037SD and 02MW036S (Both previously qualified due to lab blank)				
004W	26R005 7/22/94	Acetone	6	60	Compound not detected in associated samples				
004W	26R005 7/22/94	Carbon Disulfide	2	10	26MW001SD	2	J	5	U
004W	26T018 7/23/94	Methylene Chloride	1	10	Compound not detected in associated samples				
004W	02T024	None Found	--	--	--				
004W	26T018 7/23/94	Acetone	22	220	Compound not detected in associated samples				

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc	Lab Qual	EDS Conc	EDS Qual
005W	94M2V04127 7/27/94	Carbon Disulfide	1	5	020P013	5	B	5	U
005W	94M2V04127 7/27/94	Carbon Disulfide	1	5	020T025	7	B	7	U

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc	Lab Qual	EDS Conc	EDS Qual
005W	02R006	None Found	--	--	--	--	--	--	--
005W	8/04/94 02T026	Acetone	21	210	02MW032I	16	--	16	U
005W	8/04/94 02T026	Acetone	21	210	02MW032S	23	--	23	U
005W	8/04/94 02T026	Acetone	21	210	02MW033S	9	J	10	U
005W	8/04/94 15T029	Acetone	23	230	02MW034S	19	--	19	U
005W	8/04/94 15T029	Acetone	23	230	02MW034SD	32	--	32	U
005W	8/04/94 15T029	Acetone	23	230	15MW003S	11	--	11	U
005W	7/27/94 02T025	Acetone	24	240	020P005D	15	--	15	U
005W	7/27/94 02T025	Acetone	24	240	02R006	12	--	12	U
005W	7/27/94 02T025	Acetone	24	240	020P006	16	--	16	U
005W	7/27/94 02T025	Acetone	24	240	02MW021S	3	J	5	U
005W	7/27/94 02T025	Carbon Disulfide	7	35	020P013	5	B	5	U

005W	8/08/94 08T030	Acetone	18	180	15MW004S	12	—	12	U
005W	8/08/94 08T030	Acetone	18	180	08MW005I	44	--	44	U

SDG No.	Blank ID/Date	Affected Analyte	Conc ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
006W	V0902W01 -BLK 9/2/94	Methylene Chloride	4	40	02K004	1	BJ	5	U
006W	V0902W01 -BLK 9/2/94	Methylene Chloride	4	40	02MW028S	1	BJ	5	U
006W	V0902W01 -BLK 9/2/94	Methylene Chloride	4	40	020P007	1	BJ	5	U
006W	V0902W01 -BLK 9/2/94	Methylene Chloride	4	40	02T060	1	BJ	5	U

SDG No.	Blank ID/Date	Affected Analyte	Conc ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
006W	15T035 8/5/94	Methylene Chloride	12	120	Methylene chloride was not detected in the associated samples.				
006W	15T035 8/5/94	Acetone	13	130	15MW005I	27	--	27	U
006W	02T032 8/5/94	Acetone	12	120	02MW023I	19	--	19	U
					02K003	18	--	18	U
					02R008	16	--	16	U
					02MW011I	10	--	10	U
					02MW011ID	17	--	17	U
					02MW023S	41	--	41	U
					02T031	11	--	11	U
					15T035	13	--	13	U

006W	02T032 8/5/94	Methylene Chloride	8	80	02MW011I 02MW011ID 02T031	2 2 10	J J --	5 5 10	U U U
006W	02K003 8/5/94	Acetone	18	180	Acetone was previously qualified in 02K003 due to trip blank 02T032				
006W	02R008 8/5/94	Acetone	16	160	Acetone was previously qualified in 02R008 due to trip blank 02T032				
006W	02T031 8/5/94	Acetone Methylene Chloride	11 10	110 100	Acetone and methylene chloride were previously qualified in 02T031 due to trip blank 02T032				
006W	02T043 8/5/94	Acetone	8	80	02MW019S	11	--	11	U
006W	02T045 8/8/94	Acetone	15	150	02MW020S	62	--	62	U
006W	02T047 8/9/94	Acetone	5	50	02MW026I	15	--	15	U
006W	02T049 8/9/94	No compounds detected							
006W	02T051 8/14/94	Methylene Chloride Acetone	7 5	70 50	Methylene chloride and acetone were not detected in the associated samples.				
006W	02T057 8/18/94	Methylene Chloride	10	100	Methylene chloride was not detected in the associated samples.				
006W	02K004 9/2/94	Methylene Chloride	1	10	Methylene chloride was previously qualified in 02K004 due to lab blank contamination				
006W	02K004 9/2/94	Trichloro fluoro methane	1	5	Trichlorofluoromethane was not detected in the associated samples.				
006W	02T060 9/2/94	Acetone	9	90	020P007	5	J	10	U

SDG No.	Blank ID/ Date extracted	Affected Analyte	Conc ug/L	Action Level ug/L	Affected Sample	Lab Conc. ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
007W	V0902W01 BLK	Methylene chloride	4	40	02MW038I	2	BJ	5	U
007W	V0901W4-BLK	Acetone	4	40	08MW009S	330	B	330	--
007W	V0908W02 BLK	Acetone	5	50	08MW004S	8	BJ	10	U
007W	V0901W4-BLK	Acetone	4	40	10OP001	5	BJ	10	U
007W	V0901W4-BLK	Acetone	4	40	02MW013S	6	BJ	10	U
007W	V0901W4-BLK	Acetone	4	40	15MW005SD	13	B	13	U
007W	V0908W02 BLK	Acetone	4	40	15MW001S	5	BJ	10	U

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
007W	02T068 9/06/94	Methylene Chloride	4	40	None found				
007W	08T064 9/06/94	Acetone	4	40	08MW017S 08MW018S	4 11	J --	10 11	U U
007W	08T063 9/02/94	Acetone	8	80	08MW014S 08MW013S	8 4	J J	10 10	U U

SDG No.	Blank ID/Date Analyzed	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
008W	V0921W01 -BLK 9/21/94	None Found	--	--	--	--	--	--	--
008W	V0919W01 -BLK 9/19/94	None Found	--	--	--	--	--	--	--
008W	V0926W01 -BLK 9/26/94	None Found	--	--	--	--	--	--	--

SDG No.	Blank ID/Date Analyzed	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
008W	13R024 9/21/94	Acetone	9J	90	None - All non-detects	--	--	--	--
008W	13K005 9/21/94	Acetone	11	110	None - All non-detects	--	--	--	--
008W	13T078 9/19/94	Methylene Chloride	1J	10	None - All non-detects	--	--	--	--
008W	08T082 9/26/94	None Found	--	--	--	--	--	--	--

SDG No.	Blank ID/Date Analyzed	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
011W	VBLKBL 11/18/94	Methylene Chloride	10	100	08MW020S	4	JB	5	U
					08MW020SD	2	JB	5	U
					08R034	3	JB	5	U
					08T086	5	B	5	U
011W	VBLKBL 11/18/94	Acetone	12	120	None - All non-detects	--	--	--	--

SDG No.	Blank ID/Date Analyzed	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
011W	08R034 11/18/94	None Found	--	--	--	--	--	--	--
011W	08T086 11/18/94	None Found	--	--	--	--	--	--	--

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
001SW	VBLK7Z 8/1/94	Methylene Chloride	1	10	02SW012	1	JB	5	U
001SW	VBLK7Z 8/1/94	Methylene Chloride	1	10	02SW011	2	JB	5	U
001SW	VBLK7Z 8/1/94	Methylene Chloride	1	10	02SW013	1	JB	5	U
001SW	VBLK7Z 8/1/94	Methylene Chloride	1	10	02T033	8	B	8	U
001SW	VBLK7Z 8/1/94	Methylene Chloride	1	10	02R010	1	JB	5	U
001SW	VBLK7Z 8/1/94	Methylene Chloride	1	10	02T036	6	B	6	U
001SW	VBLK7Z 8/1/94	Methylene Chloride	1	10	02T034	10	B	10	U
001SW	VBLK7Z 8/1/94	Methylene Chloride	1	10	02SW018	3	JB	5	U
001SW	VBLK7Z 8/1/94	Methylene Chloride	1	10	02SW019	4	JB	5	U
001SW	VBLK7Z 8/1/94	Methylene Chloride	1	10	02SW022	3	JB	5	U
001SW	VBLK7Z 8/1/94	Methylene Chloride	1	10	02SW031	4	JB	5	U

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
001SW	02T033 8/1/94	Acetone	12	120	02SW012	4	J	10	U
					02SW011	12	--	12	U
					02SW014	9	J	10	U
					02SW013	12	--	12	U
001SW	02T033 8/1/94	Methylene Chloride	Compound previously qualified as undetected due to laboratory blank contamination.						
001SW	02T034 8/1/94	Methylene Chloride	Compound previously qualified as undetected due to laboratory blank contamination.						
001SW	02R010 8/1/94	Methylene Chloride	Compound previously qualified as undetected due to laboratory blank contamination.						
001SW	02R010 8/1/94	Acetone	Compound previously qualified as undetected due to laboratory blank contamination.						
001SW	02T036 8/1/94	Acetone	11	110	02SW017	18	--	18	U
					02SW032	17	--	17	U
					02SW039	3	J	10	U
					02R010	12	--	12	U
					02SW030	5	J	10	U
					02SW029	8	J	10	U
					02SW029D	11	--	11	U
					02SW015	9	J	10	U

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
002SW	VBLK8F 8/10/94	MeCl2	2J	20	49SW010	2	JB	5	U
002SW	VBLK8F 8/10/94	MeCl2	2J	20	49SW009	1	JB	5	U
002SW	VBLK8F 8/10/94	MeCl2	2J	20	49SW012	2	JB	5	U
002SW	VBLK8F 8/10/94	MeCl2	2J	20	49SW011	1	JB	5	U
002SW	VBLK8F 8/10/94	MeCl2	2J	20	49T040	8	B	8	U

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
002SW	49T040 8/10/94	Acetone	10	100	49SW010	13	--	13	U
					49SW009	7	J	10	U
					49SW012	9	J	10	U
					49SW011	6	J	10	U
002SW	02T039 8/08/94	Acetone	8	80	02SW038	18	--	18	U
					02SW038D	20	--	20	U
					02SW037	7	J	10	U
					02SW036	26	--	26	U
002SW	02T037 8/04/94	Methylene Chloride	10	100	02SW024	1	J	5	U
002SW	02T037 8/04/94	Acetone	6J	60	02SW023	6	J	10	U
					02SW024	9	J	10	U
002SW	02T037 8/04/94	Acetone	6J	60	02SW033	24	--	24	U
002SW	02T037 8/04/94	Acetone	6J	60	02SW034	24	--	24	U
002SW	02T037 8/04/94	Acetone	6J	60	02SW035	26	--	26	U
002SW	02T038 8/04/94	Methylene Chloride	9	90	none found	--	--	--	--
002SW	02T038 8/04/94	Acetone	12	120	02SW020	17	--	17	U
002SW	02T038 8/04/94	Acetone	12	120	02SW020D	16	--	16	U
002SW	02T038 8/04/94	Acetone	12	120	02SW028	6	J	10	U

002SW	02T038 8/04/94	Acetone	12	120	02SW025	5	J	10	U
002SW	02T038 8/04/94	Acetone	12	120	02SW010	17	--	17	U

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
003SW	VBLK8F 8/10/94	Methylene Chloride	2J	20	00SW001	1	JB	5	U
					49R014	2	JB	5	U
					02SW042	1	JB	5	U
					02SW041	1	JB	5	U
					02SW040	6	B	6	U
					02R015	5	B	5	U
					02T042	6	B	6	U

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
003SW	02T042 8/10/94	Methylene Chloride	Previously qualified as undetected due to lab blank contamination.						
003SW	02T042 8/10/94	Acetone	10	100	02SW043	10	--	10	U
					02SW041	9	J	10	U
					02SW040	10	--	10	U
					02R015	8	J	10	U
003SW	02R015 8/10/94	Methylene Chloride	Previously qualified as undetected due to lab blank contamination.						
003SW	02R015 8/10/94	Acetone	Previously qualified as undetected due to lab blank contamination.						
003SW	49R014 8/10/94	Methylene Chloride	Previously qualified as undetected due to lab blank contamination.						
003SW	49R014 8/10/94	Acetone	All associated samples were previously qualified due to trip blank (02T042) contamination.						

SDG N0.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
001S	19R004 7/12/94	Acetone	14	140	Compound not detected in associated samples.				
001S	19R004 7/12/94	Carbon Disulfide	3J	30	Compound not detected in associated samples.				
001S	19T011 7/12/94	Methylene Chloride	1J	10	Compound not detected in associated samples.				
001S	19T011 7/12/94	Acetone	28	280	Compound not detected in associated samples.				

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
002S	19R004 7/12/94	Acetone	14	140	Compound already qualified due to trip blank.				
002S	19R004 7/12/94	Carbon disulfide	3J	30	Compound not detected in associated samples.				
002S	19T011 7/12/904	MeCl2	1J	10	Compound not detected in associated samples.				
002S	19T011 7/12/904	Acetone	28	280	19BS001D	5	J	11	U
					19BS002	4	J	11	U
002S	19T011 7/12/904	Acetone	28	280	19BS005	7	J	11	U
					19BS006	6	J	11	U

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
003S	V0712S01-BLK 7/12/94	Acetone	15	150	19SD001	31	B	31	U
003S	V0712S01-BLK 7/12/94	Acetone	15	150	19SD002	16	B	16	U

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
003S	19T011 7/12/94	Methylene Chloride	1	10	Compound not detected in the associated samples.				
003S	19T011 7/12/94	Acetone	28	280	Previously qualified due to lab blank contamination				
003S	19R004 7/12/94	Acetone	14	140	Previously qualified due to lab blank contamination				
003S	19R004	Carbon disulfide	3J	30	19SD001D	2	J	6	U

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
004S	V0712W01 BLK 7/12/94	No Compound Detected			19R004 19T011	-	-	-	-
004S	V0712S01-BLK 7/12/94	Acetone	15	150	AASS001D AASS002	All found to be undetected			
004S	V0713S01-BLK 7/13/94	No Compounds Detected			AASS001	-	-	-	-

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
004S	19T011 7/12/94	Methylene Chloride	1	10	Compounds not detected in associated samples				
004S	19T011 7/12/94	Acetone	28	280	Compounds not detected in associated samples				
004S	19R004 7/12/94	Acetone	14	140	Compounds not detected in associated samples				
004S	19R004 7/12/94	Carbon disulfide	3J	30	Compounds not detected in associated samples				

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/l	Action Level ug/l	Affected Sample	Lab Conc ug/l	Lab Qual	EDS Conc ug/l	EDS Qual
005S	V0713S01 -BLK 7/13/94	There were no compounds detected			AABS001 AABS001D AABS002	-	-	-	-

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
005S	19T011 7/12/94	Methylene Chloride	1	10	Compound was not detected in associated sample				
005S	19T011 7/12/94	Acetone	28	280	Compound was not detected in associated sample				
005S	19R004 7/12/94	Acetone	14	140	Compound was not detected in associated sample				
005S	19R004 7/12/94	Carbon disulfide	3J	30	Compound was not detected in associated sample				

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
001SED	VBLK7W 1 7/29/94	Acetone	3	30	02SD012	19	--	19	U
					02SD011	41	--	41	--
					02SD014	21	--	21	U
					02SD013	94	--	94	--
001SED	VBLK81 8/2/94	Methylene Chloride	4J	40	02SD018	10	B	10	U
					02SD019	4	JB	8	U
					02SD022	5	JB	8	U
					02SD031	7	JB	7	U
					02SD031D	5	JB	6	U
001SED	VBLK81 8/2/94	Acetone	5J	50	02SD018	46	B	46	U
					02SD019	16	JB	16	U
					02SD022	6	JB	16	U
					02SD031	23	B	23	U
					02SD031D	56	B	56	--
001SED	VBLK84 8/3/94	Methylene Chloride	4J	40	02SD016	16	B	16	U
					02SD032	11	JB	12	U
					02SD029	47	B	47	--
					02SD029D	59	B	59	--
001SED	VBLK84 8/3/94	Acetone	5J	50	02SD016	200	B	200	--
					02SD032	89	B	89	--
					02SD029	2400	EB	2400	--
					02SD029D	1100	B	1100	--
001SED	VBLK81 8/2/94	Methylene Chloride	4J	40	02SD017	23	JB	36	U
					02SD030	4	JB	7	U
001SED	VBLK81 8/2/94	Acetone	5J	50	02SD017	680	B	680	--
					02SD030	15	B	15	U
001SED	VBLK84 8/3/94	Methylene Chloride	4J	40	02SD039	9	B	9	U
					02SD015	6	JB	6	U

001SED	VBLK84 8/3/94	Acetone	5J	50	02SD039 02SD015	18 12	B U	18 12	U U
001SED	VBLK86 8/4/94	Methylene Chloride	7	70	02SD029DL	110	BD	110	--
001SED	VBLK86 8/4/94	Acetone	8J	80	02SD029DL	870	BD	870	--

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
001SED	02T033 8/1/94	Methylene Chloride	Previously qualified due to lab blank contamination.						
001SED	02T033 8/1/94	Acetone	12	396	02SD012 02SD014	Previously qualified due to lab blank contamination.			
001SED	02T033 8/1/94	Acetone	12	396	02SD011 02SD013	41 94	-- --	41 94	U U
001SED	02T034 8/2/94	Methylene Chloride	Previously qualified due to lab blank contamination.						
001SED	02R010 8/1/94	Methylene Chloride and Acetone	Previously qualified due to lab blank contamination.						
001SED	02T036 8/1/94	Methylene Chloride	Previously qualified due to lab blank contamination.						
001SED	02T036 8/1/94	Acetone	11	363	02SD017 02SD032 02SD029 02SD029DL 02SD029D	680 89 2400 870 1100	B B EB BD B	680 89 2400 870 1100	-- U -- -- --

SDG No.	Blank ID	Affected Analyte	Conc ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
002SED	VBLK86	Methylene Chloride	7	70	49SD010	20	JB	23	U
002SED	VBLK86	Acetone	8J	80	49SD010	240	B	--	--
002SED	VBLK8E	Methylene Chloride	8	80	49SD009	32	B	32	U
					49SD011	22	B	22	U
002SED	VBLK8E	Acetone	4J	40	49SD009	230	B	--	--
					49SD011	98	B	--	--
002SED	VBLK8H	Methylene Chloride	7	70	49SD012	25	B	25	U
002SED	VBLK8H	Acetone	6J	60	49SD012	510	B	--	--
002SED	VBLK86	Methylene Chloride	7	70	02SD038	7	JB	9	U
					02SD038D	6	JB	9	U
					02SD037	22	JB	28	U
					02SD036	16	JB	19	U
002SED	VBLK86	Acetone	8J	80	02SD038	55	B	55	U
					02SD038D	56	B	56	U
					02SD037	79	B	79	U
					02SD036	450	B	450	--

002SED	VBLK84	Methylene Chloride	4J	40	02SD027	10	JB	10	U
					02SD026	10	JB	10	U
					02SD024	16	JB	17	U
					02SD023	14	B	14	U
					02SD021	12	B	12	U
					02SD033	18	B	18	U
					02SD035	10	B	10	U
002SED	VBLK84	Acetone	5J	50	02SD026	10	JB	10	U
					02SD024	72	B	72	--
					02SD023	48	B	48	U
					02SD021	--	--	--	--
					02SD033	66	B	66	--
					02SD035	290	B	290	--
002SED	VBLK86	Methylene Chloride	7	70	02SD034	18	B	18	U
					02SD020	32	B	32	U
					02SD020DD	38	B	38	U
					02SD028	8	JB	10	U
					02SD025	12	JB	18	U
					02SD010	9	B	9	U
002SED	VBLK86	Acetone	8J	80	02SD034	110	B	110	--
					02SD020	370	B	370	--
					02SD020DD	400	B	400	--
					02SD028	64	B	64	U
					02SD025	88	B	88	--
					02SD010	130	B	130	--

SDG No.	Blank ID	Affected Analyte	Conc ug/L	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
002SED	49T040	Acetone	10	333	49SD011	98	B	98	U
002SED	02T039	Acetone	8	266.4	None	Previously qualified due to lab blank contamination			
002SED	02R011	Acetone	8	266.4	None	Previously qualified due to lab blank contamination			
002SED	02T037	Methylene Chloride	10	333	None	Previously qualified due to lab blank contamination			
002SED	02T037	Acetone	6J	199.80	None	Previously qualified due to lab blank contamination			
002SED	02T038	Methylene Chloride	9	299.70	None	Previously qualified due to lab blank contamination			
002SED	02T038	Acetone	12	399.60	02SD025	88	B	88	U

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
003SED	VBLK8H 8/11/94	Methylene Chloride	7	70	02SD040	98	B	--	--
					02SD043	14	B	14	U
					02SD042	20	B	20	U
					02SD042D	28	B	28	U
					02SD041	18	B	18	U
003SED	VBLK8H 8/11/94	Acetone	6 J	60	02SD040	170	B	--	--
					02SD043	53	B	53	U
					02SD042	37	B	37	U
					02SD042D	41	B	41	U
					02SD041	36	B	36	U
003SED	VBLK8K 8/12/94	Methylene Chloride	5	50	00SD001	24	B	24	U
003SED	VBLK8K 8/12/94	Acetone	6 J	60	00SD001	50	B	50	U

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
003SED	02T042 8/10/94	Methylene Chloride	Associated samples previously qualified as undetected due to lab blank contamination.						
003SED	02T042 8/10/94	Acetone	10	100	All results have either been previously qualified due to lab blank contamination or are greater than the trip blank contamination.				
003SED	02R015 8/10/94	Methylene Chloride	Associated samples previously qualified as undetected due to lab blank contamination.						
003SED	02R015 8/10/94	Acetone	Associated samples previously qualified as undetected due to lab blank contamination.						

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
BGROUND -SW	VBLK9J 9/12/94	None Found	--	--	--	--	--	--	--
BGROUND -SW	VBLK9K 9/13/94	Acetone	7J	70	0BSW014 0BSW013 0BSW012 0BSW012D	All non-detects	--	--	--

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
BGROUND -SW	OBT075 9/12/94	Methylene Chloride	2 J	20	0BSW010	2	J	5	U

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
BGROUND-SED	VBLK9M 9/19/94	Methylene Chloride	2J	20	0BSD015	6	JB	7	U
					0BSD014	9	B	9	U
					0BSD013	4	JB	7	U
					0BSD012	5	JB	8	U
					0BSD012D	6	JB	8	U
					0BSD010	22	JB	22	--
					0BSD011	17	JB	26	U
BGROUDN-SED	VBLK9M 9/19/94	Acetone	11	110	0BSD015	16	B	16	U
					0BSD014	13	JB	14	U
					0BSD013	12	JB	14	U
					0BSD012	36	B	36	U
					0BSD012D	38	B	38	U
					0BSD010	390	B	390	--
					0BSD011	540	B	540	--

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
BGROUND-SED	0BT075 9/12/94	Methylene Chloride	2J	20	Samples previously qualified undetected due to lab blank contamination.				

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
LWW-SEW	V0919W 01-BLK 9/19/94	None Found							
LWW-SEW	V0921W 01-BLK 9/21/94	None found							
LWW-SEW	V0922W 01-BLK 9/22/94	Acetonitrile	10J	100	LWSW005 LWSW005D	None found			
LWW-SEW	V0922W 01-BLK 9/22/94	Acetonitrile	10J	100	LWSW006 LWSW008	None found			
LWW-SEW	V0922W 01-BLK 9/22/94	Acetonitrile	10J	100	LWSW009	None found			

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
LWW-SEW	LWT077 9/19/94	None found							
LWW-SEW	LWT079 9/21/94	None found							

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/l	Action Level ug/l	Affected Sample	Lab Conc ug/l	Lab Qual	EDS Conc ug/l	EDS Qual
LWW-SED	V0920S01-BLK 9/20/94	None found							
LWW-SED	V0922S01-BLK 9/20/94	None found							

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
LWW-SED	LWT029 10/6/94	None found							

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
08SL01	VBLK8L 8/15/94	None Found	--	--	--	--	--	--	--
08SL01	VBLK8R 8/18/94	Methylene Chloride	5	50	08SL01102	27	B	27	U
					08SL01201	27	B	27	U
					08SL01202	30	B	30	U
08SL01	VBLK8R 8/18/94	Acetone	11	110	08SL01102	110	B	110	U
					08SL01202	36	B	36	U
08SL01	VBLK8T 8/19/94	Methylene Chloride	2J	20	08SL01301	10	B	10	U
08SL01	VBLK8V 8/22/94	Methylene Chloride	2J	20	08SL01101	11	JB	17	U
08SL01	VBLK8V 8/22/94	Toluene	2J	10	08SL01101	5	JB	17	U
08SL01	VBLK8Q 8/18/94	Acetone	5J	50	08SL01001	18	B	18	U
					08SL00801	22		22	
					08SL01001D	13		13	
					08SL01006	16		16	
08SL01	VBLK8S 8/19/94	Methylene Chloride	2J	20	08SL00701D	18	B	18	U
08SL01	VBLK8S 8/19/94	Acetone	5J	50	08SL00501	10	B	10	U
08SL01	VBLK8V 8/22/94	Methylene Chloride	2J	20	08SL00901	10	B	10	U
					08SL00605	9	B	9	U
					08SL00701	4	JB	6	U
08SL01	VBLK8V 8/22/94	Acetone	10	100	08SL00901	9	JB	10	U
					08SL00605	64	B	64	U
08SL01	VBLK8V 8/22/94	Toluene	2J	10	08SL00901	3	JB	6	U
					08SL00605	4	JB	6	U

08SL01	VBLK8Y 8/23/94	Toluene	220J	1100	08SL00806DL	190	JBD	680	U
					08SL00601DL	180	JBD	1400	U
					08SL00705DL	170	JBD	1400	U

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
08SL01	08T053 8/15/94	Methylene Chloride	1J	10	All results have been previously qualified due to lab blank contamination				
08SL01	08T054 8/15/94	Acetone	9J	90	All results were either qualified as undetected due to lab blank contamination or were greater than the trip blank contamination.				
08SL01	08T054 8/15/94	Acetone	9J	90	08R017	6	J	10	U
08SL01	08R017 8/15/94	Acetone	6J	60	The results from the trip blank will be used for qualification since the value is higher				

SDG No.	Blank ID/Date Analyzed	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
08SL02	V1108S0 1-BLK 11/08/94	None Found	--	--	--	--	--	--	--
08SL02	V1110S0 1-BLK 11/11/94	None Found	--	--	--	--	--	--	--
08SL02	V1110W 01-BLK 11/10/94	None Found	--	--	--	--	--	--	--

SDG No.	Blank ID/Date Analyzed	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
08SL02	08T085	Acetone	7J	70	08SL00401D	16	--	16	U
	11/10/94				08R033*	9	J	10	U
					08SL00401RE	14	--	14	U
					08SL00401DRE	13	J	13	U

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
2&4-001	VBLK8C 8/8/94	None Found							
2&4-001	VBLK8H 8/11/94	Methylene Chloride	7	70	02SS00101	10	B	10	U
					04BS00810	14		14	
2&4-001	VBLK8H 8/11/94	Acetone	6J	60	02SS00101	34	B	34	U
					04BS00810	10	JB	12	U
2&4-001	VBLK8K 8/12/94	Methylene Chloride	5	50	04SS00801	10	B	10	U
					04SS00401	10	B	10	U
2&4-001	VBLK8K 8/12/94	Acetone	6J	60	04SS00801	7	JB	10	U
					04SS00401	8	JB	11	U
2&4-001	VBLK8L 8/15/94	None Found							
2&4-001	VBLK8Q 8/18/94	Acetone	5J	50	04BS00405	120	B	120	--
					04BS00905	63	B	63	--
					04BS01008	32	B	32	U
					04BS01008D	25	B	25	U
2&4-001	VBLK01 8/22/94	Acetone	3.4J	34	04SS00401D	9.2	JB	11	U
					04SS00801	2.6	JB	11	U
2&4-001	VBLK01 8/22/94	Methylene Chloride	4.6J	46	04SS00901	3.1	JB	5.5	U
					04SS00401	2.9	JB	5.1	U
					04BS00310	9.2	B	9.2	U
					04SS00801	3.4	JB	5.6	U
					04SS00601	2.9	JB	5.5	U
2&4-001	VBLK02 8/23/94	None Found							

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
2&4-001	02T041 8/8/94	Methylene Chloride	12	120	02R012	2	J	5	U
2&4-001	02T041 8/8/94	Acetone	13	130	02R012	3	J	10	U
2&4-001	04T056 8/19/94	Acetone	11	110	04SS00301	10	J	12	U

SDG No.	Blank ID/Date Analyzed	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
2&4-002	V0902W 01-BLK 9/2/94	Methylene chloride	4J	40	04T061	1	BJ	5	U
2&4-002	V0902S0 1-BLK 9/2/94	None Found	--	--	--	--	--	--	--
2&4-002	V0909W 01-BLK 9/9/94	None Found	--	--	--	--	--	--	--
2&4-002	V0909S0 1-BLK 9/9/94	None Found	--	--	--	--	--	--	--
2&4-002	V0902W 01-BLK 9/2/94	Methylene chloride	4J	40	04T065	1	BJ	5	U
2&4-002	V0908S0 1-BLK 9/8/94	None Found	--	--	--	--	--	--	--

SDG No.	Blank ID/Date Analyzed	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
2&4-002	04T061 9/2/94	Acetone	14	140	04BS00705	41	--	41	U
					04BS00611	34	--	34	U
					04BS00209	15	--	15	U
2&4-002	02T071 9/9/94	Methylene Chloride	3J	30	All non-detects	--	--	--	--
2&4-002	04R020 9/2/94	Acetone	20	200	04BS00509	34	--	34	U
					04BS00111	47	--	47	U
					04BS00111D	64	--	64	U
					04T065	9	J	10	U
2&4-002	04R020 9/2/94	Carbon Disulfide	13	65	04BS00111D	3	J	12	U

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L or ug/kg	Lab Qual	EDS Conc ug/L or ug/kg	EDS Qual
28-001	VBLK8J 8/12/94	Methylene chloride	3J	30	28T044	1	JB	5	U
28-001	VBLK8L 8/15/94	None found							
28-001	VBLK8K 8/12/94	Methylene chloride	5	50	28SS03001 28SS03001D	6 6	B B	6 6	U U
28-001	VBLK8K 8/12/94	Methylene chloride	5	50	28SS02901 28SS02801 28SS02701	7 6 6	B B B	7 6 6	U U U
28-001	VBLK8K 8/12/94	Methylene chloride	5	50	28SS02601 28SS02501	13 6	B B	13 6	U U
28-001	VBLK8K 8/12/94	Methylene chloride	5	50	28SS02401 28SS02301 238802201	6 7 7	B B B	6 7 7	U U U
28-001	VBLK8K 8/12/94	Acetone	6J	60	28SS03001 28SS03001D	4 9	B JB	10 10	U U
28-001	VBLK8K 8/12/94	Acetone	6J	60	28SS02901 28SS02801 28SS02701	29 15 34	B B B	29 15 34	U U U
28-001	VBLK8K 8/12/94	Acetone	6J	60	28SS02601 28SS02501	110 26	B B	110 26	-- U
28-001	VBLK8K 8/12/94	Acetone	6J	60	28SS02401 28SS02301 28SS02201	25 32 33	B B B	25 32 33	U U U

28-001	VBLK8M 8/15/94	Methylene chloride	4J	40	28SS02101D 28SS0301	5 6	JB B	5 6	U U
28-001	VBLK8M 8/15/94	Methylene chloride	4J	40	28SS0401 28SS0501	4 6	JB B	5 6	U U
28-001	VBLK8M 8/15/94	Methylene chloride	4J	40	28SS0701 28SS0901	6 8	B B	6 8	U U
28-001	VBLK8M 8/15/94	Acetone	5J	50	28SS02101D 28SS0301	31 30	B B	31 30	U U
28-001	VBLK8M 8/15/94	Acetone	5J	50	28SS0401 28SS0501 28SS0701	16 28 45	B B B	16 28 45	U U U
28-001	VBLK8M 8/15/94	Acetone	5J	50	28SS0901	97	B	97	--
28-001	VBLK8N 8/16/94	Methylene chloride	3J	30	28SS02101 28SS0601	9 8	B B	9 8	U U
28-001	VBLK8N 8/16/94	Acetone	7J	70	28SS02101 28SS0601	53 37	B B	53 37	U U

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
28-001	28T044 8/12/94	Acetone	7J	70	None - previously qualified as undetected due to lab blank contamination				
28-001	28R016 8/15/94	Methylene chloride	1J	10	None - previously qualified as undetected due to lab blank contamination				
28-001	28R016 8/15/94	Acetone	9J	90	None - previously qualified as undetected due to lab blank contamination				

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
28-002	VBLK8N 8/16/94	Methylene chloride	3J	30	28SS00101	13	B	13	U
					28SS00201	8		8	
					28SS01901	8		8	
					28SS02001	8		8	
					28BS00106	7		7	
					28BS00504	11		11	
					28BS02204	10		10	
					28SS01101	10		10	
					28SS01001	9		9	
					28SS01201	7		7	
28-002	VBLK8N 8/16/94	Acetone	7J	70	28SS00101	46	B	46	U
					28SS00201	28		28	
					28SS01901	25		25	
					28SS02001	24		24	
					28BS00106	26		26	
					28BS02204	37		37	
					28SS01101	25		25	
					28SS01001	41		41	
					28SS01201	22		22	
28-002	VBLK8P 8/17/94	Methylene chloride	8	80	28SS00201D	9	B	9	U
					28SS01301	9		9	
					28SS01401	10		10	
					28SS01401D	10		10	
					28SS01501	9		9	
					28SS01701	9		9	
					28SS01801	11		11	
					28BS01004	19		19	
					28BS01704	18		18	

28-002	VBLK8P 8/17/94	Acetone	5J	50	28SS00201D 28SS01301 28SS01401 28SS01401D 28SS01501 28SS01701 28SS01801	35 36 25 34 31 29 40	B	35 36 25 34 31 29 40	U
28-002	VBLK8T 8/19/94	Methylene chloride	2J	20	28SS01601	5	JB	5	U
28-002	VBLK8T 8/19/94	Acetone	5J	50	28SS01601	24	B	24	U

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
28-003	VBLK8L 8/15/94	None Found				--	--	--	--
28-003	VBLK8M 8/15/94	Methylene Chloride	4J	40	28SS03201	15	--	15	U
					28BS03104	11	--	11	U
					28BS03104D	12	--	12	U
					28SS03301	17	--	17	U
28-003	VBLK8M 8/15/94	Acetone	5J	50	28SS03201	24	--	24	U
					28BS03104	17	--	17	U
					28BS03104D	17	--	17	U
					28SS03301	27	--	27	U
28-003	VBLK8N 8/16/94	Methylene Chloride	3J	30	28SS03101	7	--	7	U
28-003	VBLK8N 8/16/94	Acetone	7J	70	28SS03101	24	--	24	U
28-003	VBLK8P 8/17/94	Methylene Chloride	8	80	48SS00101	4	JB	5	U
					48SS00201	4	JB	5	U
					48BS00205	4	JB	5	U
					48SS00501	4	JB	5	U
28-003	VBLK8P 8/17/94	Acetone	5J	50	48SS00101	8	JB	11	U
					48SS00201	9	JB	10	U
					48BS00205	21	B	21	U
					48SS00501	9	JB	10	U
28-003	VBLK8R 8/18/94	Methylene Chloride	5	50	48BS00505	22	B	22	U
					48SS00301	21	B	21	U
					48SS00401	22	B	22	U
					48SS00401D	21	B	21	U

28-003	VBLK8R 8/18/94	Acetone	11	110	48BS00505 48SS00301 48SS00401 48SS00401D	27 24 21 24	B B B B	27 24 21 24	U U U U
28-003	VBLK3 8/19/94	None Found				--	--	--	--
28-003	VBLK2 8/23/94	None Found				--	--	--	--

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
28-003	28T046 8/15/94	Methylene Chloride	1J	10	None - All previously qualified due to lab blank contamination				
28-003	28T046 8/15/94	Acetone	8J	80	None - All previously qualified due to lab blank contamination				
28-003	48T048 8/15/94	Methylene Chloride	1J	10	None - All previously qualified due to lab blank contamination				
28-003	48T048 8/15/94	Acetone	7J	70	None - All previously qualified due to lab blank contamination				
28-003	08R017 8/15/94	Acetone	6J	60	None - All previously qualified due to lab blank contamination				
28-003	08T054 8/15/94	Acetone	9J	90	None - All previously qualified due to lab blank contamination				
28-003	04T058 8/19/94	Acetone	10	100	Non-detect in associated samples				

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
5-001	V0814W01-BLK 8/14/94	None Found	—	—	—	—	—	—	—
5-001	V0818S01-BLK 8/18/94	None Found	—	—	—	—	—	—	—
5-001	V0823S01-BLK 8/23/94	None Found	—	—	—	—	—	—	—
5-001	V0817W02-BLK 8/17/94	None Found	—	—	—	—	—	—	—
5-001	V0818W01-BLK 8/18/94	None Found	—	—	—	—	—	—	—
5-001	V0817S02-BLK 8/18/94	None Found	—	—	—	—	—	—	—
5-001	V0818S01-BLK 8/18/94	None Found	—	—	—	—	—	—	—
5-001	V0906W01-BLK 9/06/94	None Found	—	—	—	—	—	—	—
5-001	V0908S01-BLK 9/08/94	None Found	—	—	—	—	—	—	—

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
5-001	04T058 8/14/94	Acetone	7J	70	--	--	--	--	--
5-001	04T058 8/14/94	Carbon Disulfide	5	25	05SS00601	2	J	5	U
5-001	05T059 8/18/94	Acetone	10	100	05SS01401	36	--	36	U
5-001	05R018 8/18/94	None Found	--	--	--	--	--	--	--
5-001	05T066	Methylene Chloride	1J	10	05BS00606	1	J	6	U

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
5-002	VBLK96	Acetone	9J	90	05R021*	11	B	11	U
	8/31/94				05T067*	7	JB	10	U
5-002	VBLK9A	Methylene Chloride	1J	10	05T069*	2	JB	5	U
	9/2/94								
5-002	VBLK9E	Methylene Chloride	1J	10	05BS02107	8	B	8	U
	9/7/94				05SS02001	5	JB	5	U
					05SS02001D	5	JB	6	U
					05BS02009	6	JB	7	U
					05SS01901	9	B	9	U
					05BS01909	5	JB	7	U
					05SS00701	9	B	9	U
					05BS00704	11	B	11	--
					05BS01009	6	J	6	U
					05BS00909D	14	B	14	--
					05BS01610	14	B	14	--
5-002	VBLK9E	Acetone	9J	90	05BS02107	25	B	25	U
	9/7/94				05SS02001	10	JB	11	U
					05SS02001D	14	B	14	U
					05BS02009	18	B	18	U
					05SS01901	12	B	12	U
					05BS01909	17	B	17	U
					05SS00701	14	B	14	U
					05BS00704	32	B	32	U
					05BS01009	21	--	21	U
					05BS00909D	42	B	42	U
					05BS01610	56	B	56	U

5-002	VBLK9G 9/8/94	Methylene Chloride	2J	20	05BS00409	24	B	24	--
					05SS01101	9	B	9	U
					05BS01107	11	B	11	U
5-002	VBLK9G 9/8/94	Acetone	6J	60	05BS00409	85	B	85	--
					05SS01101	9	JB	12	U
					05BS01107	29	B	29	U
5-002	VBLK9B 9/6/94	Methylene Chloride	2J	20	05BS00509	13	B	13	U
					05BS00909	11	B	11	U
					05BS01509	12	B	12	U
					05BS01709	11	B	11	U
					05BS01807	12	B	12	U
					05SS02101	7	B	7	U
5-002	VBLK9B 9/6/94	Acetone	10	100	05BS00509	93	B	93	U
					05BS00909	45	B	45	U
					05BS01509	24	B	24	U
					05BS01709	22	B	22	U
					05BS01807	88	B	88	U
					05SS02101	10	JB	11	U

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
5-002	05R021 8/31/94	Methylene Chloride	6	60	05BS00409	24	--	24	U
					05BS00704	11	--	11	U
					05BS00909D	14	--	14	U
					05BS01610	14	--	14	U
5-002	05T067 8/31/94	Methylene Chloride	8	80	All positive results were previously qualified due to lab blank or rinsate blank contamination.				
5-002	05T069 9/2/94	None Found	--	--	--	--	--	--	--

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
5-003	V0912W01 BLK 9/13/94	None Found	--	--	--	--	--	--	--
5-003	V0919W01 BLK 9/19/94	None Found	--	--	--	--	--	--	--
5-003	V0912S01 BLK 9/12/94	None Found	--	--	--	--	--	--	--
5-003	V0919S01 BLK 9/19/94	None Found	--	--	--	--	--	--	--
5-003	V0920S01 BLK 9/20/94	None Found	--	--	--	--	--	--	--

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ** ug/L	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
5-003	05R023 9/13/94	None Found	--	--	--	--	--	--	--
5-003	05T074 9/19/94	Methylene Chloride	2J	20	Methylene Chloride was not detected in the associated samples.				
5-003	05T074 9/19/94	Acetone	5J	50	05SS01801	27	--	27	U
5-003	05T074 9/19/94	Acetone	5J	50	05SS01601	5	J	10	U

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
3-001	VBLK7U 7/27/94	Methylene Chloride	2J	20	03R007	2	JB	5	U
					03T027	2	JB	5	U
3-001	VBLK7U 7/27/94	Acetone	7J	70	03R007	18	B	18	U
					03T027	20	B	20	U
3-001	VBLK7W 7/28/94	Methylene Chloride	1J	10	03T028	2	JB	5	U
3-001	VBLK7V 7/28/94	Acetone	5J	50	03SS00824	46	--	46	U
					03SS00824D	38	--	38	U
					03BS00832	31	--	31	U
					03BS00832D	30	--	30	U
					03SS00424	11	J	12	U
					03SS00524	16	--	16	U
3-001	VBLK7W1 7/29/94	Acetone	3J	30	03SS00624	100	--	100	--
					03SS00724	38	--	38	--
					03BS00432	13	--	13	U
					03BS00532	12	--	12	U
3-001	VBLK80 8/01/94	Methylene Chloride	1J	10	03BS00632	8	--	8	U
					03BS00732	8	--	8	U
3-001	VBLK80 8/01/94	Acetone	8J	80	03BS00632	31	--	31	U
					03BS00732	30	--	30	U
3-001	VBLK7V 7/28/94	Acetone	5J	50	03SS00301	28	--	28	U
					03SS00101	12	--	12	U
					03SS00201	6	J	12	U
					03BS00308	18	--	18	U
					03BS00108	290	E	--	--
3-001	VBLK7W1 7/29/94	Acetone	3J	30	03BS00108DL	240	D	--	--
					03BS00208	24	--	24	U

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
3-001	03R007 7/27/94	Methylene Chloride Acetone	Samples previously qualified as undetected due to lab blank contamination.						
3-001	03R007 7/27/94	Carbon Disulfide	2J	10	03BS00832 03BS00832D	2 2	J J	6 6	U U
3-001	03T027 7/27/94	Methylene Chloride Acetone	Samples previously qualified undetected due to lab blank contamination.						
3-001	03R007 7/27/94	Carbon Disulfide	1J	5	--	--	--	--	--
3-001	03T028 7/28/94	Acetone	21	210	None-all acetone results have been previously qualified as undetected or are greater then the blank contamination.				

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
56-001	V0909W01-BLK 9/9/94	None Found							
56-001	V0909S01-BLK 9/9/94	None Found							
56-001	V0912S01-BLK 9/12/94	None Found							

SDG No.	Blank ID/Date Analyzed	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
56-001	56R022 9/9/94	None Detected							
56-001	56T073 9/9/94	Methylene Chloride	3J	30	All non-detects				

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
BGROUND-BS	V1201S01 -BLK 12/01/94	Acetone	4 J	40	All non-detects	--	--	--	--
BGROUND-BS	V1202W0 2-BLK 12/02/94	None Found	--	--	--	--	--	--	--
BGROUND-BS	V1202S01 -BLK 12/02/94	None Found	--	--	--	--	--	--	--

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
BGROUND -BS	0BT087 12/02/94	Methy-lene Chloride	2	20	All non-detects	--	--	--	--
BGROUND -BS	0BR035 12/02/94	Acetone	3	30	0BBS00104 0BBS00404	3 4	J J	11 11	U U

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
49-SED	V0922W01BLK 9/22/94	Acetonitrile	10 J	100	49R027 49T060	All non-detects	--	--	--
49-SED	V0922S01 BLK 9/22/94	None Found	--	--	--	--	--	--	--
49-SED	V0923S01 BLK 9/23/94	None Found	--	--	--	--	--	--	--

SDG No.	Blank ID/Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
49-SED	49R027 9/22/94	Acetone	6 J	60	The trip blank results were used for qualification since the concentration of acetone is highest.				
49-SED	49T060 9/22/94	Acetone	15	150	49SD017	61	--	61	U
					49SD017D	100	--	100	U
					49SD016RE	24	--	24	U
					49SD015	23	--	23	U
					49SD014	22	--	22	U
					49SD013	20	--	20	U
					49R027	6	J	10	U

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
001W	B0622 WB2-Blk	N-Nitrosodiphenyl amine	3	15	02MW006S	3	BJ	10	U
001W	B0622 WB2-Blk	N-Nitrosodiphenyl amine	3	15	02MW016S	3	BJ	10	U
001W	B0622 WB2-Blk	N-Nitrosodiphenyl amine	3	15	0SMW004S	3	BJ	10	U
001W	B0622 WB2-Blk	N-Nitrosodiphenyl amine	3	15	02MW004RS	3	BJ	10	U
001W	B0622 WB2-Blk	N-Nitrosodiphenyl amine	3	15	13MW001S	2	BJ	10	U
001W	B0622 WB2-Blk	N-Nitrosodiphenyl amine	3	15	13MW006S	3	BJ	10	U
001W	B0622 WB2-Blk	N-Nitrosodiphenyl amine	3	15	13MW006SD	3	BJ	10	U
001W	B0622 WA2-Blk	N-Nitrosodiphenyl amine	3	15	02MW010S	3	BJ	10	U
001W	B0622 WB2-Blk	N-Nitrosodiphenyl amine	3	15	02R001	3	BJ	10	U
001W	B0622 WA2-Blk	N-Nitrosodiphenyl amine	3	15	02MW009I	3	BJ	10	U
001W	B0622 WA2-Blk	N-Nitrosodiphenyl amine	3	15	02MW009ID	2	BJ	10	U
001W	B0622 WA2-Blk	N-Nitrosodiphenyl amine	3	15	02K001	2	BJ	10	U

001W	B0627 WA2-Blk	N-Nitrosodiphenyl amine	3	15	02MW009S	2	BJ	10	U
001W	B0627 WA2-Blk	Bis-2(ethylhexyl) phthalate	7	70	NA	NA	NA	NA	U
001W	B0623 WA1-Blk	N-Nitrosodiphenyl amine	3	15	02MW0003S	3	BJ	10	U
001W	B0623 WA1-Blk	N-Nitrosodiphenyl amine	3	15	02MW0011S	2	BJ	10	U
001W	B0623 WA1-Blk	N-Nitrosodiphenyl amine	3	15	13MW005S	3	BJ	10	U
001W	B0623 WA1-Blk	N-Nitrosodiphenyl amine	3	15	13MW004S	3	BJ	10	U
001W	B0623 WA1-Blk	N-Nitrosodiphenyl amine	3	15	02MW007I	3	BJ	10	U
001W	B0623 WA1-Blk	N-Nitrosodiphenyl amine	3	15	02MW007S	2	BJ	10	U
001W	B0623 WA1-Blk	N-Nitrosodiphenyl amine	3	15	02MW017S	2	BJ	10	U

SDG No.	Blank ID	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
001W	02R001	Acetophenone	3	15	None-Acetophenone was not detected in any of the associated samples				
001W	02K001	Acetophenone	7	35	None-Acetophenone was not detected in any of the associated samples				

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
002W	B0711W A2-BLK 7/22/94	N-nitrosodiphenyl amine	4	20	11MW001S 16MW004S	4 3	BJ BJ	10 10	U U
002W	B0627W A2-BLK 7/14/94	N-nitrosodiphenyl amine	3	15	02R002 22MW001S	3 3	BJ BJ	10 10	U U
002W	B0711W A2-BLK 7/22/94	Bis(2-ethylhexyl) phthalate	7	70	02MW012S 02MW001S	4 2	BJ BJ	10 10	U U
002W	B0627W A2-BLK 7/14/94	N-nitrosodiphenyl amine	3	15	02MW001S	2	BJ	10	U
002W	B0629W A1-BLK 7/16/94	N-nitrosodiphenyl amine	3	15	13MW002S 13MW003S	3 3	BJ BJ	10 10	U U
002W	B0630W A1-BLK 7/18/94	N-nitrosodiphenyl amine	3	15	02MW015SR 02MW002S	2 3	BJ BJ	10 10	U U
002W	B0705W A2-BLK 7/20/94	N-nitrosodiphenyl amine	3	15	16MW001I	4	BJ	10	U
002W	B0708W A1-BLK 7/22/94	N-nitrosodiphenyl amine	4	20	11MW003S 11MW002S	4 4	BJ BJ	10 10	U U
002W	B0705W A1-BLK 7/18/94	2,4-Dimethylphenol	9	45	02MW008SD	9	BJ	10	U
002W	B0705W A1-BLK 7/18/94	N-nitrosodiphenyl amine	3	15	02MW008S 02MW008SD 16MW002S 16MW003S	3 3 3 3	BJ BJ BJ BJ	10 10 10 10	U U U U

SDG No.	Blank ID	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
002W	02R002	N-nitrosodiphenyl amine	--	--	None-Associated samples were previously qualified due to laboratory blank contamination				

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
003W	B0714W A1-Blk 7/25/94	4-Chloro-3-Methyl phenol	5	25	0BR003 0SMW001R 0SMW001RD	4 4 3	BJ BJ BJ	10 10 10	U U U
003W	B0714W A1-Blk 7/25/94	N-Nitroso diphenyl amine (1)	3	15	0BR003 0SMW001R 0SMW001RD	3 3 3	BJ BJ BJ	10 10 10	U U U
003W	B0714W A1-Blk 7/25/94	Pyrene	2	10	None Found	--	--	--	--
003W	B0714W A1-Blk 7/25/94	Phenyl-tert-butylamine	7	35	0BR003 0SMW001R 0SMW001RD	8 6 5	BJ BJ BJ	50 50 50	U U U
003W	B0714W A2-Blk 8/01/94	4-Nitrophenol	18	90	0BR003 0SMW001R 0SMW001RD	16 16 15	BJ BJ BJ	50 50 50	U U U
003W	B0714W A2-Blk 8/01/94	N-Nitroso diphenyl amine (1)	2	10	0BMW001S	2	BJ	10	U
003W	B0713W A2-Blk 8/02/94	N-Nitroso diphenyl amine (1)	2	10	0SMW002S 09MW001S 08MW008S 08MW006S 08MW006SD 02MW016D 26MW004S	3 2 3 2 2 2 2	BJ BJ BJ BJ BJ BJ BJ	10 10 10 10 10 10 10	U U U U U U U
003W	B0713W A2-Blk 8/02/94	Bis(2-ethylhexyl) phthalate	11	110	0SMW002S	7	BJ	10	U

SDG No.	Blank ID	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
003W	0BR003	4-Chloro-3-methyl phenol	--	--	None-Compounds were qualified as "U" undetected due to laboratory blank contamination				
003W	0BR003	4-Nitrophenol	--	--	None-Compounds were qualified as "U" undetected due to laboratory blank contamination				

003W	0BR003	N-nitrosodi phenyl amine	--	--	None-Compounds were qualified as "U" undetected due to laboratory blank contamination
003W	26R005	Aceto-phenone	2	--	None-Compounds were not detected in associated samples
003W	26R005	Benzoic Acid	57	--	None-Compounds were not detected in associated samples

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
004W	SBlk74 8/15/94	None Found	--	--	--	--	--	--	--
004W	SBlk6X 8/13/94	None Found	--	--	--	--	--	--	--
004W	SBlk6Y 8/13/94	None Found	--	--	--	--	--	--	--
004W	SBlk73 8/15/94	Di-n-butylphthalate	2	20	02MW037I	2	JB	10	U
004W	SBlk72 8/15/94	Di-n-butylphthalate	2	20	02MW036I RE	1	JB	10	U
004W	SBlk74 8/15/94	None Found	--	--	--	--	--	--	--
004W	SBlk71 8/15/94	None Found	--	--	--	--	--	--	--
004W	SBlk70 8/15/94	None Found	--	--	--	--	--	--	--

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/L	Action Level	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
004W	02K002 8/13/94	Di-n-butylphthalate	1	10	No samples affected-compound not detected				
004W	02K002 8/13/94	Acetophenone	2	10	No samples affected-compound not detected				
004W	26R005 8/12/94	Benzoic Acid	57	285	No samples affected-compound not detected				

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc	Lab Qual	EDS Conc	EDS Qual
005W	B0725 WB2-BLK 7/25/94	N-Nitrosodiphenyl amine	2	10	020P005	2	BJ	10	U
005W	B0725 WB2-BLK 7/25/94	N-Nitrosodiphenyl amine	2	10	020P005D	2	BJ	10	U
005W	B0725 WB2-BLK 7/25/94	N-Nitrosodiphenyl amine	2	10	02R006	2	BJ	10	U
005W	B0725 WB2-BLK 7/25/94	N-Nitrosodiphenyl amine	2	10	020P006	2	BJ	10	U
005W	B0725 WB2-BLK 7/25/94	N-Nitrosodiphenyl amine	2	10	02MW021S	2	BJ	10	U
005W	B0725 WB2-BLK 7/25/94	N-Nitrosodiphenyl amine	2	10	020P013	3	BJ	10	U
005W	B0727 WA2-BLK 8/12/94	N-Nitrosodiphenyl amine	3	15	02MW031I	2	BJ	10	U
005W	B0727 WA2-BLK 8/12/94	N-Nitrosodiphenyl amine	3	15	02MW031S	3	BJ	10	U
005W	B0727 WA2-BLK 8/12/94	N-Nitrosodiphenyl amine	3	15	02MW032I	3	BJ	10	U

005W	B0727 WA2-BLK 8/12/94	N-Nitrosodiphenyl amine	3	15	02MW032S	3	BJ	10	U
005W	B0727 WA2-BLK 8/12/94	N-Nitrosodiphenyl amine	3	15	02MW033I	3	BJ	10	U
005W	B0727 WA2-BLK 8/12/94	N-Nitrosodiphenyl amine	3	15	02MW033S	3	BJ	10	U
005W	B0727 WA2-BLK 8/12/94	N-Nitrosodiphenyl amine	3	15	02MW034S	3	BJ	10	U
005W	B0727 WA2-BLK 8/12/94	N-Nitrosodiphenyl amine	3	15	02MW034SD	2	BJ	10	U
005W	B0727 WA2-BLK 8/12/94	N-Nitrosodiphenyl amine	3	15	15MW002S	2	BJ	10	U
005W	B0727 WA2-BLK 8/12/94	N-Nitrosodiphenyl amine	3	15	15MW003S	3	BJ	10	U
005W	B0801 WB2-BLK 8/15/94	N-Nitrosodiphenyl amine	3	15	08MW0057	3	BJ	10	U
005W	B0801 WB2-BLK 8/15/94	N-Nitrosodiphenyl amine	3	15	08MW05S	3	BJ	10	U
005W	B0801 WB2-BLK 8/15/94	N-Nitrosodiphenyl amine	3	15	15MW004S	2	BJ	10	U

SDG No.	Blank ID	Affected Analyte	Conc. ug/L	Action Level	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
005W	02R006	Benzoic Acid	11	55	02MW031I	7	J	50	U
005W	02R006	N-Nitroso-piperidine	6	30	None-Compound not detected in associated samples				

SDG No.	Blank ID/ Date extracted	Affected Analyte	Conc ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
006W	B0801WA2 -BLK 8/01/94	N-Nitrosodi phenyl amine	2	10	15MW005I	2	BJ	10	U
006W	B0802WA2 -BLK 8/02/94	N-Nitrosodi phenyl amine	2	10	02MW023I	3	BJ	10	U
006W	B0801WB1 -BLK 8/01/94	N-Nitrosodi phenyl amine	4	20	02K003 02R008 02MW011I 02MW011ID 02MW023S	4 3 3 4 3	BJ BJ BJ BJ BJ	10 10 10 10 10	U U U U U
006W	B0805WA2 -BLK 8/05/94	N-Nitrosodi phenyl amine	3	15	02MW019S	3	BJ	10	U
006W	B0811WA1 -BLK 8/11/94	N-Nitrosodi phenyl amine	2	10	02MW024S 02MW026I	3 2	BJ BJ	10 10	U U

SDG No.	Blank ID/ Date extracted	Affected Analyte	Conc.	Action Level	Affected Sample	Lab Conc	Lab Qual	EDS Conc	EDS Qual
006W	02K003 8/1/94	N-Nitrosodi phenyl amine	4	20	N-Nitrosodiphenylamine was previously qualified in 02K003 due to lab blank contamination				
006W	02R008 8/1/94	N-Nitrosodi phenyl amine	3	15	N-Nitrosodiphenylamine was previously qualified in 02R008 due to lab blank contamination				
006W	02K004 8/24/94	No compounds detected							

SDG No.	Blank ID/ Date extracted	Affected Analyte	Conc.	Action Level	Affected Sample	Lab Conc	Lab Qual	EDS Conc	EDS Qual
007W	080R019	None Found	--	--	--				

SDG No.	Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
008W	B0912WA 1-BLK 9/30/94	Diethyl-phthalate	2J	20	08MW010SD	2	BJ	10	U
008W	B0912WA 1-BLK 9/30/94	Butylbenzyl-phthalate	5J	50	08MW010SD	2	BJ	10	U
008W	B0926WA 1-BLK 10/04/94	None Found	--	--	--	--	--	--	--
008W	B0916WA 1-BLK 10/06/94	None Found	--	--	--	--	--	--	--
008W	B0926WA 2-BLK 10/12/94	None Found	--	--	--	--	--	--	--
008W	B0926WB 2-BLK 10/24/94	Di-n-butyl phthalate	2J	20	None-All non-detects				
008W	B0926WB 2-BLK 10/24/94	Pyrene	2J	10	None-All non-detects	--	--	--	--
008W	B0926WB 2-BLK 10/24/94	Bis(2-ethylhexyl) phthalate	2J	20	None-All non-detects	--	--	--	--

SDG No.	Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
008W	13R024 9/30/94	None Found	--	--	--	--	--	--	--
008W	13K005 10/04/94	None Found	--	--	--	--	--	--	--

SDG No.	Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
011W	B1114W A2-BLK 12/8/94	None Found	--	--	--	--	--	--	--

SDG No.	Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
011W	08R034 12/8/94	Bis(2-ethylhexyl) phthalate	3J	30	08MW020SD	4	J	10	U

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
001SW	B0801W A1MBLK 8/11/94	N-Nitrosodiphenyl-amine	2J	10	02SW012 02SW011 02SW014 02SW013	2 2 3 3	BJ BJ BJ BJ	10 10 10 10	U U U U
001SW	B0801W A1MBLK 8/11/94	Di-n-butylphthalate	3J	30	02SW012 02SW011 02SW014 02SW013	3 4 3 3	BJ BJ BJ BJ	10 10 10 10	U U U U
001SW	B0801WB 1MBLK 9/11/94	Di-n-butylphthalate	3J	30	02SW016 02SW018 02SW019 02SW022 02SW031	3 4 10 3 4	BJ BJ U BJ BJ	10 10 10 10 10	U U -- U U
001SW	B0803WB 2MBLK 9/09/94	None Found	--	--	--	--	--	--	--
001SW	B0803W C2MBLK 9/10/94	None Found	--	--	--	--	--	--	--
001SW	B0801W A2MBLK 9/12/94	Di-n-butylphthalate	2J	20	02SW031 D	3	BJ	10	U

SDG No.	Blank ID	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
001SW	02R010	None Found	--	--	--	--	--	--	--

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
002SW	SBLK7F 8/17/94	Di-n-butylphthalate	2J	20	49SW010 49SW009	2 2	JB JB	10 10	U U
002SW	SBLK7F 8/17/94	Di-n-butylphthalate	2J	20	49SW012 49SW011	2 2	JB JB	10 10	U U

SDG No.	Blank ID	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
002SW	02R011	None Found	--	--	--	--	--	--	--

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/l	Action Level ug/l	Affected Sample	Lab Conc ug/l	Lab Qual	EDS Conc ug/l	EDS Qual
003SW	49R014 8/19/94	None Found	--	--	None Found	--	--	--	--
003SW	02R015 8/19/94	Di-n-butylphthalate	5J	50	None Found	--	--	--	--
003SW	02R015 8/19/94	bis(2-ethylhexyl) phthalate	1J	10	None Found	--	--	--	--

SDG No.	Blank ID/ Date	Affected Analyte	Conc ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
001S	B0707SA1 -BLK 7/20/94	N-Nitrosodiphenyl amine (1)	110	550	19SS001 19SS003	110 110	BJ BJ	680 690	U U
001S	B0707SA1 -BLK 7/20/94	N-Nitrosodiphenyl amine (1)	110	550	19SS004 19SS001D	120 100	BJ BJ	690 680	U U
001S	B0707SA2-BLK 7/21/94	N-Nitrosodiphenyl amine (1)	120	600	19SS002 19SS005	110 110	BJ BJ	690 690	U U
001S	B0707SA2-BLK 7/21/94	N-Nitrosodiphenyl amine (1)	120	600	19SS006	130	BJ	680	U

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
002S	B0707SA2 -BLK 7/21/94	N-Nitrosodiphenyl amine (1)	120	600	19BS001 19BS001D	120 130	BJ BJ	730 740	U U
002S	B0707SA2 -BLK 7/21/94	N-Nitrosodiphenyl amine (1)	120	600	19BS002	100	BJ	690	U
002S	B0707SB1-BLK 7/22/94	N-Nitrosodiphenyl amine (1)	120	600	19BS003 19BS004	150 150	BJ BJ	800 840	U
002S	B0707SB1-BLK 7/22/94	N-Nitrosodiphenyl amine (1)	120	600	19BS005 19BS006	140 130	BJ BJ	740 740	U U

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
003S	B0705SA3 -BLK 7/23/94	N-Nitrosodi-phenyl amine(1)	110J	550	19SD001 19SD001D	140 110	BJ BJ	860 790	U U
003S	B0705SA3 -BLK 7/23/94	N-Nitrosodi-phenyl amine(1)	110J	550	19SD002 29SD003	130 120	BJ BJ	780 800	U U

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
004S	B0705WB 2-BLK 7/23/94	N-Nitrosodi-phenyl amine(1)	4J ug/l	20 ug/l	19R004	3 ug/l	BJ	10 ug/l	U
004S	B0705S03 -BLK 7/23/94	N-Nitrosodi-phenyl amine(1)	110J	550	AASS001	100	BJ	690	U
004S	B0705SA4 -BLK 7/24/94	4-Chloro-3-methyl phenol	160J	900	AASS001D AASS002	150 140	BJ BJ	690 690	U
004S	B0705SA4 -BLK 7/24/94	4-Nitrophenol	590J	2950	AASS001D AASS002	580 560	BJ BJ	690 690	U U
004S	B0705SA4 -BLK 7/24/94	N-Nitrosodi-phenyl amine(1)	130J	650	AASS001D AASS002	130 120	BJ BJ	690 690	U U
004S	B0705SA4 -BLK 7/24/94	Pyrene	83J	415	AASS001D AASS002	930 130	B BJ	930 690	- U
004S	B0705SA4 -BLK 7/24/94	Phenyl-tert-butylamine	110J	550	AASS001D AASS002	140 170	BJ BJ	690 690	U U

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
005S	B0705SA4 -BLK 7/24/94	4-Chloro-3-methyl phenol	160J	800	AABS001 AABS001D AABS002	160 190 170	BJ BJ BJ	700 700 690	U U U
005S	B0705SA4 -BLK 7/24/94	4-Nitrophenol	590J	2950	AABS001 AABS001D AABS002	690 760 650	BJ BJ BJ	3400 3400 3400	U U U
005S	B0705SA4 -BLK 7/24/94	4-Nitrosodi-phenyl amine(1)	130J	650	AABS001 AABS001D AABS002	130 130 120	BJ BJ BJ	700 700 690	U U U
005S	B0705SA4 -BLK 7/24/94	Pyrene	83J	415	AABS001 AABS001D AABS002	75 120 97	BJ BJ BJ	700 700 690	U U U
005S	B0705SA4 -BLK 7/24/94	Phenyl-tert-butylamine	110J	550	AABS001 AABS001D	190 220	BJ BJ	3400 3400	U U

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
001SED	B0801SA 3MBLK 8/15/94	Di-n-butylphthalate	110	1100	02SD011	130	BJ	1000	U
001SED	B0801SA 3MBLK 8/15/94	Di-n-butylphthalate	110	1100	02SD014	880	BJ	1300	U
001SED	B0808SA 1MBLK 8/29/94	None Found	--	--	--	--	--	--	--
001SED	B0801SA 3MBLK 8/15/94	Di-n-butylphthalate	110	1100	02SD013	170	BJ	1200	U

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
001SED	02R010	None Found	--	--	--	--	--	--	--

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
002SED	SBLK7W 8/18/94	Di-n-butyl-phthalate	34J	340	02SD037	170	JB	2000	U
002SED	SBLK7X 8/19/94	Di-n-butyl-phthalate	33J	330	None Found	--	--	--	--
002SED	SBLK7W 8/18/94	Di-n-butyl-phthalate	34	340	None Found	--	--	--	--
002SED	SBLK7L 8/17/94	Di-n-butyl-phthalate	26	260	02SD024 02SD021	53 130	JB JB	830 1500	U U
002SED	SBLK7L 8/17/94	Bis(2-ethylhexyl) phthalate	55	550	02SD021 02SD035	97 50	JB JB	1500 560	U U
002SED	SBLK7T 8/17/94	Di-n-butyl-phthalate	28	280	None Found	--	--	--	--
002SED	SBLK7T 8/17/94	Bis(2-ethylhexyl) phthalate	61	610	None Found	--	--	--	--
002SED	SBLK7L 8/17/94	Di-n-butyl-phthalate	26	260	02SD020 02SD020D	53 72	JB JB	880 900	U U
002SED	SBLK7L 8/17/94	Bis(2-ethylhexyl) phthalate	55	550	02SD020 02SD020D	77 69	JB JB	880 900	U U
002SED	SBLK7L 8/17/94	Di-n-butyl-phthalate	26	260	02SD026 02SD028 02SD025 02SD010	61 69 120 52	JB JB JB JB	760 1000 1300 620	U U U U
002SED	SBLK7L 8/17/94	Bis(2-ethylhexyl) phthalate	55	550	02SD010	60	JB	620	U

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
003SED	SBLK7Z 8/19/94	Di-n-butylphthalate	54J	540	Compound was not detected in associated samples.				
003SED	SBLK80 8/22/94	Di-n-butylphthalate	51J	510	Compound was not detected in associated samples.				

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
003SED	02R015 8/19/94	Di-n-butylphthalate	5J	50	None Found	--	--	--	--
003SED	02R015 8/19/94	bis(2-ethylhexyl) phthalate	1J	10	None Found	--	--	--	--

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
BGROUND -SW	SBLK9R 9/21/94	Di-n-butyl phthalate	7 J	70	0BSW015 0BSW013	1 1	JB JB	10 10	U U

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
BGROUND -SED	SBLK9K 9/15/94	Di-n-butyl phthalate	47 J	470	0BSD012D	34	JB	480	U

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/l	Action Level ug/l	Affected Sample	Lab Conc ug/l	Lab Qual	EDS Conc ug/l	EDS Qual
LWW SEW	B0912W A1-BLK 9/30/94	Diethyl phthalate	All non-detects						
LWW SEW	B0912W A1-BLK 9/30/94	Butylbenzyl phthalate	All non-detects						
LWW SEW	B0916W A1-BLK 10/06/94	None found							

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/l	Action Level ug/l	Affected Sample	Lab Conc ug/l	Lab Qual	EDS Conc ug/l	EDS Qual
LWW SEW	LWR025	None Found	--						
LWW SEW	LWR026	None Found	--						

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/l	Action Level ug/l	Affected Sample	Lab Conc ug/l	Lab Qual	EDS Conc ug/l	EDS Qual
LWW SED	B0916SA 2-BLK 10/04/94	None found							

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/l	Action Level ug/l	Affected Sample	Lab Conc ug/l	Lab Qual	EDS Conc ug/l	EDS Qual
LWW SED	LWR025	None Found	--						
LED SEW	LWR026	None Found	--						

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
08/SL-01	SBLK82 8/22/94	Di-n-butyl-phthalate	29	290	None Found	--	--	--	--
08/SL-01	SBLK88 8/24/94	None Found	--	--	--	--	--	--	--
08/SL-01	SBLK87 8/23/94	Di-n-butyl-phthalate	48J	480	08SL00801 08SL00901 08SL01001 08SL01001D 08SL01006	All non-detect	--	--	--
08/SL-01	SBLK89 8/24/94	Di-n-butyl-phthalate	49J	490	08SL00906 08SL00806 08SL00501 08SL00601 08SL00605 08SL00701 08SL00701D 08SL00705 08SL01006DL 08SL00906DL 08SL00801DL 08SL00805	All non-detect	--	--	--
08/SL-01	SBLK8A 8/25/94	Di-n-butyl-phthalate	46J	460	08SL00806DL	All non-detect	--	--	--
08/SL-01	SBLK8G 8/26/94	Di-n-butyl-phthalate	2J ug/L	20	08R017RE	2	JB	10	U
08/SL-01	SBLK8G 8/26/94	Bis(2-ethylhexyl) phthalate	1J ug/L	10	08R017RE	All non-detects			

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
08/SL-01	08R017 8/24/94	Di-n-butylphthalate	2J	None Found	--	--	--	--
08/SL-01	08R017 8/24/94	Bis(2-ethylhexyl) phthalate	2J	08SL01006	210	J	3700	U
				08SL00501	470	J	3600	U
				08SL00701	500	J	7500	U
				08SL00701D	590	J	7100	U
				08SL01201	280	J	4000	U
				08SL01202	200	J	3700	U

SDG No.	Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
08/SL-02	B1031W C1-BLK 11/21/94	None Found	--	--	--	--	--	--	--
08/SL-02	B1107SA 2-BLK 11/21/94	None Found	--	--	--	--	--	--	--

SDG No.	Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
08/SL-02	08R033 11/21/94		--	--	--	--	--	--	--

SDG No.	Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
SWMU 2&4-001	SBLK76 8/15/94	Di-n-butylphthalate	1J	10	02R012	None Detected			
SWMU 2&4-001	SBLK81 8/22/94	None Found	--	--	--	--	--	--	--
SWMU 2&4-001	SBLK83 8/23/94	Di-n-butylphthalate	29J	290	04BS01008	47	JB	390	U
SWMU 2&4-001	SBLK8D 8/25/94	Di-n-butylphthalate	77J	770	04SS01001 04SS00401D 04SS00701	71 120 35	JB JB JB	370 360 350	U U U
SWMU 2&4-001	SBLK8F 8/26/94	Di-n-butylphthalate	82J	820	04SS00501	32	JB	370	U

SDG No.	Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
SWMU 2&4-001	02R012 8/15/94	None Found							

SDG No.	Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
SWMU 2&4-002	SBLK9Y 9/26/94	None Found	--	--	--	--	--	--	--
SWMU 2&4-002	SBLK9Z 9/26/94	None Found	--	--	--	--	--	--	--
SWMU 2&4-002	SBLK9V 9/26/94	None Found	--	--	--	--	--	--	--
SWMU 2&4-002	SBLKA1 9/27/94	None Found	--	--	--	--	--	--	--

SDG No.	Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
SWMU 2&4-002	04R020 9/26/94	Phenol	5J	25J	None-all non-detects	--	--	--	--

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 28-001	B0815SA 1-MBLK 8/23/94	N-Nitrosodi-phenyl amine(1)	44J	220	28SS02401 28SS02501	48 50	BJ BJ	350 350	U U
SWMU 28-001	B0815SA 1-MBLK 8/23/94	N-Nitrosodi-phenyl amine(1)	44J	220	28SS02601 28SS02701	49 48	BJ BJ	350 340	U U
SWMU 28-001	B0815SA 1-MBLK 8/23/94	N-Nitrosodi-phenyl amine(1)	44J	220	28SS02801 28SS02901	46 48	BJ BJ	350 350	U U
SWMU 28-001	B0815SA 1-MBLK 8/23/94	N-Nitrosodi-phenyl amine(1)	44J	220	28SS03001	44	BJ	340	U
SWMU 28-001	B0815SA 1-MBLK 8/23/94	Di-n-butylphthalate	68J	680	28SS02601 28SS02801	160 140	BJ BJ	350 350	U U
SWMU 28-001	B0815SA 1-MBLK 8/23/94	Di-n-butylphthalate	68J	680	28SS02901	120	BJ	350	U
SWMU 28-001	B0815SA 3-MBLK 8/24/94	N-Nitrosodi-phenyl amine(1)	48J	240	28SS00301 28SS00401	95 190	BJ BJ	720 1400	U U
SWMU 28-001	B0815SA 3-MBLK 8/24/94	N-Nitrosodi-phenyl amine(1)	48J	240	28SS00501 28SS00601	180 95	BJ BJ	1400 710	U U
SWMU 28-001	B0815SA 3-MBLK 8/24/94	N-Nitrosodi-phenyl amine(1)	48J	240	28SS00701 28SS02101	43 97	BJ BJ	350 710	U U
SWMU 28-001	B0815SA 3-MBLK 8/24/94	N-Nitrosodi-phenyl amine(1)	48J	240	28SS02101D 28SS02201	43 41	BJ BJ	360 350	U U
SWMU 28-001	B0815SA 3-MBLK 8/24/94	N-Nitrosodi-phenyl amine(1)	48J	240	28SS02301	45	BJ	340	U
SWMU 28-001	B0815SA 4-MBLK 8/25/94	N-Nitrosodi-phenyl amine(1)	52J	240	28SS00901	47	15J	350	U

SWMU 28-001	B0808W A1-MBLK 8/25/94	N-Nitrosodi-phenyl amine(1)	3J	15	28R016	2	BJ	10	U
SWMU 28-001	B0818SA 1-MBLK 8/25/94	N-Nitrosodi-phenyl amine(1)	44J	220	28SS03001D	49	BJ	390	U

SDG No.	Blank ID	Affected Analyte	Conc. ug/L	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 28-001	28R016	N-Nitrosodi-phenyl amine(1)	2	10	None-this compound was qualified as undetected "U" due to laboratory blank contamination				

SDG No.	Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 28-002	B0816SA 1-MBLK 9/15/94	None Found	--	--	--	--	--	--	--
SWMU 28-002	B0816SA 2-MBLK 9/20/94	Di-n-butylphthalate	41J	410	28BS00504 28BS02204 28SS01101 28SS01201 28SS01401	61 200 83 38 53	BJ	600 1700 360 360 360	U
SWMU 28-002	B0816SA 3-MBLK 9/21/94	Diethylphthalate	44J	440	28SS01901 28BS00106 28SS01601 28SS01701 28SS01801 28BS01004 28BS01704	38 40 39 43 42 49 47	BJ	360 350 350 370 360 420 390	U
SWMU 28-002	B0816SA 3-MBLK 9/21/94	Phenyl-tert-butylamine	45J	225	Non-detect in samples	--	--	--	--

SDG No.	Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 28-003	SBLK82 8/22/94	Di-n-butylphthalate	29J	290	28BS03104D	38	B	370	U
SWMU 28-003	SBLK83 8/23/94	Di-n-butylphthalate	29J	290	All Non-detects	--	--	--	--
SWMU 28-003	B0816SA IMBLK 9/15/94	None found	--	--	--	--	--	--	--
SWMU 28-003	SBLK8C 8/25/94	Di-n-butylphthalate	38J	380	All Non-detects	--	--	--	--
SWMU 28-003	SBLK8C 8/25/94	Bis(2-ethylhexyl) phthalate	61J	610	All Non-detects	--	--	--	--
SWMU 28-003	SBLK8F 8/26/94	None Found	--	--	--	--	--	--	--

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 28-003	08R017 8/24/94	Di-n-butyl phthalate	2J	20	Associated samples either non-detects or previously qualified due to lab blank contamination				
SWMU 28-003	08R017 8/24/94	Bis(2-ethylhexyl) phthalate	2J	20	28SS03501	26	J	370	U

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 5-001	B0815S A1BLK 9/12/94	None Found	--	--	--	--	--	--	--
SWMU 5-001	B0815W B2 BLK 9/10/94	None Found	--	--	--	--	--	--	--
SWMU 5-001	B0815S A2BLK 9/13/94	None Found	--	--	--	--	--	--	--
SWMU 5-001	B0903S A1 BLK 9/28/94	Diethyl phthalate	39 J	390	05BS00107 05BS00208	52 72	BJ BJ	470 620	U U
SWMU 5-001	B0903S A1 BLK 9/28/94	Diethyl phthalate	39 J	390	05BS00107 05BS00208	52 72	BJ BJ	470 620	U U

SDG No.	Blank ID	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 5-001	05R018	None Found	--	--	--	--	--	--	--

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 5-002	SBLK98 9/13/94	None found	--	--	--	--	--	--	--
SWMU 5-002	SBLK97 9/13/94	Di-n-butylphthalate	44J	440	05SS02001 05SS02001D	22 30	JB JB	380 370	U U
SWMU 5-002	SBLK97 9/13/94	Di-n-butylphthalate	44J	440	05BS02009 05SS01901	63 33	JB JB	430 390	U U
SWMU 5-002	SBLK97 9/13/94	Di-n-butylphthalate	44J	440	05BS01909 05BS00704	29 65	JB JB	440 440	U U
SWMU 5-002	SBLK97 9/13/94	Di-n-butylphthalate	44J	440	05SS01101 05BS01107	36 40	JB JB	380 410	U U
SWMU 5-002	SBLK99 9/13/94	Di-n-butylphthalate	51J	510	05BS01009 05BS0909D	46 50	JB JB	510 500	U U
SWMU 5-002	SBLK99 9/13/94	Di-n-butylphthalate	51J	510	05BS01709	67	JB	440	U
SWMU 5-002	SBLK99 9/13/94	Di-n-butylphthalate	51J	510	05BS01610	37	JB	390	U
SWMU 5-002	SBLK99 9/13/94	Di-n-butylphthalate	51J	510	05BS01807	58	JB	780	U

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
SWMU 5-002	05R021 9/13/94	Phenol	2J	10	None found	--	--	--	--

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 5-003	SBLK9X 9/26/94	None found	--	--	--	--	--	--	--
SWMU 5-003	SBLKA4 9/28/94	Bis(2-ethylhexyl) phthalate	180J	1800	05SS01601	37	JB	680	U
SWMU 5-003	B1003SA 1BLK 10/11/94	None found	--	--	--	--	--	--	--

SDG No.	Blank ID	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 5-003	05R023	None found	--	--	--	--	--	--	--

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 3-001	SBLK7K 8/17/94	None Found	--	--	--	--	--	--	--
SWMU 3-001	SBLK77 8/16/94	Di-n-butylphthalate	170	1700	03BS00832	110	JB	380	U
					03BS00832D	79	JB	380	U
					03SS00101	150	JB	360	U
					03SS00624	40	JB	560	U
					03SS00724	270	JB	400	U
					03BS00308	160	JB	420	U
					03BS00208	280	JB	430	U
					03SS00424	150	JB	400	U
					03SS00524	170	JB	390	U
					03BS00432	60	JB	380	U
					03BS00532	42	JB	390	U
SWMU 3-001	SBLK7C 8/16/94	Di-n-butylphthalate	170J	1700	03BS00632	620	B	620	U
SWMU 3-001	SBLK7D 8/16/94	Di-n-butylphthalate	110J	1100	03BS00732	860	B	860	U

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/L	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 3-001	03R007 8/17/94	bis(2-ethylhexyl) phthalate	3J	30	None	--	--	--	--

SDG No.	Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 56-001	SBLK9W 9/26/94	None Found							
SWMU 56-001	SBLKA2 9/27/94	bis(2-Ethylhexyl) phthalate	39J	390	56SS00101	200	JB	710	U
					56SS00101D	330	JB	690	U
					56BS00104	54	JB	830	U
					56SS00201	64	JB	690	U
					56SS00301	56	JB	700	U
					56SS00401	100	JB	700	U

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
SWMU 56-001	56R022 9/26/94	None Found							

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
BGROUND BS	B1126WA1 -BLK 12/08/94	None Found	--	--	--	--	--	--	--
BGROUND BS	B1128SA1- BLK 12/08/94	None Found	--	--	--	--	--	--	--
BGROUND BS	B1128SA2- BLK 12/27/94	Diethyl phthalate	65	650	0BBS00104 D	64	BJ	350	U

SDG No.	Blank ID	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
BGROUND BS	0BR035	None Found	--	--	--	--	--	--	--

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
Worms	B1201SA2-BLK 12/29/94	None found							
Worms	B1201SB2-BLK 01/03/95	Diethyl phthalate	140J	1400	15E03001	170	BJ	1500	U

SDG No.	Blank ID/ Date	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 49-SED	B0919SA1 BLK 10/05/94	None found	--	--	--	--	--	--	--
SWMU 49-SED	B0919WA1 BLK 10/10/94	None found	--	--	--	--	--	--	--

SDG No.	Blank ID	Affected Analyte	Conc. ug/kg	Action Level ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 49-SED	49R027	None found	--	--	--	--	--	--	--

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
001W	WTFN 0627-1	As	1.0	5.0	02MW006S	0.70	B	0.70	UJ
001W	WTFN 0627-1	As	1.0	5.0	02MW016S	0.60	U	0.60	UJ
001W	WTFN 0627-1	As	1.0	5.0	13MW001S	0.60	B	0.60	UJ
001W	WTFN 0627-1	As	1.0	5.0	13MW006S	0.60	U	0.60	UJ
001W	WTFN 0627-1	As	1.0	5.0	13MW006SD	0.60	U	0.60	UJ
001W	WTIC 0627-1	Zn	1.7	8.5	02MW006S	2.3	B	2.3	UJ
001W	WTIC 0627-1	Zn	1.7	8.5	02MW016S	2.6	B	2.6	UJ
001W	WTIC 0627-1	Zn	1.7	8.5	0SMW004S	5.1	B	5.1	UJ
001W	WTIC 0627-1	Zn	1.7	8.5	02MW004RS	4.6	B	4.6	UJ
001W	WTIC 0627-1	Zn	1.7	8.5	13MW001S	4.0	B	4.0	UJ
001W	WTIC 0627-1	Zn	1.7	8.5	13MW006S	5.7	B	5.7	UJ
001W	WTIC 0627-1	Zn	1.7	8.5	13MW006SD	3.9	B	3.9	UJ
001W	WTFN 0627-1	As	1.0	5.0	13MW005S	0.6	U	0.6	UJ
001W	WTFN 0627-1	As	1.0	5.0	13MW004S	0.6	U	0.6	UJ
001W	WTIC 0627-1	Zn	1.7	8.5	02MW0035	6.3	B	6.3	UJ
001W	WTIC 0627-1	Zn	1.7	8.5	02MW011S	16.3	B	16.3	UJ

001W	WTIC 0627-1	Zn	1.7	8.5	13MW005S	7.5	B	7.5	UJ
001W	WTIC 0627-1	Zn	1.7	8.5	13MW004S	5.1	B	5.1	UJ
001W	WTIC 0627-1	Zn	1.7	8.5	02MW007I	5.5	B	5.5	UJ
001W	WTIC 0627-1	Zn	1.7	8.5	02MW007S	3.1	B	3.1	UJ
001W	WTIC 0627-1	Zn	1.7	8.5	02MW017S	4.2	B	4.2	UJ
001W	WTFN 0627-1	As	1.0	5.0	02K001	0.60	U	0.6	UJ
001W	WTFN 0627-1	As	1.0	5.0	02R001	0.60	U	0.6	UJ
001W	WTIC 0627-1	Zn	1.7	8.5	02MW010S	4.6	B	4.6	UJ
001W	WTIC 0627-1	Zn	1.7	8.5	02K001	1.6	B	1.6	UJ
001W	WTIC 0627-1	Zn	1.7	8.5	02R001	3.9	B	3.9	UJ
001W	WTIC 0627-1	Na	92.39	924	02K001	565	B	565	UJ
001W	WTIC 0627-1	Na	92.39	924	02R001	157	B	157	UJ

SDG No.	Blank ID	Affected Analyte	Conc.	Action Level	Affected Sample	Lab Conc	Lab Qual	EDS Conc	EDS Qual
001W	02K001	Calcium	67.2	336	02R001	49.1	B	49.1	UJ
001W	02R001	Calcium	49.1	246	02K001	67.2	B	67.2	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
002W	PBW 062794	Arsenic	0.97	4.85	02MW00IS	2.1	B	2.1	UJ
002W	PBW 062794	Sodium	61.19	306.0	02R002	185	B	185	UJ
002W	PBW 062794	Zinc	2.54	12.7	02R002	10.7	B	10.7	UJ
002W	PBW 062794	Zinc	2.54	12.7	22MW001S	4.9	B	4.9	UJ
002W	PBW 062794	Zinc	2.54	12.7	02MW012I	5.8	B	5.8	UJ
002W	PBW 062794	Zinc	2.54	12.7	02MW012ID	7.0	B	7.0	UJ
002W	PBW 062794	Zinc	2.54	12.7	02MW001S	7.9	B	7.9	UJ
002W	PBW 062794	Zinc	2.54	12.7	13MW002S	7.7	B	7.7	UJ
002W	PBW 062794	Zinc	2.54	12.7	13MW003S	11.9	B	11.9	UJ
002W	PBW 063094	Iron	27.34	136.7	02MW015IR	126	--	126	UJ
002W	PBW 063094	Iron	27.34	136.7	02MW002S	91.0	B	91.0	UJ
002W	PBW 063094	Iron	27.34	136.7	02MW008S	10.4	B	27.34	UJ
002W	PBW 063094	Iron	27.34	136.7	02MW008SD	11.2	B	27.34	UJ
002W	PBW 063094	Iron	27.34	136.7	16MW003S	41.3	B	41.3	UJ
002W	PBW 070694	Cyanide	0.875	4.38	02MW008S	1.90	B	1.90	UJ
002W	PBW 070694	Cyanide	0.875	4.38	02MW008SD	1.10	B	1.10	UJ
002W	PBW 070594	Arsenic	1.36	6.80	16MW001I	1.20	B	1.36	UJ

002W	PBW 070594	Barium	0.70	3.50	16MW001I	1.40	B	1.40	UJ
002W	PBW 070594	Zinc	2.10	10.5	16MW001I	8.70	B	8.70	UJ
002W	PBW 071494	Barium	0.47	2.35	11MW002S	1.50	B	1.50	UJ
002W	PBW 071494	Barium	0.47	2.35	11M002SF	1.80	B	1.80	UJ
002W	PBW 071494	Manganese	0.44	2.20	11MW002S	2.6	B	2.6	UJ
002W	PBW 071494	Manganese	0.44	2.20	11MW002SF	1.80	B	1.80	UJ
002W	PBW 071494	Zinc	2.15	10.75	11MW003S	2.40	B	2.40	UJ
002W	PBW 071494	Zinc	2.15	10.75	11MW003SF	5.20	B	5.20	UJ
002W	PBW 071494	Iron	9.17	45.85	11MW001S	26.2	B	26.2	UJ
002W	PBW 071494	Iron	9.17	45.85	11MW001SF	11.1	B	11.1	UJ
002W	PBW 071494	Zinc	2.15	10.75	11MW001S	3.70	B	3.70	UJ
002W	PBW 071494	Zinc	2.15	10.75	11MW001SF	4.90	B	4.90	UJ
002W	PBW 071494	Zinc	2.15	10.75	16MW004S	7.90	B	7.90	UJ

SDG No.	Blank ID	Affected Analyte	Conc. ug/L	Action Level	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
002W	02R002	Barium	0.76	3.80	02R002	0.76	B	0.76	UJ
002W	02R002	Calcium	81.7	408	02R002	81.7	B	81.7	UJ
002W	02R002	Copper	6.50	32.5	02R002	6.50	B	6.50	UJ
002W	02R002	Manganese	0.66	3.30	02R002	0.66	B	0.66	UJ
002W	02R002	Zinc	10.7	53.5	02MW012S	13.4	B	13.4	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
003W	PBW 7/15/94	Cu	9.86	49.3	0SMW001RF	10.5	B	10.5	UJ
003W	PBW 7/15/94	Cu	9.86	49.3	0SMW001RDF	11.3	B	11.3	UJ
003W	PBW 7/15/94	Cu	9.86	49.3	0BMW001SF	10.1	B	10.1	UJ
003W	PBW 7/15/94	Cu	9.86	49.3	0BMW001DF	10.9	B	10.9	UJ
003W	PBW 7/15/94	Cu	9.86	49.3	0BR003	12.7	B	12.7	UJ
003W	PBW 7/15/94	Cu	9.86	49.3	0SMW001R	7.0	B	9.86	UJ
003W	PBW 7/15/94	Cu	9.86	49.3	0SMW001RD	8.4	B	9.86	UJ
003W	PBW 7/15/94	Cu	9.86	49.3	0BMW001S	10.1	B	10.1	UJ
003W	PBW 7/15/94	Cu	9.86	49.3	0BMW001D	9.8	B	9.8	UJ
003W	PBW 7/15/94	Na	75.2	376	0BR003	363	B	363	UJ
003W	PWB 7/18/94	Cr	-2.09	10.45	01MW001	2.0	U	2.0	UJ
003W	PWB 7/18/94	Cr	-2.09	10.45	0BW001I	2.0	U	2.0	UJ
003W	PWB 7/18/94	Cr	-2.09	10.45	0SMW002S	2.0	U	2.0	UJ
003W	PWB 7/18/94	Cr	-2.09	10.45	09MW001S	2.0	U	2.0	UJ
003W	PWB 7/18/94	Cr	-2.09	10.45	08MW008S	2.0	U	2.0	UJ
003W	PWB 7/18/94	Cr	-2.09	10.45	08MW006S	2.0	U	2.0	UJ
003W	PWB 7/18/94	Cr	-2.09	10.45	08MW006SD	2.0	U	2.0	UJ

003W	PWB 7/18/94	Cr	-2.09	10.45	02MW016D	2.0	U	2.0	UJ
003W	PWB 7/18/94	Cr	-2.09	10.45	26MW004S	2.0	U	2.0	UJ
003W	PWB 7/18/94	Cr	-2.09	10.45	01MW001F	2.0	U	2.0	UJ
003W	PWB 7/18/94	Cr	-2.09	10.45	0BMW001IF	2.0	U	2.0	UJ
003W	PWB 7/18/94	Ag	-2.3	11.5	01MW001	2.1	U	2.3	UJ
003W	PWB 7/18/94	Ag	-2.3	11.5	0BMW001I	2.1	U	2.3	UJ
003W	PWB 7/18/94	Ag	-2.3	11.5	0SMW002S	2.1	U	2.3	UJ
003W	PWB 7/18/94	Ag	-2.3	11.5	09MW001S	2.1	U	2.3	UJ
003W	PWB 7/18/94	Ag	-2.3	11.5	08MW008S	2.1	U	2.3	UJ
003W	PWB 7/18/94	Ag	-2.3	11.5	08MW006S	2.1	U	2.3	UJ
003W	PWB 7/18/94	Ag	-2.3	11.5	08MW006SD	2.1	U	2.3	UJ
003W	PWB 7/18/94	Ag	-2.3	11.5	02MW016D	2.1	U	2.3	UJ
003W	PWB 7/18/94	Ag	-2.3	11.5	26MW004S	2.1	U	2.3	UJ
003W	PWB 7/18/94	Ag	-2.3	11.5	01MW001F	2.1	U	2.3	UJ
003W	PWB 7/18/94	Ag	-2.3	11.5	0BMW001IF	2.1	U	2.3	UJ
003W	PWB 7/18/94	Se	1.55	7.75	08MW008S	1.9	B	1.9	UJ
003W	PWB 7/19/94	Cr	-2.34	11.7	09MW003S	2.0	U	2.34	UJ
003W	PWB 7/19/94	Cr	-2.34	11.7	09MW003SF	2.0	U	2.34	UJ
003W	PWB 7/19/94	Cr	-2.34	11.7	09MW002S	2.0	U	2.34	UJ

003W	PWB 7/19/94	Cr	-2.34	11.7	0SMW003S	2.0	U	2.34	UJ
003W	PWB 7/19/94	Cr	-2.34	11.7	0SMW003SF	2.0	U	2.34	UJ
003W	PWB 7/19/94	Cr	-2.34	11.7	08MW001S	2.0	U	2.34	UJ
003W	PWB 7/19/94	Cr	-2.34	11.7	08MW001SF	2.0	U	2.34	UJ
003W	PWB 7/19/94	Cr	-2.34	11.7	28MW001S	2.0	U	2.34	UJ
003W	PWB 7/19/94	Cr	-2.34	11.7	22MW002S	2.0	U	2.34	UJ
003W	PWB 7/19/94	Cr	-2.34	11.7	26R005	2.0	U	2.34	UJ
003W	PWB 7/19/94	Cr	-2.34	11.7	26MW001S	2.0	U	2.34	UJ
003W	PWB 7/19/94	Cr	-2.34	11.7	26MW001SD	2.0	U	2.34	UJ
003W	PWB 7/19/94	Cr	-2.34	11.7	26MW002S	2.0	U	2.34	UJ
003W	PWB 7/19/94	Cu	-4.29	21.45	09MW003S	4.0	U	4.29	UJ
003W	PWB 7/19/94	Cu	-4.29	21.45	09MW003SF	4.0	U	4.29	UJ
003W	PWB 7/19/94	Cu	-4.29	21.45	09MW002S	4.0	U	4.29	UJ
003W	PWB 7/19/94	Cu	-4.29	21.45	0SMW003S	4.0	U	4.29	UJ
003W	PWB 7/19/94	Cu	-4.29	21.45	0SMW003SF	4.0	U	4.29	UJ
003W	PWB 7/19/94	Cu	-4.29	21.45	22MW002S	4.0	U	4.29	UJ
003W	PWB 7/19/94	Cu	-4.29	21.45	26MW001S	4.0	U	4.29	UJ
003W	PWB 7/19/94	Cu	-4.29	21.45	26MW001SD	4.0	U	4.29	UJ
003W	PWB 7/19/94	Cu	-4.29	21.45	26MW002S	4.0	U	4.29	UJ

003W	PWB 7/19/94	Pb	1.01	5.05	08MW001SF	1.6	B	1.6	UJ
003W	PWB 7/19/94	Pb	1.01	5.05	22MW002S	1.5	B	1.5	UJ
003W	PWB 7/19/94	Pb	1.01	5.05	26MW001S	4.7	--	4.7	UJ
003W	PWB 7/19/94	Pb	1.01	5.05	26MW002S	2.2	B	2.2	UJ

SDG No.	Blank ID	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
003W	0BR003	Sb	3.0	15.0	0SMW001RDF	3.8	B	3.8	UJ
003W	0BR003	Sb	3.0	15.0	0BMW001SF	3.4	B	3.4	UJ
003W	0BR003	Sb	3.0	15.0	0BMW001DF	7.4	—	7.4	UJ
003W	0BR003	Sb	3.0	15.0	0BR003	3.0	B	3.0	UJ
003W	0BR003	Sb	3.0	15.0	0SMW001R	3.0	B	3.0	UJ
003W	0BR003	Sb	3.0	15.0	0SMW002S	3.4	B	3.4	UJ
003W	0BR003	Sb	3.0	15.0	01MW001F	3.7	B	3.7	UJ
003W	0BR003	Sb	3.0	15.0	0BMW001IF	3.1	B	3.1	UJ
003W	0BR003	Sb	3.0	15.0	08MW001SF	6.2	--	6.2	UJ
003W	0BR003	Ca	80.6	403	0BR003	80.6	B	80.6	UJ
003W	26R005	Ca	2340	11,700	26R005	2340	B	2340	UJ
003W	0BR003	Cu	12.7	63.5	01MW001	7.5	B	12.7	UJ
003W	0BR003	Cu	12.7	63.5	0SMW002S	10.2	B	12.7	UJ
003W	0BR003	Cu	12.7	63.5	09MW001S	4.2	B	12.7	UJ
003W	0BR003	Cu	12.7	63.5	08MW006S	9.6	B	12.7	UJ
003W	0BR003	Cu	12.7	63.5	08MW006SD	8.3	B	12.7	UJ
003W	0BR003	Cu	12.7	63.5	02MW016D	10.0	B	12.7	UJ
003W	0BR003	Cu	12.7	63.5	01MW001F	5.0	B	12.7	UJ
003W	0BR003	Cu	12.7	63.5	08MW001S	10.5	B	12.7	UJ
003W	0BR003	Cu	12.7	63.5	08MW001SF	9.4	B	12.7	UJ

003W	0BR003	Cu	12.7	63.5	28MW001S	6.0	B	12.7	UJ
003W	26R005	Cu	10.9	54.5	26R005	10.9	B	10.9	UJ
003W	0BR003	Pb	2.0	10.0	0SMW001RF	1.2	B	2.0	UJ
003W	0BR003	Pb	2.0	10.0	0SMW001RDF	2.6	B	2.6	UJ
003W	0BR003	Pb	2.0	10.0	0BMW001DF	4.4	--	4.4	UJ
003W	0BR003	Pb	2.0	10.0	0BR003	2.0	B	2.0	UJ
003W	0BR003	Pb	2.0	10.0	0SMW001R	1.8	B	2.0	UJ
003W	0BR003	Pb	2.0	10.0	0BMW001S	2.9	B	2.9	UJ
003W	0BR003	Pb	2.0	10.0	0BMW001D	2.6	B	2.6	UJ
003W	0BR003	Pb	2.0	10.0	0SMW002S	1.3	B	2.0	UJ
003W	0BR003	Pb	2.0	10.0	26MW004S	2.9	B	2.9	UJ
003W	0BR003	Pb	2.0	10.0	0BMW001I	1.5	B	2.0	UJ
003W	0BR003	Pb	2.0	10.0	0SMW003SF	8.7	--	8.7	UJ
003W	0BR003	Zn	4.2	21.0	0SMW001RF	4.5	B	4.5	UJ
003W	0BR003	Zn	4.2	21.0	0SMW001RDF	3.8	B	4.2	UJ
003W	0BR003	Zn	4.2	21.0	0BMW001SF	5.0	B	5.0	UJ
003W	0BR003	Zn	4.2	21.0	0BMW001DF	6.4	B	6.4	UJ
003W	0BR003	Zn	4.2	21.0	0BR003	4.2	B	4.2	UJ
003W	0BR003	Zn	4.2	21.0	0SMW001R	2.1	B	4.2	UJ
003W	0BR003	Zn	4.2	21.0	0SMW001RD	2.1	B	4.2	UJ
003W	0BR003	Zn	4.2	21.0	0BMW001S	8.8	B	8.8	UJ
003W	0BR003	Zn	4.2	21.0	0BMW001D	5.8	B	5.8	UJ
003W	0BR003	Zn	4.2	21.0	01MW001	6.1	B	6.1	UJ
003W	0BR003	Zn	4.2	21.0	0BMW001I	8.0	B	8.0	UJ
003W	0BR003	Zn	4.2	21.0	0SMW002S	9.4	B	9.4	UJ
003W	0BR003	Zn	4.2	21.0	09MW001S	4.5	B	4.5	UJ
003W	0BR003	Zn	4.2	21.0	08MW008S	5.8	B	5.8	UJ
003W	0BR003	Zn	4.2	21.0	08MW006S	8.5	B	8.5	UJ
003W	0BR003	Zn	4.2	21.0	08MW006SD	4.1	B	4.2	UJ
003W	0BR003	Zn	4.2	21.0	02MW016D	8.3	B	8.3	UJ

003W	0BR003	Zn	4.2	21.0	26MW004S	3.1	B	4.2	UJ
003W	0BR003	Zn	4.2	21.0	01MW001F	3.3	B	4.2	UJ
003W	0BR003	Zn	4.2	21.0	0BMW001IF	3.5	B	4.2	UJ
003W	0BR003	Zn	4.2	21.0	09MW003S	6.3	B	6.3	UJ
003W	0BR003	Zn	4.2	21.0	09MW003SF	8.9	B	8.9	UJ
003W	0BR003	Zn	4.2	21.0	09MW002S	3.8	B	4.2	UJ
003W	0BR003	Zn	4.2	21.0	0SMW003S	4.7	B	4.7	UJ
003W	0BR003	Zn	4.2	21.0	0SMW003SF	3.8	B	4.2	UJ
003W	0BR003	Zn	4.2	21.0	08MW001S	5.4	B	5.4	UJ
003W	0BR003	Zn	4.2	21.0	08MW001SF	7.5	B	7.5	UJ
003W	0BR003	Zn	4.2	21.0	28MW001S	7.9	B	7.9	UJ
003W	0BR003	Zn	4.2	21.0	22MW002S	5.5	B	5.5	UJ
003W	0BR003	Zn	7.3	36.5	26R005	7.3	B	7.3	UJ
003W	0BR003	Zn	7.3	36.5	26MW001S	5.4	B	7.3	UJ
003W	0BR003	Zn	7.3	36.5	26MW001SD	4.8	B	7.3	UJ
003W	0BR003	Zn	7.3	36.5	26MW002S	4.4	B	7.3	UJ
003W	0BR003	As	1.0	5.0	26R005	1.0	B	1.0	UJ
003W	0BR003	As	1.0	5.0	26MW001S	1.10	B	1.10	UJ
003W	0BR003	Mg	14,400	72,000	26R005	14400	--	14400	UJ
003W	0BR003	Na	56,500	282,500	26R005	56500	--	56500	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
004W	Prep	Sodium	28.050	140.25	02MW027I	7780000	-	-	none
004W	Prep	Sodium	28.050	140.25	02MW017I	7390000	-	-	none
004W	Prep	Copper	14.93	74.7	02MW037I	14.1	B	14.9	UJ
004W	Prep	Copper	14.93	74.7	02MW035S	7.9	B	14.9	UJ
004W	Prep	Sodium	75.27	376	02MW037I	11164000	-	-	none
004W	Prep	Sodium	75.27	376	02MW035S	252000	-	-	none
004W	Prep	Cyanide	0.952	4.76	02MW037I	1.7	B	1.7	UJ
004W	Prep	Cyanide	0.952	4.76	02MW035S	1.5	B	1.5	UJ
004W	Prep	Sodium	112.8	564	02MW030S	2060000	-	-	none
004W	Prep	Sodium	112.8	564	02MW029S	14400	-	-	none
004W	Prep	Zinc	-1.32	6.6	02MW030S	1.3	U	-	-
004W	Prep	Zinc	-1.32	6.6	02MW029S	1.4	B	1.4	UJ
004W	Prep	Cyanide	1.128	5.64	02MW030S	1.6	B	1.6	UJ
004W	Prep	Cyanide	1.128	5.64	02MW029S	1.5	B	1.5	UJ
004W	Prep	Calcium	22.35	111.75	None	all results greater than 111.75 ug/L			
004W	Prep	Chromium	-2.09	10.45	None	all results are undetected			
004W	Prep	Selenium	1.55	7.8	none	all results are undetected			
004W	Prep	Sodium	139.36	696	none	all results are greater than 696 ug/L			
004W	Prep	Calcium	26.5	132.5	02K002	35.0	B	35	UJ
004W	Prep	Mercury	0.106	0.53	02K002	0.22	-	0.22	UJ
004W	Prep	Mercury	0.106	0.53	02MW037S	0.24	-	0.24	UJ
004W	Prep	Mercury	0.106	0.53	02MW035I	0.09	B	0.11	UJ

004W	Prep	Mercury	0.106	0.53	02MW036I	0.21	-	0.21	UJ
004W	Prep	Sodium	95.75	478.75	02K002	279	B	279	UJ
004W	Prep	Antimony	3.2	16	02K002	2.7	B	3.2	UJ
004W	Prep	Antimony	3.2	16	02MW037SD	2.4	B	3.2	UJ
004W	Prep	Antimony	3.2	16	02MW036S	2.9	B	3.2	UJ
004W	Prep	Cyanide	-0.952	4.26	02K002	1.6	B	1.6	UJ
004W	Prep	Cyanide	-0.952	4.26	02MW032S	1.3	B	1.3	UJ
004W	Prep	Cyanide	-0.952	4.26	02MW037SD	1.3	B	1.3	UJ
004W	Prep	Cyanide	-0.952	4.26	02MW036S	1.2	B	1.2	UJ
004W	Prep	Cyanide	-0.952	4.26	02MW035I	1.5	B	1.5	UJ
004W	Prep	Cyanide	-0.952	4.26	02MW036I	1.2	B	1.2	UJ

SDG No.	Blank ID	Affected Analyte	Conc.	Action Level**	Affected Sample	Lab Conc	Lab Qual	EDS Conc	EDS Qual
004W	02K002	Lead	4.7	23.5	none	All Pb results were undetected			

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
005W	WTIC 0801-1	Fe	19.0	95.0	020P005	77.2	B	77.2	UJ
005W	WTIC 0801-1	Fe	19.0	95.0	020P005D	83.8	B	83.8	UJ
005W	WTIC 0801-1	Fe	19.0	95.0	02R006	18.1	B	18.1	UJ
005W	WTIC 0801-1	Fe	19.0	95.0	020P006	18.2	B	18.2	UJ
005W	WTIC 0801-1	Zn	1.28	6.4	020P005	1.7	B	1.7	UJ
005W	WTIC 0801-1	Zn	1.28	6.4	020P005D	3.6	B	3.6	UJ
005W	WTIC 0801-1	Zn	1.28	6.4	02R006	3.9	B	3.9	UJ
005W	WTIC 0801-1	Zn	1.28	6.4	020P006	2.6	B	2.6	UJ
005W	WTIC 0801-1	Zn	1.28	6.4	02MW021S	2.0	B	2.0	UJ
005W	WTIC 0801-1	Zn	1.28	6.4	020P013	4.3	B	4.3	UJ
005W	WTIC 0801-1	Fe	19.0	95.0	02MW031S	32.2	B	32.2	UJ
005W	WTIC 0801-1	Fe	19.0	95.0	02MW032I	59.9	B	59.9	UJ
005W	WTIC 0801-1	Zn	1.28	6.4	02MW031I	4.2	B	4.2	UJ
005W	WTIC 0801-1	Zn	1.28	6.4	02MW031S	2.5	B	2.5	UJ
005W	WTIC 0801-1	Zn	1.28	6.4	02MW032S	3.3	B	3.3	UJ
005W	WTIC 0801-1	Zn	1.28	6.4	02MW033S	2.4	B	2.4	UJ

005W	WTIC 0801-1	Zn	1.28	6.4	02MW034S	1.2	B	1.2	UJ
005W	WTIC 0801-1	Zn	1.28	6.4	02MW034SD	2.6	B	2.6	UJ
005W	WTIC 0801-1	Zn	1.28	6.4	15MW002S	2.6	B	2.6	UJ
005W	WTIC 0801-1	Zn	1.28	12.8	15MW003S	6.5	B	6.5	UJ
005W	WTIC 0801-2	Ba	1.06	5.3	08MW005I	1.2	B	1.2	UJ
005W	WTIC 0801-2	Ba	1.06	5.3	08MW005S	1.4	B	1.4	UJ
005W	WTIC 0801-2	Ba	1.06	10.6	15MW004S	6.9	B	6.9	UJ
005W	WTIC 0801-2	Fe	10.54	105.4	08MW005I	68.2	B	68.2	UJ
005W	WTIC 0801-2	Fe	10.54	105.4	08MW005S	78.6	B	78.6	UJ
005W	WTIC 0801-2	Zn	1.82	9.1	08MW005I	3.1	B	3.1	UJ
005W	WTIC 0801-2	Zn	1.82	9.1	08MW005S	1.7	B	1.7	UJ
005W	WTIC 0801-2	Zn	1.82	9.1	15MW004S	3.4	B	3.4	UJ

SDG No.	Blank ID/ Date	Affect-ed Analyte	Conc.	Action Level	Affected Sample	Lab Conc	Lab Qual	EDS Conc	EDS Qual
005W	02R006	Ba	2.0	10.0	020P005	9.1	B	9.1	UJ
005W	02R006	Ba	2.0	10.0	020P005D	9.5	B	9.5	UJ
005W	02R006	Ba	2.0	10.0	02R006	2.0	B	2.0	UJ
005W	02R006	Ca	3240	16200	02R006	3240	B	3240	UJ
005W	02R006	Mg	18800	94000	020P005	27500	--	27500	UJ
005W	02R006	Mg	18800	94000	020P005D	26800	--	26800	UJ
005W	02R006	Mg	18800	94000	02R006	18800	--	18800	UJ
005W	02R006	Mg	18800	188000	020P006	127000	--	127000	UJ

005W	02R006	Mg	18800	188000	02MW021S	105000	--	105000	UJ
005W	02R006	Mn	3.4	17.0	02R006	3.4	B	3.4	UJ
005W	02R006	Na	31500	315000	020P005	185000	--	185000	UJ
005W	02R006	Na	31500	315000	020P005D	182000	--	182000	UJ
005W	02R006	Na	31500	157500	02R006	31500	--	31500	UJ
005W	02R006	Ba	2.0	10.0	02MW031S	3.6	B	3.6	UJ
005W	02R006	Ba	2.0	10.0	02MW032S	8.5	B	8.5	UJ
005W	02R006	Ba	2.0	10.0	02MW033S	4.2	B	4.2	UJ
005W	02R006	Ba	2.0	10.0	02MW034S	6.5	B	6.5	UJ
005W	02R006	Ba	2.0	10.0	02MW034SD	6.2	B	6.2	UJ
005W	02R006	Ba	2.0	10.0	15MW002S	7.0	B	7.0	UJ
005W	02R006	Ba	2.0	10.0	15MW003S	6.6	B	6.6	UJ
005W	02R006	Mg	18800	94000	02MW031S	13800	--	13800	UJ
005W	02R006	Mg	18800	94000	02MW032S	16300	--	16300	UJ
005W	02R006	Mg	18800	94000	02MW033S	9200	--	9200	UJ
005W	02R006	Mg	18800	94000	02MW034S	12900	--	12900	UJ
005W	02R006	Mg	18800	94000	02MW034SD	12900	--	12900	UJ
005W	02R006	Mg	18800	94000	15MW002S	10600	--	10600	UJ
005W	02R006	Mg	18800	94000	15MW003S	4610	B	4610	UJ
005W	02R006	Mn	3.4	34.0	02MW031S	22.5	--	22.5	UJ
005W	02R006	Na	31500	157500	02MW031S	91800	--	91800	UJ
005W	02R006	Na	31500	157500	02MW032S	92300	--	92300	UJ
005W	02R006	Na	31500	157500	02MW033S	30100	--	30100	UJ
005W	02R006	Na	31500	157500	02MW034S	37000	--	37000	UJ
005W	02R006	Na	31500	157500	02MW034SD	39000	--	39000	UJ
005W	02R006	Na	31500	157500	15MW002S	20600	--	20600	UJ
005W	02R006	Na	31500	157500	15MW003S	10800	--	10800	UJ
005W	02R006	Ba	2.0	10.0	08MW005I	1.2	B	NA	*
005W	02R006	Ba	2.0	10.0	08MW005S	1.4	B	NA	*
005W	02R006	Ba	2.0	10.0	15MW004S	6.9	B	NA	*

005W	02R006	Mg	18800	94000	08MW005I	19700	--	19700	UJ
005W	02R006	Mg	18800	94000	08MW005S	12200	--	12200	UJ
005W	02R006	Mg	18800	94000	15MW004S	73000	--	73000	UJ
005W	02R006	Mn	3.4	34.0	08MW005I	20.1	--	20.1	UJ
005W	02R006	Mn	3.4	34.0	08MW005S	23.6	--	23.6	UJ
005W	02R006	Na	31500	157500	08MW005I	39500	--	39500	UJ
005W	02R006	Na	31500	157500	08MW005S	27100	--	27100	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
006W	WTIC 0801-2	Barium	1.06	5.30	02K003	1.4	B	1.4	UJ
006W	WTIC 0801-2	Barium	1.06	5.30	02R008	1.4	B	1.4	UJ
006W	WTIC 0801-2	Sodium	68.34	341.7	02K003	58.9	B	68.3	UJ
006W	WTIC 0801-2	Zinc	1.82	9.10	02MW023I	2.1	B	2.1	UJ
006W	WTIC 0801-2	Zinc	1.82	9.10	02K003	3.1	B	3.1	UJ
006W	WTIC 0801-2	Zinc	1.82	9.10	02R008	3.5	B	3.5	UJ
006W	WTIC 0801-2	Zinc	1.82	9.10	02MW011I	7.0	B	7.0	UJ
006W	WTIC 0801-2	Zinc	1.82	9.10	02MW011ID	2.9	B	2.9	UJ
006W	WTIC 0801-2	Zinc	1.82	9.10	02MW23S	2.8	B	2.8	UJ
006W	WTIC 0804-1	Zinc	1.78	8.90	15MW005I	2.6	B	2.6	UJ
006W	WTIC 0818-1	Zinc	2.49	12.4	02MW022S	3.2	B	3.2	UJ
006W	WTIC 0818-1	Zinc	2.49	12.4	02MW022SD	5.2	B	5.2	UJ
006W	WTIC 0818-1	Zinc	2.49	12.4	02MW022I	4.4	B	4.4	UJ
006W	WTIC 0818-1	Zinc	2.49	12.4	02MW038S	3.2	B	3.2	UJ
006W	WTIC 0815-1	Iron	20.87	104	02MW026I	53.4	B	53.4	UJ
006W	WTIC 0815-1	Iron	20.87	104	02MW025IF	19.5	B	20.87	UJ
006W	WTIC 0818-1	Copper	1.19	5.95	02MW022I	4.3	B	4.3	UJ

SDG No.	Blank ID	Affected Analyte	Conc.	Action Level	Affected Sample	Lab Conc	Lab Qual	EDS Conc	EDS Qual
006W	02K003	Mercury	0.19	0.95	02MW023I	0.18	B	0.19	UJ
006W	02K003	Mercury	0.19	0.95	02K003	0.19	B	0.19	UJ
006W	02K003	Mercury	0.19	0.95	02R008	0.13	B	0.19	UJ
006W	02K003	Mercury	0.19	0.95	02MW011ID	0.11	B	0.19	UJ
006W	02R008	Lead	0.60	3.0	02R008	0.60	B	0.60	UJ
006W	02R008	Mag-nesium	82.7	413.5	02K003	74.4	B	82.7	UJ
006W	02R008	Mag-nesium	82.7	413.5	02R008	82.7	B	82.7	UJ
006W	02K004	Calcium	46.0	230	02K004	46.0	B	46.0	UJ
006W	02K004	Sodium	153	765	02K004	153	B	153	UJ
006W	02K004	Zinc	1.8	9.0	02K004	1.8	B	1.8	UJ
006W	02K004	Zinc	1.8	9.0	02MW028S	7.4	B	7.4	UJ
006W	02K004	Zinc	1.8	9.0	020P007	2.5	B	2.5	UJ
006W	02K004	Cyanide	3.0	15.0	02K004	3.0	B	3.0	UJ
006W	02K004	Cyanide	3.0	15.0	02MW028S	3.0	B	3.0	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
007W	WTIC 0908-1	Iron	18.98	94.9	02MW038I	35.2	B	18.98	UJ

SDG No.	Blank ID	Affected Analyte	Conc.	Action Level	Affected Sample	Lab Conc	Lab Qual	EDS Conc	EDS Qual
007W	08OR019	Calcium	165	825	08OR019	165	B	165	UJ
007W	08OR019	Copper	2.4	12.0	08OR019	2.4	B	2.4	UJ
007W	08OR019	Sodium	120	600	08OR019	120	B	120	UJ
007W	08OR019	Zinc	5.7	28.5	08OR019	5.7	B	5.7	UJ
007W	08OR019	Cyanide	3.6	18.0	08OR019	3.6	B	3.6	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
Amended 007W	WTIC 0908-1	Zinc	1.0	5.0	02MW038DF	4.7	B	4.7	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
008W	WTIC 0919-1	Iron	23.1	116	13R024	11.7	B	23.1	UJ
008W	WTIC 0919-1	Iron	23.1	116	13K005	12.6	B	23.1	UJ
008W	WTIC 0927-3	Iron	25.9	130	08MW015I	76.8	B	76.8	UJ
008W	WTIC 0927-3	Iron	25.9	130	08MW019S	16.3	B	25.9	UJ
008W	WTIC 0927-3	Iron	25.9	130	08MW019SD	25.1	B	25.9	UJ
008W	WTFN 0927-3	Arsenic	0.9	4.5	08MW015I	4.0	B	4.0	UJ

SDG No.	Blank ID	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
008W	13K005	Calcium	53.8	269	13R024	103	B	103	UJ
008W	13K005	Copper	2.5	12.5	13R024	2.0	B	2.5	UJ
008W	13K005	Copper	2.5	12.5	08MW015I	1.2	B	2.5	UJ
008W	13K005	Sodium	2120	10600	13R024	2490	B	2490	UJ
008W	13K005	Zinc	2.9	14.5	08MW010S	2.3	B	2.9	UJ
008W	13K005	Zinc	2.9	14.5	08MW010SD	1.1	B	2.9	UJ
008W	13K005	Zinc	2.9	14.5	13R024	2.0	B	2.9	UJ
008W	13K005	Zinc	2.9	14.5	13MW009S	3.8	B	3.8	UJ
008W	13K005	Zinc	2.9	14.5	13MW008S	2.4	B	2.9	UJ
008W	13K005	Zinc	2.9	14.5	13MW007S	9.8	B	9.8	UJ
008W	13K005	Zinc	2.9	14.5	13MW010S	2.9	B	2.9	UJ
008W	13K005	Zinc	2.9	14.5	56MW001S	2.5	B	2.9	UJ
008W	13K005	Zinc	2.9	14.5	08MW013I	6.5	B	6.5	UJ
008W	13K005	Zinc	2.9	14.5	08MW019S	5.3	B	5.3	UJ
008W	13K005	Zinc	2.9	14.5	08MW019SD	2.3	B	2.9	UJ
008W	13R024	Tin	11.4	57.0	13MW009S	8.0	B	11.4	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
011W	WTIC 1117-1	Calcium	43.05	215	08R034	120	B	120	UJ
011W	WTIC 1117-1	Iron	12.45	62.0	08R034	9.2	B	12.4	UJ
011W	WTIC 1117-1	Manganese	0.6	3.0	08R034	0.6	B	0.6	UJ
011W	WTIC 1117-1	Zinc	1.96	9.8	08R034	7.3	B	7.3	UJ

SDG No.	Blank ID	Affected Analyte	Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
011W	08R034	Aluminum	11.5	57.5	08MW020S	22.3	B	22.3	UJ
011W	08R034	Aluminum	11.5	57.5	08MW020SD	24.6	B	24.6	UJ
011W	08R034	Zinc	7.3	36.5	08MW020S	4.7	B	7.3	UJ
011W	08R034	Zinc	7.3	36.5	08MW020SD	5.1	B	7.3	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. ug/l	Action Level ug/l	Affected Sample	Lab Conc ug/l	Lab Qual	EDS Conc ug/l	EDS Qual
001SW	PBW 8/13/94	Lead	1.86	9.30	02SW012	3.2	--	3.2	UJ
001SW	PBW 8/13/94	Lead	1.86	9.30	02SW011	7.3	--	7.3	UJ
001SW	PBW 8/13/94	Lead	1.86	9.30	02SW014	0.99	B	1.86	UJ
001SW	PBW 8/13/94	Lead	1.86	9.30	02SW013	1.5	B	1.86	UJ
001SW	PBW 8/5/94	Cyanide	1.816	9.08	02SW012	1.8	B	1.82	UJ
001SW	PBW 8/5/94	Cyanide	1.816	9.08	02SW011	2.1	B	2.1	UJ
001SW	PBW 8/5/94	Cyanide	1.816	9.08	02SW013	4.2	B	4.2	UJ
001SW	PBW 8/5/94	Cyanide	1.816	9.08	02SW014	2.2	B	2.2	UJ
001SW	PBW 8/5/94	Cyanide	1.816	9.08	02SW016	2.0	B	2.0	UJ
001SW	PBW 8/5/94	Cyanide	1.816	9.08	02SW018	1.8	B	1.82	UJ
001SW	PBW 8/5/94	Cyanide	1.816	9.08	02SW019	5.0	B	5.0	UJ
001SW	PBW 8/5/94	Cyanide	1.816	9.08	02SW022	2.9	B	2.9	UJ
001SW	PBW 8/5/94	Cyanide	1.816	9.08	02SW031	2.9	B	2.9	UJ
001SW	PBW 8/5/94	Cyanide	1.816	9.08	02SW031D	2.8	B	2.8	UJ
001SW	PBW 8/5/94	Cyanide	2.04	10.2	02SW017	3.6	B	3.6	UJ
001SW	PBW 8/5/94	Cyanide	2.04	10.2	02SW032	3.1	B	3.1	UJ.

001SW	PBW 8/5/94	Cyanide	2.04	10.2	02SW039	2.5	B	2.5	UJ
001SW	PBW 8/5/94	Cyanide	2.04	10.2	02R010	1.9	B	2.04	UJ
001SW	PBW 8/5/94	Cyanide	2.04	10.2	02SW030	2.2	B	2.2	UJ
001SW	PBW 8/5/94	Cyanide	2.04	10.2	02SW029	1.8	B	2.04	UJ
001SW	PBW 8/5/94	Cyanide	2.04	10.2	02SW029D	2.3	B	2.3	UJ
001SW	PBW 8/5/94	Cyanide	2.04	10.2	02SW015	2.8	B	2.8	UJ
001SW	PBW 8/13/94	Zinc	2.40	12.2	02R010	5.4	B	5.4	UJ
001SW	PBW 8/13/94	Zinc	2.40	12.2	02SW029D	9.0	B	9.0	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
002SW	PBW 8/15/94	Copper	6.78	33.9	02SW027	10.4	B	10.4	UJ
002SW	PBW 8/15/94	Copper	6.78	33.9	02SW026	7.6	B	7.6	UJ
002SW	PBW 8/15/94	Copper	6.78	33.9	02SW024	33.1	--	33.1	UJ
002SW	PBW 8/15/94	Copper	6.78	33.9	02SW023	17.6	B	17.6	UJ
002SW	PBW 8/15/94	Copper	6.78	33.9	02SW033	5.3	B	6.78	UJ
002SW	PBW 8/15/94	Copper	6.78	33.9	02SW034	16.8	B	16.8	UJ
002SW	PBW 8/15/94	Copper	6.78	33.9	02SW035	16.8	B	16.8	UJ
002SW	PBW 8/15/94	Copper	6.78	33.9	02SW020	7.6	B	7.6	UJ
002SW	PBW 8/15/94	Copper	6.78	33.9	02SW020DD	8.9	B	8.9	UJ
002SW	PBW 8/15/94	Copper	6.78	33.9	02SW028	32.2	--	32.2	UJ
002SW	PBW 8/15/94	Copper	6.78	33.9	02SW025	16.7	B	16.7	UJ
002SW	PBW 8/15/94	Copper	6.78	33.9	02SW010	4.7	B	6.78	UJ
002SW	PBW 8/5/94	Cyanide	2.04	10.2	02SW027	5.2	B	5.2	UJ
002SW	PBW 8/5/94	Cyanide	2.04	10.2	02SW026	3.9	B	3.9	UJ
002SW	PBW 8/5/94	Cyanide	2.04	10.2	02SW024	9.1	B	9.1	UJ
002SW	PBW 8/5/94	Cyanide	2.04	10.2	02SW023	8.1	B	8.1	UJ

002SW	PBW 8/5/94	Cyanide	2.04	10.2	02SW033	3.0	B	3.0	UJ
002SW	PBW 8/5/94	Cyanide	2.04	10.2	02SW034	2.3	B	2.3	UJ
002SW	PBW 8/5/94	Cyanide	2.04	10.2	02SW035	2.0	B	2.04	UJ
002SW	PBW 8/5/94	Cyanide	2.04	10.2	02SW020	2.7	B	2.7	UJ
002SW	PBW 8/5/94	Cyanide	2.04	10.2	02SW020DD	2.2	B	2.2	UJ
002SW	PBW 8/5/94	Cyanide	2.04	10.2	02SW025	5.0	B	5.0	UJ
002SW	PBW 8/5/94	Cyanide	2.04	10.2	02SW010	3.7	B	3.7	UJ
002SW	PWB 8/17/94	Silver	2.45	12.25	02SW038	3.3	B	3.3	UJ
002SW	PWB 8/17/94	Silver	2.45	12.25	02SW037	3.5	B	3.5	UJ
002SW	PWB 8/17/94	Zinc	-2.44	12.2	49SW012	6.0	B	6.0	UJ
002SW	PWB 8/17/94	Zinc	-2.44	12.2	49SW011	7.5	B	7.5	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
003SW	PBW 8/25/94	Mercury	0.092	0.46	00S001	0.08	U	0.09	UJ
003SW	PBW 8/25/94	Mercury	0.092	0.46	49R014	0.08	U	0.09	UJ
003SW	PBW 8/25/94	Mercury	0.092	0.46	02SW043	0.08	U	0.09	UJ
003SW	PBW 8/25/94	Mercury	0.092	0.46	02SW042	0.08	U	0.09	UJ
003SW	PBW 8/25/94	Mercury	0.092	0.46	02SW042D	0.08	U	0.09	UJ
003SW	PBW 8/25/94	Mercury	0.092	0.46	02SW040	0.08	U	0.09	UJ

SDG No.	Blank ID	Affected Analyte	Conc. ug/l	Action Level ug/l	Affected Sample	Lab Conc ug/l	Lab Qual	EDS Conc ug/l	EDS Qual
003SW	49R014	Antimony	2.8	14.0	00SW001	3.1	B	3.1	UJ
003SW	49R014	Antimony	2.8	14.0	49R014	2.8	B	2.8	UJ
003SW	49R014	Antimony	2.8	14.0	02SW043	2.7	B	2.8	UJ
003SW	49R014	Antimony	2.8	14.0	02SW042D	2.8	B	2.8	UJ
003SW	49R014	Antimony	2.8	14.0	02SW041	3.1	B	3.1	UJ
003SW	49R014	Copper	6.9	34.5	00SW001	29.5	--	29.5	UJ
003SW	49R014	Copper	6.9	34.5	49R014	6.9	B	6.9	UJ
003SW	49R014	Copper	6.9	34.5	02SW043	27.7	--	27.7	UJ
003SW	49R014	Copper	6.9	34.5	02SW042	11.7	B	11.7	UJ
003SW	49R014	Copper	6.9	34.5	02SW041	13.9	B	13.9	UJ
003SW	49R014	Copper	6.9	34.5	02SW040	8.0	B	8.0	UJ
003SW	49R014	Lead	2.8	14.0	49R014	2.8	B	2.8	UJ
003SW	49R014	Lead	2.8	14.0	02SW042D	2.2	B	2.8	UJ

003SW	49R014	Lead	2.8	14.0	02SW040	11.1	--	11.1	UJ
003SW	49R014	Zinc	23.5	117.5	00SW001	11.1	B	23.5	UJ
003SW	49R014	Zinc	23.5	117.5	49R014	23.5	--	23.5	UJ
003SW	49R014	Zinc	23.5	117.5	02SW042	21.9	--	23.5	UJ
003SW	49R014	Zinc	23.5	117.5	02SW042D	12.8	B	23.5	UJ
003SW	49R014	Zinc	23.5	117.5	02SW041	39.3	--	39.3	UJ
003SW	49R014	Zinc	23.5	117.5	02SW040	108	--	108	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
001S	S0FN 0706-1	Thallium	0.14 B	0.70	19SS001	0.12	U	0.14	UJ
001S	S0FN 0706-1	Thallium	0.14 B	0.70	19SS001D	0.12	U	0.14	UJ
001S	S0FN 0706-1	Thallium	0.14 B	0.70	19SS002	0.13	U	0.14	UJ
001S	S0FN 0706-1	Thallium	0.14 B	0.70	19SS003	0.12	U	0.14	UJ
001S	S0FN 0706-1	Thallium	0.14 B	0.70	19SS004	0.13	U	0.14	UJ
001S	S0FN 0706-1	Thallium	0.14 B	0.70	19SS005	0.13	U	0.14	UJ
001S	S0FN 0706-1	Thallium	0.14 B	0.70	19SS006	0.12	U	0.14	UJ
001S	S0IC 0706-1	Tin	4.195	21.0	19SS001	3.0	B	4.20	UJ
001S	S0IC 0706-1	Tin	4.195	21.0	19SS001D	3.4	B	4.20	UJ
001S	S0IC 0706-1	Tin	4.195	21.0	19SS002	4.7	B	4.7	UJ
001S	S0IC 0706-1	Tin	4.195	21.0	19SS003	3.0	B	4.20	UJ
001S	S0IC 0706-1	Tin	4.195	21.0	19SS004	4.1	B	4.20	UJ
001S	S0IC 0706-1	Tin	4.195	21.0	19SS005	4.1	B	4.20	UJ
001S	S0IC 0706-1	Tin	4.195	21.0	19SS006	3.1	B	4.20	UJ

SDG No.	Blank ID	Affected Analyte	Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
001S	19R004	Cobalt	0.94	4.7	19SS001	1.5	B	1.5	UJ
001S	19R004	Cobalt	0.94	4.7	19SS005	0.81	B	0.94	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
002S	S0FN 0706-1	Thallium	0.14	0.70	19BS001	0.13	U	0.14	UJ
002S	S0FN 0706-1	Thallium	0.14	0.70	19BS001D	0.13	U	0.14	UJ
002S	S0FN 0706-1	Thallium	0.14	0.70	19BS002	0.13	U	0.14	UJ
002S	S0FN 0706-1	Thallium	0.14	0.70	19BS006	0.13	U	0.14	UJ
002S	S0IC 0706-1	Tin	4.195	21.0	19BS001	5.1	B	5.1	UJ
002S	S0IC 0706-1	Tin	4.195	21.0	19BS001D	3.9	B	4.20	UJ
002S	S0IC 0706-1	Tin	4.195	21.0	19BS002	4.3	B	4.3	UJ
002S	S0IC 0706-1	Tin	4.195	21.0	19BS003	5.3	B	5.3	UJ
002S	S0IC 0706-1	Tin	4.195	21.0	19BS004	6.7	B	6.7	UJ
002S	S0IC 0706-1	Tin	4.195	21.0	19BS005	5.8	B	5.8	UJ
002S	S0IC 0706-1	Tin	4.195	21.0	19BS006	4.2	B	4.20	UJ

SDG No.	Blank ID	Affected Analyte	Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
002S	19R004	Zinc	1.48	7.4	19BS001	5.5	--	5.5	UJ
002S	19R004	Zinc	1.48	7.4	19BS001D	3.2	B	3.2	UJ
002S	19R004	Zinc	1.48	7.4	19BS003	6.4	--	6.4	UJ
002S	19R004	Zinc	1.48	7.4	19BS005	5.9	--	5.9	UJ
002S	19R004	Zinc	1.48	7.4	19BS006	5.4	--	5.4	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc.	Action Level	Affected Sample	Lab Conc	Lab Qual	EDS Conc	EDS Qual
003S	WTIC 0713-1	Cobalt	3.8 ug/l	19.0 ug/l	19R004	4.7 ug/l	B	4.7 ug/l	UJ
003S	SOIC 0715-1	Cobalt	0.707 mg/kg	3.54 mg/kg	19SD001	1.2 mg/kg	B	1.2 mg/kg	UJ
003S	SOIC 0715-1	Cobalt	0.707 mg/kg	3.54 mg/kg	19SD001D	0.84 mg/kg	B	0.84 mg/kg	UJ
003S	SOIC 0715-1	Cobalt	0.707 mg/kg	3.54 mg/kg	19SD002	0.96 mg/kg	B	0.96 mg/kg	UJ
003S	SOIC 0715-1	Cobalt	0.707 mg/kg	3.54 mg/kg	19SD003	1.0 mg/kg	B	1.0 mg/kg	UJ
003S	SOIC 0715-1	Tin	3.01 mg/kg	15.05 mg/kg	19SD001	2.5 mg/kg	B	3.01 mg/kg	UJ
003S	SOIC 0715-1	Tin	3.01 mg/kg	15.05 mg/kg	19SD001D	3.6 mg/kg	B	3.6 mg/kg	UJ
003S	SOIC 0715-1	Tin	3.01 mg/kg	15.05 mg/kg	19SD002	3.4 mg/kg	B	3.4 mg/kg	UJ
003S	SOIC 0715-1	Tin	3.01 mg/kg	15.05 mg/kg	19SD003	4.5 mg/kg	B	4.5 mg/kg	UJ

SDG No.	Blank ID	Affected Analyte	Conc.	Action Level**	Affected Sample	Lab Conc	Lab Qual	EDS Conc	EDS Qual
003S	19R004	Zinc	1.48 mg/kg	7.4 mg/kg	19SD001D	5.9 mg/kg	-	5.9 mg/kg	UJ
003S	19R004	Zinc	1.48 mg/kg	7.4 mg/kg	19SD002	5.3 mg/kg	-	5.3 mg/kg	UJ
003S	19R004	Zinc	1.48 mg/kg	7.4 mg/kg	19SD003	6.8 mg/kg	-	6.8 mg/kg	UJ
003S	19R004	Zinc	7.4 ug/l	37.0 ug/l	19R004	7.4 ug/l	B	7.4 ug/l	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
004S	SOIC 0715-1	Cobalt	0.707	3.54	AASS001	1.5	B	1.5	UJ
004S	SOIC 0715-1	Cobalt	0.707	3.54	AASS001D	1.2	B	1.2	UJ
004S	SOIC 0715-1	Tin	3.01	15.05	AASS001	3.7	B	3.7	UJ
004S	SOIC 0715-1	Tin	3.01	15.05	AASS001D	1.7	B	3.01	UJ
004S	SOIC 0715-1	Tin	3.01	15.05	AASS002	3.1	B	3.1	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc.	Action Level	Affected Sample	Lab Conc	Lab Qual	EDS Conc	EDS Qual
005S	SOIC 0715-1	Cobalt	0.707 mg/kg	3.54 mg/kg	AABS001	0.67 mg/kg	B	0.71 mg/kg	UJ
005S	SOIC 0715-1	Cobalt	0.707 mg/kg	3.54 mg/kg	AABS001D	0.95 mg/kg	B	0.95 mg/kg	UJ
005S	SOIC 0715-1	Tin	3.01 mg/kg	15.05 mg/kg	AABS001	3.6 mg/kg	B	3.6 mg/kg	UJ
005S	SOIC 0715-1	Tin	3.01 mg/kg	15.05 mg/kg	AABS001D	3.8 mg/kg	B	3.8 mg/kg	UJ
005S	SOIC 0715-1	Tin	3.01 mg/kg	15.05 mg/kg	AABS002	2.8 mg/kg	B	3.01 mg/kg	UJ

SDG No.	Blank ID	Affected Analyte	Conc.	Action Level	Affected Sample	Lab Conc.	Lab Qual	EDS Conc mg/kg	EDS Qual
005S	19R004	Zinc	1.48 mg/kg	7.4 mg/kg	AABS001D	7.1	-	7.1	UJ
005S	19R004	Zinc	1.48 mg/kg	7.4 mg/kg	AABS002	2.9	B	2.9	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
001SED	PBS 8/16/94	Mercury	0.088	0.44	02SD016	0.08	U	0.09	UJ
001SED	PBS 8/16/94	Mercury	0.088	0.44	02SD018	0.06	U	0.09	UJ
001SED	PBS 8/16/94	Mercury	0.088	0.44	02SD031	0.05	U	0.09	UJ
001SED	PBS 8/16/94	Mercury	0.088	0.44	02SD031D	0.04	U	0.09	UJ
001SED	PBS 8/13/94	Silver	0.488	2.44	02SD016	0.96	U	0.96	UJ
001SED	PBS 8/13/94	Silver	0.488	2.44	02SD019	0.90	U	0.90	UJ
001SED	PBS 8/13/94	Silver	0.488	2.44	02SD031	0.51	U	0.51	UJ
001SED	PBS 8/13/94	Silver	0.488	2.44	02SD031D	0.53	U	0.53	UJ
001SED	PBS 8/13/94	Silver	0.488	2.44	02SD039	0.69	U	0.69	UJ
001SED	PBS 8/13/94	Silver	0.488	2.44	02SD030	0.55	U	0.55	UJ
001SED	PBS 8/13/94	Silver	0.488	2.44	02SD029	2.1	U	2.1	UJ
001SED	PBS 8/13/94	Silver	0.488	2.44	02SD029D	1.9	U	1.9	UJ
001SED	PBS 8/13/94	Silver	0.488	2.44	02SD015	1.3	U	1.3	UJ

SDG No.	Blank ID	Affected Analyte	Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
001SED	02R010	Cyanide	0.38	1.90	02SD012	0.12	B	0.38	UJ
001SED	02R010	Cyanide	0.38	1.90	02SD011	0.16	B	0.38	UJ

001SED	02R010	Cyanide	0.38	1.90	02SD014	0.21	B	0.38	UJ
001SED	02R010	Cyanide	0.38	1.90	02SD013	0.15	B	0.38	UJ
001SED	02R010	Cyanide	0.38	1.90	02SD016	0.23	B	0.38	UJ
001SED	02R010	Cyanide	0.38	1.90	02SD018	0.40	B	0.40	UJ
001SED	02R010	Cyanide	0.38	1.90	02SD019	0.25	B	0.38	UJ
001SED	02R010	Cyanide	0.38	1.90	02SD022	0.22	B	0.38	UJ
001SED	02R010	Cyanide	0.38	1.90	02SD031	0.09	B	0.38	UJ
001SED	02R010	Cyanide	0.38	1.90	02SD031D	0.11	B	0.38	UJ
001SED	02R010	Cyanide	0.38	1.90	02SD017	0.34	B	0.38	UJ
001SED	02R010	Cyanide	0.38	1.90	02SD032	0.37	B	0.38	UJ
001SED	02R010	Cyanide	0.38	1.90	02SD039	0.12	B	0.38	UJ
001SED	02R010	Cyanide	0.38	1.90	02SD030	0.09	B	0.38	UJ
001SED	02R010	Cyanide	0.38	1.90	02SD029	0.47	B	0.47	UJ
001SED	02R010	Cyanide	0.38	1.90	02SD029D	0.42	B	0.42	UJ
001SED	02R010	Cyanide	0.38	1.90	02SD015	0.40	B	0.40	UJ
001SED	02R010	Barium	1.48	7.4	02SD018	5.9	B	5.9	UJ
001SED	02R010	Barium	1.48	7.4	02SD031	4.2	B	4.2	UJ
001SED	02R010	Barium	1.48	7.4	02SD031D	4.1	B	4.1	UJ
001SED	02R010	Barium	1.48	7.4	02SD039	5.7	B	5.7	UJ
001SED	02R010	Mercury	0.05	0.25	02SD019	0.12	B	0.12	UJ
001SED	02R010	Mercury	0.05	0.25	02SD022	0.18	B	0.18	UJ

SDG No.	Blank ID	Affected Analyte	Conc. ug/l	Action Level ug/l	Affected Sample	Lab Conc ug/l	Lab Qual	EDS Conc ug/l	EDS Qual
003SED	02R015	Selenium	1.7	8.50	02R015	1.7	B	1.7	UJ
003SED	02R015	Tin	10.7	53.5	02R015	10.7	B	10.7	UJ
003SED	02R015	Tin	2.14 mg/kg	10.7 mg/kg	00SD001	5.0 mg/kg	B	5.0 mg/kg	UJ
003SED	02R015	Tin	2.14 mg/kg	10.7 mg/kg	02SD043	7.0 mg/kg	B	7.0 mg/kg	UJ
003SED	02R015	Tin	2.14 mg/kg	10.7 mg/kg	02SD042	4.6 mg/kg	B	4.6 mg/kg	UJ
003SED	02R015	Tin	2.14 mg/kg	10.7 mg/kg	02SD042D	5.7 mg/kg	B	5.7 mg/kg	UJ
003SED	02R015	Tin	2.14 mg/kg	10.7 mg/kg	02SD041	3.5 mg/kg	B	3.5 mg/kg	UJ
003SED	02R015	Zinc	5.0	25.0	02R015	5.0	B	5.0	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
LWW SEW	WTIC 0919-2	Iron	9.25	46.2	LWSW004	28.0	B	28.0	UJ
LWW SEW	WTIC 0919-2	Iron	9.25	46.2	LWSW003	22.0	B	22.0	UJ
LWW SEW	WTIC 0919-2	Iron	9.25	46.2	LWSW002	28.5	B	28.5	UJ
LWW SEW	WTIC 0919-2	Iron	9.25	462	LWSW001	28.2	B	28.2	UJ
LWW SEW	WTIC 0919-2	Zinc	1.2	6.0	LWSW004	1.9	B	1.9	UJ
LWW SEW	WTIC 0919-2	Zinc	1.2	6.0	LWSW003	2.2	B	2.2	UJ
LWW SEW	WTIC 0919-2	Zinc	1.2	6.0	LWSW002	1.8	B	1.8	UJ
LWW SEW	WTIC 0919-2	Zinc	1.2	6.0	LWSW001	2.4	B	2.4	UJ
LWW SEW	WTIC 0919-2	Zinc	1.2	6.0	LWSW005	2.4	B	2.4	UJ
LWW SEW	WTIC 0919-2	Zinc	1.2	6.0	LWSW005D	2.7	B	2.7	UJ
LWW SEW	WTIC 0919-2	Zinc	1.2	6.0	LWSW008	2.5	B	2.5	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
LWW SED	SOIC 0920-1	Barium	0.39	1.95	LWSD003	1.4	B	1.4	UJ
LWW SED	SOIC 0920-1	Copper	0.669	3.34	LWSD003	3.2	B	3.2	UJ
LWW SED	SOIC 0920-1	Copper	0.669	3.34	LWSD002	2.0	B	2.0	UJ
LWW SED	SOIC 0920-1	Copper	0.669	3.34	LWSD001	2.5	B	2.5	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
LWW SED	LWR025	Zinc	0.56	2.8	LWSD002	2.7	B	2.7	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
08/SL -01	PBS 8/20/94	Copper	0.926	4.63	08SL01102	0.86	U	0.93	UJ
08/SL -01	PBS 8/20/94	Selenium	0.43	2.15	08SL01101	0.56	U	0.56	UJ
08/SL -01	PBS 8/20/94	Selenium	0.43	2.15	08SL01102	0.28	U	0.43	UJ
08/SL -01	PBS 8/20/94	Selenium	0.43	2.15	08SL01201	0.30	U	0.43	UJ
08/SL -01	PBS 8/20/94	Selenium	0.43	2.15	08SL01202	0.29	U	0.43	UJ
08/SL -01	PBS 8/20/94	Selenium	0.43	2.15	08SL01301	0.30	U	0.43	UJ
08/SL -01	PBS 8/20/94	Selenium	0.43	2.15	08Sl01302	0.30	U	0.43	UJ
08/SL -01	PSB 8/29/94	Selenium	0.278	1.39	08SL00801	0.54	B	0.54	UJ
08/SL -01	PBS 8/29/94	Selenium	0.278	1.39	08SL00901	0.73	B	0.73	UJ
08/SL -01	PBS 8/29/94	Selenium	0.278	1.39	08SL01001D	0.51	B	0.51	UJ
08/SL -01	PBS 8/29/94	Selenium	0.278	1.39	08SL01006	0.61	B	0.61	UJ
08/SL -01	PBS 8/29/94	Selenium	0.278	1.39	08SL00906	0.48	B	0.48	UJ
08/SL -01	PBS 8/29/94	Selenium	0.278	1.39	08SL00806	0.44	B	0.44	UJ
08/SL -01	PBS 8/29/94	Selenium	0.278	1.39	08SL00501	0.41	B	0.41	UJ
08/SL -01	PBS 8/29/94	Selenium	0.278	1.39	08SL00505	0.86	B	0.86	UJ
08/SL -01	PBS 8/29/94	Selenium	0.278	1.39	08SL00601	0.30	B	0.30	UJ

08/SL -01	PBS 8/29/94	Selenium	0.278	1.39	08SL00605	0.65	B	0.65	UJ
08/SL -01	PBS 8/29/94	Beryllium	0.056	0.28	08SL00901	0.06	U	0.06	UJ
08/SL -01	PBS 8/29/94	Beryllium	0.056	0.28	08SL01006	0.04	U	0.06	UJ
08/SL -01	PBS 8/29/94	Beryllium	0.056	0.28	08SL00906	0.04	U	0.06	UJ
08/SL -01	PBS 8/29/94	Beryllium	0.056	0.28	08SL00806	0.04	U	0.06	UJ
08/SL -01	PBS 8/29/94	Beryllium	0.056	0.28	08SL00505	0.05	U	0.06	UJ
08/SL -01	PBS 8/29/94	Beryllium	0.056	0.28	08SL00601	0.04	U	0.06	UJ
08/SL -01	PBS 8/29/94	Beryllium	0.056	0.28	08SL00605	0.05	U	0.06	UJ
08/SL -01	PBS 8/29/94	Beryllium	0.056	0.28	08SL00701	0.04	U	0.06	UJ
08/SL -01	PBS 8/29/94	Beryllium	0.056	0.28	08SL00701D	0.04	U	0.06	UJ
08/SL -01	PBS 8/29/94	Beryllium	0.056	0.28	08SL00705	0.05	U	0.06	UJ

SDG No.	Blank ID	Affected Analyte	Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
08/SL-01	08R017	Beryllium	0.038	0.19	08SL01101	0.15	B	0.15	UJ
08/SL-01	08R017	Beryllium	0.038	0.19	08SL01102	0.07	B	0.07	UJ
08/SL-01	08R017	Beryllium	0.038	0.19	08SL01201	0.10	B	0.10	UJ
08/SL-01	08R017	Beryllium	0.038	0.19	08SL01202	0.09	B	0.09	UJ
08/SL-01	08R017	Beryllium	0.038	0.19	08SL01301	0.08	B	0.08	UJ

08/SL-01	08R017	Beryllium	0.038	0.19	08SL01302	0.12	B	0.12	UJ
08/SL-01	08R017	Beryllium	0.038	0.19	08SL00801	0.07	B	0.07	UJ
08/SL-01	08R017	Beryllium	0.038	0.19	08SL01001	0.06	B	0.06	UJ
08/SL-01	08R017	Beryllium	0.038	0.19	08SL01001D	0.05	B	0.05	UJ
08/SL-01	08R017	Beryllium	0.038	0.19	08SL00501	0.10	B	0.10	UJ
08/SL-01	08R017	Copper	0.94	4.7	08SL01202	2.5	B	2.5	UJ
08/SL-01	08R017	Copper	0.94	4.7	08SL01302	3.2	B	3.2	UJ
08/SL-01	08R017	Copper	0.94	4.7	08SL00605	1.1	B	1.1	UJ
08/SL-01	08R017	Zinc	1.36	6.8	08SL01102	3.1	B	3.1	UJ
08/SL-01	08R017	Zinc	1.36	6.8	08SL00501	4.1	B	4.1	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
08/SL-02	SOIC 1110-1	Cadmium	0.325	1.62	08SL00401	1.0	B	1.0	UJ
08/SL-02	SOIC 1110-1	Cadmium	0.325	1.62	08SL00401D	0.41	B	0.41	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
2&4-001	PBS 8/20/94	Copper	0.926	4.63	04BS00810	0.97	U	0.97	UJ
2&4-001	PBS 8/20/94	Selenium	0.43	2.15	02SS00101 04SS00801 04BS00810 04SS00401	0.30 0.27 0.32 0.29	U U U U	0.43 0.43 0.43 0.43	UJ UJ UJ UJ
2&4-001	PBS 8/24/94	Selenium	0.278	1.39	04BS00405 04BS01008	0.50 0.36	B B	0.50 0.36	UJ UJ
2&4-001	PBS 08/29/94	Beryllium	0.06	0.12	04BS00905 04BS01008 04BS01008D	0.04 0.04 0.06	U U U	0.06 0.06 0.06	UJ UJ UJ

SDG No.	Blank ID	Affected Analyte	Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
2&4-001	02R012	Copper	0.92	4.6	04SS00801 04SS00401 04BS01008D 04SS01001 04SS00901 04SS00401 04SS00401D 04SS00701 04SS00301 04SS00601 04SS00501 28SS03501 28SS00801	3.8 2.7 2.4 4.2 3.5 4.0 3.2 1.2 2.8 3.0 1.4 4.1 3.3	B	3.8 2.7 2.4 4.2 3.5 4.0 3.2 1.2 2.8 3.0 1.4 4.1 3.3	UJ
2&4-001	02R012	Zinc	0.96	4.8	04BS00810 04BS01008 04BS01008D 04SS00701 04SS00501 04SS00801	4.0 1.9 1.8 2.6 4.2 1.6	B	4.0 1.9 1.8 2.6 4.2 1.6	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
2&4-002	SOIC 0916-1	Cadmium	0.206	1.03	04BS00509	0.37	B	0.37	UJ
2&4-002	SOIC 0916-1	Tin	3.16	15.8	04BS00111	3.8	B	3.8	UJ
2&4-002	SOIC 0914-1	Chromium	0.696	3.48	02BS00407	3.1	--	3.1	UJ
2&4-002	SOIC 0914-1	Chromium	0.696	3.48	02BS00407D	3.0	--	3.0	UJ
2&4-002	SOIC 0914-1	Copper	0.43	2.15	02SS00301	1.5	B	1.5	UJ
2&4-002	SOIC 0914-1	Copper	0.43	2.15	02SS00401	2.0	B	2.0	UJ
2&4-002	SOIC 0914-1	Copper	0.43	2.15	02BS00407D	1.9	B	1.9	UJ
2&4-002	SOHG 0922-2	Mercury	0.036	0.18	02BS00107	0.05	B	0.05	UJ
2&4-002	SOHG 0922-2	Mercury	0.036	0.18	02SS00301	0.03	B	0.03	UJ
2&4-002	SOHG 0922-2	Mercury	0.036	0.18	02BS00307	0.04	B	0.04	UJ
2&4-002	SOHG 0922-2	Mercury	0.036	0.18	02SS00401	0.05	B	0.05	UJ
2&4-002	SOHG 0922-2	Mercury	0.036	0.18	02BS00407D	0.04	B	0.04	UJ
2&4-002	SOHG 0922-2	Mercury	0.036	0.18	02SS00201	0.05	B	0.05	UJ
2&4-002	SOHG 0922-2	Mercury	0.036	0.18	02BS00203	0.08	B	0.08	UJ

SDG No.	Blank ID	Affected Analyte	Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
2&4-002	04R020	Copper	0.54	2.7	02BS00407	2.2	B	2.2	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
28-001	PBS 08/22/94	Zinc	1.35	NA	28SS02901	0.27	U	1.35	UJ
28-001	PBS 08/22/94	Zinc	1.35	NA	28SS02501	0.26	U	1.35	UJ

SDG No.	Blank ID	Affected Analyte	Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
28-001	28R016	Zinc	0.56	2.80	28SS03001	1.2	B	1.2	UJ
28-001	28R016	Zinc	0.56	2.80	28SS03001D	0.44	B	0.56	UJ
28-001	28R016	Zinc	0.56	2.80	28SS02701	0.88	B	0.88	UJ
28-001	28R016	Zinc	0.56	2.80	28SS02601	0.54	B	0.56	UJ
28-001	28R016	Zinc	0.56	2.80	28SS02401	1.6	B	1.6	UJ
28-001	28R016	Zinc	0.56	2.80	28SS02301	0.70	B	0.70	UJ
28-001	28R016	Zinc	0.56	2.80	28SS02201	1.0	B	1.0	UJ
28-001	28R016	Zinc	0.56	2.80	28SS02101	0.93	B	0.93	UJ
28-001	28R016	Zinc	0.56	2.80	28SS02101D	1.2	B	1.2	UJ
28-001	28R016	Zinc	0.56	2.80	28SS00301	0.66	B	0.66	UJ
28-001	28R016	Zinc	0.56	2.80	28SS00401	0.45	B	0.56	UJ
28-001	28R016	Zinc	0.56	2.80	28SS00501	1.7	B	1.7	UJ
28-001	28R016	Zinc	0.56	2.80	28SS00601	1.3	B	1.3	UJ
28-001	28R016	Zinc	0.56	2.80	28SS00701	1.5	B	1.5	UJ
28-001	28R016	Zinc	0.56	2.80	28SS00901	1.4	B	1.4	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
28-002	PBS 08/25/94	Beryllium	0.42	NA	28SS00101	0.04	U	0.04	UJ
28-002	PBS 08/25/94	Beryllium	0.42	NA	28SS01901	0.04	U	0.04	UJ
28-002	PBS 08/25/94	Beryllium	0.42	NA	28BS00106	0.04	U	0.04	UJ
28-002	PBS 08/25/94	Beryllium	0.42	NA	28SS01001	0.04	U	0.04	UJ
28-002	PBS 08/25/94	Lead	0.29	1.45	28SS02001	1.0	-	1.0	UJ
28-002	PBS 08/25/94	Lead	0.29	1.45	28BS00106	1.2	-	1.2	UJ
28-002	PBS 08/25/94	Lead	0.29	1.45	28SS01101	1.3	-	1.3	UJ
28-002	PSB 08/25/94	Lead	0.29	1.45	28SS01001	0.92	-	0.92	UJ
28-002	PBS 08/25/94	Lead	0.29	1.45	28SS01201	1.2	-	1.2	UJ
28-002	PBS 08/25/94	Lead	0.29	1.45	28SS01401	1.1	-	1.1	UJ
28-002	PBS 08/25/94	Lead	0.29	1.45	28SS01401D	1.2	-	1.2	UJ
28-002	PBS 08/25/94	Lead	0.29	1.45	28SS01601	1.0	-	1.0	UJ
28-002	PBS 08/25/94	Lead	0.29	1.45	28SS01701	1.3	-	1.3	UJ
28-002	PBS 08/25/94	Lead	0.29	1.45	28SS01801	1.2	-	1.2	UJ
28-002	PBS 08/25/94	Lead	0.29	1.45	28BS01704	1.0	-	1.0	UJ
28-002	PBS 08/25/94	Silver	0.52	NA	28SS00101	0.47	U	0.52	UJ
28-002	PBS 08/25/94	Silver	0.52	NA	28SS00201	0.46	U	0.52	UJ

28-002	PBS 08/25/94	Silver	0.52	NA	28SS00201D	0.45	U	0.52	UJ
28-002	PBS 08/25/94	Silver	0.52	NA	28SS01901	0.45	U	0.52	UJ
28-002	PBS 08/25/94	Silver	0.52	NA	28SS02001	0.44	U	0.52	UJ
28-002	PBS 08/25/94	Silver	0.52	NA	28BS00106	0.44	U	0.52	UJ
28-002	PBS 08/25/94	Silver	0.52	NA	28BS00504	0.78	U	0.78	UJ
28-002	PBS 08/25/94	Silver	0.52	NA	28BS02204	0.56	U	0.56	UJ
28-002	PBS 08/25/94	Silver	0.52	NA	28SS01101	0.46	U	0.52	UJ
28-002	PSB 08/25/94	Silver	0.52	NA	28SS01001	0.44	U	0.52	UJ
28-002	PBS 08/25/94	Silver	0.52	NA	28SS01201	0.44	U	0.52	UJ
28-002	PBS 08/25/94	Silver	0.52	NA	28SS01301	0.44	U	0.52	UJ
28-002	PBS 08/25/94	Silver	0.52	NA	28SS01401	0.44	U	0.52	UJ
28-002	PBS 08/25/94	Silver	0.52	NA	28SS01401D	0.44	U	0.52	UJ
28-002	PBS 08/25/94	Silver	0.52	NA	28SS01501	0.44	U	0.52	UJ
28-002	PBS 08/25/94	Silver	0.52	NA	28SS01601	0.45	U	0.52	UJ
28-002	PBS 08/25/94	Silver	0.52	NA	28SS01701	0.45	U	0.52	UJ
28-002	PBS 08/25/94	Silver	0.52	NA	28SS01801	0.45	U	0.52	UJ
28-002	PBS 08/25/94	Silver	0.52	NA	28BS01004	0.53	U	0.53	UJ
28-002	PBS 08/25/94	Silver	0.52	NA	28BS01704	0.50	U	0.52	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
28-003	PBS 8/20/94	Copper	0.926	4.63	28SS03201	0.87	U	0.93	UJ
					28SS03104D	0.85	U	0.93	UJ
					28SS03301	0.84	U	0.93	UJ
28-003	PBS 8/20/95	Selenium	0.43	2.15	28SS03101	0.28	U	0.43	UJ
					28SS03201	0.29	U	0.43	UJ
					28BS03104	0.29	U	0.43	UJ
					28BS03104D	0.28	U	0.43	UJ
					28SS03301	0.28	U	0.43	UJ
28-003	PBS 8/24/94	Selenium	0.28	1.4	48SS00101	0.28	U	0.28	UJ
					48SS00201	0.28	U	0.28	UJ
					48BS00205	0.34	U	0.34	UJ
					48SS00501	0.28	U	0.28	UJ
					48BS00505	0.28	U	0.28	UJ
					48SS00301	0.28	U	0.28	UJ
					48SS00401	0.28	U	0.28	UJ
					48SS00401D	0.28	U	0.28	UJ
28-003	PBS 9/7/94	Beryllium	0.062	0.31	48SS00101	0.09	B	0.09	UJ
					48BS00205	0.22	B	0.22	UJ
					48SS00501	0.12	B	0.12	UJ
					48BS00505	0.09	B	0.09	UJ
					48SS00301	0.06	B	0.06	UJ
					48SS00401	0.21	B	0.21	UJ
					48SS00401D	0.12	B	0.12	UJ
28-003	PBS 8/24/94	Lead	0.58	2.90	48SS00101	2.9	--	2.9	UJ
					48SS00501	1.8	--	1.8	UJ
					48SS00301	2.7	--	2.7	UJ
					48SS00401D	2.9	--	2.9	UJ

SDG No.	Blank ID	Affected Analyte	Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
28-003	08R017	Beryllium	0.038	0.19	28SS03101	0.11	B	0.11	UJ
					28SS03201	0.07	B	0.07	UJ
					28BS03104	0.06	B	0.06	UJ
					28BS03104D	0.05	B	0.05	UJ
					28SS03301	0.09	B	0.09	UJ

28-003	08R017	Copper	0.94	4.7	28SS03101	2.1	B	2.1	UJ
					28BS03104	2.2	B	2.2	UJ
					48SS00101	1.4	B	1.4	UJ
					48SS00201	2.7	B	2.7	UJ
					48SS00501	1.2	B	1.2	UJ
					48SS00401	0.98	B	0.98	UJ
28-003	08R017	Zinc	1.36	6.8	28SS03201	2.3	B	2.3	UJ
					28BS03104	4.7	B	4.7	UJ
					28BS03104D	5.0	B	5.0	UJ
					28SS03301	3.4	B	3.4	UJ
					48SS00101	2.5	B	2.5	UJ
					48SS00201	2.1	B	2.1	UJ
					48BS00205	5.1	--	5.1	UJ
					48SS00501	4.5	--	4.5	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
5-001	SOIC 0823-1	Beryllium	0.08	0.42	05SS01001	0.07	B	0.08	UJ
5-001	SOIC 0823-1	Beryllium	0.08	0.42	05SS01301	0.30	B	0.30	UJ
5-001	SOIC 0823-1	Beryllium	0.08	0.42	05SS00501	0.12	B	0.12	UJ
5-001	SOIC 0823-1	Beryllium	0.08	0.42	05SS00601	0.17	B	0.17	UJ
5-001	SOIC 0823-1	Beryllium	0.08	0.42	05SS00901	0.17	B	0.17	UJ
5-001	SOIC 0823-1	Beryllium	0.08	0.42	05SS01701	0.12	B	0.12	UJ
5-001	SOIC 0823-1	Beryllium	0.08	0.42	05SS00101	0.17	B	0.17	UJ
5-001	SOIC 0823-1	Beryllium	0.08	0.42	05SS00201	0.18	B	0.18	UJ
5-001	SOIC 0823-1	Beryllium	0.08	0.42	05SS00401	0.25	B	0.25	UJ
5-001	SOIC 0823-1	Beryllium	0.08	0.42	05SS00801	0.15	B	0.15	UJ
5-001	SOIC 0823-1	Beryllium	0.08	0.42	05SS01201	0.15	B	0.15	UJ
5-001	SOIC 0823-1	Beryllium	0.08	0.42	05SS01401	0.14	B	0.14	UJ
5-001	SOIC 0823-1	Copper	0.69	3.46	05SS00501	3.10	B	3.10	UJ
5-001	SOIC 0823-1	Copper	0.69	3.46	05SS00801	2.5	B	2.5	UJ
5-001	SOIC 0823-1	Copper	0.69	3.46	05SS01401	1.7	B	1.7	UJ
5-001	SOIC 0823-1	Copper	0.69	3.46	05SS01201	2.4	B	2.4	UJ
5-001	WTFN 0829-1	Arsenic	0.6 ug/l	3.0 ug/l	05R018	0.6	U	0.6	UJ

SDG No.	Blank ID	Affected Analyte	Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
5-001	05R018	Zinc	0.32	1.60	05SS00801	1.6	B	0.32	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
5-002	PBS 09/07/94	Beryllium	0.62	3.1	05BS01009	0.14	B	0.62	UJ
5-002	PBS 09/07/94	Beryllium	0.62	3.1	05BS00509	0.22	B	0.62	UJ
5-002	PBS 09/07/94	Beryllium	0.62	3.1	05BS00909	0.30	B	0.62	UJ
5-002	PBS 09/07/94	Beryllium	0.62	3.1	05BS00909D	0.31	B	0.62	UJ
5-002	PBS 09/07/94	Beryllium	0.62	3.1	05BS01509	0.20	B	0.62	UJ
5-002	PBS 09/07/94	Beryllium	0.62	3.1	05BS01709	0.24	B	0.62	UJ
5-002	PBS 09/07/94	Beryllium	0.62	3.1	05BS01610	0.12	B	0.62	UJ
5-002	PBS 09/07/94	Beryllium	0.62	3.1	05BS01807	0.24	B	0.62	UJ
5-002	PBS 09/07/94	Beryllium	0.62	3.1	05SS02101	0.08	B	0.62	UJ
5-002	PBS 08/31/94	Beryllium	0.06	NA	05BS02107	0.05	U	0.06	UJ
5-002	PBS 08/31/94	Beryllium	0.06	NA	05SS02001	0.04	U	0.06	UJ
5-002	PBS 08/31/94	Beryllium	0.06	NA	05SS02001D	0.04	U	0.06	UJ
5-002	PBS 08/31/94	Arsenic	0.344	1.72	05BS02107	0.69	B	0.69	UJ
5-002	PBS 08/31/94	Arsenic	0.344	1.72	05SS02001	0.53	B	0.53	UJ
5-002	PBS 08/31/94	Arsenic	0.344	1.72	05SS02001D	0.33	B	0.34	UJ
5-002	PBS 08/31/94	Arsenic	0.344	1.72	05BS02009	1.50	B	1.50	UJ

5-002	PBS 08/31/94	Arsenic	0.344	1.72	05SS01901	1.2	B	1.2	UJ
5-002	PBS 08/31/94	Arsenic	0.344	1.72	05BS00704	1.7	B	1.7	UJ
5-002	PBS 08/31/94	Arsenic	0.344	1.72	05SS01101	1.1	B	1.1	UJ
5-002	PBS 08/31/94	Arsenic	0.344	1.72	05BS01107	1.5	B	1.5	UJ
5-002	PBW 09/06/94	Cyanide	0.73 ug/L	3.67 ug/L	05R021	0.60	B	0.73	UJ

SDG No.	Blank ID	Affected Analyte	Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
5-002	05R021	Selenium	3.92	19.6	05BS00909	0.61	B	3.92	UJ
5-002	05R021	Selenium	3.92	19.6	05BS00909D	0.99	B	3.92	UJ
5-002	05R021	Selenium	3.92	19.6	05BS01509	0.89	B	3.92	UJ
5-002	05R021	Selenium	3.92	19.6	05BS01709	0.77	B	3.92	UJ
5-002	05R021	Selenium	3.92	19.6	05BS01610	0.93	B	3.92	UJ
5-002	05R021	Selenium	3.92	19.6	05BS01807	0.35	B	3.92	UJ
5-002	05R021	Selenium	3.92	19.6	05BS00409	0.66	B	3.92	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
5-003	SOIC 0919-1	Chromium	0.67	3.4	05SS00301D	2.7	-	2.7	UJ
5-003	FNIC 0919-1	Thallium	0.12	0.6	05SS00301	0.13	B	0.13	UJ
5-003	FNIC 0919-1	Thallium	0.12	0.6	05SS00301D	0.15	B	0.15	UJ
5-003	FNIC 0919-1	Thallium	0.12	0.6	05SS01501	0.18	B	0.18	UJ
5-003	FNIC 0919-1	Thallium	0.12	0.6	05SS01601	0.16	B	0.16	UJ
5-003	SOIC 0919-1	Tin	2.4	12.0	05SS01501	6.8	B	6.8	UJ
5-003	SOIC 0919-1	Tin	2.4	12.0	05SS01601	4.5	B	4.5	UJ
5-003	SOIC 0919-1	Tin	2.4	12.0	05SS01801	2.6	B	2.6	UJ
5-003	WTIC 0915-2	Zinc	3.99 ug/L	20.0 ug/L	05R023	6.0	B	6.0	UJ

SDG No.	Blank ID	Affected Analyte	Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
5-003	05R023	Cadmium	2.12	10.6	05SS00301	0.22	B	2.12	UJ
5-003	05R023	Cadmium	2.12	10.6	05SS01501	0.32	B	2.12	UJ
5-003	05R023	Cadmium	2.12	10.6	05SS01801	0.24	B	2.12	UJ
5-003	05R023	Vanadium	0.56	2.8	05SS00301D	2.7	B	2.7	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc. mg/kg	Lab Qual	EDS Conc. mg/kg	EDS Qual
3-001	PBW 07/29/94	Cyanide	0.968 ug/l	4.84 ug/l	03R007	1.0 ug/l	B	1.0 ug/l	UJ
3-001	PBS 08/02/94	Antimony	0.48	2.4	03BS00532	0.65	B	0.65	UJ
3-001	PBS 08/02/94	Antimony	0.48	2.4	03BS00632	0.82	B	0.82	UJ
3-001	PBS 08/02/94	Antimony	0.48	2.4	03BS00732	0.56	B	0.56	UJ
3-001	PBS 08/02/94	Arsenic	0.69	NA	03SS00724	0.19	U	0.69	UJ
3-001	PBS 08/02/94	Copper	1.69	8.45	03SS00301	1.7	B	1.7	UJ
3-001	PBS 08/02/94	Copper	1.69	8.45	03SS00201	2.3	B	2.3	UJ
3-001	PBS 08/02/94	Copper	1.69	8.45	03BS00308	1.5	B	1.69	UJ
3-001	PBS 08/02/94	Copper	1.69	8.45	03BS00108	2.2	B	2.2	UJ
3-001	PBS 08/02/94	Copper	1.69	8.45	03BS00632	2.3	B	2.3	UJ

SDG No.	Blank ID	Affected Analyte	Conc. mg/kg	Action Level** mg/kg	Affected Sample	Lab Conc. mg/kg	Lab Qual	EDS Conc. mg/kg	EDS Qual.
3-001	03R007	Calcium	4020	20100	03BS00308	11300	-	11300	UJ
3-001	03R007	Calcium	4020	20100	03BS00108	16500	-	16500	UJ
3-001	03R007	Calcium	4020	20100	03BS00208	10300	-	10300	UJ
3-001	03R007	Calcium	4020	20100	03SS00724	17700	-	17700	UJ
3-001	03R007	Magnesium	9380	46900	03SS00824	9320	-	9380	UJ
3-001	03R007	Magnesium	9380	46900	03SS00824D	9350	-	9380	UJ
3-001	03R007	Magnesium	9380	46900	03BS00832	530	B	9380	UJ
3-001	03R007	Magnesium	9380	46900	03BS00832D	524	B	9380	UJ

3-001	03R007	Magnesium	9380	46900	03SS00301	503	B	9380	UJ
3-001	03R007	Magnesium	9380	46900	03SS00101	1090	-	9380	UJ
3-001	03R007	Magnesium	9380	46900	03SS00201	1320	-	9380	UJ
3-001	03R007	Magnesium	9380	46900	03BS00308	924	B	9380	UJ
3-001	03R007	Magnesium	9380	46900	03BS00108	1040	B	9380	UJ
3-001	03R007	Magnesium	9380	46900	03BS00208	434	B	9380	UJ
3-001	03R007	Magnesium	9380	46900	03SS00424	1470	-	9380	UJ
3-001	03R007	Magnesium	9380	46900	03SS00524	6420	-	9380	UJ
3-001	03R007	Magnesium	9380	46900	03SS00624	7240	-	9380	UJ
3-001	03R007	Magnesium	9380	46900	03SS00724	392	B	9380	UJ
3-001	03R007	Magnesium	9380	46900	03BS00432	586	B	9380	UJ
3-001	03R007	Magnesium	9380	46900	03BS00532	1870	-	9380	UJ
3-001	03R007	Magnesium	9380	46900	03BS00632	1770	-	9380	UJ
3-001	03R007	Magnesium	9380	46900	03BS00732	395	B	9380	UJ
3-001	03R007	Sodium	3140	15700	03SS00824	5690	-	5690	UJ
3-001	03R007	Sodium	3140	15700	03SS00824D	5630	-	5630	UJ
3-001	03R007	Sodium	3140	15700	03BS00832	1400	-	3140	UJ
3-001	03R007	Sodium	3140	15700	03BS00832D	1560	-	3140	UJ
3-001	03R007	Sodium	3140	15700	03SS00301	1380	-	3140	UJ
3-001	03R007	Sodium	3140	15700	03SS00101	424	B	3140	UJ
3-001	03R007	Sodium	3140	15700	03SS00201	353	B	3140	UJ
3-001	03R007	Sodium	3140	15700	03BS00308	1710	-	3140	UJ
3-001	03R007	Sodium	3140	15700	03BS00108	1790	-	3140	UJ
3-001	03R007	Sodium	3140	15700	03BS00208	832	B	3140	UJ
3-001	03R007	Sodium	3140	15700	03SS00424	240	B	3140	UJ
3-001	03R007	Sodium	3140	15700	03SS00524	348	B	3140	UJ
3-001	03R007	Sodium	3140	15700	03SS00624	686	B	3140	UJ
3-001	03R007	Sodium	3140	15700	03SS00724	384	B	3140	UJ
3-001	03R007	Sodium	3140	15700	03BS00432	1100	B	3140	UJ
3-001	03R007	Sodium	3140	15700	03BS00532	854	B	3140	UJ

3-001	03R007	Sodium	3140	15700	03BS00632	827	B	3140	UJ
3-001	03R007	Sodium	3140	15700	03BS00732	1160	B	3140	UJ
3-001	03R007	Zinc	2.22	11.1	03BS00832	0.98	B	2.22	UJ
3-001	03R007	Zinc	2.22	11.1	03BS00832D	1.4	B	2.22	UJ
3-001	03R007	Zinc	2.22	11.1	03SS00301	2.6	B	2.6	UJ
3-001	03R007	Zinc	2.22	11.1	03SS00201	7.1	-	7.1	UJ
3-001	03R007	Zinc	2.22	11.1	03BS00308	4.4	B	4.4	UJ
3-001	03R007	Zinc	2.22	11.1	03BS00108	10.8	-	10.8	UJ
3-001	03R007	Zinc	2.22	11.1	03SS00424	0.98	B	2.22	UJ
3-001	03R007	Zinc	2.22	11.1	03SS00724	1.9	B	2.22	UJ
3-001	03R007	Zinc	2.22	11.1	03BS00432	1.8	B	2.22	UJ
3-001	03R007	Zinc	2.22	11.1	03BS00532	2.0	B	2.22	UJ
3-001	03R007	Zinc	2.22	11.1	03BS00732	1.5	B	2.22	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
56-001	WTIC 0915-2	Zinc	3.99 ug/l	20.0 ug/l	56R022	4.5 ug/l	B	4.5 ug/l	UJ
56-001	SOIC 0914-1	Barium	0.497	2.48	56BS00304	2.4	B	2.4	UJ
56-001	SOIC 0914-1	Copper	0.43	2.15	56BS00104 56BS00204 56BS00304 56BS00405	1.7 1.3 1.7 1.7	B B B B	1.7 1.3 1.7 1.7	UJ UJ UJ UJ
56-001	SOIC 0914-1	Chromium	0.696	3.48	56BS00104 56BS00204 56BS00301 56BS00405	2.1 1.7 2.2 2.0	B B B B	2.1 1.7 2.2 2.0	UJ UJ UJ UJ
56-001	SOHG 0922-4	Mercury	0.04	0.18	56SS00101 56SS00101 D 56BS00104 56SS00201 56BS00204 56SS00301 56BS00304 56BS00405	0.05 0.03 0.04 0.04 0.04 0.03 0.04 0.05	B B B B B B B B	0.05 0.04 0.04 0.04 0.04 0.04 0.04 0.05	UJ UJ UJ UJ UJ UJ UJ UJ

SDG No.	Blank ID	Affected Analyte	Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
56-001	56R022	Beryllium	0.08	0.41	56SS00101 56SS00101D 56BS00104 56SS00201 56BS00204 56SS00301 56BS00304 56SS00401	0.11 0.16 0.11 0.09 0.10 0.13 0.08 0.14	B B B B B B B B	0.11 0.16 0.11 0.09 0.10 0.13 0.08 0.14	UJ UJ UJ UJ UJ UJ UJ UJ
56-001	56R022	Zinc	0.90	4.5	56BS00104 56BS00304	3.8 3.9	B B	3.8 3.9	UJ UJ
56-001	56R022	Cyanide	0.26	1.30	56SS00201	0.16	B	0.26	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. ug/L	Action Level ug/L	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
BGROUND-BS	WTIC 1205-1	Zinc	2.14	10.7	0BR035	5.9	B	5.9	UJ

SDG No.	Blank ID	Affected Analyte	Conc mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
BGROUND-BS	0BR035	Copper	0.24	1.2	0BBS00504	0.90	B	0.90	UJ
BGROUND-BS	0BR035	Lead	0.14	0.70	0BBS00604	0.58	B	0.58	UJ
BGROUND-BS	0BR035	Lead	0.14	0.70	0BBS00404	0.59	B	0.59	UJ
BGROUND-BS	0BR035	Zinc	1.18	5.9	0BBS00104	2.9	B	2.9	UJ
BGROUND-BS	0BR035	Zinc	1.18	5.9	0BBS00104D	2.8	B	2.8	UJ
BGROUND-BS	0BR035	Zinc	1.18	5.9	0BBS00604	2.4	B	2.4	UJ
BGROUND-BS	0BR035	Zinc	1.18	5.9	0BBS00504	2.5	B	2.5	UJ
BGROUND-BS	0BR035	Zinc	1.18	5.9	0BBS00404	2.0	B	2.0	UJ

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg	Action Level ug/L	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc ug/L	EDS Qual
Worms	Prep	Mercury	0.034	0.17	None-sample results rejected due to excessive holding time violation				

SDG No.	Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
49-SED	SOIC 0920-1	Barium	0.39	1.95	49SD014	1.7	B	1.7	UJ
49-SED	SOIC 0920-1	Copper	0.67	3.34	49SD017	2.8	B	2.8	UJ
49-SED	SOIC 0920-1	Copper	0.67	3.34	49SD016	1.9	B	1.9	UJ
49-SED	SOIC 0920-1	Copper	0.67	3.34	49SD013	1.4	B	1.4	UJ
49-SED	SOIC 0920-1	Copper	0.67	3.34	49SD015	2.2	B	2.2	UJ
49-SED	SOIC 0920-1	Copper	0.67	3.34	49SD014	1.0	B	1.0	UJ
49-SED	WTIC 0919-2	Zinc	1.2 ug/l	11.0 ug/l	49R027	2.2	B	2.2	UJ

SDG No.	Blank ID	Affected Analyte	Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
49-SED	49R027	Lead	0.38	1.9	49SD013	0.20	B	0.38	UJ
49-SED	49R027	Lead	0.38	1.9	49SD015	1.5	-	1.5	UJ
49-SED	49R027	Lead	0.38	1.9	49SD014	0.94	-	0.94	UJ
49-SED	49R027	Nickel	2.86	14.3	49SD017	6.0	B	6.0	UJ
49-SED	49R027	Nickel	2.86	14.3	49SD016	2.4	B	2.86	UJ
49-SED	49R027	Nickel	2.86	14.3	49SD013	1.8	B	2.86	UJ

APPENDIX C
Completeness Tables

Summary of Rejected Compounds				
SDG No. 001W	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 2-Butanone Acrolein 1,4-Dioxane	24 24 24 24	RRF < 0.05	1416
Semivolatiles	Hexachlorophene	1	RRF < 0.05	2180
Pest/PCBs	None			620
Inorganic	None			460

Summary of Rejected Compounds				
SDG No. 002W	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	1,4-Dioxane	27	RRF < 0.05	1593
Semivolatiles	None			2180
Pest/PCBs	None			620
Inorganic	Cyanide	10	MS %R=13/9%	526

Summary of Rejected Compounds				
SDG No. 003W	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol Acrolein 1,4-Dioxane	22 10 22	RRF < 0.05	1298
Semivolatiles	Hexachloroethane Hexachlorophene Benzoic Acid	4 7 6	RRF < 0.05	2180
Pest/PCBs	None			620
Inorganic	None			746

Summary of Rejected Compounds				
SDG No. 004W	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane Acrolein	26 26 25	RRF < 0.05	1534
Semivolatiles	Hexachlorophene Benzoic Acid	16 12	RRF < 0.05	2725
Pest/PCBs	None			620
Inorganic	Antimony Selenium Lead	3 2 2	MS %R=0.0 MS %R=0.0 MS %R=0.0	365

Summary of Rejected Compounds				
SDG No. 005W	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane 2-Butanone Acrolein	22 22 5 5	RRF < 0.05	1416
Semivolatiles	Hexachlorophene Hexachloropropene	12 1	RRF < 0.05	2071
Pest/PCBs	None			589
Organophosphorus Pesticides	None			483
Herbicides	None			45
Inorganic	None			20

Summary of Rejected Compounds				
SDG No. 006W	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 2-Butanone 1,4-Dioxane	31 7 31	RRF < 0.05	1829
Semivolatiles	Hexachlorophene Hexachloropropene 4-Nitroquinoline-1-oxide	14 15 11	RRF < 0.05	2289
Pest/PCBs	None			651
Inorganic	None			570

Summary of Rejected Compounds				
SDG No. 007W	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane 2-Butanone	25 25 13	RRF < 0.05	1475
Semivolatiles	4-Nitroquinoline-1-oxide Hexachlorophene	10 10	RRF < 0.05	2289
Pesticides	None			620
Inorganic	None			462

Summary of Rejected Compounds				
SDG No. Amended 007W	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Organophosphorus Pesticides	None			27
Herbicides	None			12
Inorganic	None			44

Summary of Rejected Compounds				
SDG No. 008W	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane 2-Butanone	17 17 12	RRF < 0.05	1003
Semivolatiles	4-Nitroquinoline-1-oxide Hexachlorophene	3 8	RRF < 0.05	1417
Pest/PCBs	None			434
Inorganic	None			299

Summary of Rejected Compounds				
SDG No. 009W	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Inorganic-Cyanide Only	None			16

Summary of Rejected Compounds				
SDG No. 010W	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Inorganic-Cyanide Only	None			18

Summary of Rejected Compounds				
SDG No. 011W	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane	4 4	RRF < 0.05	236
Semivolatiles	None			327
Pest/PCBs	None			93
Inorganic	None			72

Summary of Rejected Compounds				
SDG No. 001SW	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	1,4-Dioxane	19	RRF < 0.05	1239
Semivolatiles	Hexachlorophene 4-Nitroquinoline-1-oxide	18 14	RRF < 0.05	1962
Pest/PCBs	None			527
Inorganic	None			324

Summary of Rejected Compounds				
SDG No. 002SW	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	1,4-Dioxane	23	RRF < 0.05	1475
Semivolatiles	Hexachloropropene 4-Nitroquinoline-1-oxide Hexachlorophene Benzoic Acid	2 21 21 4	RRF < 0.05	2289
Pest/PCBs	None			651
Inorganic	None			378

Summary of Rejected Compounds				
SDG No. 003W	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	1.4-Dioxane	9	RRF < 0.05	531
Semivolatiles	None			872
Pest/PCBs	None			248
Inorganic	Lead	2	MS %R = 16.8	161

Summary of Rejected Compounds				
SDG No. 001S	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane	7 7	RRF < 0.05	413
Semivolatiles	Hexachlorophene	4	RRF < 0.05	436
Pest/PCBs	None			217
Inorganic	None			126

Summary of Rejected Compounds				
SDG No. 002S	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane	7 7	RRF < 0.05	413
Semivolatiles	None			763
Pest/PCBs	None			217
Inorganic	None			126

Summary of Rejected Compounds				
SDG No. 003S	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane 2-Butanone Acrolein	4 4 4 4	RRF < 0.05	236
Semivolatiles	None			436
Pest/PCBs	None			124
Inorganic	N0ne			90

Summary of Rejected Compounds				
SDG No. 004S	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane 2-Butanone Acrolein	5 5 4 4	RRF < 0.05	295
Semivolatiles	None			436
Pest/PCBs	None			93
Inorganic	None			54

Summary of Rejected Compounds				
SDG No. 005S	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane	3 3	RRF < 0.05	177
Semivolatiles	None			327
Pest/PCBs	None			124
Inorganic	None			54

Summary of Rejected Compounds				
SDG No. 001SED	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	2-Butanone 1,4-Dioxane	7 18	RRF < 0.05	1062
Semivolatiles	Hexachloropropene 4-Nitroquinoline-1-oxide Hexachlorophene	6 12 16	RRF < 0.05	1744
Pest/PCBs	None			558
Inorganic	None			306

Summary of Rejected Compounds				
SDG No. 002SED	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	1,4-Dioxane 2-Butanone	21 3	RRF < 0.05	1239
Semivolatiles	Benzoic Acid Hexachlorophene	13 13	RRF < 0.05	2943
Pest/PCBs	None			651
Inorganic	None			378

Summary of Rejected Compounds				
SDG No. 003SED	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	2-Butanone 1,4-Dioxane	6 6	RRF < 0.05	354
Semivolatiles	Hexachlorophene	1	RRF < 0.05	654
Pest/PCBs	None			186
Inorganic	Lead	1	MS %R = 16.8	126

Summary of Rejected Compounds				
SDG No. BGROUND-SW	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	1,4-Dioxane	8	RRF < 0.05	472
Semivolatiles	Hexachlorophene	7	RRF < 0.05	763
Pest/PCBs	None			217
Inorganic	None			126

Summary of Rejected Compounds				
SDG No. BGROUND-SED	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	2-Butanone 1,4-Dioxane	3 7	RRF < 0.05	413
Semivolatiles	Hexachlorophene	7	RRF < 0.05	763
Pest/PCBs	None			217
Inorganic	None			126

Summary of Rejected Compounds				
SDG No. LWW SEW	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane 2-Butanone	13 13 13	RRF < 0.05	767
Semivolatiles	None			1199
Pest/PCBs	None			279
Inorganic	None			207

Summary of Rejected Compounds				
SDG No. LWW SED	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane 2-Butanone	10 10 8	RRF < 0.05	590
Semivolatiles	Hexachlorophene	4	RRF < 0.05	1090
Pest/PCBs	None			372
Inorganic	None			226

Summary of Rejected Compounds				
SDG No. SWMU 08/SL-01	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	1,4-Dioxane 2-Butanone	29 4	RRF < 0.05	1711
Semivolatiles	Hexachlorophene Benzoic Acid	19 1	RRF < 0.05	2725
Pest/PCBs	None			651
Inorganic	None			378

Summary of Rejected Compounds				
SDG No. 08/SL-02	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane 2-Butanone	4 4 2	RRF < 0.05	236
Semivolatiles	None			327
Pest/PCBs	None			93
Inorganic	None			54

Summary of Rejected Compounds				
SDG No. SWMU 2&4-001	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	1,4-Dioxane 2-Butanone Isobutanol	12 3 1	RRF < 0.05	1416
Semivolatiles	Hexachlorophene Benzoic Acid	10 7	RRF < 0.05	2398
Pest/PCBs	None			651
Inorganic	None			432

Summary of Rejected Compounds				
SDG No. SWMU 2&4-002	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane 2-Butanone Methacrylonitrile	18 18 6 3	RRF < 0.05	1962
Semivolatiles	Hexachlorophene	15	RRF < 0.05	1635
Pest/PCBs	None			496
Inorganic	None			270

Summary of Rejected Compounds				
SDG No. SWMU 28-001	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	2-Butanone 1,4-Dioxane	18 20	RRF < 0.05	1180
Semivolatiles	Hexachloropropene	19	RRF < 0.05	2071
Pest/PCBs	None			589
Inorganic	Lead	1	MS %R=16.8	342

Summary of Rejected Compounds				
SDG No. SWMU 28-002	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	2-Butanone 1,4-Dioxane	19 20	RRF < 0.05	1180
Semivolatiles	4-Nitroquinoline-1-oxide Hexachlorophene	19 20	RRF < 0.05	2180
Pest/PCBs	None			620
Inorganic	None			360

Summary of Rejected Compounds				
SDG No. SWMU 28-003	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	1,4-Dioxane	20	RRF < 0.05 and no 5-point calibration	1121
	2-Butanone	13		
	Acrolein	1		
	Isobutanol	5		
	Acetonitrile	4		
	2-Chloro-1,3-butadiene	4		
	1,2-Dibromo-3-chloropropane	4		
	3-Chloro-1-propene	4		
	1,2-Dibromoethane	4		
	Dibromoethane	4		
	Trans-1,4-dichloro-2-butene	4		
	Ethyl methacrylate	4		
	Iodomethane	4		
	Methacrylonitrile	4		
	Methyl methacrylate	4		
	Propionitrile	4		
	1,1,2,2-Tetrachloroethane	4		
	1,2,3-Trichloropropane	4		
Semivolatiles	4-Nitroquinoline-1-oxide	1	RRF < 0.05	1744
	Hexachlorophene	11		
	Benzoic Acid	8		
Pest/PCBs	None			496
Inorganic	None			234

Summary of Rejected Compounds				
SDG No. SWMU 5-001	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatile	Isobutyl Alcohol 1,4-Dioxane 2-Butanone	23 23 1	RRF < 0.05	1357
Semivolatiles	4-Nitroquinoline-1-oxide Hexachlorophene	18 18	RRF < 0.05	2180
Pest/PCBs	None			620
Inorganic	None			360

Summary of Rejected Compounds				
SDG No. SWMU 5-002	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	1,4-Dioxane 2-Butanone	23 13	RRF < 0.05	1357
Semivolatiles	Hexachlorophene	21	RRF < 0.05	2289
Pest/PCBs	None			651
Inorganic	None			378

Summary of Rejected Compounds				
SDG No. SWMU 5-003	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane 2-Butanone	7 7 4	RRF < 0.05	413
Semivolatiles	Hexachlorophene	6	RRF < 0.05	654
Pest/PCBs	None			186
Inorganic	Copper	5	%R = -68.5	108

Summary of Rejected Compounds				
SDG No. SWMU 15-001	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Pesticides/PCBs	None			552
Organophosphorus Pesticides	None			92
Herbicides	None			207

Summary of Rejected Compounds				
SDG No. SWMU 15-002	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Pesticides/PCBs	None			144
Organophosphorus Pesticides	None			24
Herbicides	None			54

Summary of Rejected Compounds				
SDG No. SWMU 3-001	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	1,4-Dioxane 2-Butanone	22 15	RRF < 0.05	1298
Semivolatiles	Benzoic Acid Hexachlorophene 4-Nitroquinoline-1-oxide	19 19 2	RRF < 0.05	2071
Pest/PCBs	None			589
Inorganic	Antimony	5	MS %R = 25.5	437

Summary of Rejected Compounds				
SDG No. SWMU 56-001	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane	11 11	RRF < 0.05	649
Semivolatiles	Hexachlorophene	10	RRF < 0.05	1090
Pest/PCBs	None			310
Inorganic	None			180

Summary of Rejected Compounds				
SDG No. BGROUND-BS	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	1,4-Dioxane	7	RRF < 0.05	413
Semivolatiles	Hexachlorophene	3	RRF < 0.05	654
Pest/PCBs	None			186
Inorganic	None			108

Summary of Rejected Compounds				
SDG No. WORMS	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Semivolatiles	Hexachlorophene	1	RRF < 0.05	763
Pest/PCBs	None			279
Inorganic	Mercury	7	Holding Time 105 days	119

Summary of Rejected Compounds				
SDG No. FISH	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Pest/PCBs	None			310
Inorganic	None			9

Summary of Rejected Compounds				
SDG No. SWMU 49-SED	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane 2-Butanone	7 7 7	RRF < 0.05	472
Semivolatiles	None			763
Pest/PCBs	None			265
Inorganic	None			126

APPENDIX D
Calibration Tables

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
001W	6/25/94 94M2V03603-07	2-Butanone	40.3	0.022	02MW006S 02MW016S 02MW004S 02MW004RS 013MW001S 013MW006S 013MW006SD 02T002 02MW009S 02MW009I 02MW009ID 02MW010S 02K001 02R001 02MW003S 02MW011S 02T004 13MW005S 13MW004S 02MW007I 02MW007S 02MW017S 02T003 02T006	10	U	10	R
001W	6/30/94 94M2V03603-07	Acrolein	18.4	0.035	02MW006S 02MW016S 02MW004S 02MW004RS 013MW001S 013MW006S 013MW006SD 02T002	100	U	100	R

001W	6/30/94 94M2V03652-6	Isobutyl Alcohol	40.2	0.012	02MW006S 02MW016S 02MW004S 02MW004RS 013MW001S 013MW006S 013MW006SD 02T002 02MW009S 02MW009I 02MW009ID 02MW010S 02K001 02R001 02MW003S 02MW011S 02T004 13MW005S 13MW004S 02MW007I 02MW007S 02MW017S 02T003 02T006	200	U	200	R
001W	6/30/94 94M2V03652-6	1,4-Dioxane	35.8	0.004	02MW006S 02MW016S 02MW004S 02MW004RS 013MW001S 013MW006S 013MW006SD 02T002 02MW009S 02MW009I 02MW009ID 02MW010S 02K001 02R001 02MW003S 02MW011S 02T004 13MW005S 13MW004S 02MW007I 02MW007S 02MW017S 02T003 02T006	200	U	200	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
001W	6/30/94 94M2V03659	2-Butanone	9.1	0.020	02MW006S 02MW016S 02MW004S 02MW004RS 013MW001S 013MW006S 013MW006SD 02T002 02T006 02T003 02MW017S 02MW007S 02MW007I 13MW004S 13MW005S 02MW003S	10	U	10	R
001W	6/30/94 94M2V03659	Acrolein	22.9	0.027	02MW006S 02MW016S 02MW004S 02MW004RS 013MW001S 013MW006S 013MW006SD 02T002 02T006 02T003 02MW017S 02MW007S 02MW007I 13MW004S 13MW005S 02MW003S	100	U	100	R

001W	6/30/94 94M2V03660	Isobutyl Alcohol	16.7	0.014	02MW006S 02MW016S 02MW004S 02MW004RS 013MW001S 013MW006S 013MW006SD 02T002 02T006 02T003 02MW017S 02MW007S 02MW007I 13MW004S 13MW005S 02MW003S	200	U	200	R
001W	6/30/94 94M2V03660	1,4-Dioxane	0.0	0.004	02MW006S 02MW016S 02MW004S 02MW004RS 013MW001S 013MW006S 013MW006SD 02T002 02T006 02T003 02MW017S 02MW007S 02MW007I 13MW004S 13MW005S 02MW003S	200	U	200	R
001W	6/30/94 94M2V03660	Acetonitrile	26.5	0.100	02MW006S 02MW016S 02MW004S 13MW001S 13MW006S 13MW006SD 02T002 02T006 02T003 02MW017S 02MW007S 02MW007I 13MW004S 13MW005S 02MW003S	100	U	100	UJ

001W	7/01/94 94M2V03681	Isobutyl Alcohol	50.0	0.018	02T004 02MW009I 02MW011S 02MW009S 02MW009ID 02MW010S	200	U	200	R
001W	7/01/94 94M2V03681	1,4-Dioxane	0.0	0.004	02T004 02MW009I 02MW011S 02MW009S 02MW009ID 02MW010S	200	U	200	R
001W	7/01/94 94M2V03681	Pentachloro-ethane	33.5	0.335	02T004 02MW009I 02MW011S 02MW009S 02MW009ID 02MW010S	10	U	10	UJ
001W	7/01/94 94M2V03683	2-Butanone	18.2	0.018	02T004 02MW009I 02MW011S 02MW009S 02MW009ID 02MW010S	10	U	10	R
001W	7/01/94 94M2V03683	Acrolein	20.0	0.028	02T004 02MW009I 02MW011S 02MW009S 02MW009ID 02MW010S	100	U	100	R
001W	7/01/94 94M2V03683	Chloro-methane	39.6	1.248	02T004 02MW009I 02MW011S 02MW009S 02MW009ID 02MW010S	10	U	10	UJ
001W	7/01/94 94M2V03683	1,2-Dichloro-ethane	47.6	1.992	02T004 02MW009I 02MW011S 02MW009S 02MW009ID 02MW010S	5	U	5	UJ

001W	7/01/94 94M2V03683	Trans-1,4-dichloro-2-butanone	25.9	0.175	02T004 02MW009I 02MW011S 02MW009S 02MW009ID 02MW010S	5	U	5	UJ
001W	7/01/94 94M2V03683	1,2-Dichloro-ethane	47.6	1.992	02MW009I	1	J	1	J
001W	7/02/94 94M2V03697	Isobutyl Alcohol	33.3	0.016	02K001 02R001	200	U	200	R
001W	7/02/94 94M2V03697	1,4-Dioxane	0.0	0.004	02K001 02R001	200	U	200	R
001W	7/02/94 94M2V03697	Dichlorodi-fluoromethane	35.7	1.772	02K001 02R001	10	U	10	UJ
001W	7/02/94 94M2V03697	2-Butanone	22.7	0.017	02K001 02R001	10	U	10	R
001W	7/02/94 94M2V03698	Acrolein	48.6	0.018	02K001 02R001	100	U	100	R
001W	7/02/94 94M2V03697	1,2-Dichloro-ethane	44.2	1.946	02K001 02R001	5	U	5	UJ
001W	7/02/94 94M2V03697	2-Chloroethyl-vinylether	54.5	0.066	02K001 02R001	10	U	10	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	%RSD	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
002W	EV02401024.D-26D,28D,29D,30D	1,4-Dioxane	8.4	0.004	16T009 16MW003S 16MW002S 02MW008S 02MW008SD 11MW003S 11MW002S 11T012 16MW001I 16T010 02MW015IR 02MW015SR 02MW002S 02T008 02MW012S 02R002 22MW001S 02MW012I 02MW012ID 02MW001S 02T005 11MW001S 16MW004S 02T013	200	U	200	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
002W	7/05/94 EV03601037.D	1,4-Dioxane	10.7	0.003	16MW001I 16T010 16T009	200	U	200	R
002W	7/05/94 EV03601037.D	Chloromethane	36.0	1.132	16MW001I 16T010 16T009	10	U	10	UJ
002W	7/05/94 EV03601037.D	Bromomethane	33.0	1.001	16MW001I 16T010 16T009	10	U	10	UJ
002W	7/05/94 EV03601037.D	Dichlorodi-fluoromethane	32.3	1.557	16MW001I 16T010 16T009	10	U	10	UJ

002W	7/05/94 EV03601037.D	Iodomethane	46.9	3.567	16MW001I 16T010 16T009	10	U	10	UJ
002W	7/07/94 EV08001080.D	1,4-Dioxane	6.9	0.004	16MW003S	200	U	200	R
002W	7/07/94 EV08001080.D	Dichlorodi-fluoromethane	42.3	3.273	16MW003S	10	U	10	UJ
002W	7/07/94 EV08001080.D	Iodomethane	46.0	3.545	16MW003S	10	U	10	UJ
002W	7/08/94 EV00301003.D	1,4-Dioxane	2.6	0.004	11MW002S 02MW008S 02MW008SD 16MW002S	200	U	200	R
002W	7/08/94 EV00301003.D	Bromomethane	27.2	1.089	11MW002S 02MW008S 02MW008SD 16MW002S	10	U	10	UJ
002W	7/08/94 EV00301003.D	Dichlorodi-fluoromethane	43.8	3.307	11MW002S 02MW008S 02MW008SD 16MW002S	10	U	10	UJ
002W	7/08/94 EV00301003.D	Iodomethane	43.0	3.471	11MW002S 02MW008S 02MW008SD 16MW002S	10	U	10	UJ
002W	7/12/94 EV04701047.D	1,4-Dioxane	3.3	0.004	11MW003S	200	U	200	R
002W	7/12/94 EV04701047.D	Chloromethane	30.1	1.236	11MW003S	10	U	10	UJ
002W	7/12/94 EV04701047.D	Bromomethane	32.8	1.005	11MW003S	10	U	10	UJ
002W	7/12/94 EV04701047.D	Dichlorodi-fluoromethane	38.9	1.405	11MW003S	10	U	10	UJ
002W	7/12/94 EV04701047.D	Iodomethane	47.5	3.581	11MW003S	10	U	10	UJ
002W	7/13/94 EV06901069.D	1,4-Dioxane	1.0	0.004	11T012	200	U	200	R
002W	7/13/94 EV06901069.D	Chloromethane	26.2	1.306	11T012	10	U	10	UJ

002W	7/13/94 EV06901069.D	Bromomethane	38.2	0.923	11T012	10	U	10	UJ
002W	7/13/94 EV06901069.D	Dichlorodi-fluoromethane	36.8	1.453	11T012	10	U	10	UJ
002W	7/13/94 EV06901069.D	Iodomethane	38.4	3.361	11T012	10	U	10	UJ
002W	6/30/94 EV09401094.D	1,4-Dioxane	9.8	0.003	02MW015IR 02MW015SR 02MW002S 02T008 13MW002S 02T007	200	U	200	R
002W	6/30/94 EV09401094.D	Dichlorodi-fluoromethane	40.9	3.240	02MW015IR 02MW015SR 02MW002S 02T008 13MW002S 02T007	10	U	10	UJ
002W	7/01/94 EV01501015.D	1,4-Dioxane	1.2	0.004	13MW003S	200	U	200	R
002W	7/01/94 EV01501015.D	Bromomethane	27.2	1.088	13MW003S	10	U	10	UJ
002W	7/01/94 EV01501015.D	Dichlorodi-fluoromethane	35.1	3.107	13MW003S	10	U	10	UJ
002W	7/01/94 EV01501015.D	Iodomethane	29.1	3.133	13MW003S	10	U	10	UJ
002W	6/28/94 EV05001050.D	1,4-Dioxane	0.5	0.004	02MW012S 02R002 22MW001S 02MW012I 02MW012ID 02MW001S 02T005	200	U	200	R
002W	6/28/94 EV05001050.D	Dichloro-fluoromethane	42.6	3.281	02MW012S 02R002 22MW001S 02MW012I 02MW012ID 02MW001S 02T005	10	U	10	UJ

002W	6/28/94 EV05001050.D	Acetone	30.2	0.151	02MW012S 02R002 22MW001S 02MW012I 02MW012ID 02MW001S 02T005	10	U	10	UJ
002W	7/14/94 EV09201092.D	Bromomethane	36.4	0.950	11MW001S 16MW004S 02T013	10	U	10	UJ
002W	7/14/94 EV09201092.D	Dichlorodi- fluoromethane	36.7	1.457	11MW001S 16MW004S 02T013	10	U	10	UJ
002W	7/14/94 EV09201092.D	Iodomethane	37.2	3.330	11MW001S 16MW004S 02T013	10	U	10	UJ
002W	7/14/94 EV09201092.D	Methyl methacrylate	57.4	0.146	11MW001S 16MW004S 02T013	10	U	10	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
003W	6/30/94 94M2V03652-56	Isobutyl Alcohol	40.2	0.012	0BR003 0SMW001R 0SMW001RD 0BMW001S 0BMW001D 01MW001 0BMW001I 0SMW002S 09MW001S 08MW008S 08MW006S 08MW006SD 02MW016D 26MW004S 09T016	200	U	200	R
003W	6/30/94 94M2V03652-56	Acetone	31.5	0.993	08MW006SD 02MW016D	9 15	J J	9 15	J J
003W	6/30/94 94M2V03652-56	1,4-Dioxane	35.8	0.004	0BR003 0SMW001R 0SMW001RD 0BMW001S 0BMW001D 01MW001 0BMW001I 0SMW002S 09MW001S 08MW008S 08MW006S 08MW006SD 02MW016D 26MW004S 09T016	200	U	200	R
003W	6/27/94, 7/18/94 CSXI032447.D-50.D	Isobutyl Alcohol	8.7	0.034	09MW003S 09MW002S 0SMW003S 28MW001S 09T017 22MW002S 08MW001S	200	U	200	R

003W	6/27/94, 7/18/94 CSXI032447.D-50.D	1,4-Dioxane	19.5	0.003	09MW003S 09MW002S 0SMW003S 28MW001S 09T017 22MW002S 08MW001S	200	U	200	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
003W	7/21/94 94M2V04019	Acrolein	43.6	0.031	0BR003 0SMW001R 0SMW001RD 0BMW001S 0BMW001D 01MW001 0BMW001I 0SMW002S 09MW001S 09T016	100	U	100	R
003W	7/21/94 94M2V04019	Iodomethane	45.4	2.141	0BR003 0SMW001R 0SMW001RD 0BMW001S 0BMW001D 01MW001 0BMW001I 0SMW002S 09MW001S 09T016	10	U	10	UJ
003W	7/21/94 94M2V04019	Acrylonitrile	29.6	0.382	0BR003 0SMW001R 0SMW001RD 0BMW001S 0BMW001D 01MW001 0BMW001I 0SMW002S 09MW001S 09T016	100	U	100	UJ

003W	7/21/94 94M2V04020	Isobutyl Alcohol	99.9	0.025	0BR003 0SMW001R 0SMW001RD 0BMW001S 0BMW001D 01MW001 0BMW001I 0SMW002S 09MW001S 09T016	200	U	200	R
003W	7/21/94 94M2V04020	Acetonitrile	46.3	0.073	0BR003 0SMW001R 0SMW001RD 0BMW001S 0BMW001D 01MW001 0BMW001I 0SMW002S 09MW001S 09T016	100	U	100	UJ
003W	7/21/94 94M2V04020	3-Chloro propane	37.8	0.247	0BR003 0SMW001R 0SMW001RD 0BMW001S 0BMW001D 01MW001 0BMW001I 0SMW002S 09MW001S 09T016	5	U	5	UJ
003W	7/21/94 94M2V04020	Propionitrile	33.3	0.128	0BR003 0SMW001R 0SMW001RD 0BMW001S 0BMW001D 01MW001 0BMW001I 0SMW002S 09MW001S 09T016	100	U	100	UJ
003W	7/20/94 94M2V04001	Acetone	48.0	0.516	26MW004S 02MW016D 08MW006SD 08MW006S 08MW008S	10	U	10	UJ

003W	7/20/94 94M2V04001	Acetone	48.0	0.516	08MW006SD	9	J	9	J
003W	7/20/94 94M2V04001	Acetone	48.0	0.516	02MW016D	15	--	15	J
003W	7/20/94 94M2V04001	Carbon Disulfide	38.5	1.482	26MW004S 02MW016D 08MW006SD 08MW006S 08MW008S	5	U	5	UJ
003W	7/20/94 94M2V04001	Trichloro-fluoromethane	45.3	0.628	26MW004S 02MW016D 08MW006SD 08MW006S 08MW008S	5	U	5	UJ
003W	7/20/94 94M2V04001	1,1-Dichloro-ethane	29.7	2.216	26MW004S 02MW016D 08MW006SD 08MW006S 08MW008S	5	U	5	UJ
003W	7/20/94 94M2V04001	1,2-Dichloro-ethane	27.7	1.577	26MW004S 02MW016D 08MW006SD 08MW006S 08MW008S	5	U	5	UJ
003W	7/20/94 94M2V04001	Vinyl Acetate	44.1	0.447	26MW004S 02MW016D 08MW006SD 08MW006S 08MW008S	10	U	10	UJ
003W	7/20/94 94M2V04001	2-Chloroethyl-vinylether	45.5	0.139	26MW004S 02MW016D 08MW006SD 08MW006S 08MW008S	10	U	10	UJ
003W	7/20/94 94M2V04001	2-Hexanone	32.7	0.417	26MW004S 02MW016D 08MW006SD 08MW006S 08MW008S	10	U	10	UJ

003W	7/20/94 94M2V04001	4-Methyl-2- Pentanone	29.7	0.650	26MW004S 02MW016D 08MW006SD 08MW006S 08MW008S	10	U	10	UJ
003W	7/20/94 94M2V04001	Iodomethane	33.7	2.598	26MW004S 02MW016D 08MW006SD 08MW006S 08MW008S	10	U	10	UJ
003W	7/20/94 94M2V04004	Isobutyl Alcohol	8.3	0.011	26MW004S 02MW016D 08MW006SD 08MW006S 08MW008S	200	U	200	R
003W	7/20/94 94M2V04004	1,4-Dioxane	25	0.005	26MW004S 02MW016D 08MW006SD 08MW006S 08MW008S	200	U	200	R
003W	7/20/94 94M2V04004	Acetonitrile	41.2	0.80	26MW004S 02MW016D 08MW006SD 08MW006S 08MW008S	100	U	100	UJ
003W	7/20/94 94M2V04004	3-Chloro propene	27.2	0.289	26MW004S 02MW016D 08MW006SD 08MW006S 08MW008S	5	U	5	UJ
003W	7/20/94 94M2V04004	Pentachloro- ethane	36.2	0.342	26MW004S 02MW016D 08MW006SD 08MW006S 08MW008S	10	U	10	UJ
003W	7/20/94 94M2V04004	Chloroprene	27.0	0.927	26MW004S 02MW016D 08MW006SD 08MW006S 08MW008S	200	U	200	UJ

003W	7/21/94 94M2V04020	1,4-Dioxane	50.0	0.006	0BR003 0SMW001R 0SMW001RD 0BMW001S 0BMW001SD 01MW001 0BMW001I 0SMW002S 09MW001S 09T016	200	U	200	R
003W	7/21/94 94M2V04020	1,2-Dibromo-3-Chloro propane	68.8	0.486	0BR003 0SMW001R 0SMW001RD 0BMW001S 0BMW001SD 01MW001 0BMW001I 0SMW002S 09MW001S 09T016	10	U	10	UJ
003W	7/21/94 94M2V04020	Pentachloro ethane	65.7	0.416	0BR003 0SMW001R 0SMW001RD 0BMW001S 0BMW001SD 01MW001 0BMW001I 0SMW002S 09MW001S 09T016	10	U	10	UJ
003W	7/21/94 94M2V04020	Chloroprene	29.2	0.899	0BR003 0SMW001R 0SMW001RD 0BMW001S 0BMW001SD 01MW001 0BMW001I 0SMW002S 09MW001S 09T016	200	U	200	UJ

003W	7/24/94 94M2V04019	Chloro- methane	32.1	1.015	0BR003 0SMW001R 0SMW001RD 0BMW001S 0BMW001SD 01MW001 0BMW001I 0SMW002S 09MW001S 09T016	10	U	10	UJ
003W	7/24/94 94M2V04019	Acetone	45.1	0.545	0BR003 0SMW001R 0SMW001RD 0BMW001S 0BMW001SD 01MW001 0BMW001I 0SMW002S 09MW001S 09T016	10	U	10	UJ
003W	7/24/94 94M2V04019	Carbon Disulfide	49.4	1.281	0BR003 0SMW001R 0SMW001RD 0BMW001S 0BMW001SD 01MW001 0BMW001I 0SMW002S 09MW001S 09T016	5	U	5	UJ
003W	7/24/94 94M2V04019	Trichloro- fluoromethane	39.2	0.699	0BR003 0SMW001R 0SMW001RD 0BMW001S 0BMW001SD 01MW001 0BMW001I 0SMW002S 09MW001S 09T016	5	U	5	UJ

003W	7/24/94 94M2V04019	1,1-Dichloro-ethane	38.9	1.928	0BR003 0SMW001R 0SMW001RD 0BMW001S 0BMW001SD 01MW001 0BMW001I 0SMW002S 09MW001S 09T016	5	U	5	UJ
003W	7/24/94 94M2V04019	1,2-Dichloro-ethene (total)	55.6	0.624	0BR003 0SMW001R 0SMW001RD 0BMW001S 0BMW001SD 01MW001 0BMW001I 0SMW002S 09MW001S 09T016	5	U	5	UJ
003W	7/24/94 94M2V04019	Vinyl Acetate	41.2	0.470	0BR003 0SMW001R 0SMW001RD 0BMW001S 0BMW001SD 01MW001 0BMW001I 0SMW002S 09MW001S 09T016	10	U	10	UJ
003W	7/24/94 94M2V04019	2-Chloroethyl-vinylether	47.8	0.128	0BR003 0SMW001R 0SMW001RD 0BMW001S 0BMW001SD 01MW001 0BMW001I 0SMW002S 09MW001S 09T016	10	U	10	UJ

003W	7/24/94 94M2V04019	Bromoform	31.2	0.912	0BR003 0SMW001R 0SMW001RD 0BMW001S 0BMW001SD 01MW001 0BMW001I 0SMW002S 09MW001S 09T016	5	U	5	UJ
003W	7/22/94 CSV0032509.2	Methylene Chloride	25.6	0.941	09T017	2	J	2	J

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
004W	6/30/94 94M2V03652-3656	Isobutyl Alcohol	40.2	0.012	02T020 02MW017I 02T019 130P004 26MW003S 02MW18S 02T024 02MW030S 02MW029S 02MW035S 02MW037I 02T023 02K002 02MW037SD 02MW035I 02MW037S 02MW036S 02MW036I 02T022	200	U	200	R
004W	6/30/94 94M2V03652-3656	1,4-Dioxane	35.8	0.004	02T020 02MW017I 02T019 130P004 26MW003S 02MW18S 02T024 02MW030S 02MW029S 02MW035S 02MW037I 02T023 02K002 02MW037SD 02MW035I 02MW037S 02MW036S 02MW036I 02T022	200	U	200	R

004W	7/26/94 94M2V04103-111	Acrolein	18.4	0.034	02T024 02MW030S 02MW029S 02MW018I 02MW027I 02K002 02MW037SD 02MW037S 02MW036S 02T022 02MW036I 02T020 02MW017I 02MW035S 02MW037I 02T023	100	U	100	R
004W	6/27/94 CSV0032320.D- 24.D	Isobutyl Alcohol	8.7	0.034	02MW018I 02MW027I	200	U	200	R
004W	6/27/94 CSV0032320.D- 24.D	Acetone	53.1	0.316	02MW018I 02MW027I	11 10	B U	11 10	UJ UJ
004W	6/27/94 CSV0032320.D- 24.D	1,4-Dioxane	19.5	0.003	02MW018I 02MW027I	200	U	200	R
004W	94M2V03814-19 7/12/94	Isobutyl Alcohol	40.2	0.012	26R005 26MW001S 26MW001SD 26MW002S 26T018	200	U	200	R
004W	94M2V03814-19 7/12/94	Acetone	31.5	0.993	26R005 26MW001S 26MW001SD 26MW002S 26T018	6 10 10 10 22	J U U U --	6 10 10 10 22	J UJ UJ UJ J
004W	94M2V03814-19 7/12/94	Acetonitrile	45.3	0.136	26R005 26MW001S 26MW001SD 26MW002S 26T018	100	U	100	UJ

004W	94M2V03814-19 7/12/94	1,4-Dioxane	35.8	0.004	26R005 26MW001S 26MW001SD 26MW002S 26T018	200	U	200	R
004W	94M2V03814-19 7/12/94	Acrolein	45.4	0.055	26R005 26MW001S 26MW001SD 26MW002S 26T018	100	U	100	UJ

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
004W	7/22/94 94M2V04056	Acetone	33.4	0.661	26MW001S 26R005 26MW001SD	6 10 10	J U U	6 10 10	J UJ UJ
004W	7/22/94 94M2V04056	Carbon Disulfide	34.7	1.573	26MW001S 26R005 26MW001SD	5 2 5	U J U	5 2 5	UJ J UJ
004W	7/22/94 94M2V04056	Trichloro-fluoromethane	25.4	0.857	26MW001S 26R005 26MW001SD	5	U	5	UJ
004W	7/22/94 94M2V04056	Vinyl Acetate	40.0	0.479	26MW001S 26R005 26MW001SD	10	U	10	UJ
004W	7/22/94 94M2V04056	Isobutyl Alcohol	-8.3	0.013	26MW001S 26R005 26MW001SD	200	U	200	R
004W	7/22/94 94M2V04056	Acetonitrile	41.2	0.080	26MW001S 26R005 26MW001SD	100	U	100	UJ
004W	7/22/94 94M2V04056	1,4-Dioxane	-25.0	0.005	26MW001S 26R005 26MW001SD	200	U	200	R
004W	7/22/94 94M2V04056	Pentachloro-ethane	-33.1	0.334	26MW001S 26R005 26MW001SD	10	U	10	UJ
004W	7/22/94 94M2V04056	Acrolein	27.3	0.040	26MW001S 26R005 26MW001SD	100	U	100	R

004W	7/22/94 94M2V04056	Iodomethane	35.9	2.513	26MW001S 26R005 26MW001SD	10	U	10	UJ
004W	7/23/94 94M2V04078	Acetone	31.9	0.676	26MW002S 26T018	10 22	U --	10 22	UJ J
004W	7/23/94 94M2V04078	Carbon Disulfide	31.8	1.644	26MW002S 26T018	5	U	5	UJ
004W	7/23/94 94M2V04078	Vinyl Acetate	39.6	0.483	26MW002S 26T018	10	U	10	UJ
004W	7/23/94 94M2V04078	2-Chloroethyl vinyl ether	27.4	0.185	26MW002S 26T018	10	U	10	UJ
004W	7/23/94 94M2V04078	Isobutyl Alcohol	-50.0	0.018	26MW002S 26T018	200	U	200	R
004W	7/23/94 94M2V04078	Acetonitrile	27.2	0.099	26MW002S 26T018	100	U	100	UJ
004W	7/23/94 94M2V04078	1,4-Dioxane	-75.0	0.007	26MW002S 26T018	200	U	200	R
004W	7/23/94 94M2V04078	1,2-Dibromo-3-Chloropropane	-41.0	0.406	26MW002S 26T018	10	U	10	UJ
004W	7/23/94 94M2V04078	Pentachloro ethane	-40.6	0.353	26MW002S 26T018	10	U	10	UJ
004W	7/23/94 94M2V04078	Acrolein	29.1	0.039	26MW002S 26T018	100	U	100	R
004W	7/23/94 94M2V04078	Iodomethane	33.7	2.600	26MW002S 26T018	10	U	10	UJ
004W	7/27/94 94M2V04121	Isobutyl Alcohol	58.3	0.019	02K002 02MW037S 02MW037SD 02MW035I 02T024 02MW030S 02MW029S 02T022	200	U	200	R

004W	7/27/94 94M2V04121	1,4-Dioxane	50.0	0.006	02K002 02MW037S 02MW037SD 02MW035I 02T024 02MW030S 02MW029S 02T022	200	U	200	R
004W	7/27/94 94M2V04121	Acetonitrile	27.9	0.098	02K002 02MW037S 02MW037SD 02MW035I 02T024 02MW030S 02MW029S 02T022	100	U	100	UJ
004W	7/27/94 94M2V04122	Acrolein	8.8	0.037	02K002 02MW037S 02MW037SD 02MW035I 02T024 02MW030S 02MW029S 02T022	100	U	100	R
004W	7/27/94 94M2V04122	Chloromethane	29.4	0.730	02K002 02MW037S 02MW037SD 02MW035I 02T024 02MW030S 02MW029S 02T022	10	U	10	UJ
004W	7/18/94 CSV0032445.D	1,4-Dioxane	12.2	0.003	02MW018I 02MW027I	200	U	200	R
004W	7/18/94 CSV0032445.D	Isobutyl Alcohol	1.0	0.034	02MW018I 02MW027I	200	U	200	R
004W	7/18/94 CSV0032445.D	Acetone	44.3	0.176	02MW018I 02MW027I	11 10	U U	11 10	UJ UJ
004W	7/23/94 94M2V04077	Isobutyl Alcohol	50.0	0.018	130P004 26MW003S 02MW018S 02T019	200	U	200	R

004W	7/23/94 94M2V04077	1,4-Dioxane	75.0	0.007	130P004 26MW003S 02MW018S 02T019	200	U	200	R
004W	7/23/94 94M2V04077	Acetonitrile	27.2	0.099	130P004 26MW003S 02MW018S 02T019	100	U	100	UJ
004W	7/23/94 94M2V04077	1,2-Dibromo-3-Chloropropane	41.0	0.406	130P004 26MW003S 02MW018S 02T019	10	U	10	UJ
004W	7/23/94 94M2V04077	Pentachloro ethane	40.6	0.353	130P004 26MW003S 02MW018S 02T019	10	U	10	UJ
004W	7/23/94 94M2V04078	Acrolein	29.1	0.039	130P004 26MW003S 02MW018S 02T019	100	U	100	R
004W	7/23/94 94M2V04078	Acetone	31.9	0.679	130P004 26MW003S 02MW018S 02T019	10	U	10	UJ
004W	7/23/94 94M2V04078	Carbon Disulfide	31.8	1.644	130P004 26MW003S 02MW018S 02T019	5 5 5 1	U U U J	5 5 5 1	UJ UJ UJ J
004W	7/23/94 94M2V04078	Vinyl Acetate	39.6	0.483	130P004 26MW003S 02MW018S 02T019	10	U	10	UJ
004W	7/23/94 94M2V04078	2-Chloroethyl vinyl ether	27.4	0.185	130P004 26MW003S 02MW018S 02T019	10	U	10	UJ
004W	7/23/94 94M2V04078	Iodomethane	33.7	2.600	130P004 26MW003S 02MW018S 02T019	10	U	10	UJ

004W	7/26/94 94M2V04103	Acrolein	17.6	0.040	02MW037I 02MW017I 02T020 02MW035S 02T023 02MW036I	100	U	100	R
004W	7/26/94 94M2V04103	Isobutyl Alcohol	33.3	0.016	02MW037I 02MW017I 02T020 02MW035S 02T023 02MW036I	200	U	200	R
004W	7/26/94 94M2V04103	1,4-Dioxane	25.0	0.005	02MW037I 02MW017I 02T020 02MW035S 02T023 02MW036I	200	U	200	R
004W	7/26/94 94M2V04103	Chloromethane	31.1	1.356	02MW037I 02MW017I 02T020 02MW035S 02T023 02MW036I	10	U	10	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
005W	6/30/94 94M2V03652-56	Isobutyl Alcohol	40.2	0.012	020P005 020P005D 02R006 02MW033I 08MW005I 08MW005S 15MW004S 08T030	200	U	200	R
005W	6/30/94 94M2V03652-56	1,4-Dioxane	35.8	0.004	020P005 020P005D 02R006 02MW033I 08MW005I 08MW005S 15MW004S 08T030	200	U	200	R
005W	7/26/94 94M2V04103, 106, 107, 108, 111	2-Butanone	5.1	0.049	020P006 020MW021S 020P013 020T025 02MW033I	10	U	10	R
005W	7/26/94 94M2V04103, 106, 107, 108, 111	Acrolein	18.4	0.034	020P006 020MW021S 020P013 020T025 02MW033I	100	U	100	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
005W	7/27/94 94M2V04122	Acrolein	8.8	0.037	02T025 02MW021S 020P013 02MW033I	100	U	100	R
005W	7/27/94 94M2V04122	Chloromethane	29.4	0.730	02T025 02MW021S 020P013 02MW033I	10	U	10	J

005W	7/27/94 94M2V04121	Isobutyl Alcohol	58.3	0.019	02T025 02MW021S 020P013 02MW033I	200	U	200	R
005W	7/27/94 94M2V04121	1,4-Dioxane	50.0	0.006	02T025 02MW021S 020P013 02MW033I	200	U	200	R
005W	7/27/94 94M2V04121	Acetonitrile	27.9	0.098	02T025 02MW021S 020P013 02MW033I	100	U	100	J
005W	7/28/94 94M2V04143	Isobutyl Alcohol	8.3	0.013	020P006	200	U	200	R
005W	7/28/94 94M2V04143	1,4-Dioxane	25.0	0.005	020P006	200	U	200	R
005W	7/28/94 94M2V04143	Acetonitrile	30.2	0.095	020P006	100	U	100	J
005W	7/28/94 94M2V04144	Acrolein	2.9	0.035	020P006	100	U	100	R
005W	7/28/94 94M2V04144	Chloromethane	26.1	0.764	020P006	10	U	10	J
005W	8/04/94 94M2V04208	Isobutyl Alcohol	58.3	0.019	020P005 020P005D 02R006 02MW03IS 02MW032I 02MW032S 02MW033S 02MW034S 02MW034SD 02T026 15T029	200	U	200	R
005W	8/04/94 94M2V04208	1,4-Dioxane	0.0	0.004	020P005 020P005D 02R006 02MW03IS 02MW032I 02MW032S 02MW033S 02MW034S 02MW034SD 02T026 15T029	200	U	200	R

005W	8/04/94 94M2V04208	Acetonitrile	33.1	0.091	020P005 020P005D 02R006 02MW03IS 02MW032I 02MW032S 02MW033S 02MW034S 02MW034SD 02T026 15T029	100	U	100	R
005W	8/04/94 94M2V04208	Pentachloro-ethane	28.7	0.323	020P005 020P005D 02R006 02MW03IS 02MW032I 02MW032S 02MW033S 02MW034S 02MW034SD 02T026 15T029	10	U	10	UJ
005W	8/05/94 94MWV04230	Isobutyl Alcohol	50.0	0.018	02MW031I 15MW002S 15MW003S	200	U	200	R
005W	8/05/94 94MWV04230	1,4-Dioxane	0.0	0.004	02MW031I 15MW002S 15MW003S	200	U	200	R
005W	8/05/94 94MWV04230	1,2-Dibromo-3-chloropropane	27.4	0.367	02MW031I 15MW002S 15MW003S	10	U	10	UJ
005W	8/05/94 94MWV04230	Pentachloro-ethane	38.6	0.348	02MW031I 15MW002S 15MW003S	10	U	10	UJ
005W	8/08/94 94M2W4252	Isobutyl Alcohol	99.9	0.027	08MW005I 08MW005S 15MW004S 08T030	200	U	200	R
005W	8/08/94 94M2W4252	1,4-Dioxane	50.0	0.006	08MW005I 08MW005S 15MW004S 08T030	200	U	200	R

005W	8/08/94 94M2W4252	Propionitrile	37.5	0.264	08MW005I 08MW005S 15MW004S 08T030	100	U	100	UJ
005W	8/08/94 94M2W4252	Chloroprene	26.1	1.600	08MW005I 08MW005S 15MW004S 08T030	200	U	200	UJ
005W	8/08/94 94M2W4253	Acrolein	40.0	0.182	08MW005I 08MW005S 15MW004S 08T030	100	U	100	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
006W	6/30/94 94M2V03652-3656	Isobutyl Alcohol	40.2	0.012	15MW005I 15T035 02MW023I 02K003 02R008 02MW011I 02MW011ID 02T032 02MW023S 02T031 02MW019S 02T043 02MW020S 02T045 02MW024S 02MW026I 02T047 02MW026S 02T049 02MW025S 02MW025I 02T051 02MW022S 02MW022SD 02MW022I 02MW038S 02T057	200	U	200	R

006W	6/30/94 94M2V03652- 3656	1,4-Dioxane	35.8	0.004	15MW005I 15T035 02MW023I 02K003 02R008 02MW011I 02MW011ID 02T032 02MW023S 02T031 02MW019S 02T043 02MW020S 02T045 02MW024S 02MW026I 02T047 02MW026S 02T049 02MW025S 02MW025I 02T051 02MW022S 02MW022SD 02MW022I 02MW038S 02T057	200	U	200	R
006W	8/22/94 94M2V04466- 4470	Isobutyl Alcohol	31.3	0.022	02K004 02MW028S 020P007 02T060	200	U	200	R
006W	8/22/94 94M2V04466- 4470	1,4-Dioxane	38.4	0.006	02K004 02MW028S 020P007 02T060	200	U	200	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
006W	8/05/94 94M2V04230	1,4-Dioxane	0.0	0.004	15T035	200	U	10	R
006W	8/08/94 94M2V04252	Isobutyl Alcohol	-99.9	0.027	15MW005I 02MW020S 02T045	200	U	100	R

006W	8/08/94 94M2V04252	1,4-Dioxane	-50.0	0.006	15MW005I 02MW020S 02T045	200	U	200	R
006W	8/05/94 94M2V04230	Isobutyl Alcohol	50.0	0.018	15T035 02MW023I 02K003 02R008 02MW011I 02MW011ID 02T032 02MW023S 02T031 02MW019S 02T043	200	U	200	R
006W	8/05/94 94M2V04230	1,2-Dibromo-3-chloropropane	27.4	0.367	15T035 02MW023I 02K003 02R008 02MW011I 02MW011ID 02T032 02MW023S 02T031 02MW019S 02T043	10	U	10	UJ
006W	8/05/94 94M2V04230	Pentachloro-ethane	38.6	0.348	15T035 02MW023I 02K003 02R008 02MW011I 02MW011ID 02T032 02MW023S 02T031 02MW019S 02T043	10	U	10	UJ
006W	8/08/94 94M2V04252	Acetonitrile	-25.7	0.171	15MW005I 02MW020S 02T045	100	U	100	UJ
006W	8/08/94 94M2V04252	Propionitrile	37.5	0.264	15MW005I 02MW020S 02T045	100	U	100	UJ
006W	8/08/94 94M2V04252	Chloroprene	-26.1	1.600	15MW005I 02MW020S 02T045	200	U	200	UJ

006W	8/08/94 94M2V04253	Acrolein	-40.0	0.182	15MW005I 02MW020S 02T045	100	U	200	UJ
006W	8/09/94 94M2V04274- 4276	Bromomethane	28.1	1.130	02MW024S 02MW026I 02T047 02MW026S 02T049	10	U	10	UJ
006W	8/09/94 94M2V04274- 4276	Vinyl Acetate	-25.2	1.201	02MW024S 02MW026I 02T047 02MW026S 02T049	10	U	10	UJ
006W	8/09/94 94M2V04274- 4276	Iodomethane	44.6	1.692	02MW024S 02MW026I 02T047 02MW026S 02T049	10	U	10	UJ
006W	8/09/94 94M2V04274- 4276	Isobutyl Alcohol	-99.9	0.025	02MW024S 02MW026I 02T047 02MW026S 02T049	200	U	200	R
006W	8/09/94 94M2V04274- 4276	1,4-Dioxane	-25.0	0.005	02MW024S 02MW026I 02T047 02MW026S 02T049	200	U	200	R
006W	8/09/94 94M2V04274- 4276	Pentachloro- ethane	-25.5	0.315	02MW024S 02MW026I 02T047 02MW026S 02T049	10	U	10	UJ
006W	8/09/94 94M2V04274- 4276	Chloroprene	-25.1	1.587	02MW024S 02MW026I 02T047 02MW026S 02T049	200	U	200	UJ
006W	8/09/94 94M2V04274- 4276	Propionitrile	-28.1	0.246	02MW024S 02MW026I 02T047 02MW026S 02T049	100	U	100	UJ

006W	8/09/94 94M2V04274- 4276	Dichlorodi- fluoromethane	-31.9	1.723	02MW024S 02MW026I 02T047 02MW026S 02T049	10	U	10	UJ
006W	8/14/94 94M2V04300	1,2- Dichloroethane	26.5	2.512	02MW025S 02MW025I 02T051	5	U	5	UJ
006W	8/14/94 94M2V04300	2-Butanone	28.4	0.048	02MW025S 02MW025I 02T051	10	U	10	R
006W	8/14/94 94M2V04300	Trans,1,3- Dichloro propene	26.6	0.517	02MW025S 02MW025I 02T051	5	U	5	UJ
006W	8/14/94 94M2V04300	2-Hexanone	37.5	0.356	02MW025S 02MW025I 02T051	10	U	10	UJ
006W	8/14/94 94M2V04300	4-Methyl-2- Pentanone	37.0	0.481	02MW025S 02MW025I 02T051	10	U	10	UJ
006W	8/14/94 94M2V04300	Acrylonitrile	25.4	0.303	02MW025S 02MW025I 02T051	100	U	100	UJ
006W	8/14/94 94M2V04306	Isobutyl Alcohol	-91.7	0.023	02MW025S 02MW025I 02T051	200	U	200	R
006W	8/14/94 94M2V04306	Dichlorodi- fluoromethane	-56.5	2.044	02MW025S 02MW025I 02T051	10	U	10	UJ
006W	8/14/94 94M2V04306	3- Chloropropene	-52.1	0.604	02MW025S 02MW025I 02T051	5	U	5	UJ
006W	8/14/94 94M2V04306	1,4-Dioxane	-50.0	0.006	02MW025S 02MW025I 02T051	200	U	200	R
006W	8/14/94 94M2V04306	Chloroprene	-58.3	2.009	02MW025S 02MW025I 02T051	200	U	200	UJ
006W	8/16/94 94M2V04325	Isobutyl Alcohol	-99.9	0.032	02MW022S 02MW022SD	200	U	200	R

006W	8/16/94 94M2V04325	1,4-Dioxane	-50.0	0.006	02MW022S 02MW022SD	200	U	200	R
006W	8/16/94 94M2V04325	Pentachloro-ethane	-25.1	0.314	02MW022S 02MW022SD	10	U	10	UJ
006W	8/17/94 94M2V04359	Isobutyl Alcohol	-50.0	0.018	02MW022I 02MW038S	200	U	200	R
006W	8/17/94 94M2V04359	Dichlorodi-fluoromethane	-33.8	1.747	02MW022I 02MW038S	10	U	10	UJ
006W	8/17/94 94M2V04359	Acetonitrile	-32.8	0.180	02MW022I 02MW038S	100	U	100	UJ
006W	8/17/94 94M2V04359	1,4-Dioxane	25.0	0.003	02MW022I 02MW038S	200	U	200	R
006W	8/17/94 94M2V04359	Pentachloro-ethane	-35.9	0.341	02MW022I 02MW038S	10	U	10	UJ
006W	8/17/94 94M2V04359	Chloroprene	-97.4	2.505	02MW022I 02MW038S	200	U	200	UJ
006W	8/18/94 94M2V04380	Isobutyl Alcohol	-25.0	0.015	02T057	200	U	200	R
006W	8/18/94 94M2V04380	Dichlorodi-fluoromethane	-35.8	1.774	02T057	10	U	10	UJ
006W	8/18/94 94M2V04380	Acetonitrile	-72.1	0.234	02T057	100	U	100	UJ
006W	8/18/94 94M2V04380	Methacrylo-nitrile	-25.5	0.605	02T057	5	U	5	UJ
006W	8/18/94 94M2V04380	1,4-Dioxane	50.0	0.002	02T057	200	U	200	R
006W	8/18/94 94M2V04380	1,2-Dibromo-3-Chloropropene	-38.9	0.400	02T057	10	U	10	UJ
006W	8/18/94 94M2V04380	Pentachloro-ethane	-49.4	0.375	02T057	10	U	10	UJ
006W	8/18/94 94M2V04380	Chloroprene	-99.9	2.551	02T057	200	U	200	UJ
006W	9/2/94 94M2V04653	Isobutyl Alcohol	40.9	0.013	02K004 02MW028S 020P007 02T060	200	U	200	R

006W	9/2/94 94M2V04653	Acetonitrile	54.1	0.090	02K004 02MW028S 020P007 02T060	100	U	100	UJ
006W	9/2/94 94M2V04653	Propionitrile	31.4	0.208	02K004 02MW028S 020P007 02T060	100	U	100	UJ
006W	9/2/94 94M2V04653	Methacrylo-nitrile	31.1	0.518	02K004 02MW028S 020P007 02T060	5	U	5	UJ
006W	9/2/94 94M2V04653	Methyl Methacrylate	29.0	0.309	02K004 02MW028S 020P007 02T060	10	U	10	UJ
006W	9/2/94 94M2V04653	1,2-Dibromo-ethane	26.0	0.993	02K004 02MW028S 020P007 02T060	5	U	5	UJ
006W	9/2/94 94M2V04653	1,2-Dibromo-3-Chloropropane	42.6	0.343	02K004 02MW028S 020P007 02T060	10	U	10	UJ
006W	9/2/94 94M2V04653	Pentachloro-ethane	34.7	0.348	02K004 02MW028S 020P007 02T060	10	U	10	UJ
006W	9/2/94 94M2V04654	2-Butanone	19.3	0.046	02K004 02MW028S 020P007 02T060	10	U	10	R
006W	9/2/94 94M2V04654	Acetone	30.3	0.679	02K004 02MW028S 020P007 02T060	10 10 10 9	U U U J	10 10 10 9	UJ UJ UJ J

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
007W	8/22/94 94M2V04466	Isobutyl alcohol	31.3	0.022	02MW038I 02MW038D 02MW036D 08MW005D 02T068 02T070 08MW016S 08MW016SD 08MW009S 08MW004S 08MW017S 08MW018S 08T064 10OP001 15OP001 02MW013S 15MW005S 15MW005SD 15MW001S 02T062 08OR019 08MW014S 08MW013S 08MW012S 08T063	200	U	200	R

007W	8/22/94 94M2V04470	1,4-Dioxane	38.4	0.006	02MW038I 02MW038D 02MW036D 08MW005D 02T068 02T070 08MW016S 08MW16SD 08MW009S 08MW004S 08MW017S 08MW018S 08T064 10OP001 15OP001 02MW013S 15MW005S 15MW005SD 15MW001S 02T062 08OR019 08MW014S 08MW013S 08MW012S 08T063	200	U	200	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
007W	9/02/94 94M2V04653	Isobutyl alcohol	40.9	0.013	08T063 08MW012S 08OR019 08MW014S 08MW013S 02MW038I	200	U	200	R
007W	9/02/94 94M2V04653	1,4-Dioxane	16.7	0.005	08T063 08MW012S 08OR019 08MW014S 08MW013S 02MW038I	200	U	200	R
007W	9/02/94 94M2V04653	Acetonitrile	54.1	0.090	08T063 08MW012S 08OR019 08MW014S 08MW013S 02MW038I	100	U	100	UJ

007W	9/02/94 94M2V04653	Propionitrile	31.4	0.208	08T063 08MW012S 08OR019 08MW014S 08MW013S 02MW038I	100	U	100	UJ
007W	9/02/94 94M2V04653	Methacrylo-nitrile	31.1	0.518	08T063 08MW012S 08OR019 08MW014S 08MW013S 02MW038I	5	U	5	UJ
007W	9/02/94 94M2V04653	Methyl methacrylate	29.0	0.301	08T063 08MW012S 08OR019 08MW014S 08MW013S 02MW038I	10	U	10	UJ
007W	9/02/94 94M2V04653	1,2-Dibromoethane	26.0	0.993	08T063 08MW012S 08OR019 08MW014S 08MW013S 02MW038I	5	U	5	UJ
007W	9/02/94 94M2V04653	1,2-Dibromo-3-chloropropene	42.6	0.343	08T063 08MW012S 08OR019 08MW014S 08MW013S 02MW038I	10	U	10	UJ
007W	9/02/94 94M2V04653	Pentachloro-ethane	34.7	0.348	08T063 08MW012S 08OR019 08MW014S 08MW013S 02MW038I	10	U	10	UJ
007W	9/02/94 94M2V04654	2-Butanone	19.3	0.046	08T063 08MW012S 08OR019 08MW014S 08MW013S 02MW038I	10	U	10	R

007W	9/02/94 94M2V04654	Acetone	30.3	0.679	08T063 08MW012S 08OR019 08MW014S 08MW013S 02MW038I	8 10 10 10 10 10	J U U U U U	8 10 10 10 10 10	J UJ UJ UJ UJ UJ
007W	9/06/94 94M2V04675	Isobutyl alcohol	45.4	0.012	02T070 02T068 02MW036D 02MW038D 08MW005D 08T064 08MW016S 08MW016SD 08MW017S 08MW018S	200	U	200	R
007W	9/06/94 94M2V04675	1,4-Dioxane	16.7	0.005	02T070 02T068 02MW036D 02MW038D 08MW005D 08T064 08MW016S 08MW016SD 08MW017S 08MW018S	200	U	200	R
007W	9/06/94 94M2V04675	Acetonitrile	57.1	0.084	02T070 02T068 02MW036D 02MW038D 08MW005D 08T064 08MW016S 08MW016SD 08MW017S 08MW018S	100	U	100	UJ
007W	9/06/94 94M2V04675	Propionitrile	31.4	0.208	02T070 02T068 02MW036D 02MW038D 08MW005D 08T064 08MW016S 08MW016SD 08MW017S 08MW018S	100	U	100	UJ

007W	9/06/94 94M2V04675	Methylacrylo-nitrile	31.1	0.518	02T070 02T068 02MW036D 02MW038D 08MW005D 08T064 08MW016S 08MW016SD 08MW017S 08MW018S	5	U	5	UJ
007W	9/06/94 94M2V04675	Methyl methacrylate	32.6	0.293	02T070 02T068 02MW036D 02MW038D 08MW005D 08T064 08MW016S 08MW016SD 08MW017S 08MW018S	10	U	10	UJ
007W	9/06/94 94M2V04675	1,2-Dibromoethane	26.7	0.983	02T070 02T068 02MW036D 02MW038D 08MW005D 08T064 08MW016S 08MW016SD 08MW017S 08MW018S	5	U	5	UJ
007W	9/06/94 94M2V04675	1,2-Dibromo-3-chloropropane	43.1	0.340	02T070 02T068 02MW036D 02MW038D 08MW005D 08T064 08MW016S 08MW016SD 08MW017S 08MW018S	10	U	10	UJ

007W	9/06/94 94M2V04675	Pentachloro-ethane	36.2	0.340	02T070 02T068 02MW036D 02MW038D 08MW005D 08T064 08MW016S 08MW016SD 08MW017S 08MW018S	10	U	10	UJ
007W	9/01/94 94M2V04637	2-butanone	19.3	0.046	08MW009S	230	--	230	J
007W	9/01/94 94M2V04637	Acetone	26.5	0.716	08MW009S	330	B	330	J
007W	9/01/94 94M2V04637	Isobutyl alcohol	45.4	0.012	08MW009S	400	U	400	R
007W	9/01/94 94M2V04637	1,4-Dioxane	16.7	0.005	08MW009S	400	U	400	R
007W	9/01/94 94M2V04637	Acetonitrile	57.1	0.084	08MW009S	200	U	200	UJ
007W	9/01/94 94M2V04637	Propionitrile	30.0	0.212	08MW009S	200	U	200	UJ
007W	9/01/94 94M2V04637	Methylacrylo-nitrile	31.1	0.518	08MW009S	10	U	10	UJ
007W	9/01/94 94M2V04637	Methyl methacrylate	31.3	0.299	08MW009S	20	U	20	UJ
007W	9/01/94 94M2V04637	1,2-Dibromoethane	28.8	0.955	08MW009S	10	U	10	UJ
007W	9/01/94 94M2V04637	1,2-Dibromo-3-chloropropane	42.1	0.346	08MW009S	20	U	20	UJ
007W	9/01/94 94M2V04637	Pentachloro-ethane	35.6	0.343	08MW009S	20	U	20	UJ
007W	9/01/94 94M2V04637	2-Butanone	19.3	0.046	02MW013S 10OP001 15MW001S 15MW005S 15OP001 15MW005SD 02T062	10	U	10	R

007W	9/01/94 94M2V04637	Acetone	26.5	0.716	02MW013S 10OP001 15MW001S 15MW005S 15OP001 15MW005SD 02T062	10	U	10	UJ
007W	9/01/94 94M2V04637	Isobutyl alcohol	45.4	0.012	02MW013S 10OP001 15MW001S 15MW005S 15OP001 15MW005SD 02T062	200	U	200	UJ
007W	9/01/94 94M2V04637	1,4-Dioxane	16.7	0.005	02MW013S 10OP001 15MW001S 15MW005S 15OP001 15MW005SD 02T062	200	U	200	R
007W	9/01/94 94M2V04637	Acetonitrile	57.1	0.084	02MW013S 10OP001 15MW001S 15MW005S 15OP001 15MW005SD 02T062	100	U	100	UJ
007W	9/01/94 94M2V04637	Propionitrile	30.0	0.212	02MW013S 10OP001 15MW001S 15MW005S 15OP001 15MW005SD 02T062	100	U	100	UJ
007W	9/01/94 94M2V04637	Methylacrylo- nitrile	31.1	0.518	02MW013S 10OP001 15MW001S 15MW005S 15OP001 15MW005SD 02T062	5	U	5	UJ

007W	9/01/94 94M2V04637	Methyl methacrylate	31.3	0.299	02MW013S 10OP001 15MW001S 15MW005S 15OP001 15MW005SD 02T062	10	U	10	UJ
007W	9/01/94 94M2V04637	1,2-Dibromoethane	28.9	0.955	02MW013S 10OP001 15MW001S 15MW005S 15OP001 15MW005SD 02T062	5	U	5	UJ
007W	9/01/94 94M2V04637	1,2-Dibromo-3-chloropropane	42.1	0.346	02MW013S 10OP001 15MW001S 15MW005S 15OP001 15MW005SD 02T062	10	U	10	UJ
007W	9/01/94 94M2V04637	Pentachloro-ethane	35.6	0.343	02MW013S 10OP001 15MW001S 15MW005S 15OP001 15MW005SD 02T062	10	U	10	UJ
007W	9/08/94 94M2V04739	Isobutyl alcohol	45.4	0.012	08MW004S	400	U	400	R
007W	9/08/94 94M2V04739	1,4-Dioxane	16.7	0.005	08MW004S	400	U	400	R
007W	9/08/94 94M2V04739	Acetonitrile	30.3	0.402	08MW004S	200	U	200	UJ
007W	9/08/94 94M2V04739	Propionitrile	30.0	0.212	08MW004S	200	U	200	UJ
007W	9/08/94 94M2V04739	Methylacrylo-nitrile	31.6	0.514	08MW004S	400	U	400	UJ
007W	9/08/94 94M2V04739	Methyl methacrylate	31.0	0.300	08MW004S	20	U	20	UJ
007W	9/08/94 94M2V04739	1,2-Dibromoethane	29.0	0.952	08MW004S	10	U	10	UJ

007W	9/08/94 94M2V04739	1,2-Dibromo-3-chloropropane	41.0	0.353	08MW004S	20	U	20	UJ
007W	9/08/94 94M2V04739	Pentachloro-ethane	36.8	0.337	08MW004S	20	U	20	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
008W	8/22/94 94M2V04466.D- 94M2V04470.D	Isobutyl Alcohol	31.3	0.022	08MW010S 08MW010SD 13T076 13R024 13K005 13MW009S 13MW008S 13MW007S 13MW010S 56MW001S 02MW034I 13T078 08MW013I 08MW015I 08MW019S 08MW019SD 08T082	200	U	200	R
008W	8/22/94 94M2V04466.D- 94M2V04470.D	1,4-Dioxane	38.4	0.006	08MW010S 08MW010SD 13T076 13R024 13K005 13MW009S 13MW008S 13MW007S 13MW010S 56MW001S 02MW034I 13T078 08MW013I 08MW015I 08MW019S 08MW019SD 08T082	200	U	200	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual

008W	9/21/94 94M2V04926	Isobutyl Alcohol	50.0	0.011	08MW010S 08MW010SD 13T076 13R024 13K005	200	U	200	R
008W	9/21/94 94M2V04926	3-Chloropropene	33.8	0.382	08MW010S 08MW010SD 13T076 13R024 13K005	5	U	5	UJ
008W	9/21/94 94M2V04926	Propionitrile	32.3	0.205	08MW010S 08MW010SD 13T076 13R024 13K005	100	U	100	UJ
008W	9/21/94 94M2V04926	Methacrylo-nitrile	31.2	0.517	08MW010S 08MW010SD 13T076 13R024 13K005	5	U	5	UJ
008W	9/21/94 94M2V04926	Methyl Methacrylate	32.2	0.295	08MW010S 08MW010SD 13T076 13R024 13K005	10	U	10	UJ
008W	9/21/94 94M2V04926	1,2-Dibromo-ethane	28.5	0.959	08MW010S 08MW010SD 13T076 13R024 13K005	5	U	5	UJ
008W	9/21/94 94M2V04926	1,2-Dibromo-3-Chloropropane	43.5	0.338	08MW010S 08MW010SD 13T076 13R024 13K005	10	U	10	UJ
008W	9/21/94 94M2V04926	Pentachloro-ethane	37.7	0.332	08MW010S 08MW010SD 13T076 13R024 13K005	10	U	10	UJ

008W	9/21/94 94M2V04926	1,4-Dioxane	16.7	0.005	08MW010S 08MW010SD 13T076 13R024 13K005	200	U	200	R
008W	9/21/94 94M2V04927	Acetone	31.5	0.667	08MW010S 08MW010SD 13T076 13R024 13K005	10 10 10 9 11	U U U J --	10 10 10 9 11	UJ UJ UJ J J
008W	9/21/94 94M2V04927	2-Chloroethyl vinylether	58.4	0.121	08MW010S 08MW010SD 13T076 13R024 13K005	10	U	10	UJ
008W	9/21/94 94M2V04927	2-Butanone	22.8	0.044	08MW010S 08MW010SD 13T076 13R024 13K005	10	U	10	R
008W	9/19/94 94M2V04884	Acetone	30.3	0.679	13MW009S 13MW008S 13MW007S 13MW010S 56MW001S 02MW034I 13T078	4 18 10 24 14 53 10	J -- -- -- -- -- U	4 18 10 24 14 53 10	J J J J J J UJ
008W	9/19/94 94M2V04884	2-Chloroethyl vinylether	32.3	0.197	13MW009S 13MW008S 13MW007S 13MW010S 56MW001S 02MW034I 13T078	10	U	10	UJ
008W	9/19/94 94M2V04884	2-Butanone	17.5	0.047	13MW009S 13MW008S 13MW007S 13MW010S 56MW001S 02MW034I 13T078	10	U	10	R

008W	9/19/94 94M2V04885	Isobutyl Alcohol	45.4	0.012	13MW009S 13MW008S 13MW007S 13MW010S 56MW001S 02MW034I 13T078	200	U	200	R
008W	9/19/94 94M2V04885	1,4-Dioxane	16.7	0.005	13MW009S 13MW008S 13MW007S 13MW010S 56MW001S 02MW034I 13T078	200	U	200	R
008W	9/19/94 94M2V04885	Dichlorodi-fluoromethane	26.6	1.463	13MW009S 13MW008S 13MW007S 13MW010S 56MW001S 02MW034I 13T078	10	U	10	UJ
008W	9/19/94 94M2V04885	3-Chloropropene	38.0	0.358	13MW009S 13MW008S 13MW007S 13MW010S 56MW001S 02MW034I 13T078	5	U	5	UJ
008W	9/19/94 94M2V04885	Propionitrile	31.0	0.209	13MW009S 13MW008S 13MW007S 13MW010S 56MW001S 02MW034I 13T078	100	U	100	UJ
008W	9/19/94 94M2V04885	Methacrylo-nitrile	32.4	0.508	13MW009S 13MW008S 13MW007S 13MW010S 56MW001S 02MW034I 13T078	5	U	5	UJ

008W	9/19/94 94M2V04885	Methyl Methacrylate	34.9	0.283	13MW009S 13MW008S 13MW007S 13MW010S 56MW001S 02MW034I 13T078	10	U	10	UJ
008W	9/19/94 94M2V04885	1,2-Dibromo-ethane	35.9	0.860	13MW009S 13MW008S 13MW007S 13MW010S 56MW001S 02MW034I 13T078	5	U	5	UJ
008W	9/19/94 94M2V04885	1,2-Dibromo-3-Chloropropane	44.2	0.334	13MW009S 13MW008S 13MW007S 13MW010S 56MW001S 02MW034I 13T078	10	U	10	UJ
008W	9/19/94 94M2V04885	Pentachloro-ethane	42.0	0.309	13MW009S 13MW008S 13MW007S 13MW010S 56MW001S 02MW034I 13T078	10	U	10	UJ
008W	9/26/94 94M2V04989	Isobutyl Alcohol	31.8	0.015	08MW013I 08MW015I 08MW019S 08MW019SD 08T082	200	U	200	R
008W	9/26/94 94M2V04989	1,4-Dioxane	0.0	0.006	08MW013I 08MW015I 08MW019S 08MW019SD 08T082	200	U	200	R
008W	9/26/94 94M2V04989	3-Chloropropene	34.1	0.380	08MW013I 08MW015I 08MW019S 08MW019SD 08T082	5	U	5	UJ

008W	9/26/94 94M2V04989	Propionitrile	28.7	0.216	08MW013I 08MW015I 08MW019S 08MW019SD 08T082	100	U	100	UJ
008W	9/26/94 94M2V04989	Methacrylo-nitrile	28.7	0.536	08MW013I 08MW015I 08MW019S 08MW019SD 08T082	5	U	5	UJ
008W	9/26/94 94M2V04989	Methyl Methacrylate	29.2	0.308	08MW013I 08MW015I 08MW019S 08MW019SD 08T082	10	U	10	UJ
008W	9/26/94 94M2V04989	1,2-Dibromo-ethane	28.1	0.964	08MW013I 08MW015I 08MW019S 08MW019SD 08T082	5	U	5	UJ
008W	9/26/94 94M2V04989	1,2-Dibromo-3-chloropropane	42.0	0.347	08MW013I 08MW015I 08MW019S 08MW019SD 08T082	10	U	10	UJ
008W	9/26/94 94M2V04989	Pentachloro-ethane	39.2	0.324	08MW013I 08MW015I 08MW019S 08MW019SD 08T082	10	U	10	UJ
008W	9/26/94 94M2V04990	2-Chloroethyl-vinylether	27.5	0.211	08MW013I 08MW015I 08MW019S 08MW019SD 08T082	10	U	10	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
011W	10/13/94 CSV0033230.D-CSV0033234.D	Methylene Chloride	36.4	1.892	None - All non-detects	--	--	--	--
011W	10/13/94 CSV0033230.D-CSV0033234.D	Isobutyl Alcohol	11.0	0.047	08MW020S 08MW020SD 08R034 08T086	200	U	200	R
011W	10/13/94 CSV0033230.D-CSV0033234.D	1,4-Dioxane	4.0	0.003	08MW020S 08MW020SD 08R034 08T086	200	U	200	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
011W	11/18/94 CSV0033512.D	2-Chloroethyl vinylether	67.1	0.189	08MW020S 08MW020SD 08R034 08T086	10	U	10	UJ
011W	11/18/94 CSV0033512.D	1,4-Dioxane	6.0	0.003	08MW020S 08MW020SD 08R034 08T086	200	U	200	R
011W	11/18/94 CSV0033512.D	Trans-1,4-Dichloro-2-Butene	81.8	0.123	08MW020S 08MW020SD 08R034 08T086	5	U	5	UJ
011W	11/18/94 CSIX033513.D	Isobutyl Alcohol	7.6	0.044	08MW020S 08MW020SD 08R034 08T086	200	U	200	R

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
001SW	7/21/94 EV01701017.D EV01801018.D EV01901019.D EV02001020.D EV02101021.D	1,4-Dioxane	1.4	0.004	02SW012 02SW011 02SW014 02SW013 02T033 02SW016 02SW018 02SW019 02SW022 02SW031 02SW031D 02T034 02SW017 02SW032 02SW039 02R010* 02SW030 02SW029 02SW029D 02SW015 02T036*	200	U	200	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
001SW	8/1/94 EV02601026.D	1,4-Dioxane	6.8	0.004	02SW012 02SW011 02SW014 02SW013 02T033 02SW016 02SW018 02SW019 02SW022 02SW031 02T034 02R010* 02T036*	200	U	200	R
001SW	8/2/94 EV04901049.D	1,4-Dioxane	7.0	0.004	02SW031D	200	U	200	R

001SW	8/4/94 EV00201002.D	1,4-Dioxane	0.5	0.004	02SW017 02SW032 02SW039 02SW030 02SW029 02SW029D 02SW015	200	U	200	R

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
002SW	7/21/94 EV01701017.D EV01801018.D EV01901019.D EV02001020.D EV02101021.D	1,4-Dioxane	1.4	0.004	49T040 49SW010 49SW009 02SW036 02SW038 02SW038D 02SW037 02T039 02SW027 02SW026 02SW024 02SW023 02SW033 02SW034 02SW035 02SW020 02SW020D 02SW025 02SW028 02SW010 02R011 02T037 02T038 49SW012 49SW011	200	U	200	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
002SW	8/10/94 EV00201002.D	1,4-Dioxane	3.7	0.004	02SW036 49T040 49SW010 49SW011 49SW009 49SW012	200	U	200	R
002SW	8/10/94 EV00201002.D	Dichlorodi-fluoromethane	59.6	1.500	02SW036 49T040 49SW010 49SW011 49SW009 49SW012	10	U	10	UJ

002SW	8/08/94 EV66301063.D	1,4-Dioxane	6.9	0.004	02SW020D 02SW028 02SW025 02SW010 02SW038 02SW038D 02SW037 02T039	200	U	200	R
002SW	8/08/94 EV66301063.D	Dichlorodi- fluoromethane	59.1	1.516	02SW020D 02SW028 02SW025 02SW010 02SW038 02SW038D 02SW037 02T039	10	U	10	UJ
002SW	8/04/94 EV00201002.D	1,4-Dioxane	0.5	0.004	02T037 02T038 02SW024	200	U	200	R
002SW	8/05/94 EV00201024.D	1,4-Dioxane	8.3	0.004	02R011	200	U	200	R
002SW	8/05/94 EV00201024.D	Dichlorodi- fluoromethane	58.3	1.546	02SW027 02SW026 02R011	10	U	10	UJ
002SW	8/07/94 EV04501045.D	1,4-Dioxane	7.0	0.004	02SW026 02SW033 02SW023 02SW034 02SW035 02SW020	200	U	200	R

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
003SW	7/21/94 EV01701017.D-EV02101021.D	1,4-Dioxane	1.4	0.004	00SW001 49R014 02SW043 02SW042 02SW042D 02SW041 02SW040 02R015 02T042	200	U	200	R

SDG NO.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
003SW	8/10/94 EV00201002.D	1,4-Dioxane	3.7	0.004	00SW001 49R014 02SW043 02SW042 02SW042D 02SW041 02SW040 02R015 02T042	200	U	200	R
003SW	8/10/94 EV00201002.D	Dichlorodi-fluoromethane	59.6	1.500	00SW001 49R014 02SW043 02SW042 02SW042D 02SW041 02SW040 02R015 02T042	10	U	10	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
001S	6/30/94 94M2V03652 - 94M2V03656	Isobutyl Alcohol	40.2	0.012	19SS001 19SS001D 19SS002 19SS003 19SS004 19SS005 19SS006	210	U	210	R
001S	6/30/94 94M2V03652 - 94M2V03656	1,4-Dioxane	35.8	0.004	19SS001 19SS001D 19SS002 19SS003 19SS004 19SS005 19SS006	210	U	210	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
001S	7/18/94 94M2V03842	Isobutyl Alcohol	16.7	0.010	19SS001 19SS001D 19SS002	210 210 210	U	210	R
001S	7/18/94 94M2V03842	Dichlorodifluoro -methane	30.2	1.700	19SS001 19SS001D 19SS002	10 10 10	U	10	UJ
001S	7/18/94 94M2V03842	3-Chloropropene	34.3	0.533	19SS001 19SS001D 19SS002	5 5 5	U	5	UJ
001S	7/18/94 94M2V03842	Propionitrile	46.9	0.282	19SS001 19SS001D 19SS002	100 100 100	U	100	UJ
001S	7/18/94 94M2V03842	1,4-Dioxane	50.6	0.006	19SS001 19SS001D 19SS002	210 210 210	U	210	R
001S	7/18/94 94M2V03842	1,2-Dibromo-3-chloropropane	28.5	0.370	19SS001 19SS001D 19SS002	10 10 10	U	10	UJ
001S	7/18/94 94M2V03842	Pentachloro-ethane	29.1	0.324	19SS001 19SS001D 19SS002	10 10 10	U	10	UJ

001S	7/18/94 94M2V03842	2-Butanone	26.9	0.066	19SS001 19SS001D 19SS002	10	U	10	UJ
001S	7/13/94 94M2V03858	Isobutyl Alcohol	50.0	0.006	19SS003 19SS004	210 210	U U	210 210	R R
001S	7/13/94 94M2V03858	Isobutyl Alcohol	50.0	0.006	19SS005 19SS006	210 210	U U	210 210	R R
001S	7/13/94 94M2V03858	1,4-Dioxane	25.0	0.003	19SS003 19SS004	210 210	U U	210 210	R R
001S	7/13/94 94M2V03858	1,4-Dioxane	25.0	0.003	19SS005 19SS006	210 210	U U	210 210	R R
001S	7/13/94 94M2V03858	Acrolein	27.3	0.070	19SS003 19SS004	100 110	U U	100 110	UJ UJ
001S	7/13/94 94M2V03858	Acrolein	27.3	0.070	19SS005 19SS006	100 100	U U	100 100	UJ UJ
001S	7/13/94 94M2V03859	2-Butanone	26.9	0.066	19SS003 19SS004 19SS005 19SS006	10 11 10 10	U	10 11 10 10	UJ
001S	7/13/94 94M2V03859	Iodomethane	25.1	2.936	19SS003 19SS004 19SS005 19SS006	10 11 10 10	U	10 11 10 10	UJ
001S	7/13/94 94M2V03859	Pentachloro- ethane	25.1	0.314	19SS003 19SS004 19SS005 19SS006	10 11 10 10	U	10 11 10 10	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
002S	6/30/94 94M2V03652-56	Isobutyl Alcohol	40.2	0.012	19BS001 19BS001D	220	U	220	R
002S	6/30/94 94M2V03652-56	Isobutyl Alcohol	40.2	0.012	19BS002 19BS003	210 240	U U	210 240	R
002S	6/30/94 94M2V03652-56	Isobutyl Alcohol	40.2	0.012	19BS004 19BS005	250 220	U U	250 220	R R
002S	6/30/94 94M2V03652-56	Isobutyl Alcohol	40.2	0.012	19BS006	220	U	220	R
002S	6/30/94 94M2V03652-56	1,4-Dioxane	35.8	0.004	19BS001 19BS001D	220	U	220	R
002S	6/30/94 94M2V03652-56	1,4-Dioxane	35.8	0.004	19BS002 19BS003	210 240	U U	210 240	R R
002S	6/30/94 94M2V03652-56	1,4-Dioxane	35.8	0.004	19BS004 19BS005	250 220	U U	250 220	R R
002S	6/30/94 94M2V03652-56	1,4-Dioxane	35.8	0.004	19BS006	220	U	220	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
002S	7/13/94 94M2V03858	Isobutyl Alcohol	50.0	0.006	19BS001 19BS001D 19BS002	220 220 210	U	220 220 210	R
002S	7/13/94 94M2V03858	Isobutyl Alcohol	50.0	0.006	19BS003 19BS004	240 250	U	240 250	R
002S	7/13/94 94M2V03858	Isobutyl Alcohol	50.0	0.006	19BS005 19BS006	220 220	U U	220 220	R
002S	7/13/94 94M2V03858	1,4-Dioxane	25.0	0.003	19BS001 19BS001D 19BS002	220 220 210	U	220 220 210	R
002S	7/13/94 94M2V03858	1,4-Dioxane	25.0	0.003	19BS003 19BS004	240 250	U	240 250	R
002S	7/13/94 94M2V03858	1,4-Dioxane	25.0	0.003	19BS005 19BS006	220 220	U	220 220	R

002S	7/13/94 94M2V03858	Acrolein	27.3	0.070	19BS001 19BS001D 19BS002	110 110 110	U	110 110 110	UJ
002S	7/13/94 94M2V03858	Acrolein	27.3	0.070	19BS003 19BS004	120 130	U	120 130	UJ
002S	7/13/94 94M2V03858	Acrolein	27.3	0.070	19BS005 19BS006	110 110	U	110 110	UJ
002S	7/13/94 94M2V03859	2-Butanone	26.9	0.066	19BS001 19BS001D 19BS002 19BS003 19BS004 19BS005 19BS006	11 11 11 12 13 11 11	U	11 11 11 12 13 11 11	UJ
002S	7/13/94 94M2V03859	Iodomethane	25.1	2.936	19BS001 19BS001D 19BS002 19BS003 19BS004 19BS005 19BS006	11 11 11 12 13 11 11	U	11 11 11 12 13 11 11	UJ
002S	7/13/94 94M2V03859	Pentachloro- ethane	25.1	0.314	19BS001 19BS001D 19BS002 19BS003 19BS004 19BS005 19BS006	11 11 11 12 13 11 11	U	11 11 11 12 13 11 11	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
003S	6/30/94 94M2V03652- 94M2V03656	Isobutyl Alcohol	40.2	0.012	19SD001 19SD001D 19SD002 19SD003	260 240 240 240	U	260 240 240 240	R
003S	6/30/94 94M2V03652- 94M2V03656	1,4-Dioxane	35.8	0.004	19SD001 19SD001D 19SD002 19SD003	260 240 240 240	U	260 240 240 240	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
003S	7/12/94 94M2V03825	2-Butanone	48.1	0.027	19SD001 19SD001D 19SD002 19SD003	13 12 12 12	U	13 12 12 12	R
003S	7/12/94 94M2V03825	Acetone	48.7	0.509	19SD001 19SD001D 19SD002 19SD003	31 12 16 12	U	31 12 16 12	UJ
003S	7/12/94 94M2V03825	2-Chloroethyl-vinylether	29.0	0.181	19SD001 19SD001D 19SD002 19SD003	13 12 12 12	U	13 12 12 12	UJ
003S	7/12/94 94M2V03825	2-Hexanone	42.3	0.358	19SD001 19SD001D 19SD002 19SD003	13 12 12 12	U	13 12 12 12	UJ
003S	7/12/94 94M2V03825	4-Methyl-2-pentanone	40.9	0.547	19SD001 19SD001D 19SD002 19SD003	13 12 12 12	U	13 12 12 12	UJ
003S	7/12/94 94M2V03825	1,1,2,2-Tetra-chloroethane	29.7	0.837	19SD001 19SD001D 19SD002 19SD003	6 6 6 6	U	6 6 6 6	UJ
003S	7/12/94 94M2V03825	Acrolein	27.3	0.040	19SD001 19SD001D 19SD002 19SD003	130 120 120 120	U	130 120 120 120	R

003S	7/12/94 94M2V03825	Acrylonitrile	33.5	0.361	19SD001 19SD001D 19SD002 19SD003	130 120 120 120	U	130 120 120 120	UJ
003S	7/12/94 94M2V03825	Ethyl methacrylate	26.8	0.1461	19SD001 19SD001D 19SD002 19SD003	6 6 6 6	U	6 6 6 6	UJ
003S	7/12/94 94M2V03825	1,2,3-Trichloro-propane	29.3	0.183	19SD001 19SD001D 19SD002 19SD003	6 6 6 6	U	6 6 6 6	UJ
003S	7/12/94 94M2V03825	Trans-1,4-dichloro-2-butene	30.3	0.177	19SD001 19SD001D 19SD002 19SD003	6 6 6 6	U	6 6 6 6	UJ
003S	7/12/94 94M2V03825	Isobutyl alcohol	83.3	0.002	19SD001 19SD001D 19SD002 19SD003	260 240 240 240	U	260 240 240 240	R
003S	7/12/94 94M2V03825	Dichlorodifluoro-methane	50.3	1.963	19SD001 19SD001D 19SD002 19SD003	13 12 12 12	U	13 12 12 12	UJ
003S	7/12/94 94M2V03825	Acetonitrile	26.5	0.100	19SD001 19SD001D 19SD002 19SD003	130 120 120 120	U	130 120 120 120	UJ
003S	7/12/94 94M2V03825	3-Chloropropene	29	0.512	19SD001 19SD001D 19SD002 19SD003	6 6 6 6	U	6 6 6 6	UJ
003S	7/12/94 94M2V03825	Propionitrile	26.6	0.141	19SD001 19SD001D 19SD002 19SD003	130 120 120 120	U	130 120 120 120	UJ
003S	7/12/94 94M2V03825	1,4-Dioxane	11.5	0.004	19SD001 19SD001D 19SD002 19SD003	260 240 240 240	U	260 240 240 240	R

003S	7/12/94 94M2V03825	Pentachloro- ethane	33.9	0.336	19SD001 19SD001D 19SD002 19SD003	13 12 12 12	U	13 12 12 12	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
004S	6/30/94 94M2V03652- 94M2V03656	Isobutyl Alcohol	40.2	0.012	19T011 19R004	200 ug/l	U	200 ug/l	R
004S	6/30/94 94M2V03652- 94M2V03656	1,4-Dioxane	35.8	0.004	19T011 19R004	200 ug/l	U	200 ug/l	R
004S	7/12/94 94M2V03814 94M2V03817	Acetone	31.5	0.993	19T011 19R004	28 14 ug/l	--	28 14 ug/l	J
004S	6/30/94 94M2V03652- 94M2V03656	Isobutyl alcohol	40.2	0.012	AASS001 AASS001D AASS002	210 210 210	U	210 210 210	R
004S	6/30/94 94M2V03652- 94M2V03656	1,4-Dioxane	35.8	0.004	AASS001 AASS001D AASS002	210 210 210	U	210 210 210	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
004S	7/12/94 94M2V03825	2-Butanone	48.1	0.027	19T011* 19R004* AASS001D AASS002	10	U	10	R
004S	7/12/94 94M2V03825	Acetone	48.7	0.509	19T011* 19R004* AASS001D AASS002	28 14 10 10	-	28 14 10 10	J J UJ UJ
004S	7/12/94 94M2V03825	2-Chloroethyl-vinylether	29.0	0.181	19T011* 19R004* AASS001D AASS002	10	U	10	UJ
004S	7/12/94 94M2V03825	2-Hexanone	42.3	0.358	19T011* 19R004* AASS001D AASS002	10	U	10	UJ
004S	7/12/94 94M2V03825	4-Methyl-2-pentanone	40.9	0.547	19T011* 19R004* AASS001D AASS002	10	U	10	UJ

004S	7/12/94 94M2V03825	1,1,2,2-Tetra-chloroethane	29.7	0.837	19T011* 19R004* AASS001D AASS002	5	U	5	UJ
004S	7/12/94 94M2V03825	Acrolein	27.3	0.040	19T011* 19R004* AASS001D AASS002	100	U	100	R
004S	7/12/94 94M2V03825	Acrylonitrile	33.5	0.361	19T011* 19R004* AASS001D AASS002	100	U	100	UJ
004S	7/12/94 94M2V03825	Ethyl methacrylate	26.8	0.1461	19T011* 19R004* AASS001D AASS002	5	U	5	UJ
004S	7/12/94 94M2V03825	1,2,3-Trichloro-propane	29.3	0.183	19T011* 19R004* AASS001D AASS002	5	U	5	UJ
004S	7/12/94 94M2V03825	Trans-1,4-dichloro-2-butene	30.3	0.177	19T011* 19R004* AASS001D AASS002	5	U	5	UJ
004S	7/12/94 94M2V03825	Isobutyl alcohol	83.3	0.002	19T011* 19R004* AASS001D AASS002	200 200 210 210	U	200 200 210 210	R
004S	7/12/94 94M2V03825	Dichlorodi-fluoromethane	50.3	1.963	19T011* 19R004* AASS001D AASS002	10	U	10	UJ
004S	7/12/94 94M2V03825	Acetonitrile	26.5	0.100	19T011* 19R004* AASS001D AASS002	100	U	100	UJ
004S	7/12/94 94M2V03825	3-Chloropropene	29	0.512	19T011* 19R004* AASS001D AASS002	5	U	5	UJ

004S	7/12/94 94M2V03825	Propionitrile	26.6	0.141	19T011* 19R004* AASS001D AASS002	100	U	100	UJ
004S	7/12/94 94M2V03825	1,4-Dioxane	11.5	0.004	19T011* 19R004* AASS001D AASS002	200 200 210 210	U	200 200 210 210	R
004S	7/12/94 94M2V03825	Pentachloro-ethane	33.9	0.336	19T011* 19R004* AASS001D AASS002	10	U	10	UJ
004S	7/13/94 94M2V03842	Isobutyl alcohol	16.7	0.010	AASS001	210	U	210	R
004S	7/13/94 94M2V03842	Dichlorodi-fluoromethane	30.2	1.700	AASS001	11	U	11	UJ
004S	7/13/94 94M2V03842	3-Chloropropene	34.3	0.533	AASS001	5	U	5	UJ
004S	7/13/94 94M2V03842	Propionitrile	46.9	0.282	AASS001	110	U	110	UJ
004S	7/13/94 94M2V03842	1,4-Dioxane	50.0	0.006	AASS001	210	U	210	R
004S	7/13/94 94M2V03842	1,2-Dibromo-3-chloropropane	28.5	0.370	AASS001	11	U	11	UJ
004S	7/13/94 94M2V03842	Pentachloro-ethane	29.1	0.324	AASS001	11	U	11	UJ
004S	7/13/94 94M2V03842	2-Butanone	26.9	0.066	AASS001	11	U	11	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
005S	6/30/94 94M2V03652-94M2V03656	Isobutyl alcohol	40.2	0.012	AABS001 AABS001D AABS002	210	U	210	R
005S	6/30/94 94M2V03652-94M2V03656	1,4-Dioxane	35.8	0.004	AABS001 AABS001D AABS002	210	U	200	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/l	Lab Qual	EDS Conc ug/l	EDS Qual
005S	7/13/94 94M2V03842	Isobutyl alcohol	16.7	0.010	AABS001 AABS001D AABS002	210	U	210	R
005S	7/13/94 94M2V03842	Dichlorodifluoro-Methane	30.2	1.700	AABS001 AABS001D AABS002	11	U	11	UJ
005S	7/13/94 94M2V03842	3-Chloropropene	34.3	0.533	AABS001 AABS001D AABS002	5	U	5	UJ
005S	7/13/94 94M2V03842	Propionitrile	46.9	0.282	AABS001 AABS001D AABS002	110	U	110	UJ
005S	7/13/94 94M2V03842	1,4-Dioxane	50.0	0.006	AABS001 AABS001D AABS002	210	U	210	R
005S	7/13/94 94M2V03842	1,2-Dibromo-3-chloropropane	28.5	0.370	AABS001 AABS001D AABS002	11	U	11	UJ
005S	7/13/94 94M2V03842	Pentachloro-ethane	29.1	0.324	AABS001 AABS001D AABS002	11	U	11	UJ
005S	7/13/94 94M2V03842	2-Butanone	26.9	0.066	AABS001 AABS001D AABS002	11	U	11	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
001SED	6/29/94 CSVH032362.D-32366.D	2-Butanone	14.9	0.045	02SD012	16	U	16	R
					02SD011	20	U	20	R
					02SD014	21	U	21	R
					02SD013	18	--	18	J
001SED	6/29/94 CSVH032362.D-32366.D	1,4-Dioxane	15.9	0.006	02SD012	320	U	320	R
					02SD011	400	U	400	R
					02SD014	420	U	420	R
					02SD013	360	U	360	R
001SED	6/29/94 CSVH032362.D-32366.D	Acetone	52.1	0.484	02SD012	19	U	19	--
					02SD011	41	--	41	J
					02SD014	21	U	21	--
					02SD013	94	--	94	J
001SED	6/29/94 CSVH032362.D-32366.D	2-Butanone	14.9	0.045	02SD016	29	--	29	J
					02SD018	5	J	5	J
					02SD019	4	J	4	J
					02SD022	16	U	16	R
					02SD031	4	J	4	J
					02SD031D	12	J	12	J
001SED	6/29/94 CSVH032362.D-32366.D	1,4-Dioxane	15.9	0.006	02SD016	490	U	490	R
					02SD018	280	U	280	R
					02SD019	320	U	320	R
					02SD022	330	U	330	R
					02SD031	290	U	290	R
					02SD031D	250	U	250	R
001SED	6/29/94 CSVH032362.D-32366.D	Acetone	52.1	0.484	02SD016	200	--	200	J
					02SD018	46	U	--	--
					02SD019	16	U	--	--
					02SD022	16	U	--	--
					02SD031	23	U	--	--
					02SD031D	56	--	56	J
001SED	6/29/94 CSVH032362.D-32366.D	2-Butanone	14.9	0.045	02SD017	100	--	100	J
					02SD030	14	U	14	R
					02SD032	25	--	25	J
					02SD029	420	--	420	J
					02SD039	13	U	13	R
					02SD029D	160	--	160	J
					02SD029DL	120	JD	120	J
					02SD015	12	U	12	R

001SED	6/29/94 CSVH032362.D-32366.D	1,4-Dioxane	15.9	0.006	02SD017	1400	U	1400	R
					02SD030	280	U	280	R
					02SD032	500	U	500	R
					02SD029	1700	U	1700	R
					02SD039	260	U	260	R
					02SD029D	2000	U	2000	R
					02SD029DL	3300	U	3300	R
					02SD015	250	U	250	R
001SED	6/29/94 CSVH032362.D-32366.D	Acetone	52.1	0.484	02SD017	680	--	680	J
					02SD030	15	U	15	--
					02SD032	89	U	89	--
					02SD029	2400	EB	2400	J
					02SD039	18	U	18	--
					02SD029D	1100	B	1100	J
					02SD029DL	870	BD	870	J
					02SD015	12	U	12	--

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
001SED	CSVH032578.D 7/29/94	2-Butanone	4.3	0.043	02SD012	16	U	16	R
					02SD011	20	U	20	R
					02SD014	21	U	21	R
					02SD013	18	--	18	J
001SED	CSVH032578.D 7/29/94	1,4-Dioxane	8.9	0.005	02SD012	320	U	320	R
					02SD011	400	U	400	R
					02SD014	420	U	420	R
					02SD013	360	U	360	R
001SED	CSVH032578.D 7/29/94	Acetone	41.1	0.285	02SD012	19	U	19	UJ
					02SD011	41	--	41	J
					02SD014	21	U	21	UJ
					02SD013	94	--	94	J
001SED	CSVH032602.D 8/2/94	2-Butanone	0.9	0.046	02SD018	5	J	5	J
					02SD019	4	J	4	J
					02SD022	16	U	16	R
					02SD031	4	J	4	J
					02SD031D	12	J	12	J
001SED	CSVH032602.D 8/2/94	1,4-Dioxane	8.3	0.005	02SD018	280	U	280	R
					02SD019	320	U	320	R
					02SD022	330	U	330	R
					02SD031	290	U	290	R
					02SD031D	250	U	250	R

001SED	CSVH032602.D 8/2/94	Acetone	42.9	0.276	02SD018 02SD019 02SD022 02SD031 02SD031D	46 16 16 23 56	U U U U --	46 16 16 23 56	UJ UJ UJ UJ J
001SED	CSVH032617.D 8/3/94	2-Butanone	2.7	0.044	02SD016	29	--	29	J
001SED	CSVH032617.D 8/3/94	1,4-Dioxane	10.6	0.005	02SD016	490	U	490	R
001SED	CSVH032617.D 8/3/94	Acetone	42.6	0.278	02SD016	200	--	200	J
001SED	CSVH032602.D 8/2/94	2-Butanone	0.9	0.046	02SD017 02SD030	100 14	-- U	100 14	J R
001SED	CSVH032602.D 8/2/94	1,4-Dioxane	8.3	0.005	02SD017 02SD030	1400 280	U U	1400 280	R R
001SED	CSVH032602.D 8/2/94	Acetone	42.9	0.276	02SD017 02SD030	680 15	-- U	680 15	J UJ
001SED	CSVH032617.D 8/3/94	2-Butanone	2.7	0.044	02SD032 02SD029 02SD039 02SD029D 02SD015	25 420 13 160 12	-- -- U U U	25 420 13 160 12	J J R J R
001SED	CSVH032617.D 8/3/94	1,4-Dioxane	10.6	0.005	02SD032 02SD029 02SD039 02SD029D 02SD015	500 1700 260 2000 250	U U U U U	500 1700 260 2000 250	R R R R R
001SED	CSVH032617.D 8/3/94	Acetone	42.6	0.278	02SD032 02SD029 02SD039 02SD029D 02SD015	89 2400 18 1100 12	U EB U B U	89 2400 18 1100 12	UJ J UJ J UJ
001SED	CSVH032637.D 8/4/94	1,4-Dioxane	2.3	0.006	02SD029DL	3300	U	3300	R
001SED	CSVH032637.D 8/4/94	Bromo- methane	37.9	0.863	02SD029DL	170	U	170	UJ
001SED	CSVH032637.D 8/4/94	Acetone	34.7	0.316	02SD029DL	870	BD	870	J

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
002SED	6/29/94 CSVHO32362.D-32366.D	2-Butanone	14.9	0.045	49SD010	33	J	33	J
002SED	6/29/94 CSVHO32362.D-32366.D	1,4-Dioxane	15.9	0.006	49SD010	910	U	910	R
002SED	6/29/94 CSVHO32362.D-32366.D	Acetone	52.1	0.484	49SD010	240	B	240	J
002SED	8/08/94 CSVH032713.D-32717.D	2-Butanone	14.5	0.047	49SD009 49SD011 49SD012	20 15 64	J J --	20 15 64	J J J
002SED	8/08/94 CSVH032713.D-32717.D	1,4-Dioxane	13.5	0.005	49SD009 49SD011 49SD012	640 510 670	U U U	640 510 670	R R R
002SED	8/08/94 CSVH032713.D-32717.D	Acetone	37.9	0.511	49SD009 49SD011 49SD012	230 98 510	B B B	230 98 510	J U J
002SED	6/29/94 CSVH032362.D-32366.D	2-Butanone	14.9	0.045	02SD038 02SD038D 02SD037 02SD036	11 8 11 78	J J J --	11 8 11 78	J J J J
002SED	6/29/94 CSVH032362.D-32366.D	1,4-Dioxane	15.9	0.006	02SD038 02SD038D 02SD037 02SD036	370 340 1100 770	U U U U	370 340 1100 770	R R R R
002SED	6/29/94 CSVH032362.D-32366.D	Acetone	52.1	0.484	02SD036	450	B	450	J

002SED	6/29/94 CSVH032362.D-32366.D	2-Butanone	14.9	0.045	02SD027	27	--	27	J
					02SD026	21	U	21	R
					02SD024	9	J	9	J
					02SD023	9	J	9	J
					02SD021	22	U	22	R
					02SD033	30	U	30	R
					02SD034	13	J	13	J
					02SD035	52	--	52	J
					02SD020	60	J	60	J
					02SD028	6	J	6	J
					02SD025	16	J	16	J
					02SD010	180	--	180	J
					02SD020DD	70	--	70	J
002SED	6/29/94 CSVH032362.D-32366.D	1,4-Dioxane	15.9	0.006	02SD027	460	U	460	R
					02SD026	420	U	420	R
					02SD024	670	U	670	R
					02SD023	500	U	500	R
					02SD021	430	U	430	R
					02SD033	610	U	610	R
					02SD034	590	U	590	R
					02SD035	340	U	340	R
					02SD020	1200	U	1200	R
					02SD028	380	U	380	R
					02SD025	710	U	710	R
					02SD010	300	U	300	R
					02SD020D	1000	U	1000	R
002SED	6/29/94 CSVH032362.D-32366.D	Acetone	52.1	0.489	02SD024	72	B	72	J
					02SD033	66	B	66	J
					02SD034	110	B	110	J
					02SD035	290	B	290	J
					02SD020	370	B	370	J
					02SD020DD	400	B	400	J
					02SD010	130	B	130	J

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
002SED	8/04/94 CSVH032637.D	1,4-Dioxane	2.3	0.006	49SD010	910	U	910	R
002SED	8/04/94 CSVH032637.D	Bromomethane	37.9	0.863	49SD010	45	U	45	UJ
002SED	8/04/94 CSVH032637.D	Acetone	34.7	0.316	49SD010	240	U	240	J
002SED	8/10/94 CSVH032727.D	1,4-Dioxane	16.5	0.006	49SD009	640	U	640	R
					49SD011	510	U	510	R

002SED	8/11/94 CSVH032749.D	2-Butanone	0.4	0.047	49SD012	64	--	64	J
002SED	8/11/94 CSVH032749.D	1,4-Dioxane	3.7	0.005	49SD012	670	U	670	R
002SED	8/04/94 CSVH032637.D	1,4-Dioxane	2.3	0.006	02SD038 02SD038D 02SD037 02SD036	370 340 1100 770	U U U U	370 340 1100 770	R R R R
002SED	8/04/94 CSVH032637.D	Bromomethane	37.9	0.863	02SD038 02SD038D 02SD037 02SD036	18 17 56 38	U U U U	18 17 56 38	UJ UJ UJ UJ
002SED	8/04/94 CSVH032637.D	Acetone	34.7	0.316	02SD038 02SD038D 02SD037 02SD036	55 56 79 450	U U U --	55 56 79 450	UJ UJ UJ J
002SED	8/03/94 CSVH032617.D	2-Butanone	2.7	0.044	02SD024 02SD023 02SD021 02SD033 02SD035 02SD027 02SD026	9 9 22 30 52 27 21	J J U U -- -- U	9 9 22 30 52 27 21	J J R R J J R
002SED	8/03/94 CSVH032617.D	1,4-Dioxane	10.6	0.005	02SD024 02SD023 02SD021 02SD033 02SD035 02SD027 02SD026	670 500 430 610 340 460 420	U U U U U U U	670 500 430 610 340 460 420	R R R R R R R
002SED	8/03/94 CSVH032617.D	Acetone	42.6	0.278	02SD024 02SD023 02SD021 02SD033 02SD035 02SD027 02SD026	72 48 22 66 290 200 10	U U U U U JB JB	72 48 22 66 290 200 10	J UJ UJ J J J UJ
002SED	8/04/94 CSVH032637.D	1,4-Dioxane	2.3	0.006	02SD034 02SD020 02SD020DD 02SD028 02SD025 02SD010	590 1200 1000 380 710 300	U U U U U U	590 1200 1000 380 710 300	R R R R R R

002SED	8/04/94 CSVH032637.D	Bromomethane	37.9	0.863	02SD034	29	U	29	UJ
					02SD020	62	U	62	UJ
					02SD020DD	50	U	50	UJ
					02SD028	19	U	19	UJ
					02SD025	36	U	36	UJ
					02SD010	15	U	15	UJ
002SED	8/04/94 CSVH032637.D	Acetone	34.7	0.316	02SD034	110	B	110	J
					02SD020	370	B	370	J
					02SD020DD	400	B	400	J
					02SD028	64	U	64	UJ
					02SD025	88	U	88	UJ
					02SD010	130	B	130	J

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
003SED	8/8/94 CSVH032713.D-CSVH032717.D	2-Butanone	14.5	0.047	00SD001	24	U	24	R
					02SD042	14		14	
					02SD042D	15		15	
					02SD043	19		19	
					02SD041	14		14	
					02SD040	71		71	
003SED	8/8/94 CSVH032713.D-CSVH032717.D	1,4-Dioxane	13.5	0.005	00SD001	480	U	480	R
					02SD042	290		290	
					02SD042D	290		290	
					02SD043	380		380	
					02SD041	280		280	
					02SD040	1400		1400	
003SED	8/8/94 CSVH032713.D-CSVH032717.D	Acetone	37.9	0.511	00SD001	50	U	--	--
					02SD042	37	U	--	--
					02SD042D	41	U	--	--
					02SD043	53	U	--	--
					02SD041	36	U	--	--
					02SD040	170	B	170	J

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
003SED	8/11/94 CSVH032749.D	2-Butanone	0.4	0.047	02SD042	14	U	14	R
					02SD042D	15		15	
					02SD041	14		14	
					02SD040	71		71	
					02SD043	19		19	
003SED	8/11/94 CSVH032749.D	1,4-Dioxane	3.7	0.005	02SD042	290	U	290	R
					02SD042D	290		290	
					02SD041	280		280	
					02SD040	1400		1400	
					02SD043	380		380	
003SED	8/12/94 CSVH032771.D	2-Butanone	1.5	0.046	00SD001	24	U	24	R
003SED	8/12/94 CSVH032771.D	1,4-Dioxane	12.1	0.005	00SD001	480	U	480	R

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/l	Lab Qual	EDS Conc ug/l	EDS Qual
LWW-SEW	8/22/94 94M2V04466 94M2V04467 94M2V04468 94M2V04469 94M2V04470	Isobutyl alcohol	31.3	0.022	LWSW001 LWSW002 LWSW003 LWSW004 LWSW005 LWSW005D LWSW006 LWSW008 LWSW009 LWT079 LWR025 LWR026 LWT077	200	U	200	R
LWW-SEW	8/22/94 94M2V04466 94M2V04467 94M2V04468 94M2V04469 94M2V04470	1,4-Dioxane	38.4	0.006	LWSW001 LWSW002 LWSW003 LWSW004 LWSW005 LWSW005D LWSW006 LWSW008 LWSW009 LWT079 LWR025 LWR026 LWT077	200	U	200	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/l	Lab Qual	EDS Conc ug/l	EDS Qual
LWW-SEW	94M2V04884 9/19/94	Acetone	30.3	0.679	LWR025 LWR026 LWT077	10	U	10	UJ
LWW-SEW	94M2V04884 9/19/94	2-Chloroethyl vinylether	32.3	0.197	LWR025 LWR026 LWT077	10	U	10	UJ
LWW-SEW	94M2V04884 9/19/94	2-Butanone	17.5	0.047	LWR025 LWR026 LWT077	10	U	10	R

LWW-SEW	94M2V04884 9/19/94	Isobutyl Alcohol	45.4	0.012	LWR025 LWR026 LWT077	200	U	200	R
LWW-SEW	94M2V04884 9/19/94	Dichlorodi-fluoromethane	26.6	1.463	LWR025 LWR026 LWT077	10	U	10	UJ
LWW-SEW	94M2V04884 9/19/94	3-Chloro propene	38.0	0.358	LWR025 LWR026 LWT077	5	U	5	UJ
LWW-SEW	94M2V04884 9/19/94	Propionitrile	31.0	0.209	LWR025 LWR026 LWT077	100	U	100	UJ
LWW-SEW	94M2V04884 9/19/94	Methacrylo-nitrile	32.4	0.508	LWR025 LWR026 LWT077	5	U	5	UJ
LWW-SEW	94M2V04884 9/19/94	Methyl methacrylate	34.9	0.283	LWR025 LWR026 LWT077	10	U	10	UJ
LWW-SEW	94M2V04884 9/19/94	1,2-Dibromo-ethane	35.9	0.860	LWR025 LWR026 LWT077	5	U	5	UJ
LWW-SEW	94M2V04884 9/19/94	1,2-Dibromo-3-chloropropane	44.2	0.334	LWR025 LWR026 LWT077	10	U	10	UJ
LWW-SEW	94M2V04884 9/19/94	Pentachloro-ethane	42.0	0.309	LWR025 LWR026 LWT077	10	U	10	UJ
LWW-SEW	94M2V04884 9/19/94	1,4-Dioxane	16.7	0.005	LWR025 LWR026 LWT077	200	U	200	R
LWW-SEW	9/21/94 94M2V04926	Isobutyl alcohol	50.0	0.011	LWSW001 LWSW002 LWSW003 LWSW004 LWT079	200	U	200	R
LWW-SEW	9/21/94 94M2V04926	1,4-Dioxane	16.7	0.005	LWSW001 LWSW002 LWSW003 LWSW004 LWT079	200	U	200	R

LWW-SEW	9/21/94 94M2V04926	3-Chloro-propene	33.8	0.382	LWSW001 LWSW002 LWSW003 LWSW004 LWT079	5	U	5	UJ
LWW-SEW	9/21/94 94M2V04926	Propionitrile	32.3	0.205	LWSW001 LWSW002 LWSW003 LWSW004 LWT079	100	U	100	UJ
LWW-SEW	9/21/94 94M2V04926	Methacrylo-nitrile	31.2	0.517	LWSW001 LWSW002 LWSW003 LWSW004 LWT079	5	U	5	UJ
LWW-SEW	9/21/94 94M2V04926	Methyl methacrylate	32.2	0.295	LWSW001 LWSW002 LWSW003 LWSW004 LWT079	10	U	10	UJ
LWW-SEW	9/21/94 94M2V04926	1,2-Dibromo-ethane	28.5	0.959	LWSW001 LWSW002 LWSW003 LWSW004 LWT079	5	U	5	UJ
LWW-SEW	9/21/94 94M2V04926	1,2-Dibromo-3-chloropropane	43.5	0.338	LWSW001 LWSW002 LWSW003 LWSW004 LWT079	10	U	10	UJ
LWW-SEW	9/21/94 94M2V04926	Pentachloro-ethane	37.7	0.332	LWSW001 LWSW002 LWSW003 LWSW004 LWT079	10	U	10	UJ
LWW-SEW	9/21/94 94M2V04926	2-Butanone	22.8	0.044	LWSW001 LWSW002 LWSW003 LWSW004 LWT079	10	U	10	R

LWW-SEW	9/21/94 94M2V04926	Acetone	31.5	0.667	LWSW001 LWSW002 LWSW003 LWSW004 LWT079	6 10 10 10 10	J U U U U	6 10 10 10 10	J UJ UJ UJ UJ
LWW-SEW	9/21/94 94M2V04926	2-Chloroethyl vinyl ether	58.4	0.121	LWSW001 LWSW002 LWSW003 LWSW004 LWT079	10	U	10	UJ
LWW-SEW	9/22/94 94M2V04947	Isobutyl alcohol	50.0	0.011	LWSW005 LWSW005D LWSW006 LWSW008 LWSW009	200	U	200	R
LWW-SEW	9/22/94 94M2V04947	1,4-Dioxane	16.7	0.005	LWSW005 LWSW005D LWSW006 LWSW008 LWSW009	200	U	200	R
LWW-SEW	9/22/94 94M2V04947	3-Chloro propene	33.4	0.384	LWSW005 LWSW005D LWSW006 LWSW008 LWSW009	5	U	5	UJ
LWW-SEW	9/22/94 94M2V04947	Propionitrile	35.6	0.195	LWSW005 LWSW005D LWSW006 LWSW008 LWSW009	100	U	100	UJ
LWW-SEW	9/22/94 94M2V04947	Methacrylo-nitrile	32.7	0.506	LWSW005 LWSW005D LWSW006 LWSW008 LWSW009	5	U	5	UJ
LWW-SEW	9/22/94 94M2V04947	Methyl methacrylate	32.0	0.296	LWSW005 LWSW005D LWSW006 LWSW008 LWSW009	10	U	10	UJ

LWW-SEW	9/22/94 94M2V04947	1,2-Dibromo-ethane	26.2	0.989	LWSW005 LWSW005D LWSW006 LWSW008 LWSW009	5	U	5	UJ
LWW-SEW	9/22/94 94M2V04947	1,2-Dibromo-3-chloropropane	43.1	0.340	LWSW005 LWSW005D LWSW006 LWSW008 LWSW009	10	U	10	UJ
LWW-SEW	9/22/94 94M2V04947	Pentachloro-ethane	35.6	0.343	LWSW005 LWSW005D LWSW006 LWSW008 LWSW009	10	U	10	UJ
LWW-SEW	9/22/94 94M2V04948	2-Butanone	29.8	0.040	LWSW005 LWSW005D LWSW006 LWSW008 LWSW009	10	U	10	R
LWW-SEW	9/22/94 94M2V04948	2-Chloroethyl vinyl ether	70.1	0.087	LWSW005 LWSW005D LWSW006 LWSW008 LWSW009	10	U	10	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
LWW-SED	8/22/94 94M2V04466-94M2V04470	Isobutyl alcohol	31.3	0.022	LWSD001	280	U	280	R
					LWSD002	270		270	
					LWSD003	300		300	
					LWSD004	280		280	
					LWSD005	430		430	
					LWSD005D	480		480	
					LWSD006	420		420	
					LWSD007	310		310	
					LWSD008	410		410	
					LWSD009	360		360	
LWW-SED	8/22/94 94M2V04466-94M2V04470	1,4-Dioxane	38.4	0.006	LWSD001	280	U	280	R
					LWSD002	270		270	
					LWSD003	300		300	
					LWSD004	280		280	
					LWSD005	430		430	
					LWSD005D	480		480	
					LWSD006	420		420	
					LWSD007	310		310	
					LWSD008	410		410	
					LWSD009	360		360	

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
LWW-SED	9/20/94 94M2V04905	Isobutyl alcohol	45.4	0.012	LWSD001	280	U	280	R
					LWSD002	270		270	
LWW-SED	9/20/94 94M2V04905	Isobutyl alcohol	45.4	0.012	LWSD003	300	U	300	R
					LWSD004	280		280	
LWW-SED	9/20/94 94M2V04905	Isobutyl alcohol	45.4	0.012	LWSD005D	480	U	480	R
					LWSD006	420		420	
LWW-SED	9/20/94 94M2V04905	Isobutyl alcohol	45.4	0.012	LWSD007	310	U	310	R
					LWSD009	360		360	
LWW-SED	9/20/94 94M2V04905	1,4-Dioxane	0.0	0.006	LWSD001	280	U	280	R
					LWSD002	270		270	
LWW-SED	9/20/94 94M2V04905	1,4-Dioxane	0.0	0.006	LWSD003	300	U	300	R
					LWSD004	280		280	
LWW-SED	9/20/94 94M2V04905	1,4-Dioxane	0.0	0.006	LWSD005D	480	U	480	R
					LWSD006	420		420	
LWW-SED	9/20/94 94M2V04905	1,4-Dioxane	0.0	0.006	LWSD007	310	U	310	R
					LWSD009	360		360	

LWW-SED	9/20/94 94M2V04905	3-Chloropropene	29.6	0.406	LWSD001 LWSD002	7 7	U	7 7	UJ
LWW-SED	9/20/94 94M2V04905	3-Chloropropene	29.6	0.406	LWSD003 LWSD004	8 7	U	8 7	UJ
LWW-SED	9/20/94 94M2V04905	3-Chloropropene	29.6	0.406	LWSD005D LWSD006	12 10	U	12 10	UJ
LWW-SED	9/20/94 94M2V04905	3-Chloropropene	29.6	0.406	LWSD007 LWSD009	8 9	U	8 9	UJ
LWW-SED	9/20/94 94M2V04905	Propionitrile	29.0	0.215	LWSD001 LWSD002	140 130	U	140 130	UJ
LWW-SED	9/20/94 94M2V04905	Propionitrile	29.0	0.215	LWSD003 LWSD004	150 140	U	150 140	UJ
LWW-SED	9/20/94 94M2V04905	Propionitrile	29.8	0.215	LWSD005D LWSD006	240 210	U	240 210	UJ
LWW-SED	9/20/94 94M2V04905	Propionitrile	29.8	0.215	LWSD007 LWSD009	150 180	U	150 180	UJ
LWW-SED	9/20/94 94M2V04905	Methacrylo-nitrile	28.3	0.539	LWSD001 LWSD002	7 7	U	7 7	UJ
LWW-SED	9/20/94 94M2V04905	Methacrylo-nitrile	28.3	0.539	LWSD003 LWSD004	8 7	U	8 7	UJ
LWW-SED	9/20/94 94M2V04905	Methacrylo-nitrile	28.3	0.539	LWSD005D LWSD006	12 10	U	12 10	UJ
LWW-SED	9/20/94 94M2V04905	Methacrylo-nitrile	28.3	0.539	LWSD007 LWSD009	8 9	U	8 9	UJ
LWW-SED	9/20/94 94M2V04905	Methyl methacrylate	32.2	0.295	LWSD001 LWSD002	14 13	U	14 13	UJ
LWW-SED	9/20/94 94M2V04905	Methyl methacrylate	32.2	0.295	LWSD003 LWSD004	15 14	U	15 14	UJ
LWW-SED	9/20/94 94M2V04905	Methyl methacrylate	32.2	0.295	LWSD005D LWSD006	24 21	U	24 21	UJ
LWW-SED	9/20/94 94M2V04905	Methyl methacrylate	32.2	0.295	LWSD007 LWSD009	15 18	U	15 18	UJ
LWW-SED	9/20/94 94M2V04905	1,2-Dibromoethane	30.6	0.931	LWSD001 LWSD002	7 7	U	7 7	UJ
LWW-SED	9/20/94 94M2V04905	1,2-Dibromoethane	30.6	0.931	LWSD003 LWSD004	8 7	U	8 7	UJ
LWW-SED	9/20/94 94M2V04905	1,2-Dibromoethane	30.6	0.931	LWSD005D LWSD006	12 10	U	12 10	UJ

LWW-SED	9/20/94 94M2V04905	1,2-Dibromoethane	30.6	0.931	LWSD007 LWSD009	8 9	U	8 9	UJ
LWW-SED	9/20/94 94M2V04905	1,2-Dibromo-3-chloropropane	44.8	0.330	LWSD001 LWSD002	14 13	U	14 13	UJ
LWW-SED	9/20/94 94M2V04905	1,2-Dibromo-3-chloropropane	44.8	0.330	LWSD003 LWSD004	15 14	U	15 14	UJ
LWW-SED	9/20/94 94M2V04905	1,2-Dibromo-3-chloropropane	44.8	0.330	LWSD005D LWSD006	24 21	U	24 21	UJ
LWW-SED	9/20/94 94M2V04905	1,2-Dibromo-3-chloropropane	44.8	0.330	LWSD007 LWSD009	15 18	U	15 18	UJ
LWW-SED	9/20/94 94M2V04905	Pentachloro-ethane	42.6	0.306	LWSD001 LWSD002	14 13	U	14 13	UJ
LWW-SED	9/20/94 94M2V04905	Pentachloro-ethane	42.6	0.306	LWSD003 LWSD004	15 14	U	15 14	UJ
LWW-SED	9/20/94 94M2V04905	Pentachloro-ethane	42.6	0.306	LWSD005D LWSD006	24 21	U	24 21	UJ
LWW-SED	9/20/94 94M2V04905	Pentachloro-ethane	42.6	0.306	LWSD007 LWSD009	8 9	U	8 9	UJ
LWW-SED	9/20/94 94M2V04906	2-Butanone	14	0.049	LWSD001 LWSD002	14 13	U	14 13	R
LWW-SED	9/20/94 94M2V04906	2-Butanone	14	0.049	LWSD003 LWSD004	15 14	U	15 14	R
LWW-SED	9/20/94 94M2V04906	2-Butanone	14	0.049	LWSD005D LWSD006	24 21	U	24 21	R
LWW-SED	9/20/94 94M2V04906	2-Butanone	14	0.049	LWSD007 LWSD009	15 18	U	15 18	R
LWW-SED	9/20/94 94M2V04906	Acetone	29.6	0.686	LWSD001 LWSD002	14 13	- U	14 13	J UJ
LWW-SED	9/20/94 94M2V04906	Acetone	29.6	0.686	LWSD003 LWSD004	19 4	- J	19 4	J J
LWW-SED	9/20/94 94M2V04906	Acetone	29.6	0.686	LWSD005D LWSD006	19 44	J -	19 44	J J
LWW-SED	9/20/94 94M2V04906	Acetone	29.6	0.686	LWSD007 LWSD009	35 24	- -	35 24	J J
LWW-SED	9/20/94 94M2V04906	Trichlorofluoro methane	28.3	1.015	LWSD001 LWSD002	7 7	U	7 7	UJ
LWW-SED	9/20/94 94M2V04906	Trichlorofluoro methane	28.3	1.015	LWSD003 LWSD004	8 7	U	8 7	UJ

LWW-SED	9/20/94 94M2V04906	Trichlorofluoro methane	28.3	1.015	LWSD005D LWSD006	12 10	U	12 10	UJ
LWW-SED	9/20/94 94M2V04906	Trichlorofluoro methane	28.3	1.015	LWSD007 LWSD009	8 9	U	8 9	UJ
LWW-SED	9/20/94 94M2V04906	2-Chloroethyl vinyl ether	43.6	0.164	LWSD001 LWSD002	14 13	U	14 13	UJ
LWW-SED	9/20/94 94M2V04906	2-Chloroethyl vinyl ether	43.6	0.164	LWSD003 LWSD004	15 14	U	15 14	UJ
LWW-SED	9/20/94 94M2V04906	2-Chloroethyl vinyl ether	43.6	0.164	LWSD005D LWSD006	24 21	U	24 21	UJ
LWW-SED	9/20/94 94M2V04906	2-Chloroethyl vinyl ether	43.6	0.164	LWSD007 LWSD009	15 18	U	15 18	UJ
LWW-SED	9/22/94 94M2V04947	Isobutyl alcohol	50.0	0.011	LWSD005 LWSD008	430 410	U	430 410	R
LWW-SED	9/22/94 94M2V04947	1,4-Dioxane	16.7	0.005	LWSD005 LWSD008	430 410	U	430 410	R
LWW-SED	9/22/94 94M2V04947	3-Chloropropene	33.4	0.384	LWSD005 LWSD008	11 10	U	11 10	UJ
LWW-SED	9/22/94 94M2V04947	Propionitrile	35.6	0.195	LWSD005 LWSD008	220 200	U	220 200	UJ
LWW-SED	9/22/94 94M2V04947	Methacrylo-nitrile	32.7	0.506	LWSD005 LWSD008	11 10	U	11 10	UJ
LWW-SED	9/22/94 94M2V04947	Methyl methacrylate	32.0	0.296	LWSD005 LWSD008	22 20	U	22 20	UJ
LWW-SED	9/22/94 94M2V04947	1,2-Dibromoethane	26.2	0.989	LWSD005 LWSD008	11 10	U	11 10	UJ
LWW-SED	9/22/94 94M2V04947	1,2-Dibromo-3-chloropropane	43.1	0.340	LWSD005 LWSD008	22 20	U	22 20	UJ
LWW-SED	9/22/94 94M2V04947	Pentachloro-ethane	35.6	0.343	LWSD005 LWSD008	22 20	U	22 20	UJ
LWW-SED	9/22/94 94M2V04948	2-Butanone	29.8	0.040	LWSD005 LWSD008	22 20	U	22 20	UJ
LWW-SED	9/22/94 94M2V04948	2-Chloroethyl vinyl ether	70.1	0.087	LWSD005 LWSD008	22 20	U	22 20	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
08/SL-01	7/21/94 EV01701017.D-EV02101021.D	1,4-Dioxane	1.4	0.004	08T053 08T054 08R017	200 ug/L	U	200 ug/L	R
08/SL-01	8/08/94 CSVH032713.D-CSVH032717.D	2-Butanone	14.5	0.047	08SL01101 08SL01102 08SL01201 08SL01202 08SL01301 08SL01302	41 36 12 11 13 13	-- -- -- U -- U	41 36 12 11 13 13	J J J R J R
08/SL-01	8/08/94 CSVH032713.D-CSVH032717.D	1,4-Dioxane	13.5	0.005	08SL01101 08SL01102 08SL01201 08SL01202 08SL01301 08SL01302	670 240 240 220 230 260	U U U U U U	670 240 240 220 230 260	R R R R R R
08/SL-01	8/08/94 CSVH032713.D-CSVH032717.D	Acetone	37.9	0.511	08SL01101 08SL01201 08SL01301 08SL01302	240 120 86 140	-- -- -- --	240 120 86 140	J J J J
08/SL-01	8/08/94 CSVH032713.D-CSVH032717.D	2-Butanone	14.5	0.047	08SL00901 08SL00605 08SL00701	12 2 13	U J U	12 2 13	R J R
08/SL-01	8/08/94 CSVH032713.D-CSVH032717.D	1,4-Dioxane	13.5	0.005	08SL00901 08SL00605 08SL00701	240 240 260	U U U	240 240 260	R R R
08/SL-01	8/08/94 CSVH032713.D-CSVH032717.D	Acetone	37.9	0.511	08SL00901 08SL00605 08SL00701	10 64 150	U U --	10 64 150	-- -- J

08/SL-01	8/17/94 EV00201002.D-EV00601006.D	1,4-Dioxane	22.6	0.009	08SL01001	250	U	250	R
					08SL00801	240		240	
					08SL01001D	240		240	
					08SL01006	220		220	
					08SL00501	220		220	
					08SL00701D	290		290	
					08SL00505	250		250	
					08SL00505DL	1200		1200	
					08SL00601	1100		1100	
					08SL00605DL	1200		1200	
					08SL00906	1100		1100	
					08SL00806	1100		1100	
					08SL00705	1200		1200	
					08SL00906DL	690		690	
					08SL00806DL	680		680	
					08SL00601DL	690		690	
					08SL00705DL	730		730	
08/SL-01	8/17/94 EV00201002.D-EV00601006.D	Acetone	38.8	0.677	08SL00505	180	--	180	J
					08SL00505DL	160	D	160	J
					08SL00601	120	--	120	J
					08SL00605DL	120	D	120	J
					08SL00906	160	--	160	J
					08SL00806	140	--	140	J
					08SL00705	190	--	190	J
					08SL00906DL	400	JD	400	J
					08SL00806DL	450	JD	450	J

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
08/SL-01	EV0741074.D 8/15/94	1,4-Dioxane	1.5	0.004	08T053	200 ug/L	U	200 ug/L	R
					08T054				
					08R017				
08/SL-01	CSVH032853.D 8/18/94	2-Butanone	1.3	0.047	08SL01102	36	--	36	J
					08SL01201	12	--	12	J
					08SL01202	11	U	11	R
					08SL01302	13	U	13	R
08/SL-01	CSVH032853.D 8/18/94	1,4-Dioxane	7.1	0.005	08SL01102	240	U	240	R
					08SL01201	240	U	240	R
					08SL01202	220	U	220	R
					08SL01302	260	U	260	R
08/SL-01	CSVH032853.D 8/18/94	Dichlorodi-fluoromethane	83.6	1.806	08SL01102	12	U	12	UJ
					08SL01201	12	U	12	UJ
					08SL01202	11	U	11	UJ
					08SL01302	13	U	13	UJ

08/SL-01	CSVH032873.D 8/19/94	2-Butanone	2.0	0.048	08SL01301	13	--	13	J
08/SL-01	CSVH032873.D 8/19/94	1,4-Dioxane	4.8	0.005	08SL01301	230	U	230	R
08/SL-01	CSVH032873.D 8/19/94	Dichlorodi-fluoromethane	79.3	1.764	08SL01301	11	U	11	UJ
08/SL-01	CSVH032896.D 8/22/94	2-Butanone	2.0	0.048	08SL01101	41	--	41	J
08/SL-01	CSVH032896.D 8/22/94	1,4-Dioxane	1.6	0.005	08SL01101	670	U	670	R
08/SL-01	CSVH032896.D 8/22/94	Bromo-methane	26.2	1.07	08SL01101	33	U	33	UJ
08/SL-01	CSVH032896.D 8/22/94	Dichlorodi-fluoromethane	103	2.002	08SL01101	33	U	33	UJ
08/SL-01	CSVH032896.D 8/22/94	Propionitrile	27.2	0.113	08SL01101	330	U	330	UJ
08/SL-01	CSVH032896.D 8/22/94	Chloroprene	28.5	0.301	08SL01101	670	U	670	UJ
08/SL-01	CSVH032896.D 8/22/94	2-Butanone	2.0	0.048	08SL00901 08SL00605 08SL00701	12 2 13	U J U	12 2 13	R J R
08/SL-01	CSVH032896.D 8/22/94	1,4-Dioxane	1.6	0.005	08SL00901 08SL00605 08SL00701	240 240 260	U	240 240 260	R
08/SL-01	CSVH032896.D 8/22/94	Bromo-methane	26.2	1.017	08SL00901 08SL00605 08SL00701	12 12 13	U	12 12 13	UJ
08/SL-01	CSVH032896.D 8/22/94	Dichlorodi-fluoromethane	103	2.002	08SL00901 08SL00605 08SL00701	12 12 13	U	12 12 13	UJ
08/SL-01	CSVH032896.D 8/22/94	Propionitrile	27.2	0.113	08SL00901 08SL00605 08SL00701	120 120 130	U	120 120 130	UJ
08/SL-01	CSVH032896.D 8/22/94	Chloroprene	28.5	0.301	08SL00901 08SL00605 08SL00701	240 240 260	U	240 240 260	UJ
08/SL-01	EV01301013.D 8/18/94	1,4-Dioxane	1.0	0.009	08SL01001 08SL00801 08SL01001D 08SL01006	250 240 240 220	U	250 240 240 220	R

08/SL-01	EV01301013.D 8/18/94	Isobutyl Alcohol	25.7	0.169	08SL01001 08SL00801 08SL01001D 08SL01006	250 240 240 130	U U U J	250 240 240 130	UJ UJ UJ J
08/SL-01	EVH3401034.D 8/19/94	1,4-Dioxane	34.2	0.006	08SL00501 08SL00701D 08SL00505	220 290 250	U	220 290 250	R
08/SL-01	EVH3401034.D 8/19/94	Acetone	28.5	0.484	08SL00501 08SL00701D 08SL00505	10 15 180	U U --	10 15 180	UJ UJ J
08/SL-01	EV05701057.D 8/21/94	1,4-Dioxane	16.8	0.007	08SL00505DL 08SL00601 08SL00605DL 08SL00906 08SL00806 08SL00705	1200 1100 1200 1100 1100 1200	U	1200 1100 1200 1100 1100 1200	R
08/SL-01	EV05701057.D 8/21/94	Acetonitrile	38.9	0.247	08SL00505DL 08SL00601 08SL00605DL 08SL00906 08SL00806 08SL00705	620 550 600 560 540 580	U	620 550 600 560 540 580	UJ
08/SL-01	EV05701057.D 8/21/94	3-Chloro-propene	27.5	2.738	08SL00505DL 08SL00601 08SL00605DL 08SL00906 08SL00806 08SL00705	31 27 30 28 27 29	U	31 27 30 28 27 29	UJ
08/SL-01	EV08501085.D 8/22/94	1,4-Dioxane	3.8	0.004	08SL00906DL 08SL00806DL 08SL00601DL 08SL00705DL	690 680 690 730	U	690 680 690 730	R

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
08/SL-02	8/22/94 94M2V04466.D- 94M2V04470.D	Isobutyl Alcohol	31.3	0.022	08SL00401 08SL00401RE 08SL00401D 08SL00401DRE 08R033* 08T085*	260 260 270 270 200 200	U	260 260 270 270 200 200	R
08/SL-02	8/22/94 94M2V04466.D- 94M2V04470.D	1,4-Dioxane	38.4	0.006	08SL00401 08SL00401RE 08SL00401D 08SL00401DRE 08R033* 08T085*	260 260 270 270 200 200	U	260 260 270 270 200 200	R
08/SL-02	11/08/94 94M2V05384.D- 94M2V05388.D	2-Butanone	14.3	0.049	08SL00401 08SL00401D	13 14	U	13 14	R
08/SL-02	11/08/94 94M2V05384.D- 94M2V05388.D	Acrolein	31.1	0.214	None - All nondetects	--	--	--	--
08/SL-02	11/10/94 94M2V05417.D- 94M2V05420.D	1,1,2-Trichloro-ethane	31.2	0.870	None - All nondetects	--	--	--	--
08/SL-02	11/10/94 94M2V05417.D- 94M2V05420.D	Benzene	36.8	0.420	None - All nondetects	--	--	--	--
08/SL-02	11/10/94 94M2V05417.D- 94M2V05420.D	1,4-Dichloro-benzene	39.8	0.940	None - All nondetects	--	--	--	--
08/SL-02	11/10/94 94M2V05417.D- 94M2V05420.D	Dibromo-methane	39.2	0.590	None - All nondetects	--	--	--	--

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
08/SL-02	11/8/94 94M2V05384	2-Butanone	10.2	0.044	08SL00401 08SL00401D	13 14	U	13 14	R
08/SL-02	11/8/94 94M2V05390	Isobutyl Alcohol	45.4	0.012	08SL00401 08SL00401D	260 270	U	260 270	R

08/SL-02	11/8/94 94M2V05390	1,4-Dioxane	16.7	0.005	08SL00401 08SL00401D	260 270	U	260 270	R
08/SL-02	11/8/94 94M2V05390	Propionitrile	35.6	0.195	08SL00401 08SL00401D	130 140	U	130 140	UJ
08/SL-02	11/8/94 94M2V05390	Methyl Methacrylate	30.6	0.302	08SL00401 08SL00401D	13 14	U	13 14	UJ
08/SL-02	11/8/94 94M2V05390	1,2-Dibromo-ethane	25.7	0.996	08SL00401 08SL00401D	7 7	U	7 7	UJ
08/SL-02	11/8/94 94M2V05390	1,2-Dibromo-3-Chloro propane	48.5	0.308	08SL00401 08SL00401D	13 14	U	13 14	UJ
08/SL-02	11/8/94 94M2V05390	Pentachloro-ethane	42.6	0.306	08SL00401 08SL00401D	13 14	U	13 14	UJ
08/SL-02	11/8/94 94M2V05390	Chloroprene	45.5	4.145	08SL00401 08SL00401D	260 270	U	260 270	UJ
08/SL-02	11/10/94 94M2V05423	Isobutyl Alcohol	40.9	0.013	08T085* 08R033* 08SL00401RE 08SL00401DRE	200 200 260 270	U	200 200 260 270	R
08/SL-02	11/10/94 94M2V05423	Acetonitrile	50.5	0.097	08T085* 08R033* 08SL00401RE 08SL00401DRE	100 100 130 140	U	100 100 130 140	UJ
08/SL-02	11/10/94 94M2V05423	1,4-Dioxane	16.7	0.005	08T085* 08R033* 08SL00401RE 08SL00401DRE	200 200 260 270	U	200 200 260 270	R
08/SL-02	11/10/94 94M2V05423	3-Chloro-propene	25.5	0.430	08T085* 08R033* 08SL00401RE 08SL00401DRE	5 5 7 7	U	5 5 7 7	UJ
08/SL-02	11/10/94 94M2V05423	Propionitrile	36.0	0.194	08T085* 08R033* 08SL00401RE 08SL00401DRE	100 100 130 140	U	100 100 130 140	UJ
08/SL-02	11/10/94 94M2V05423	Methacrylo-nitrile	32.8	0.505	08T085* 08R033* 08SL00401RE 08SL00401DRE	5 5 7 7	U	5 5 7 7	UJ

08/SL-02	11/10/94 94M2V05423	Methyl Methacrylate	33.8	0.288	08T085* 08R033* 08SL00401RE 08SL00401DRE	10 10 13 14	U	10 10 13 14	UJ
08/SL-02	11/10/94 94M2V05423	1,2-Dibromo ethane	29.6	0.944	08T085* 08R033* 08SL00401RE 08SL00401DRE	5 5 7 7	U	5 5 7 7	UJ
08/SL-02	11/10/94 94M2V05423	1,2-Dibromo-3-Chloro propane	56.2	0.262	08T085* 08R033* 08SL00401RE 08SL00401DRE	10 10 13 14	U	10 10 13 14	UJ
08/SL-02	11/10/94 94M2V05423	Pentachloro-ethane	47.6	0.279	08T085* 08R033* 08SL00401RE 08SL00401DRE	10 10 13 14	U	10 10 13 14	UJ
08/SL-02	11/10/94 94M2V05423	Chloroprene	27.1	2.078	08T085* 08R033* 08SL00401RE 08SL00401DRE	200 200 260 270	U	200 200 260 270	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 2&4-001	EV01701017.D-EV02101021.D 7/21/94	1,4-Dioxane	1.4	0.004	02T041* 02R012* 04T055*	200	U	200	R
SWMU 2&4-001	CSVH032713.D-CSVH032717.D 8/8/94	2-Butanone	14.5	0.047	02SS00101 04SS00801 04BS00810 04SS00401	11 7 12 11	U J U U	11 7 12 11	R J R R
SWMU 2&4-001	CSVH032713.D-CSVH032717.D 8/8/94	1,4-Dioxane	13.5	0.005	02SS00101 04SS00801 04BS00810 04SS00401	220 210 250 220	U U U U	220 210 250 220	R R R R
SWMU 2&4-001	EV00201002.D-EV00601006.D 8/17/94	Acetone	38.8	0.677	04BS00405 04BS00905	120 63	-- --	120 63	J J
SWMU 2&4-001	EV00201002.D-EV00601006.D 8/17/94	1,4-Dioxane	22.6	0.009	04BS00405 04BS00905 04BS01008 04BS01008D	240 250 230 230	U U U U	240 250 230 230	R R R R
SWMU 2&4-001	VOL2575-VOL2579 4/21/94	Acetonitrile	54.8	0.398	04T056	100	U	100	UJ
SWMU 2&4-001	VOL2575-VOL2579 4/21/94	1,4-Dioxane	30.5	0.004	04T056	500	U	500	R
SWMU 2&4-001	VOL2575-VOL2579 4/21/94	Isobutanol	16.1	0.010	04T056	200	U	200	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 2&4-001	EV06301063.D 8/8/94	Dichlorodi-fluoromethane	59.1	1.516	02T041* 02R012*	10	U	10	UJ
SWMU 2&4-001	EV06301063.D 8/8/94	1,4-Dioxane	6.9	0.004	02T041* 02R012*	200	U	200	R
SWMU 2&4-001	CSVH032749.D 8/11/94	2-Butanone	0.4	0.047	02SS00101 04BS00810	11 12	U U	11 12	R R

SWMU 2&4-001	CSVH032749.D 8/11/94	1,4-Dioxane	3.7	0.005	02SS00101 04BS00810	220 250	U U	220 250	R R
SWMU 2&4-001	CSVH032771.D 8/12/94	2-Butanone	1.5	0.046	04SS00801 04SS00401	7 11	J U	7 11	J R
SWMU 2&4-001	CSVH032771.D 8/12/94	Dichlorodi-fluoromethane	107	2.038	04SS00801 04SS00401	10 11	U U	10 11	UJ UJ
SWMU 2&4-001	CSVH032771.D 8/12/94	1,4-Dioxane	12.1	0.005	04SS00801 04SS00401	210 220	U U	210 220	R R
SWMU 2&4-001	EV07401074.D 8/15/94	1,4-Dioxane	1.5	0.004	04T055*	200	U	200	R
SWMU 2&4-001	EV01301013.D 8/18/94	1,4-Dioxane	1.0	0.009	04BS00405 04BS00905 04BS01008 04BS01008D	240 250 230 230	U	240 250 230 230	R
SWMU 2&4-001	EV01301013.D 8/18/94	Isobutyl Alcohol	25.7	0.169	04BS00405 04BS00905 04BS01008 04BS01008D	240 250 230 230	U	240 250 230 230	UJ
SWMU 2&4-001	VOL4751 8/19/94	Chloroethane	31.6	0.904	04T056	10	U	10	UJ
SWMU 2&4-001	VOL4751 8/19/94	Acetone	32.1	0.167	04T056	11	--	11	J
SWMU 2&4-001	VOL4751 8/19/94	2-Hexanone	25.9	0.203	04T056	10	U	10	UJ
SWMU 2&4-001	VOL4752 8/19/94	Dichlorodi-fluoromethane	61.2	0.819	04T056	10	U	10	UJ
SWMU 2&4-001	VOL4752 8/19/94	Trichloro-fluoromethane	33.2	2.983	04T056	5	U	5	UJ
SWMU 2&4-001	VOL4752 8/19/94	Acetonitrile	25.1	0.298	04T056	100	U	100	UJ
SWMU 2&4-001	VOL4752 8/19/94	Chloro-butadiene	35.9	1.375	04T056	200	U	200	UJ
SWMU 2&4-001	VOL4752 8/19/94	Acrylonitrile	36.2	0.132	04T056	100	U	100	UJ
SWMU 2&4-001	VOL4752 8/19/94	3-Chloro-propene	27.5	0.387	04T056	5	U	5	UJ
SWMU 2&4-001	VOL4752 8/19/94	1,4-Dioxane	25.0	0.003	04T056	500	U	500	R

SWMU 2&4-001	VOL4752 8/19/94	1,4-Dichloro-2-butene	28.3	0.077	04T056	5	U	5	UJ
SWMU 2&4-001	VOL4752 8/19/94	1,2-Dibromo-3-chloropropane	25.5	0.193	04T056	10	U	10	UJ
SWMU 2&4-001	VOL4752 8/19/94	Isobutanol	0.0	0.010	04T056	200	U	200	R
SWMU 2&4-001	VOL4752 8/19/94	Acrolein	10.9	0.041	04T056	100	U	100	R
SWMU 2&4-001	V0101033.D 8/22/94	Chloro-methane	31.2	1.700	04SS01001 04SS00901 04SS00401 04SS00401D 04BS00310 04SS00801 04SS00701 04SS00601 04SS00501	11 11 10 11 14 11 12 11 13	U	11 11 10 11 14 11 12 11 13	UJ
SWMU 2&4-001	V0101033.D 8/22/94	Vinyl Acetate	36.7	0.616	04SS01001 04SS00901 04SS00401 04SS00401D 04BS00310 04SS00801 04SS00701 04SS00601 04SS00501	11 11 10 11 14 11 12 11 13	U	11 11 10 11 14 11 12 11 13	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 2&4-002	8/22/94 94M2V04466.D-94M2V04470.D	Isobutyl Alcohol	31.3	0.022	04BS00705	220	U	220	R
					04BS00611	250		250	
					04BS00209	250		250	
					04T061*	200		200	
					02BS00107	260		260	
					02SS00301	220		220	
					02BS00307	240		240	
					02SS00401	220		220	
					02BS00407	260		260	
					02BS00407D	260		260	
					02SS00201	220		220	
					02BS00203	240		240	
					02T071*	200		200	
					04BS00509	230		230	
					04BS00111	430		430	
					04BS00111D	470		470	
					04T065*	200		200	
					04R020*	200		200	
SWMU 2&4-002	8/22/94 94M2V04466.D-94M2V04470.D	1,4-Dioxane	38.4	0.006	04BS00705	220	U	220	R
					04BS00611	250		250	
					04BS00209	250		250	
					04T061*	200		200	
					02BS00107	260		260	
					02SS00301	220		220	
					02BS00307	240		240	
					02SS00401	220		220	
					02BS00407	260		260	
					02BS00407D	260		260	
					02SS00201	220		220	
					02BS00203	240		240	
					02T071*	200		200	
					04BS00509	230		230	
					04BS00111	430		430	
					04BS00111D	470		470	
					04T065*	200		200	
					04R020*	200		200	

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual

SWMU 2&4-002	9/2/94 94M2V04653	Isobutyl Alcohol	40.9	0.013	04BS00705 04BS00611 04BS00209 04T061* 04T065* 04R020*	220 250 250 200 200 200	U	220 250 250 200 200 200	R
SWMU 2&4-002	9/2/94 94M2V04653	Acetonitrile	54.1	0.090	04BS00705 04BS00611 04BS00209 04T061* 04T065* 04R020*	110 120 130 100 100 100	U	110 120 130 100 100 100	UJ
SWMU 2&4-002	9/2/94 94M2V04653	Propionitrile	31.4	0.208	04BS00705 04BS00611 04BS00209 04T061* 04T065* 04R020*	110 120 130 100 100 100	U	110 120 130 100 100 100	UJ
SWMU 2&4-002	9/2/94 94M2V04653	Methacrylo-nitrile	31.1	0.518	04BS00705 04BS00611 04BS00209 04T061* 04T065* 04R020*	6 6 6 5 5 5	U	6 6 6 5 5 5	UJ
SWMU 2&4-002	9/2/94 94M2V04653	Methyl Methacrylate	29.0	0.309	04BS00705 04BS00611 04BS00209 04T061* 04T065* 04R020*	11 12 13 10 10 10	U	11 12 13 10 10 10	UJ
SWMU 2&4-002	9/2/94 94M2V04653	1,4-Dioxane	16.7	0.005	04BS00705 04BS00611 04BS00209 04T061* 04T065* 04R020*	220 250 250 200 200 200	U	220 250 250 200 200 200	R
SWMU 2&4-002	9/2/94 94M2V04653	1,2-Dibromo ethane	26.0	0.993	04BS00705 04BS00611 04BS00209 04T061* 04T065* 04R020*	6 6 6 5 5 5	U	6 6 6 5 5 5	UJ

SWMU 2&4-002	9/2/94 94M2V04653	1,2-Dibromo-3-Chloro propane	42.6	0.343	04BS00705 04BS00611 04BS00209 04T061* 04T065* 04R020*	11 12 13 10 10 10	U	11 12 13 10 10 10	UJ
SWMU 2&4-002	9/2/94 94M2V04653	Pentachloro-ethane	34.7	0.348	04BS00705 04BS00611 04BS00209 04T061* 04T065* 04R020*	11 12 13 10 10 10	U	11 12 13 10 10 10	UJ
SWMU 2&4-002	9/2/94 94M2V04654	Acetone	30.3	0.679	04BS00705 04BS00611 04BS00209 04T061* 04T065* 04R020*	41 34 15 14 10 20	U U U -- U --	41 34 15 14 10 20	UJ UJ UJ J UJ J
SWMU 2&4-002	9/2/94 94M2V04654	2-Butanone	19.3	0.046	04BS00705 04BS00611 04BS00209 04T061* 04T065* 04R020*	11 12 13 10 10 10	U	11 12 13 10 10 10	R
SWMU 2&4-002	9/9/94 94M2V04760	Isobutyl Alcohol	40.9	0.013	02BS00107 02SS00301 02BS00307 02SS00401 02BS00407 02BS00407D 02SS00201 02BS00203 02T071*	260 220 240 220 260 260 220 240 200	U	260 220 240 220 260 260 220 240 200	R
SWMU 2&4-002	9/9/94 94M2V04760	1,4-Dioxane	0.0	0.006	02BS00107 02SS00301 02BS00307 02SS00401 02BS00407 02BS00407D 02SS00201 02BS00203 02T071*	260 220 240 220 260 260 220 240 200	U	260 220 240 220 260 260 220 240 200	R

SWMU 2&4-002	9/9/94 94M2V04760	3-Chloro-propene	26.9	0.422	02BS00107	6	U	6	UJ
					02SS00301	5		5	
					02BS00307	6		6	
					02SS00401	6		6	
					02BS00407	6		6	
					02BS00407D	6		6	
					02SS00201	6		6	
					02BS00203	6		6	
					02T071*	5		5	
SWMU 2&4-002	9/9/94 94M2V04760	Propionitrile	27.4	0.220	02BS00107	130	U	130	UJ
					02SS00301	110		110	
					02BS00307	120		120	
					02SS00401	110		110	
					02BS00407	130		130	
					02BS00407D	130		130	
					02SS00201	110		110	
					02BS00203	120		120	
					02T071*	100		100	
SWMU 2&4-002	9/9/94 94M2V04760	Methacrylo-nitrile	27.8	0.543	02BS00107	6	U	6	UJ
					02SS00301	5		5	
					02BS00307	6		6	
					02SS00401	6		6	
					02BS00407	6		6	
					02BS00407D	6		6	
					02SS00201	6		6	
					02BS00203	6		6	
					02T071*	5		5	
SWMU 2&4-002	9/9/94 94M2V04760	Methyl Methacrylate	30.1	0.304	02BS00107	13	U	13	UJ
					02SS00301	11		11	
					02BS00307	12		12	
					02SS00401	11		11	
					02BS00407	13		13	
					02BS00407D	13		13	
					02SS00201	11		11	
					02BS00203	12		12	
					02T071*	10		10	
SWMU 2&4-002	9/9/94 94M2V04760	1,2-Dibromo ethane	27.5	0.972	02BS00107	6	U	6	UJ
					02SS00301	5		5	
					02BS00307	6		6	
					02SS00401	6		6	
					02BS00407	6		6	
					02BS00407D	6		6	
					02SS00201	6		6	
					02BS00203	6		6	
					02T071*	5		5	

SWMU 2&4-002	9/9/94 94M2V04760	1,2-Dibromo-3-Chloro propane	40.8	0.354	02BS00107 02SS00301 02BS00307 02SS00401 02BS00407 02BS00407D 02SS00201 02BS00203 02T071*	13 11 12 11 13 13 11 12 10	U	13 11 12 11 13 13 11 12 10	UJ
SWMU 2&4-002	9/9/94 94M2V04760	Pentachloro-ethane	37.3	0.334	02BS00107 02SS00301 02BS00307 02SS00401 02BS00407 02BS00407D 02SS00201 02BS00203 02T071*	13 11 12 11 13 13 11 12 10	U	13 11 12 11 13 13 11 12 10	UJ
SWMU 2&4-002	9/9/94 94M2V04761	2-Chloroethyl-vinyl ether	32.3	0.197	02BS00107 02SS00301 02BS00307 02SS00401 02BS00407 02BS00407D 02SS00201 02BS00203 02T071*	13 11 12 11 13 13 11 12 10	U	13 11 12 11 13 13 11 12 10	UJ
SWMU 2&4-002	9/8/94 94M2V04739	Isobutyl Alcohol	45.4	0.012	04BS00509 04BS00111 04BS00111D	230 430 470	U	230 430 470	R
SWMU 2&4-002	9/8/94 94M2V04739	1,4-Dioxane	16.7	0.005	04BS00509 04BS00111 04BS00111D	230 430 470	U	230 430 470	R
SWMU 2&4-002	9/8/94 94M2V04739	3-Chloro-propene	30.3	0.402	04BS00509 04BS00111 04BS00111D	6 11 12	U	6 11 12	UJ
SWMU 2&4-002	9/8/94 94M2V04739	Propionitrile	30.0	0.212	04BS00509 04BS00111 04BS00111D	110 220 230	U	110 220 230	UJ
SWMU 2&4-002	9/8/94 94M2V04739	Methacrylo-nitrile	31.6	0.514	04BS00509 04BS00111 04BS00111D	6 11 12	U	6 11 12	R

SWMU 2&4-002	9/8/94 94M2V04739	Methyl Methacrylate	31.0	0.300	04BS00509 04BS00111 04BS00111D	11 22 23	U	11 22 23	UJ
SWMU 2&4-002	9/8/94 94M2V04739	1,2-Dibromo-ethane	29.0	0.952	04BS00509 04BS00111 04BS00111D	6 11 12	U	6 11 12	UJ
SWMU 2&4-002	9/8/94 94M2V04739	1,2-Dibromo-3-Chloro propane	41.0	0.353	04BS00509 04BS00111 04BS00111D	11 22 23	U	11 22 23	UJ
SWMU 2&4-002	9/8/94 94M2V04739	Pentachloro-ethane	36.8	0.337	04BS00509 04BS00111 04BS00111D	11 22 23	U	11 22 23	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 28-001	8/08/94 CSVH032713.D-CSVH032717.D	2-Butanone	14.5	0.047	28SS03001 28SS03001D	10 10	U	10 10	R
SWMU 28-001	8/08/94 CSVH032713.D-CSVH032717.D	2-Butanone	14.5	0.047	28SS02901 28SS02801	11 11	U	11 11	R
SWMU 28-001	8/08/94 CSVH032713.D-CSVH032717.D	2-Butanone	14.5	0.047	28SS02701 28SS02601	10 12	U	10 12	R
SWMU 28-001	8/08/94 CSVH032713.D-CSVH032717.D	2-Butanone	14.5	0.047	28SS02501 28SS02401	10 10	U	10 10	R
SWMU 28-001	8/08/94 CSVH032713.D-CSVH032717.D	2-Butanone	14.5	0.047	28SS02301 28SS02201	10 11	U	10 11	R
SWMU 28-001	8/08/94 CSVH032713.D-CSVH032717.D	2-Butanone	14.5	0.047	28SS02101 28SS02101D	11 11	U	11 11	R
SWMU 28-001	8/08/94 CSVH032713.D-CSVH032717.D	2-Butanone	14.5	0.047	28SS0301 28SS0401	11 10	U	11 10	R
SWMU 28-001	8/08/94 CSVH032713.D-CSVH032717.D	2-Butanone	14.5	0.047	28SS0501 28SS0601	11 11	U	11 11	R
SWMU 28-001	8/08/94 CSVH032713.D-CSVH032717.D	2-Butanone	14.5	0.047	28SS0701 28SS0901	11 11	U	11 11	R
SWMU 28-001	8/08/94 CSVH032713.D-CSVH032717.D	1,4-Dioxane	13.5	0.005	28SS3001 28SS3001D	210 210	U	210 210	R
SWMU 28-001	8/08/94 CSVH032713.D-CSVH032717.D	1,4-Dioxane	13.5	0.005	28SS2901 28SS2801	210 210	U	210 210	R
SWMU 28-001	8/08/94 CSVH032713.D-CSVH032717.D	1,4-Dioxane	13.5	0.005	28SS2701 28SS2601	210 240	U	210 240	R

SWMU 28-001	8/08/94 CSVH032713.D-CSVH032717.D	1,4-Dioxane	13.5	0.005	28SS2501 28SS2401	210 210	U	210 210	R
SWMU 28-001	8/08/94 CSVH032713.D-CSVH032717.D	1,4-Dioxane	13.5	0.005	28SS2301 28SS2201	210 220	U	210 220	R
SWMU 28-001	8/08/94 CSVH032713.D-CSVH032717.D	1,4-Dioxane	13.5	0.005	28SS2101 28SS2101D	210 220	U	210 220	R
SWMU 28-001	8/08/94 CSVH032713.D-CSVH032717.D	1,4-Dioxane	13.5	0.005	28SS0301 28SS0401	220 210	U	220 210	R
SWMU 28-001	8/08/94 CSVH032713.D-CSVH032717.D	1,4-Dioxane	13.5	0.005	28SS0501	220	U	220	R
SWMU 28-001	8/08/94 CSVH032713.D-CSVH032717.D	1,4-Dioxane	13.5	0.005	28SS0601	220	U	220	R
SWMU 28-001	8/08/94 CSVH032713.D-CSVH032717.D	1,4-Dioxane	13.5	0.005	28SS0701 28SS0901	210 220	U	210 220	R
SWMU 28-001	8/08/94 CSVH032713.D-CSVH032717.D	Acetone	37.9	0.511	28SS02601	110	-	110	J
SWMU 28-001	8/08/94 CSVH032713.D-CSVH032717.D	Acetone	37.9	0.1511	28SS0901	97	-	97	J
SWMU 28-001	7/21/94 EV01701017.D-EV02101021.D	1,4-Dioxane	1.4	0.004	28R016 28T044	200 ug/l	U	200 ug/l	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 28-001	8/12/94 CSVH032771.D	2-Butanone	1.5	0.046	28SS03001 28SS03001D	10 10	U	10 10	R
SWMU 28-001	8/12/94 CSVH032771.D	2-Butanone	1.5	0.046	28SS02901 28SS02801	11 11	U	11 11	R

SWMU 28-001	8/12/94 CSVH032771.D	2-Butanone	1.5	0.046	28SS02701 28SS02601	10 12	U	10 12	R
SWMU 28-001	8/12/94 CSVH032771.D	2-Butanone	1.5	0.046	28SS2501 28SS2401	10 10	U	10 10	R
SWMU 28-001	8/12/94 CSVH032771.D	2-Butanone	1.5	0.046	28SS2301 28SS2201	10 11	U	10 11	R
SWMU 28-001	8/12/94 CSVH032771.D	1,4-Dioxane	12.1	0.005	28SS3001 28SS3001D	210 210	U	210 210	R
SWMU 28-001	8/12/94 CSVH032771.D	1,4-Dioxane	12.1	0.005	28SS2901 28SS2801	210 210	U	210 210	R
SWMU 28-001	8/12/94 CSVH032771.D	1,4-Dioxane	12.1	0.005	28SS2701 28SS2601	210 240	U	210 240	R
SWMU 28-001	8/12/94 CSVH032771.D	1,4-Dioxane	12.1	0.005	28SS2501 28SS2401	210 210	U	210 210	R
SWMU 28-001	8/12/94 CSVH032771.D	1,4-Dioxane	12.1	0.005	28SS2301 28SS2201	210 220	U	210 220	R
SWMU 28-001	8/12/94 CSVH032771.D	Dichlorodi-fluoromethane	107	2.038	28SS3001 28SS3001D	10 10	U	10 10	UJ
SWMU 28-001	8/12/94 CSVH032771.D	Dichlorodi-fluoromethane	107	2.038	28SS2901 28SS2801	11 11	U	11 11	UJ
SWMU 28-001	8/12/94 CSVH032771.D	Dichlorodi-fluoromethane	107	2.038	28SS2701 28SS2601	10 12	U	10 12	UJ
SWMU 28-001	8/12/94 CSVH032771.D	Dichlorodi-fluoromethane	107	2.038	28SS2501 28SS2401	10 10	U	10 10	UJ
SWMU 28-001	8/12/94 CSVH032771.D	Dichlorodi-fluoromethane	107	2.038	28SS2301 28SS2201	10 11	U	10 11	UJ
SWMU 28-001	8/15/94 CSVH032791.D	2-Butanone	1.8	0.046	28SS02101D 28SS00301	11 11	U	11 11	R
SWMU 28-001	8/15/94 CSVH032791.D	2-Butanone	1.8	0.046	28SS0401 28SS0501	10 11	U	10 11	R
SWMU 28-001	8/15/94 CSVH032791.D	2-Butanone	1.8	0.046	28SS0701 28SS0901	11 11	U	11 11	R
SWMU 28-001	8/15/94 CSVH032791.D	1,4-Dioxane	3.2	0.005	28SS2101D 28SS0301	220 220	U	220 220	R
SWMU 28-001	8/15/94 CSVH032791.D	1,4-Dioxane	3.2	0.005	28SS0401 28SS0501	210 220	U	210 220	R
SWMU 28-001	8/15/94 CSVH032791.D	1,4-Dioxane	3.2	0.005	28SS0701 28SS0901	210 220	U	210 220	R

SWMU 28-001	8/15/94 CSVH032791.D	Dichlorodi-fluoromethane	96.7	1.935	28SS2101D 28SS0301	11 11	U	11 11	UJ
SWMU 28-001	8/15/94 CSVH032791.D	Dichlorodi-fluoromethane	96.7	1.935	28SS0401 28SS0501	10 11	U	10 11	UJ
SWMU 28-001	8/15/94 CSVH032791.D	Dichlorodi-fluoromethane	96.7	1.935	28SS0701 28SS0901	11 11	U	11 11	UJ
SWMU 28-001	8/16/94 CSVH032811.D	2-Butanone	7.1	0.043	28SS02101 28SS0601	11 11	U	11 11	R
SWMU 28-001	8/16/94 CSVH032811.D	1,4-Dioxane	14.3	0.005	28SS02101 28SS0601	220 220	U	220 220	R
SWMU 28-001	8/16/94 CSVH032811.D	Dichlorodi-fluoromethane	94.5	1.915	28SS02101 28SS0601	11 11	U	11 11	UJ
SWMU 28-001	8/12/94 EV05301053.D	1,4-Dioxane	0.9	0.004	28T044	200	U	200	R
SWMU 28-001	8/15/94 EV07401074.D	1,4-Dioxane	1.5	0.004	28R016	200	U	200	R

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 28-002	8/08/94 CSVH032713.D-CSVH032717.D	2-Butanone	14.5	0.047	28SS00101	11	U	11	R
					28SS00201	11	U	11	R
					28SS00201D	11	U	11	R
					28SS01901	11	U	11	R
					28SS02001	11	U	11	R
					28BS00106	11	U	11	R
					28BS00504	21	J	21	J
					28BS02204	14	U	14	R
					28SS01101	11	U	11	R
					28SS01001	11	U	11	R
					28SS01201	11	U	11	R
					28SS01301	11	U	11	R
					28SS01401	11	U	11	R
					28SS01401D	11	U	11	R
					28SS01501	11	U	11	R
					28SS01601	11	U	11	R
					28SS01701	11	U	11	R
					28SS01801	11	U	11	R
					28BS01004	12	U	12	R
					28BS01704	12	U	12	R
SWMU 28-002	8/08/94 CSVH032713.D-CSVH032717.D	Acetone	37.9	0.511	28BS00504	200	--	200	J
					28BS01004	88	--	88	J
					28BS01704	59	--	59	J
SWMU 28-002	8/08/94 CSVH032713.D-CSVH032717.D	1,4-Dioxane	13.5	0.005	28SS00101	230	U	230	R
					28SS00201	220		220	
					28SS00201D	220		220	
					28SS01901	210		210	
					28SS02001	220		220	
					28BS00106	210		210	
					28BS00504	420		420	
					28BS02204	280		280	
					28SS01101	230		230	
					28SS01001	220		220	
					28SS01201	210		210	
					28SS01301	210		210	
					28SS01401	220		220	
					28SS01401D	220		220	
					28SS01501	210		210	
					28SS01601	220		220	
					28SS01701	220		220	
					28SS01801	220		220	
					28BS01004	250		250	
					28BS01704	240		240	

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 28-002	8/16/94 CSVH032811.D	2-Butanone	7.1	0.043	28SS00101	11	U	11	R
					28SS00201	11	U	11	R
					28SS01901	11	U	11	R
					28SS02001	11	U	11	R
					28BS00106	11	U	11	R
					28BS00504	21	J	21	J
					28BS02204	14	U	14	R
					28SS01101	11	U	11	R
					28SS01001	11	U	11	R
					28SS01201	11	U	11	R
SWMU 28-002	8/16/94 CSVH032811.D	Dichlorodi-fluoro methane	94.5	1.914	28SS00101	11	U	11	UJ
					28SS00201	11		11	
					28SS01901	11		11	
					28SS02001	11		11	
					28BS00106	11		11	
					28BS00504	21		21	
					28BS02204	14		14	
					28SS01101	11		11	
					28SS01001	11		11	
					28SS01201	11		11	
SWMU 28-002	8/16/94 CSVH032811.D	1,4-Dioxane	14.3	0.005	28SS00101	230	U	230	R
					28SS00201	220		220	
					28SS01901	210		210	
					28SS02001	220		220	
					28BS00106	210		210	
					28BS00504	420		420	
					28BS02204	280		280	
					28SS01101	230		230	
					28SS01001	220		220	
					28SS01201	210		210	
SWMU 28-002	8/17/94 CSVH032832.D	Bromo-methane	28.1	0.990	28SS00201D	11	U	11	UJ
					28SS01301	11		11	
					28SS01401	11		11	
					28SS01401D	11		11	
					28SS01501	11		11	
					28SS01701	11		11	
					28SS01801	11		11	
					28BS01004	12		12	
					28BS01704	12		12	

SWMU 28-002	8/17/94 CSVH032832.D	2-Butanone	4.6	0.049	28SS00201D 28SS01301 28SS01401 28SS01401D 28SS01501 28SS01701 28SS01801 28BS01004 28BS01704	11 11 11 11 11 11 11 12 12	U	11 11 11 11 11 11 11 12 12	R
SWMU 28-002	8/17/94 CSVH032832.D	Dichlorodi-fluoro methane	93.8	1.906	28SS00201D 28SS01301 28SS01401 28SS01401D 28SS01501 28SS01701 28SS01801 28BS01004 28BS01704	11 11 11 11 11 11 11 12 12	U	11 11 11 11 11 11 11 12 12	UJ
SWMU 28-002	8/17/94 CSVH032832.D	1,4-Dioxane	0.5	0.005	28SS00201D 28SS01301 28SS01401 28SS01401D 28SS01501 28SS01701 28SS01801 28BS01004 28BS01704	220 210 220 220 210 220 220 250 240	U	220 210 220 220 210 220 220 250 240	R
SWMU 28-002	8/19/94 CSVH032873.D	2-Butanone	2.0	0.048	28SS01601	11	U	11	R
SWMU 28-002	8/19/94 CSVH032873.D	Dichlorodi-fluoro methane	79.3	1.764	28SS01601	11	U	11	UJ
SWMU 28-002	8/19/94 CSVH032873.D	1,4-Dioxane	4.8	0.005	28SS01601	220	U	220	R

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 28-003	7/21/94 EV01701017.D-EV02101021.D	1,4-Dioxane	1.4	0.004	28T046*	200	U	200	R
					48T048*	200	U	200	R
SWMU 28-003	8/8/94 CSVH032713.D-CSVH032717.D	Acetone	37.9	0.511	28SS03101	24	--	24	UJ
					28SS03201	24	--	24	UJ
					28BS03104	17	--	17	UJ
					28BS03104D	17	--	17	UJ
					28SS03301	27	--	27	UJ
					48SS00101	11	--	11	UJ
					48SS00201	10	--	10	UJ
					48BS00205	21	--	21	UJ
					48SS00501	10	--	10	UJ
					48BS00505	27	--	27	UJ
					48SS00301	24	--	24	UJ
					48SS00401	21	--	21	UJ
					48SS00401D	24	--	24	UJ
SWMU 28-003	8/8/94 CSVH032713.D-CSVH032717.D	2-Butanone	14.5	0.047	28SS03101	11	U	11	R
					28SS03201	11	U	11	R
					28BS03104	11	U	11	R
					28BS03104D	11	U	11	R
					28SS03301	10	U	10	R
					48SS00101	11	U	11	R
					48SS00201	10	U	10	R
					48BS00205	11	U	11	R
					48SS00501	10	U	10	R
					48BS00505	11	U	11	R
					48SS00301	10	U	10	R
					48SS00401	10	U	10	R
					48SS00401D	10	U	10	R
SWMU 28-003	8/8/94 CSVH032713.D-CSVH032717.D	1,4-Dioxane	13.5	0.005	28SS03101	220	U	220	R
					28SS03201	220	U	220	R
					28BS03104	220	U	220	R
					28BS03104D	220	U	220	R
					28SS03301	210	U	210	R
					48SS00101	220	U	220	R
					48SS00201	210	U	210	R
					48BS00205	210	U	210	R
					48SS00501	210	U	210	R
					48BS00505	210	U	210	R
					48SS00301	210	U	210	R
					48SS00401	210	U	210	R
					48SS00401D	210	U	210	R

SWMU 28-003	4/21/94 VOL2575-VOL2579	Acrolein	16.3	0.046	04T058*	100	U	100	R
SWMU 28-003	4/21/94 VOL2575-VOL2579	1,4-Dioxane	30.5	0.004	04T058*	500	U	500	R
SWMU 28-003	4/21/94 VOL2575-VOL2579	Isobutanol	16.1	0.010	04T058*	200	U	200	R
SWMU 28-003	4/21/94 VOL2575-VOL2579	Acetonitrile	54.8	0.398	04T058*	--	--	--	--

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 28-003	8/15/94 EV07401074.D	1,4-Dioxane	1.5	0.004	28T046* 48T048*	200 200	U U	200 200	R R
SWMU 28-003	8/15/94 CSVH032791.D	2-Butanone	1.8	0.046	28SS03201 28BS03104 28BS03104D 28SS03301	11 11 11 10	U U U U	11 11 11 10	R R R R
SWMU 28-003	8/15/94 CSVH032791.D	Dichlorodi-fluoromethane	96.7	1.935	28SS03201 28BS03104 28BS03104D 28SS03301	11 11 11 10	U U U U	11 11 11 10	UJ UJ UJ UJ
SWMU 28-003	8/15/94 CSVH032791.D	1,4-Dioxane	3.2	0.005	28SS03201 28BS03104 28BS03104D 28SS03301	220 220 220 210	U U U U	220 220 220 210	R R R R
SWMU 28-003	8/16/94 CSVH032811.D	2-Butanone	7.1	0.043	28SS03101	11	U	11	R
SWMU 28-003	8/16/94 CSVH032811.D	Dichlorodi-fluoromethane	94.5	1.914	28SS03101	11	U	11	UJ
SWMU 28-003	8/16/94 CSVH032811.D	1,4-Dioxane	14.3	0.005	18SS03101	220	U	220	R
SWMU 28-003	8/17/94 CSVH032832.D	Bromomethane	28.1	0.990	48SS00101 48SS00201 48BS00205 48SS00501	11 10 11 10	U U U U	11 10 11 10	UJ UJ UJ UJ

SWMU 28-003	8/17/94 CSVH032832.D	2-Butanone	4.6	0.049	48SS00101 48SS00201 48BS00205 48SS00501	11 10 11 10	U U U U	11 10 11 10	R R R R
SWMU 28-003	8/17/94 CSVH032832.D	Dichlorodi-fluoromethane	93.8	1.906	48SS00101 48SS00201 48BS00205 48SS00501	11 10 11 10	U U U U	11 10 11 10	UJ UJ UJ UJ
SWMU 28-003	8/17/94 CSVH032832.D	1,4-Dioxane	0.5	0.005	48SS00101 48SS00201 48BS00205 48SS00501	220 210 210 210	U U U U	220 210 210 210	R R R R
SWMU 28-003	8/18/94 CSVH032853.D	2-Butanone	1.3	0.047	48BS00505 48SS00301 48SS00401 48SS00401D	11 10 10 10	U U U U	11 10 10 10	R R R R
SWMU 28-003	8/18/94 CSVH032853.D	Dichlorodi-fluoromethane	83.6	1.806	48BS00505 48SS00301 48SS00401 48SS00401D	11 10 10 10	U U U U	11 10 10 10	UJ UJ UJ UJ
SWMU 28-003	8/18/94 CSVH032853.D	1,4-Dioxane	7.1	0.005	48BS00505 48SS00301 48SS00401 48SS00401D	210 210 210 210	U U U U	210 210 210 210	R R R R
SWMU 28-003	8/19/94 VOL4751	Chloroethane	31.6	0.904	04T058*	10	U	10	UJ
SWMU 28-003	8/19/94 VOL4751	Acetone	32.1	0.167	04T058*	10	--	10	J
SWMU 28-003	8/19/94 VOL4751	2-Hexanone	25.9	0.203	04T058*	10	U	10	UJ
SWMU 28-003	8/19/94 VOL4752	Dichlorodi-fluoromethane	61.2	0.819	04T058*	10	U	10	UJ
SWMU 28-003	8/19/94 VOL4752	Trichloro-fluoromethane	33.2	2.983	04T058*	5	U	5	UJ
SWMU 28-003	8/19/94 VOL4752	Acetonitrile	25.1	0.298	04T058*	100	U	100	UJ
SWMU 28-003	8/19/94 VOL4752	Chloro-butadiene	35.9	1.375	04T058*	200	U	200	UJ
SWMU 28-003	8/19/94 VOL4752	Acrylonitrile	36.2	0.132	04T058*	100	U	100	UJ

SWMU 28-003	8/19/94 VOL4752	3-Chloropropene	27.5	0.387	04T058*	5	U	5	UJ
SWMU 28-003	8/19/94 VOL4752	1,4-Dioxane	25.0	0.003	04T058*	500	U	500	R
SWMU 28-003	8/19/94 VOL4752	1,4-Dichloro-2-butene	28.3	0.077	04T058*	5	U	5	UJ
SWMU 28-003	8/19/94 VOL4752	1,2-Dibromo-3-chloropropene	25.5	0.193	04T058*	10	U	10	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 5-001	8/14/94 94M2V04300-94M2V04304	2-Hexanone	36.8	0.570	04T058*	10	U	--	--
SWMU 5-001	8/14/94 94M2V04300-94M2V04304	4-Methyl-2-pentanone	35.4	0.763	04T058*	10	U	--	--
SWMU 5-001	8/14/94 94M2V04300-94M2V04304	Acrolein	33.2	0.163	04T058*	100	U	--	--
SWMU 5-001	6/30/94 94M2V03652-94M2V03656	Isobutyl Alcohol	40.2	0.012	05SS01001 05SS01001D 05SS01301 05SS00501 05SS00601	210 210 230 210 220	U U U U U	210 210 230 210 220	R R R R R
SWMU 5-001	6/30/94 94M2V03652-94M2V03656	1,4-Dioxane	35.8	0.004	05SS01001 05SS01001D 05SS01301 05SS00501 05SS00601	210 210 230 210 220	U U U U U	210 210 230 210 220	R R R R R
SWMU 5-001	6/30/94 94M2V03652-94M2V03656	Acetonitrile	45.3	0.136	05SS01001 05SS01001D 05SS01301 05SS00501 05SS00601	100 100 110 100 110	U U U U U	-- -- -- -- --	-- -- -- -- --
SWMU 5-001	8/22/94 94M2V04466-94M2V04470	Isobutyl Alcohol	31.3	0.022	05SS00901	220	U	220	R
SWMU 5-001	8/22/94 94M2V04466-94M2V04470	1,4-Dioxane	38.4	0.006	05SS00901	220	U	220	R
SWMU 5-001	6/30/94 94M2V03652-94M2V03656	Isobutyl Alcohol	40.2	0.012	05SS00101 05SS00201 05SS00401 05SS01701 05SS00801 05SS01201 05SS01401 05T059* 05R018*	220 240 270 220 240 220 240 200 200	U U U U U U U U U	220 240 270 220 240 220 240 200 200	R R R R R R R R R

SWMU 5-001	6/30/94 94M2V03652-94M2V03656	1,4-Dioxane	35.8	0.004	05SS00101	220	U	220	R
					05SS00201	240	U	240	R
					05SS00401	270	U	270	R
					05SS01701	220	U	220	R
					05SS00801	240	U	240	R
					05SS01201	220	U	220	R
					05SS01401	240	U	240	R
					05T059*	200	U	200	R
					05R018*	200	U	200	R
SWMU 5-001	6/30/94 94M2V03652-94M2V03656	Acetonitrile	45.3	0.136	05SS00101	110	U	110	UJ
					05SS00201	120	U	120	UJ
					05SS00401	140	U	140	UJ
					05SS01701	110	U	110	UJ
					05SS00801	120	U	120	UJ
					05SS01201	110	U	110	UJ
					05SS01401	120	U	120	UJ
					05T059*	100	U	100	UJ
					05R018*	100	U	100	UJ
SWMU 5-001	8/22/94 94M2V04466-94M2V04470	Isobutyl Alcohol	31.3	0.022	05BS00107	290	U	290	R
					05BS00208	380	U	380	R
					05BS00306	270	U	270	R
					05BS00606	250	U	250	R
					05BS00606D	230	U	230	R
					05BS01307	260	U	260	R
					05T066*	200	U	200	R
SWMU 5-001	8/22/94 94M2V04466-94M2V04470	1,4-Dioxane	38.4	0.006	05BS00107	290	U	290	R
					05BS00208	380	U	380	R
					05BS00306	270	U	270	R
					05BS00606	250	U	250	R
					05BS00606D	230	U	230	R
					05BS01307	260	U	260	R
					05T066*	200	U	200	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 5-001	8/14/94 94M2V04300	Acrylonitrile	25.4	0.303	04T058*	100	U	100	UJ
SWMU 5-001	8/14/94 94M2V04306	Isobutyl Alcohol	91.7	0.023	04T058*	200	U	200	R
SWMU 5-001	8/14/94 94M2V04306	1,4-Dioxane	50.0	0.006	04T058*	200	U	200	R
SWMU 5-001	8/14/94 94M2V04306	Dichlorodi-fluoromethane	56.6	2.044	04T058*	10	U	10	UJ

SWMU 5-001	8/14/94 94M2V04306	3-Chloropropene	52.1	0.604	04T058*	5	U	5	UJ
SWMU 5-001	8/14/94 94M2V04306	Chloropropene	58.3	2.009	04T058*	200	U	200	UJ
SWMU 5-001	8/18/94 94M2V04380	Isobutyl Alcohol	25.0	0.015	05SS01001	210	U	210	R
					05SS01001D	210	U	210	R
					05SS01301	230	U	230	R
					05SS00501	210	U	210	R
					05SS00601	220	U	220	R
SWMU 5-001	8/18/94 94M2V04380	1,4-Dioxane	50.0	0.002	05SS01001	210	U	210	R
					05SS01001D	210	U	210	R
					05SS01301	230	U	230	R
					05SS00501	210	U	210	R
					05SS00601	220	U	220	R
SWMU 5-001	8/18/94 94M2V04380	Dichlorodi-fluoromethane	35.8	1.774	05SS01001	10	U	10	UJ
					05SS01001D	10	U	10	UJ
					05SS01301	11	U	11	UJ
					05SS00501	10	U	10	UJ
					05SS00601	11	U	11	UJ
SWMU 5-001	8/18/94 94M2V04380	Acetonitrile	72.1	0.234	05SS01001	100	U	100	UJ
					05SS01001D	100	U	100	UJ
					05SS01301	110	U	110	UJ
					05SS00501	100	U	100	UJ
					05SS00601	110	U	110	UJ
SWMU 5-001	8/18/94 94M2V04380	Methacrylo-nitrile	25.5	0.605	05SS01001	5	U	5	UJ
					05SS01001D	5	U	5	UJ
					05SS01301	6	U	6	UJ
					05SS00501	5	U	5	UJ
					05SS00601	5	U	5	UJ
SWMU 5-001	8/18/94 94M2V04380	1,2-dibromo-3-chloropropane	38.9	0.400	05SS01001	10	U	10	UJ
					05SS01001D	10	U	10	UJ
					05SS01301	11	U	11	UJ
					05SS00501	10	U	10	UJ
					05SS00601	11	U	11	UJ
SWMU 5-001	8/18/94 94M2V04380	Pentachloro-ethane	49.4	0.375	05SS01001	10	U	10	UJ
					05SS01001D	10	U	10	UJ
					05SS01301	11	U	11	UJ
					05SS00501	10	U	10	UJ
					05SS00601	11	U	11	UJ
SWMU 5-001	8/18/94 94M2V04380	Chloroprene	99.9	2.551	05SS01001	210	U	210	UJ
					05SS01001D	210	U	210	UJ
					05SS01301	230	U	230	UJ
					05SS00501	210	U	210	UJ
					05SS00601	220	U	220	UJ

SWMU 5-001	8/23/94 94M2V04472	Isobutyl Alcohol	22.7	0.017	05SS00901	220	U	220	R
SWMU 5-001	8/23/94 94M2V04472	1,4-Dioxane	0.0	0.006	05SS00901	220	U	220	R
SWMU 5-001	8/23/94 94M2V04475	Dibromochloro-methane	28.5	0.870	05SS00901	5	U	5	UJ
SWMU 5-001	8/23/94 94M2V04475	Bromoform	46.6	0.915	05SS00901	5	U	5	UJ
SWMU 5-001	8/23/94 94M2V04475	Tetrachloro-ethene	32.8	0.639	05SS00901	5	U	5	UJ
SWMU 5-001	8/23/94 94M2V04475	Iodomethane	33.2	3.755	05SS00901	11	U	11	UJ
SWMU 5-001	8/14/94 94M2V04300	1,2-Dichloroethane	26.5	2.512	04T058	5	U	5	UJ
SWMU 5-001	8/14/94 94M2V04300	2-Butanone	28.4	0.048	04T058	10	U	10	R
SWMU 5-001	8/14/94 94M2V04300	Trans-1,3-dichloropropene	26.6	0.517	04T058	5	U	5	UJ
SWMU 5-001	8/14/94 94M2V04300	2-Hexanone	37.5	0.356	04T058	10	U	10	UJ
SWMU 5-001	8/14/94 94M2V04300	4-Methyl-2-pentanone	37.0	0.481	04T058	10	U	10	UJ
SWMU 5-001	8/17/94 94M2V04358	Isobutyl Alcohol	50.0	0.018	05SS00101 05SS00201 05SS00401 05T059	220 240 270 200	U U U U	220 240 270 200	R R R R
SWMU 5-001	8/17/94 94M2V04358	1,4-Dioxane	25.0	0.003	05SS00101 05SS00201 05SS00401 05T059	220 240 270 200	U U U U	220 240 270 200	R R R R
SWMU 5-001	8/17/94 94M2V04358	Dichlorodi-fluoromethane	33.8	1.747	05SS00101 05SS00201 05SS00401 05T059	11 12 14 10	U U U U	11 12 14 10	UJ UJ UJ UJ
SWMU 5-001	8/17/94 94M2V04358	Acetonitrile	32.4	0.180	05SS00101 05SS00201 05SS00401 05T059	110 120 140 100	U U U U	110 120 140 100	UJ UJ UJ UJ

SWMU 5-001	8/17/94 94M2V04358	Pentachloro-ethane	35.9	0.341	05SS00101 05SS00201 05SS00401 05T059	11 12 14 10	U U U U	11 12 14 10	UJ UJ UJ UJ
SWMU 5-001	8/17/94 94M2V04358	Chloroprene	97.4	2.505	05SS00101 05SS00201 05SS00401 05T059	220 240 270 200	U U U U	220 240 270 200	UJ UJ UJ UJ
SWMU 5-001	8/18/94 94M2V04379	Isobutyl Alcohol	25.0	0.015	05SS01701 05SS00801 05SS01201 05SS01401 05R018	220 240 220 240 200	U U U U U	220 240 220 240 200	R R R R R
SWMU 5-001	8/18/94 94M2V04379	1,4-Dioxane	50.0	0.002	05SS01701 05SS00801 05SS01201 05SS01401 05R018	220 240 220 240 200	U U U U U	220 240 220 240 200	R R R R R
SWMU 5-001	8/18/94 94M2V04379	Dichlorodi-fluoromethane	35.8	1.774	05SS01701 05SS00801 05SS01201 05SS01401 05R018	11 12 11 12 10	U U U U U	11 12 11 12 10	UJ UJ UJ UJ UJ
SWMU 5-001	8/18/94 94M2V04379	Acetonitrile	72.1	0.234	05SS01701 05SS00801 05SS01201 05SS01401 05R018	110 120 110 120 100	U U U U U	110 120 110 120 100	UJ UJ UJ UJ UJ
SWMU 5-001	8/18/94 94M2V04379	Methacrylo-nitrile	25.5	0.605	05SS01701 05SS00801 05SS01201 05SS01401 05R018	5 6 6 6 5	U U U U U	5 6 6 6 5	UJ UJ UJ UJ UJ
SWMU 5-001	8/18/94 94M2V04379	1,2-Dibromo-3-chloropropane	38.9	0.400	05SS01701 05SS00801 05SS01201 05SS01401 05R018	11 12 11 12 10	U U U U U	11 12 11 12 10	UJ UJ UJ UJ UJ
SWMU 5-001	8/18/94 94M2V04379	Pentachloro-ethane	49.4	0.375	05SS01701 05SS00801 05SS01201 05SS01401 05R018	11 12 11 12 10	U U U U U	11 12 11 12 10	UJ UJ UJ UJ UJ

SWMU 5-001	8/18/94 94M2V04379	Chloroprene	99.9	2.551	05SS01701 05SS00801 05SS01201 05SS01401 05R018	220 240 220 240 200	U U U U U	220 240 220 240 200	UJ UJ UJ UJ UJ
SWMU 5-001	9/6/94 94M2V04675	Isobutyl Alcohol	45.4	0.012	05T066	200	U	200	R
SWMU 5-001	9/6/94 94M2V04675	1,4-Dioxane	16.7	0.005	05T066	200	U	200	R
SWMU 5-001	9/6/94 94M2V04675	Acetonitrile	57.1	0.084	05T066	100	U	100	UJ
SWMU 5-001	9/6/94 94M2V04675	Propionitrile	31.4	0.208	05T066	100	U	100	UJ
SWMU 5-001	9/6/945 94M2V04675	Methacrylo-nitrile	31.1	0.518	05T066	5	U	5	UJ
SWMU 5-001	9/6/94 94M2V04675	Methyl Methacrylate	32.6	0.293	05T066	10	U	10	UJ
SWMU 5-001	9/6/94 94M2V04675	1,2-Dibromoethane	26.7	0.983	05T066	5	U	5	UJ
SWMU 5-001	9/6/94 94M2V04675	1,2-Dibromo-3-chloropropane	43.1	0.340	05T066	10	U	10	UJ
SWMU 5-001	9/6/94 94M2V04675	Pentachloro-ethane	36.2	0.340	05T066	10	U	10	UJ
SWMU 5-001	9/8/94 94M2V04739	Isobutyl Alcohol	45.4	0.012	05BS00107 05BS00208 05BS00306 05BS00606 05BS00606D 05BS01307	290 380 270 250 230 260	U U U U U U	290 380 270 250 230 260	R R R R R R
SWMU 5-001	9/8/94 94M2V04739	1,4-Dioxane	16.7	0.005	05BS00107 05BS00208 05BS00306 05BS00606 05BS00606D 05BS01307	290 380 270 250 230 260	U U U U U U	290 380 270 250 230 260	R R R R R R
SWMU 5-001	9/8/94 94M2V04739	3-Chloropropene	30.3	0.402	05BS00107 05BS00208 05BS00306 05BS00606 05BS00606D 05BS01307	7 9 7 6 6 6	U U U U U U	7 9 7 6 6 6	UJ UJ UJ UJ UJ UJ

SWMU 5-001	9/8/94 94M2V04739	Propionitrile	30.0	0.212	05BS00107	140	U	140	UJ
					05BS00208	190	U	190	UJ
					05BS00306	130	U	130	UJ
					05BS00606	120	U	120	UJ
					05BS00606D	120	U	120	UJ
					05BS01307	130	U	130	UJ
SWMU 5-001	9/8/94 94M2V04739	Methacrylo-nitrile	31.6	0.514	05BS00107	7	U	7	UJ
					05BS00208	9	U	9	UJ
					05BS00306	7	U	7	UJ
					05BS00606	6	U	6	UJ
					05BS00606D	6	U	6	UJ
					05BS01307	6	U	6	UJ
SWMU 5-001	9/8/94 94M2V04739	Methyl Methacrylate	31.0	0.300	05BS00107	14	U	14	UJ
					05BS00208	19	U	19	UJ
					05BS00306	13	U	13	UJ
					05BS00606	12	U	12	UJ
					05BS00606D	12	U	12	UJ
					05BS01307	13	U	13	UJ
SWMU 5-001	9/8/94 94M2V04739	1,2-Dibromoethane	29.0	0.952	05BS00107	7	U	7	UJ
					05BS00208	9	U	9	UJ
					05BS00306	7	U	7	UJ
					05BS00606	6	U	6	UJ
					05BS00606D	6	U	6	UJ
					05BS01307	6	U	6	UJ
SWMU 5-001	9/8/94 94M2V04739	1,2-Dibromo-3-chloropropane	41.0	0.353	05BS00107	14	U	14	UJ
					05BS00208	19	U	19	UJ
					05BS00306	13	U	13	UJ
					05BS00606	12	U	12	UJ
					05BS00606D	12	U	12	UJ
					05BS01307	13	U	13	UJ
SWMU 5-001	9/8/94 94M2V04739	Pentachloro-ethane	36.8	0.332	05BS00107	14	U	14	UJ
					05BS00208	19	U	19	UJ
					05BS00306	13	U	13	UJ
					05BS00606	12	U	12	UJ
					05BS00606D	12	U	12	UJ
					05BS01307	13	U	13	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 5-002	7/21/94 EV01701017.D-EV02101021.D	1,4-Dioxane	1.4	0.004	05R021 05T067	200 ug/l	U	200 ug/l	R
SWMU 5-002	9/1/94 EV03901039.D-EV04301043.D	1,4-Dioxane	6.7	0.004	05T069	200 ug/l	U	200 ug/l	R
SWMU 5-002	9/1/94 EV03901039.D-EV04301043.D	2-Chloroethyl vinyl ether	31.9	0.212	05T069	10 ug/l	U	--	--
SWMU 5-002	8/8/94 CSVH032713.D-CSVH032717.D	2-Butanone	14.5	0.047	05BS02107 05SS02001 05SS02001D 05BS02009 05SS01901 05BS01909 05SS00701 05BS00704 05BS00409 05SS01101 05BS01107	14 11 11 14 12 14 12 13 14 12 2	U U U U U U U U J U J	14 11 11 14 12 14 12 13 14 12 2	R R R R R R R R J R J
SWMU 5-002	8/8/94 CSVH032713.D-CSVH032717.D	1,4-Dioxane	13.5	0.005	05BS02107 05SS02001 05SS02001D 05BS02009 05SS01901 05BS01909 05SS00701 05BS00704 05BS00409 05SS01101 05BS01107	270 220 220 270 230 270 240 270 480 230 240	U	270 220 220 270 230 270 240 270 480 230 240	R
SWMU 5-002	8/8/94 CSVH032713.D-CSVH032717.D	Acetone	37.9	0.511	05BS00409	85	--	85	J

SWMU 5-002	8/8/94 CSVH032713.D-CSVH032717.D	2-Butanone	14.5	0.047	05BS00509	12	J	12	J
					05BS00909	6	J	6	J
					05BS01509	3	J	3	J
					05BS01709	14	U	14	R
					05BS01807	12	J	12	J
					05SS02101	11	U	11	R
					05BS01009	13	U	13	R
					05BS00909D	15	U	15	R
					05BS01610	4	J	4	J
SWMU 5-002	8/8/94 CSVH032713.D-CSVH032717.D	1,4-Dioxane	13.5	0.005	05BS00509	280	U	280	R
					05BS00909	310	U	310	R
					05BS01509	260	U	260	R
					05BS01709	270	U	270	R
					05BS01807	250	U	250	R
					05SS02101	220	U	220	R
					05BS01009	260	U	260	R
					05BS00909D	300	U	300	R
					05BS01610	240	U	240	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 5-002	8/31/94 EV01601016.D	1,4-Dioxane	2.8	0.004	05R021 05T067	200 ug/l	U	200 ug/l	R
SWMU 5-002	8/31/94 EV01601016.D	Bromo-methane	38.1	0.932	05R021 05T067	10 ug/l	U	10 ug/l	UJ
SWMU 5-002	8/31/94 EV01601016.D	Vinyl acetate	39.7	0.437	05R021 05T067	10 ug/l	U	10 ug/l	UJ
SWMU 5-002	8/31/94 EV01601016.D	Iodomethane	30.6	2.429	05R021 05T067	10 ug/l	U	10 ug/l	UJ
SWMU 5-002	9/2/94 EV05701057.D	1,4-Dioxane	10.1	0.004	05T069	200 ug/l	U	200 ug/l	R
SWMU 5-002	9/2/94 EV05701057.D	Bromo-methane	39.4	1.714	05T069	10 ug/l	U	10 ug/l	UJ
SWMU 5-002	9/7/94 CSVH033014.D	2-Butanone	2.8	0.045	05BS02107	14	U	14	R
					05SS02001	11	U	11	R
					05SS02001D	11	U	11	R
					05BS02009	14	U	14	R
					05SS01901	12	U	12	R
					05BS01909	14	U	14	R
					05SS00701	12	U	12	R
					05BS00704	13	U	13	R

SWMU 5-002	9/7/94 CSVH033014.D	1,4-Dioxane	7.2	0.005	05BS02107	270	U	270	R
					05SS02001	220	U	220	R
					05SS02001D	220	U	220	R
					05BS02009	270	U	270	R
					05SS01901	230	U	230	R
					05BS01909	270	U	270	R
					05SS00701	240	U	240	R
					05BS00704	270	U	270	R
SWMU 5-002	9/7/94 CSVH033014.D	Dichlorodi-fluoromethane	47.3	1.449	05BS02107	14	U	14	UJ
					05SS02001	11	U	11	UJ
					05SS02001D	11	U	11	UJ
					05BS02009	14	U	14	UJ
					05SS01901	12	U	12	UJ
					05BS01909	14	U	14	UJ
					05SS00701	12	U	12	UJ
					05BS00704	13	U	13	UJ
SWMU 5-002	9/8/94 CSVH033032.D	2-Butanone	5.6	0.044	05BS00409	14	J	14	J
					05SS01101	12	U	12	R
					05BS01107	2	J	2	J
SWMU 5-002	9/8/94 CSVH033032.D	1,4-Dioxane	10.8	0.005	05BS00409	480	U	480	R
					05SS01101	230	U	230	R
					05BS01107	240	U	240	R
SWMU 5-002	9/8/94 CSVH033032.D	Bromo-methane	28.8	0.981	05BS00409	24	U	24	UJ
					05SS01101	12	U	12	UJ
					05BS01107	12	U	12	UJ
SWMU 5-002	9/8/94 CSVH033033.D	Acetonitrile	27.8	0.201	05BS00409	240	U	240	UJ
					05SS01101	120	U	120	UJ
					05BS01107	120	U	120	UJ
SWMU 5-002	9/8/94 CSVH033032.D	Dichlorodi-fluoromethane	112	2.088	05BS00409	24	U	24	UJ
					05SS01101	12	U	12	UJ
					05BS01107	12	U	12	UJ
SWMU 5-002	9/6/94 CSVH032995.D	2-Butanone	2.4	0.048	05BS00509	12	J	12	J
					05BS00909	6	J	6	J
					05BS01509	3	J	3	J
					05BS01709	14	U	14	R
					05BS01807	12	J	12	J
					05SS02101	11	U	11	R
SWMU 5-002	9/6/94 CSVH032995.D	1,4-Dioxane	5.1	0.005	05BS00509	280	U	280	R
					05BS00909	310	U	310	R
					05BS01509	260	U	260	R
					05BS01709	270	U	270	R
					05BS01807	250	U	250	R
					05SS02101	220	U	220	R

SWMU 5-002	9/6/94 CSVH032995.D	Bromo-methane	25.5	1.027	05BS00509	14	U	14	UJ
					05BS00909	16	U	16	UJ
					05BS01509	13	U	13	UJ
					05BS01709	14	U	14	UJ
					05BS01807	12	U	12	UJ
					05SS02101	11	U	11	UJ
SWMU 5-002	9/6/94 CSVH032995.D	Dichlorodi-fluoromethane	48.2	1.457	05BS00509	14	U	14	UJ
					05BS00909	16	U	16	UJ
					05BS01509	13	U	13	UJ
					05BS01709	14	U	14	UJ
					05BS01807	12	U	12	UJ
					05SS02101	11	U	11	UJ
SWMU 5-002	9/7/94 CSVH033014.D	2-Butanone	2.8	0.045	05BS01009	13	U	13	R
					05BS00909D	15	U	15	R
					05BS01610	4	J	4	J
SWMU 5-002	9/7/94 CSVH033014.D	1,4-Dioxane	7.2	0.005	05BS01009	260	U	260	R
					05BS00909D	300	U	300	R
					05BS01610	240	U	240	R
SWMU 5-002	9/7/94 CSVH033014.D	Dichlorodi-fluoromethane	47.3	1.449	05BS01009	13	U	13	UJ
					05BS00909D	15	U	15	UJ
					05BS01610	12	U	12	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 5-003	8/22/94 94M2V04466-94M2V04470	Isobutyl Alcohol	31.3	0.022	05SS00301 05SS00301D 05SS01501 05SS01601 05SS01801 05R023 05T074	220 220 230 200 220 200 ug/L 200 ug/L	U	220 220 230 200 220 200 ug/L 200 ug/L	R
SWMU 5-003	8/22/94 94M2V04466-94M2V04470	1,4-Dioxane	38.4	0.006	05SS00301 05SS00301D 05SS01501 05SS01601 05SS01801 05R023 05T074	220 220 230 200 220 200 ug/L 200 ug/L	U	220 220 230 200 220 200 ug/L 200 ug/L	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 5-003	9/12/94 94M2V04783	Isobutyl Alcohol	63.6	0.008	05SS00301 05SS00301D 05R023*	220 220 200	U	220 220 200	R
SWMU 5-003	9/12/94 94M2V04783	1,4-Dioxane	16.7	0.005	05SS00301 05SS00301D 05R023*	220 220 200	U	220 220 200	R
SWMU 5-003	9/12/94 94M2V04783	3-Chloropropene	31.2	0.397	05SS00301 05SS00301D 05R023*	5 5 5	U	5 5 5	UJ
SWMU 5-003	9/12/94 94M2V04783	Propionitrile	34.6	0.198	05SS00301 05SS00301D 05R023*	110 110 100	U	110 110 100	UJ
SWMU 5-003	9/12/94 94M2V04783	Methacrylo-nitrile	31.2	0.517	05SS00301 05SS00301D 05R023*	5 5 5	U	5 5 5	UJ
SWMU 5-003	9/12/94 94M2V04783	Methyl methacrylate	29.7	0.306	05SS00301 05SS00301D 05R023*	11 11 10	U	11 11 10	UJ

SWMU 5-003	9/12/94 94M2V04783	1,2- Dibromoethane	25.5	0.999	05SS00301 05SS00301D 05R023*	5 5 5	U U U	5 5 5	UJ UJ UJ
SWMU 5-003	9/12/94 94M2V04783	1,2-Dibromo-3- Chloropropane	40.6	0.355	05SS00301 05SS00301D 05R023*	11 11 10	U U U	11 11 10	UJ UJ UJ
SWMU 5-003	9/12/94 94M2V04783	Pentachloro- ethane	34.3	0.350	05SS00301 05SS00301D 05R023*	11 11 10	U U U	11 11 10	UJ UJ UJ
SWMU 5-003	9/19/94 94M2V04884	2-Butanone	17.5	0.047	05SS01501 05SS01801 05T074*	11 11 10	U U U	11 11 10	R R R
SWMU 5-003	9/19/94 94M2V04885	Isobutyl Alcohol	45.4	0.012	05SS01501 05SS01801 05T074*	230 220 200	U U U	230 220 200	R R R
SWMU 5-003	9/19/94 94M2V04885	1,4-Dioxane	16.7	0.005	05SS01501 05SS01801 05T074*	230 220 200	U U U	230 220 200	R R R
SWMU 5-003	9/19/94 94M2V04884	Acetone	30.3	0.679	05SS01501 05SS01801 05T074*	11 27 5	U U J	11 27 5	UJ UJ J
SWMU 5-003	9/19/94 94M2V04884	2-Chloroethyl vinyl ether	32.3	0.197	05SS01501 05SS01801 05T074*	11 11 10	U U U	11 11 10	UJ UJ UJ
SWMU 5-003	9/19/94 94M2V04885	Dichlorodi- fluoromethane	26.6	1.463	05SS01501 05SS01801 05T074*	11 11 10	U U U	11 11 10	UJ UJ UJ
SWMU 5-003	9/19/94 94M2V04885	3- Chloropropene	38.0	0.358	05SS01501 05SS01801 05T074*	6 6 5	U U U	6 6 5	UJ UJ UJ
SWMU 5-003	9/19/94 94M2V04885	Propionitrile	31.0	0.209	05SS01501 05SS01801 05T074*	110 110 100	U U U	110 110 100	UJ UJ UJ
SWMU 5-003	9/19/94 94M2V04885	Methacrylo- nitrile	32.4	0.508	05SS01501 05SS01801 05T074*	6 6 5	U U U	6 6 5	UJ UJ UJ
SWMU 5-003	9/19/94 94M2V04885	Methyl methacrylate	34.9	0.283	05SS01501 05SS01801 05T074*	11 11 10	U U U	11 11 10	UJ UJ UJ

SWMU 5-003	9/19/94 94M2V04885	1,2-Dibromoethane	35.9	0.860	05SS01501 05SS01801 05T074*	6 6 5	U U U	6 6 5	UJ UJ UJ
SWMU 5-003	9/19/94 94M2V04885	1,2-Dibromo-3-chloropropane	44.2	0.334	05SS01501 05SS01801 05T074*	11 11 10	U U U	11 11 10	UJ UJ UJ
SWMU 5-003	9/19/94 94M2V04885	Pentachloro-ethane	42.0	0.309	05SS01501 05SS01801 05T074*	11 11 10	U U U	11 11 10	UJ UJ UJ
SWMU 5-003	9/20/94 94M2V04905	Isobutyl Alcohol	45.4	0.012	05SS01601	200	U	200	R
SWMU 5-003	9/20/94 94M2V04905	1,4-Dioxane	0.0	0.006	05SS01601	200	U	200	R
SWMU 5-003	9/20/94 94M2V04905	2-Butanone	14.0	0.049	05SS01601	10	U	10	R
SWMU 5-003	9/20/94 94M2V04905	3-Chloropropene	29.6	0.406	05SS01601	5	U	5	UJ
SWMU 5-003	9/20/94 94M2V04905	Propionitrile	29.0	0.215	05SS01601	100	U	100	UJ
SWMU 5-003	9/20/94 94M2V04905	Methacrylo-nitrile	28.3	0.539	05SS01601	5	U	5	UJ
SWMU 5-003	9/20/94 94M2V04905	Methyl methacrylate	32.3	0.295	05SS01601	10	U	10	UJ
SWMU 5-003	9/20/94 94M2V04905	1,2-Dibromoethane	30.6	0.931	05SS01601	5	U	5	UJ
SWMU 5-003	9/20/94 94M2V04905	1,2-Dibromo-3-chloropropane	44.8	0.330	05SS01601	10	U	10	UJ
SWMU 5-003	9/20/94 94M2V04905	Pentachloro-ethane	42.6	0.306	05SS01601	10	U	10	UJ
SWMU 5-003	9/20/94 94M2V04906	Acetone	29.6	0.686	05SS01601	10	U	10	UJ
SWMU 5-003	9/20/94 94M2V04906	Trichlorofluoro -methane	28.3	1.015	05SS01601	5	U	5	UJ
SWMU 5-003	9/20/94 94M2V04906	2-Chloroethyl vinyl ether	43.6	0.164	05SS01601	10	U	10	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 3-001	7/21/94 EV01701017.D-EV02101021.D	1,4-Dioxane	1.4	0.004	03R007	200 ug/L	U	200 ug/L	R
					03T027				
					03T028				
SWMU 3-001	6/29/94 CSVH032362.D-CSVH032366.D	2-Butanone	14.9	0.045	03SS00824	14	U	14	R
					03SS00824D	14	U	14	R
					03BS00832	12	U	12	R
					03BS00832D	12	U	12	R
					03SS00424	12	U	12	R
					03SS00524	12	U	12	R
					03SS00624	16	--	16	J
					03SS00724	11	U	11	R
					03BS00432	12	U	12	R
					03BS00532	12	U	12	R
					03BS00632	4	J	4	J
					03BS00732	3	J	3	J
SWMU 3-001	6/29/94 CSVH032362.D-CSVH032366.D	1,4-Dioxane	15.9	0.006	03SS00824	280	U	280	R
					03SS00824D	280		280	
					03BS00832	240		240	
					03BS00832D	240		240	
					03SS00424	230		230	
					03SS00524	240		240	
					03SS00624	210		210	
					03SS00724	220		220	
					03BS00432	240		240	
					03BS00532	240		240	
					03BS00632	260		260	
					03BS00732	240		240	
SWMU 3-001	6/29/94 CSVH032362.D-CSVH032366.D	Acetone	52.1	0.484	03SS00624	100	--	100	J
					03SS00724	38	--	38	J
SWMU 3-001	6/29/94 CSVH032362.D-CSVH032366.D	2-Butanone	14.9	0.045	03SS00301	12	U	12	R
					03SS00101	11	U	11	R
					03SS00201	12	U	12	R
					03BS00308	12	U	12	R
					03BS00108	13	U	13	R
					03BS00108DL	26	U	26	R
					03BS00208	3	J	3	J

SWMU 3-001	6/29/94 CSVH032362.D-CSVH032366.D	1,4-Dioxane	15.9	0.006	03SS00301 03SS00101 03SS00201 03BS00308 03BS00108 03BS00108DL 03BS00208	240 220 240 250 260 530 250	U U U U U U U	240 220 240 250 260 530 250	R R R R R R R
SWMU 3-001	6/29/94 CSVH032362.D-CSVH032366.D	Acetone	52.1	0.484	03BS00108 03BS00108DL	290 240	E D	290 240	J J

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 3-001	7/27/94 EV07001070.D	1,4-Dioxane	27.3	0.003	03R007 03T027	200 ug/L	U	200 ug/L	R
SWMU 3-001	7/28/94 EV08601086.D	1,4-Dioxane	0.7	0.004	03T028	200 ug/L	U	200 ug/L	R
SMWU 3-001	7/28/94 CSVH032558.D	2-Butanone	2.3	0.044	03SS00824 03SS00824D 03BS00832 03BS00832D 03SS00424 03SS00524	14 14 12 12 12 12	U U U U U U	14 14 12 12 12 12	R R R R R R
SWMU 3-001	7/28/94 CSVH032558.D	1,4-Dioxane	10.6	0.005	03SS00824 03SS00824D 03BS00832 03BS00832D 03SS00424 03SS00524	280 280 240 240 230 240	U U U U U U	280 280 240 240 230 240	R R R R R R
SWMU 3-001	7/28/94 CSVH032558.D	Acetone	40.4	0.288	03SS00824 03SS00824D 03BS00832 03BS00832D 03SS00424 03SS00524	46 38 31 30 12 16	U U U U U U	46 38 31 30 12 16	UJ UJ UJ UJ UJ UJ
SWMU 3-001	7/29/94 CSVH032578.D	2-Butanone	4.3	0.043	03SS00624 03SS00724 03BS00432 03BS00532	16 11 12 12	-- U U U	16 11 12 12	J R R R

SMWU 3-001	7/29/94 CSVH032578.D	1,4-Dioxane	8.9	0.005	03SS00624 03SS00724 03BS00432 03BS00532	210 220 240 240	U U U U	210 220 240 240	R R R R
SWMU 3-001	7/29/94 CSVH032578.D	Acetone	41.1	0.285	03SS00624 03SS00724 03BS00432 03BS00532	100 38 13 12	-- -- U U	100 38 13 12	J J UJ UJ
SWMU 3-001	8/01/94 CSVH032595.D	2-Butanone	8.4	0.042	03BS00632 03BS00732	4 3	J J	4 3	J J
SWMU 3-001	8/01/94 CSVH032595.D	1,4-Dioxane	18.3	0.005	03BS00632 03BS00732	260 240	U U	260 240	R R
SMWU 3-001	8/01/94 CSVH032595.D	Acetone	43.4	0.274	03BS00632 03BS00732	31 30	U U	31 30	UJ UJ
SWMU 3-001	8/01/94 CSVH032595.D	Acrolein	27.3	0.150	03BS00632 03BS00732	130 120	U U	130 120	UJ UJ
SWMU 3-001	8/01/94 CSVH032595.D	Methyl Methacrylate	48.9	0.188	03BS00632 03BS00732	13 12	U U	13 12	UJ UJ
SWMU 3-001	7/28/94 CSVH032558.D	2-Butanone	2.3	0.044	03SS00301 03SS00101 03SS00201 03BS00308 03BS00108	12 11 12 12 13	U U U U U	12 11 12 12 13	R R R R R
SMWU 3-001	7/28/94 CSVH032558.D	1,4-Dioxane	10.6	0.005	03SS00301 03SS00101 03SS00201 03BS00308 03BS00108	240 220 240 250 260	U U U U U	240 220 240 250 260	R R R R R
SWMU 3-001	7/28/94 CSVH032558.D	Acetone	40.4	0.288	03SS00301 03SS00101 03SS00201 03BS00308 03BS00108	28 12 12 18 290	U U U U E	28 12 12 18 290	UJ UJ UJ UJ J
SWMU 3-001	7/29/94 CSVH032578.D	2-Butanone	4.3	0.043	03BS00108DL 03BS00208	26 3	U J	26 3	R J
SWMU 3-001	7/29/94 CSVH032578.D	1,4-Dioxane	8.9	0.005	03BS00108DL 03BS00208	530 250	U U	530 250	R R
SMWU 3-001	7/29/94 CSVH032578.D	Acetone	41.4	0.285	03BS00108DL 03BS00208	240 24	D U	240 24	J UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 49-SED	8/22/94 94M2V04466-94M2V04470	Isobutyl Alcohol	31.3	0.022	49SD017 49SD017D 49SD016RE 49SD015 49SD014 49SD013 49R027 49T060	510 500 270 260 270 250 200 ug/L 200 ug/L	U	510 500 270 260 270 250 200 ug/L 200 ug/L	R
SWMU 49-SED	8/22/94 94M2V04466-94M2V04470	1,4-Dioxane	38.4	0.006	49SD017 49SD017D 49SD016RE 49SD015 49SD014 49SD013 49R027 49T060	510 500 270 260 270 250 200 ug/L 200 ug/L	U	510 500 270 260 270 250 200 ug/L 200 ug/L	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 49-SED	9/22/94 94M2V04947	Isobutyl Alcohol	50.0	0.011	49R027* 49T060* 49SD017 49SD017D	200 200 510 500	U	200 200 510 500	R
SMWU 49-SED	9/22/94 94M2V04947	1,4-Dioxane	16.7	0.005	49R027* 49T060* 49SD017 49SD017D	200 200 510 500	U	200 200 510 500	R
SWMU 49-SED	9/22/94 94M2V04947	3-Chloropropene	33.4	0.384	49R027* 49T060* 49SD017 49SD017D	5 5 13 12	U	5 5 13 12	UJ
SWMU 49-SED	9/22/94 94M2V04947	Propionitrile	35.6	0.195	49R027* 49T060* 49SD017 49SD017D	100 100 260 250	U	100 100 260 250	UJ

SWMU 49-SED	9/22/94 94M2V04947	Methacrylo- nitrile	32.7	0.506	49R027* 49T060* 49SD017 49SD017D	5 5 13 12	U	5 5 13 12	UJ
SMWU 49-SED	9/22/94 94M2V04947	Methyl methacrylate	32.0	0.296	49R027* 49T060* 49SD017 49SD017D	10 10 26 25	U	10 10 26 25	UJ
SWMU 49-SED	9/22/94 94M2V04947	1,2- Dibromoethane	26.2	0.989	49R027* 49T060* 49SD017 49SD017D	5 5 13 12	U	5 5 13 12	UJ
SWMU 49-SED	9/22/94 94M2V04947	1,2-Dibromo-3- Chloropropane	43.1	0.340	49R027* 49T060* 49SD017 49SD017D	10 10 26 25	U	10 10 26 25	UJ
SWMU 49-SED	9/22/94 94M2V04947	Pentachloro- ethane	35.6	0.343	49R027* 49T060* 49SD017 49SD017D	10 10 26 25	U	10 10 26 25	UJ
SMWU 49-SED	9/22/94 94M2V04948	2-Butanone	29.8	0.040	49R027* 49T060* 49SD017 49SD017D	10 10 26 25	U	10 10 26 25	R
SWMU 49-SED	9/23/94 94M2V04969	2-Chloroethyl vinyl ether	70.1	0.087	49R027* 49T060* 49SD017 49SD017D	10 10 26 25	U	10 10 26 25	UJ
SWMU 49-SED	9/23/94 94M2V04969	Isobutyl Alcohol	36.4	0.014	49SD016RE 49SD015 49SD014 49SD013	270 260 270 250	U	270 260 270 250	R
SWMU 49-SED	9/23/94 94M2V04969	1,4-Dioxane	0.0	0.006	49SD016RE 49SD015 49SD014 49SD013	270 260 270 250	U	270 260 270 250	R
SMWU 49-SED	9/23/94 94M2V04969	3- Chloropropene	29.1	0.409	49SD016RE 49SD015 49SD014 49SD013	7 6 7 6	U	7 6 7 6	UJ

SWMU 49-SED	9/23/94 94M2V04969	Propionitrile	25.7	0.225	49SD016RE 49SD015 49SD014 49SD013	140 130 140 130	U	140 130 140 130	UJ
SWMU 49-SED	9/23/94 94M2V04969	Methacrylo-nitrile	25.3	0.562	49SD016RE 49SD015 49SD014 49SD013	7 6 7 6	U	7 6 7 6	UJ
SWMU 49-SED	9/23/94 94M2V04969	Methyl methacrylate	26.7	0.319	49SD016RE 49SD015 49SD014 49SD013	14 13 14 13	U	14 13 14 13	UJ
SMWU 49-SED	9/23/94 94M2V04969	1,2-Dibromo-3-Chloropropane	38.8	0.366	49SD016RE 49SD015 49SD014 49SD013	14 13 14 13	U	14 13 14 13	UJ
SWMU 49-SED	9/23/94 94M2V0496	Pentachloro-ethane	34.7	0.348	49SD016RE 49SD015 49SD014 49SD013	14 13 14 13	U	14 13 14 13	UJ
SWMU 49-SED	9/23/94 94M2V04970	2-Butanone	19.3	0.046	49SD016RE 49SD015 49SD014 49SD013	14 13 14 13	U	14 13 14 13	R
SWMU 49-SED	9/23/94 94M2V04970	2-Chloroethyl vinyl ether	64.3	0.104	49SD016RE 49SD015 49SD014 49SD013	14 13 14 13	U	14 13 14 13	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 56-001	8/22/94 94M2V04466-94M2V04470	Isobutyl Alcohol	31.3	0.022	56SS00101	210	U	210	R
					56SS00101D	210	U	210	R
					56BS00104	250	U	250	R
					56SS00201	210	U	210	R
					56BS00204	230	U	230	R
					56SS00301	210	U	210	R
					56BS00304	230	U	230	R
					56SS00401	210	U	210	R
					56BS00405	260	U	260	R
					56R022*	200	U	200	R
					56T073*	200	U	200	R
SWMU 56-001	8/22/94 94M2V04466-94M2V04470	1,4-Dioxane	38.4	0.006	56SS00101	210	U	210	R
					56SS00101D	210	U	210	R
					56BS00104	250	U	250	R
					56SS00201	210	U	210	R
					56BS00204	230	U	230	R
					56SS00301	210	U	210	R
					56BS00304	230	U	230	R
					56SS00401	210	U	210	R
					56BS00405	260	U	260	R
					56R022*	200	U	200	R
					56T073*	200	U	200	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 56-001	9/9/94 94M2V04760	Isobutyl Alcohol	40.9	0.013	56T073*	200	U	200	R
					56R022*	200	U	200	R
					56SS00101D	210	U	210	R
					56BS00104	250	U	250	R
					56SS00201	210	U	210	R
SWMU 56-001	9/9/94 94M2V04760	1,4-Dioxane	0.0	0.006	56T073*	200	U	200	R
					56R022*	200	U	200	R
					56SS00101D	210	U	210	R
					56BS00104	250	U	250	R
					56SS00201	210	U	210	R
SWMU 56-001	9/9/94 94M2V04760	3-Chloropropene	26.9	0.422	56T073*	5	U	5	UJ
					56R022*	5	U	5	UJ
					56SS00101D	5	U	5	UJ
					56BS00104	6	U	6	UJ
					56SS00201	5	U	5	UJ

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 56-001	9/9/94 94M2V04760	Propionitrile	27.4	0.220	56T073*	100	U	100	UJ
					56R022*	100	U	100	UJ
					56SS00101D	100	U	100	UJ
					56BS00104	120	U	120	UJ
					56SS00201	100	U	100	UJ
SWMU 56-001	9/9/94 94M2V04760	Methacrylo-nitrile	27.8	0.543	56T073*	5	U	5	UJ
					56R022*	5	U	5	UJ
					56SS00101D	5	U	5	UJ
					56BS00104	6	U	6	UJ
					56SS00201	5	U	5	UJ
SWMU 56-001	9/9/94 94M2V04760	Methyl methacrylate	30.1	0.304	56T073*	10	U	10	UJ
					56R022*	10	U	10	UJ
					56SS00101D	10	U	10	UJ
					56BS00104	12	U	12	UJ
					56SS00201	10	U	10	UJ
SWMU 56-001	9/9/94 94M2V04760	1,2-Dibromoethane	27.5	0.972	56T073*	5	U	5	UJ
					56R022*	5	U	5	UJ
					56SS00101D	5	U	5	UJ
					56BS00104	6	U	6	UJ
					56SS00201	5	U	5	UJ
SWMU 56-001	9/9/94 94M2V04760	1,2-Dibromo-3-chloropropane	40.8	0.354	56T073*	10	U	10	UJ
					56R022*	10	U	10	UJ
					56SS00101D	10	U	10	UJ
					56BS00104	12	U	12	UJ
					56SS00201	10	U	10	UJ
SWMU 56-001	9/9/94 94M2V04760	Pentachloro-ethane	37.3	0.334	56T073*	10	U	10	UJ
					56R022*	10	U	10	UJ
					56SS00101D	10	U	10	UJ
					56BS00104	12	U	12	UJ
					56SS00201	10	U	10	UJ
SWMU 56-001	9/9/94 94M2V04761	2-Chloroethyl vinyl ether	32.3	0.197	56T073*	10	U	10	UJ
					56R022*	10	U	10	UJ
					56SS00101D	10	U	10	UJ
					56BS00104	12	U	12	UJ
					56SS00201	10	U	10	UJ

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 56-001	9/12/94 94M2V04783	Isobutyl alcohol	63.6	0.008	56SS00101	210	U	210	R
					56BS00204	230	U	230	R
					56SS00301	210	U	210	R
					56BS00304	230	U	230	R
					56SS00401	210	U	210	R
					56BS00405	260	U	260	R
SWMU 56-001	9/12/94 94M2V04783	1,4-Dioxane	16.7	0.005	56SS00101	210	U	210	R
					56BS00204	230	U	230	R
					56SS00301	210	U	210	R
					56BS00304	230	U	230	R
					56SS00401	210	U	210	R
					56BS00405	260	U	260	R
SWMU 56-001	9/12/94 94M2V04783	3-Chloropropene	31.2	0.397	56SS00101	5	U	5	UJ
					56BS00204	6	U	6	UJ
					56SS00301	5	U	5	UJ
					56BS00304	6	U	6	UJ
					56SS00401	5	U	5	UJ
					56BS00405	7	U	7	UJ
SWMU 56-001	9/12/94 94M2V04783	Propionitrile	34.6	0.198	56SS00101	110	U	110	UJ
					56BS00204	120	U	120	UJ
					56SS00301	110	U	110	UJ
					56BS00304	110	U	110	UJ
					56SS00401	100	U	100	UJ
					56BS00405	130	U	130	UJ
SWMU 56-001	9/12/94 94M2V04783	Methacrylo-nitrile	31.2	0.517	56SS00101	5	U	5	UJ
					56BS00204	6	U	6	UJ
					56SS00301	5	U	5	UJ
					56BS00304	6	U	6	UJ
					56SS00401	5	U	5	UJ
					56BS00405	7	U	7	UJ
SWMU 56-001	9/12/94 94M2V04783	Methyl Methacrylate	29.7	0.306	56SS00101	11	U	11	UJ
					56BS00204	12	U	12	UJ
					56SS00301	11	U	11	UJ
					56BS00304	11	U	11	UJ
					56SS00401	10	U	10	UJ
					56BS00405	13	U	13	UJ

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
SWMU 56-001	9/12/94 94M2V04783	1,2-Dibromo-methane	25.5	0.999	56SS00101	5	U	5	UJ
					56BS00204	6	U	6	UJ
					56SS00301	5	U	5	UJ
					56BS00304	6	U	6	UJ
					56SS00401	5	U	5	UJ
					56BS00405	7	U	7	UJ
SWMU 56-001	9/12/94 94M2V04783	1,2-Dibromo-3-chloropropane	40.6	0.355	56SS00101	11	U	11	UJ
					56BS00204	12	U	12	UJ
					56SS00301	11	U	11	UJ
					56BS00304	11	U	11	UJ
					56SS00401	10	U	10	UJ
					56BS00405	13	U	13	UJ
SWMU 56-001	9/12/94 94M2V04783	Pentachloro-ethane	34.3	0.350	56SS00101	11	U	11	UJ
					56BS00204	12	U	12	UJ
					56SS00301	11	U	11	UJ
					56BS00304	11	U	11	UJ
					56SS00401	10	U	10	UJ
					56BS00405	13	U	13	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
BGRO UND	11/30/94 94M2V05533-94M2V05537	1,4-Dioxane	20.9	0.012	0BBS00104D 0BBS00604 0BBS00504 0BBS00104 0BBS00404 0BT087 0BR035	220 230 220 220 220 200 200	U	220 230 220 220 220 200 200	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
BGRO UND	12/01/94 94M2V05549	1,4-Dioxane	33.3	0.008	0BBS00104D 0BBS00604 0BBS00504	220 230 220	U	220 230 220	R
BGRO UND	12/02/94 94M2V05570	1,4-Dioxane	8.3	0.011	0BT087 0BR035 0BBS00104 0BBS00404	200 200 220 220	U	200 200 220 220	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%RSD	RRF	Affected Samples	Lab Value ug/L	Lab Qual	EDS Value ug/L	EDS Qual
001W	7/12/94 94M1BN2257	4-Chloroaniline	34.9	0.278	02MW010S 02MW009I 02MW009ID 02K001	10	U	10	UJ
001W	7/12/94 94M1BN2257	Benzidine	47.6	0.220	02MW010S 02MW009I 02MW009ID 02K001	50	U	50	UJ
001W	7/12/94 94M1BN2258	Hexachlorophene	54.9	0.079	02MW010S 02MW009I 02MW009ID 02K001	500	U	500	UJ
001W	7/13/94 94M1BN2273	4-Chloroaniline	37.9	0.265	02R001	10	U	10	UJ
001W	7/13/94 94M1BN2273	Benzidine	63.8	0.244	02R001	50	U	50	UJ
001W	7/13/94 94M1BN2273	2-Naphthylamine	50.6	0.232	02R001	50	U	50	UJ
001W	7/13/94 94M1BN2273	4-Nitroquinoline-1-oxide	36.7	0.088	02R001	500	U	500	UJ
001W	7/13/94 94M1BN2273	Hexachlorophene	60.0	0.07	02R001	500	U	500	UJ
001W	7/14/94 94M1BN2285	4-Chloroaniline	38.9	0.261	02MW009S	10	U	10	UJ
001W	7/14/94 94M1BN2285	2,4-Dinitrophenol	26.6	0.163	02MW009S	50	U	50	UJ
001W	7/14/94 94M1BN2285	Benzidine	81.2	0.270	02MW009S	50	U	50	UJ
001W	7/14/94 94M1BN2270	Hexachlorophene	88.0	0.021	02MW009S	500	U	500	R
001W	7/14/94 94M1BN2270	N-Nitrosopiperidine	29.5	0.247	02MW009S	10	U	10	UJ
001W	7/14/94 94M1BN2270	2-Naphthylamine	54.7	0.213	02MW009S	50	U	50	UJ

001W	7/14/94 94M1BN2270	Phenacetin	25.9	0.314	02MW009S	10	U	10	UJ
001W	7/14/94 94M1BN2270	1,3,5- Trinitrobenzene	25.7	0.176	02MW009S	10	U	10	UJ
001W	7/14/94 94M1BN2270	4-Nitroquinoline- 1-oxide	49.6	0.070	02MW009S	500	U	500	UJ
001W	7/14/94 94M1BN2270	Methapyriline	37.7	0.351	02MW009S	50	U	50	UJ
001W	7/16/94 94M1BN2321	Benzidine	41.6	0.211	02MW003S 13MW005S 13MW004S 02MW007I 02MW007S 02MW017S	50	U	50	UJ
001W	7/16/94 94M1BN2321	4-Nitroquinoline- 1-oxide	44.6	0.077	02MW003S 13MW005S 13MW004S 02MW007I 02MW007S 02MW017S	500	U	500	UJ
001W	7/16/94 94M1BN2321	3,3,-Dimethyl- benzidine	26.9	0.228	02MW003S 13MW005S 13MW004S 02MW007I 02MW007S 02MW017S	10	U	10	UJ
001W	7/16/94 94M1BN2321	Hexachlorophene	70.3	0.052	02MW003S 13MW005S 13MW004S 02MW007I 02MW007S 02MW017S	500	U	500	UJ
001W	7/16/94 94M1BN2321	P-Phenylene- diamine	27.9	0.147	02MW003S 13MW005S 13MW004S 02MW007I 02MW007S 02MW017S	500	U	500	UJ
001W	7/18/94 94M1BN2353	4-Chloroaniline	31.4	0.293	02MW011S	10	U	10	UJ
001W	7/18/94 94M1BN2353	Benzidine	99.9	.308	02MW011S	50	U	50	UJ

001W	7/18/94 94M1BN2353	4-Nitroquinoline-1-oxide	43.2	0.079	02MW011S	500	U	500	UJ
001W	7/18/94 94M1BN2353	Methapyriline	32.0	0.383	02MW011S	50	U	50	UJ
001W	7/18/94 94M1BN2353	Hexachlorophene	69.1	0.054	02MW011S	500	U	500	UJ
001W	7/18/94 94M1BN2353	P-Phenylene-diamine	29.4	0.164	02MW011S	500	U	500	UJ

SDG No.	CCAL Date and File/ Batch Number of Stds.	Affected Analyte	% RSD	RRF	Affected Samples	Lab Value ug/L	Lab Qual	EDS Valu e ug/L	EDS Qual
002W	7/22/94 94M1BN2415	Aniline	31.0	1.510	11MW003S 11MW002S 11MW001S 16MW004S	10	U	10	UJ
002W	7/22/94 94M1BN2415	4-Chloro-aniline	26.9	0.312	11MW003S 11MW002S 11MW001S 16MW004S	10	U	10	UJ
002W	7/22/94 94M1BN2415	3-Nitroaniline	26.5	0.236	11MW003S 11MW002S 11MW001S 16MW004S	50	U	50	UJ
002W	7/22/94 94M1BN2415	2,4-Dinitrophenol	49.6	0.112	11MW003S 11MW002S 11MW001S 16MW004S	50	U	50	UJ
002W	7/22/94 94M1BN2415	4,6-Dinitro-2-methylphenol	43.3	0.110	11MW003S 11MW002S 11MW001S 16MW004S	50	U	50	UJ
002W	7/22/94 94M1BN2415	Benzidine	99.9	0.350	11MW003S 11MW002S 11MW001S 16MW004S	50	U	50	UJ
002W	7/22/94 94M1BN2416	N-Nitroso-piperidine	35.7	0.227	11MW003S 11MW002S 11MW001S 16MW004S	10	U	10	UJ

002W	7/22/94 94M1BN2416	Phenacetin	27.8	0.306	11MW003S 11MW002S 11MW001S 16MW004S	10	U	10	UJ
002W	7/22/94 94M1BN2416	1,4-Naphtho-quinone	99.9	0.178	11MW003S 11MW002S 11MW001S 16MW004S	1000	U	1000	UJ
002W	7/22/94 94M1BN2416	4-Nitroquinoline-1-oxide	48.2	0.072	11MW003S 11MW002S 11MW001S 16MW004S	500	U	500	UJ
002W	7/22/94 94M1BN2416	Methapyriline	30.2	0.393	11MW003S 11MW002S 11MW001S 16MW004S	50	U	50	UJ
002W	7/22/94 94M1BN2416	1,3,5-Trinitro-benzene	25.3	0.177	11MW003S 11MW002S 11MW001S 16MW004S	10	U	10	UJ
002W	7/22/94 94M1BN2416	Hexachloro-phene	41.7	0.102	11MW003S 11MW002S 11MW001S 16MW004S	500	U	500	UJ
002W	7/14/94 94M1BN2289	4-Chloroaniline	38.9	0.261	02MW012ID 02MW001S 02MW012I 02MW012S 02R002 22MW001S	10	U	10	R
002W	7/14/94 94M1BN2289	2,4-Dinitrophenol	26.6	0.163	02MW012ID 02MW001S 02MW012I 02MW012S 02R002 22MW001S	50	U	50	UJ
002W	7/14/94 94M1BN2289	Benzidine	81.2	0.270	02MW012ID 02MW001S 02MW012I 02MW012S 02R002 22MW001S	50	U	50	UJ

002W	7/14/94 94M1BN2290	Hexachloro-phene	88.0	0.021	02MW012ID 02MW001S 02MW012I 02MW012S 02R002 22MW001S	500	U	500	UJ
002W	7/14/94 94M1BN2290	N-Nitroso-piperidine	29.5	0.249	02MW012ID 02MW001S 02MW012I 02MW012S 02R002 22MW001S	10	U	10	UJ
002W	7/14/94 94M1BN2290	2-Naphthylamine	54.7	0.213	02MW012ID 02MW001S 02MW012I 02MW012S 02R002 22MW001S	50	U	50	UJ
002W	7/14/94 94M1BN2290	Phenacetin	25.9	0.314	02MW012ID 02MW001S 02MW012I 02MW012S 02R002 22MW001S	10	U	10	UJ
002W	7/14/94 94M1BN2290	1,3,5-Trinitro-benzene	25.7	0.176	02MW012ID 02MW001S 02MW012I 02MW012S 02R002 22MW001S	10	U	10	UJ
002W	7/14/94 94M1BN2290	4-Nitroquinoline -1-oxide	49.6	0.070	02MW012ID 02MW001S 02MW012I 02MW012S 02R002 22MW001S	500	U	500	UJ
002W	7/14/94 94M1BN2290	Methapyriline	37.7	0.351	02MW012ID 02MW001S 02MW012I 02MW012S 02R002 22MW001S	50	U	50	UJ
002W	7/16/94 94M1BN2321	Benzidine	41.6	0.211	13MW002S 13MW003S	50	U	50	UJ

002W	7/16/94 94M1BN2321	4- Nitroquinoline -1-oxide	44.6	0.077	13MW002S 13MW003S	500	U	500	UJ
002W	7/16/94 94M1BN2321	3,3-Dimethyl benzidine	26.9	0.228	13MW002S 13MW003S	10	U	10	UJ
002W	7/16/94 94M1BN2321	Hexachloro- phene	70.3	0.052	13MW002S 13MW003S	500	U	500	UJ
002W	7/16/94 94M1BN2321	p- Phenylene- diamine	27.9	0.142	13MW002S 13MW003S	500	U	500	UJ
002W	7/18/94 94M1BN2353	4- Chloroaniline	31.4	0.293	02MW002S 02MW015SR 02MW015IR 02MW008S 02MW008SD 16MW002S 16MW003S	10	U	10	UJ
002W	7/18/94 94M1BN2353	Benzidine	99.9	0.308	02MW002S 02MW015SR 02MW015IR 02MW008S 02MW008SD 16MW002S 16MW003S	50	U	50	UJ
002W	7/18/94 94M1BN2353	4- Nitroquinoline -1-oxide	43.2	0.079	02MW002S 02MW015SR 02MW015IR 02MW008S 02MW008SD 16MW002S 16MW003S	500	U	500	UJ
002W	7/18/94 94M1BN2353	Methapyriline	32.0	0.383	02MW002S 02MW015SR 02MW015IR 02MW008S 02MW008SD 16MW002S 16MW003S	50	U	50	UJ

002W	7/18/94 94M1BN2353	Hexachloro-phene	69.1	0.054	02MW002S 02MW015SR 02MW015IR 02MW008S 02MW008SD 16MW002S 16MW003S	500	U	500	UJ
002W	7/18/94 94M1BN2353	p-Phenylene-diamine	29.4	0.144	02MW002S 02MW015SR 02MW015IR 02MW008S 02MW008SD 16MW002S 16MW003S	500	U	500	UJ
002W	7/20/94 94M1BN2384	Aniline	26.4	1.610	16MW001I	10	U	10	UJ
002W	7/20/94 94M1BN2384	4-Chloroaniline	30.4	0.297	16MW001I	10	U	10	UJ
002W	7/20/94 94M1BN2384	3-Nitroaniline	28.7	0.229	16MW001I	50	U	50	UJ
002W	7/20/94 94M1BN2384	2,4-Dinitrophenol	37.4	0.139	16MW001I	50	U	50	UJ
002W	7/20/94 94M1BN2384	4,6-Dinitro-2-methylphenol	28.4	0.139	16MW001I	50	U	50	UJ
002W	7/20/94 94M1BN2384	Benzidine	99.9	0.308	16MW001I	50	U	50	UJ
002W	7/20/94 94M1BN2384	N-Nitroso-piperidine	31.7	0.241	16MW001I	10	U	10	UJ
002W	7/20/94 94M1BN2384	1,3,5-Trinitro-benzene	36.7	0.150	16MW001I	10	U	10	UJ
002W	7/20/94 94M1BN2384	4-Nitroquinoline-1-oxide	41.0	0.082	16MW001I	500	U	500	UJ
002W	7/20/94 94M1BN2384	Hexachloro-phene	87.4	0.022	16MW001I	500	U	500	UJ
002W	7/20/94 94M1BN2384	p-Phenylene-diamine	32.8	0.137	16MW001I	500	U	500	UJ

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/L	Lab Qual	EDS Value ug/L	EDS Qual
003W	7/24/94 94M1BN2447	N-Nitrosodi-methylamine	28.4	0.699	0BR003 0SMW001R 0SMW001RD	10	U	10	UJ
003W	7/24/94 94M1BN2447	Aniline	37.5	1.367	0BR003 0SMW001R 0SMW001RD	10	U	10	UJ
003W	7/24/94 94M1BN2447	4-Chloroaniline	41.7	0.249	0BR003 0SMW001R 0SMW001RD	10	U	10	UJ
003W	7/24/94 94M1BN2447	3-Nitroaniline	25.6	0.239	0BR003 0SMW001R 0SMW001RD	50	U	50	UJ
003W	7/24/94 94M1BN2447	2,4-Dinitrophenol	33.8	0.147	0BR003 0SMW001R 0SMW001RD	50	U	50	UJ
003W	7/24/94 94M1BN2447	4,6-Dinitro-2-Methylphenol	33.0	0.130	0BR003 0SMW001R 0SMW001RD	50	U	50	UJ
003W	7/24/94 94M1BN2447	Benzo (b) Fluoranthene	30.9	1.384	0BR003 0SMW001R 0SMW001RD	10	U	10	UJ
003W	7/24/94 94M1BN2447	Benzo (g,h,i) Perylene	27.9	1.099	0BR003 0SMW001R 0SMW001RD	10	U	10	UJ
003W	7/24/94 94M1BN2448	N-Nitrosopiperidine	43.1	0.201	0BR003 0SMW001R 0SMW001RD	10	U	10	UJ
003W	7/24/94 94M1BN2448	N-Nitrosodi-n-butylamine	29.2	0.194	0BR003 0SMW001R 0SMW001RD	10	U	10	UJ
003W	7/24/94 94M1BN2448	2-Naphthylamine	41.3	0.276	0BR003 0SMW001R 0SMW001RD	50	U	50	UJ
003W	7/24/94 94M1BN2448	Phenacetin	30.2	0.296	0BR003 0SMW001R 0SMW001RD	10	U	10	UJ

003W	7/24/94 94M1BN2448	4-Aminobiphenyl	46.5	0.184	0BR003 0SMW001R 0SMW001RD	50	U	50	UJ
003W	7/24/94 94M1BN2448	7,12- Dimethylbenz(a) anthracene	28.3	0.680	0BR003 0SMW001R 0SMW001RD	10	U	10	UJ
003W	7/24/94 94M1BN2448	1,4- Naphthoquinone	97.9	0.170	0BR003 0SMW001R 0SMW001RD	1000	U	1000	UJ
003W	7/24/94 94M1BN2448	4-Nitroquinoline- 1-oxide	46.8	0.074	0BR003 0SMW001R 0SMW001RD	500	U	500	UJ
003W	7/24/94 94M1BN2448	Methapyrilene	33.6	0.374	0BR003 0SMW001R 0SMW001RD	50	U	50	UJ
003W	7/24/94 94M1BN2448	3,3-Dimethyl- benzidine	57.0	0.134	0BR003 0SMW001R 0SMW001RD	10	U	10	UJ
003W	7/24/94 94M1BN2448	Hexachlorophene	58.3	0.073	0BR003 0SMW001R 0SMW001RD	500	U	500	UJ
003W	7/24/94 94M1BN2448	3-Methylchol anthrene	25.2	0.681	0BR003 0SMW001R 0SMW001RD	10	U	10	UJ
003W	7/24/94 94M1BN2447	Benzoic Acid	27.2	0.193	0BR003 0SMW001R 0SMW001RD	50	U	50	UJ
003W	8/01/94 94M1BN2546	4-Methylphenol	43.0	0.772	0BMW001S 0BMW001D 01MW001 0BMW001I	10	U	10	UJ
003W	8/01/94 94M1BN2546	Dibenz(a,h) anthracene	25.4	1.047	0BMW001S 0BMW001D 01MW001 0BMW001I	10	U	10	UJ
003W	8/01/94 94M1BN2546	Hexachloro- ethane	98.6	0.009	0BMW001S 0BMW001D 01MW001 0BMW001I	10	U	10	R

003W	8/01/94 94M1BN2546	Aniline	28.3	1.570	0BMW001S 0BMW001D 01MW001 0BMW001I	10	U	10	UJ
003W	8/01/94 94M1BN2546	N-Nitroso-di-n-propylamine	47.5	0.580	0BMW001S 0BMW001D 01MW001 0BMW001I	10	U	10	UJ
003W	8/01/94 94M1BN2546	Benzoic Acid	43.4	0.150	0BMW001S 0BMW001D 01MW001 0BMW001I	50	U	50	UJ
003W	8/01/94 94M1BN2546	2,4-Dinitrophenol	26.1	0.164	0BMW001S 0BMW001D 01MW001 0BMW001I	50	U	50	UJ
003W	8/01/94 94M1BN2546	Indeno(1,2,3-cd)pyrene	28.3	1.325	0BMW001S 0BMW001D 01MW001 0BMW001I	10	U	10	UJ
003W	8/01/94 94M1BN2546	Benzo(g,h,i) perylene	29.7	1.069	0BMW001S 0BMW001D 01MW001 0BMW001I	10	U	10	UJ
003W	8/01/94 94M1BN2547	4-Aminobiphenyl	99.4	0.002	0BMW001S 0BMW001D 01MW001 0BMW001I	50	U	50	UJ
003W	8/01/94 94M1BN2547	Hexachlorophene	95.4	0.008	0BMW001S 0BMW001D 01MW001 0BMW001I	500	U	500	UJ
003W	8/01/94 94M1BN2547	1,4-Naphthoquinone	99.9	0.178	0BMW001S 0BMW001D 01MW001 0BMW001I	1000	U	1000	UJ
003W	8/01/94 94M1BN2547	4-Nitroquinoline-1-oxide	42.4	0.080	0BMW001S 0BMW001D 01MW001 0BMW001I	500	U	500	UJ

003W	8/01/94 94M1BN2547	Methapyrilene	36.8	0.356	0BMW001S 0BMW001D 01MW001 0BMW001I	50	U	50	UJ
003W	8/01/94 94M1BN2547	P-Phenylene-diamine	27.9	0.147	0BMW001S 0BMW001D 01MW001 0BMW001I	500	U	50	UJ
003W	8/02/94 94M1BN2562	Aniline	33.9	1.446	0SMW002S 09MW001S 08MW008S 08MW006S 08MW006SD 02MW016D 26MW004S	10	U	10	UJ
003W	8/02/94 94M1BN2562	4-Chloroaniline	26.2	0.315	0SMW002S 09MW001S 08MW008S 08MW006S 08MW006SD 02MW016D 26MW004S	10	U	10	UJ
003W	8/02/94 94M1BN2562	Indeno(1,2,3-cd)pyrene	30.9	1.277	0SMW002S 09MW001S 08MW008S 08MW006S 08MW006SD 02MW016D 26MW004S	10	U	10	UJ
003W	8/02/94 94M1BN2562	Dibenz(a,h,)anthracene	29.0	0.996	0SMW002S 09MW001S 08MW008S 08MW006S 08MW006SD 02MW016D 26MW004S	10	U	10	UJ
003W	8/02/94 94M1BN2562	Benzo(g,h,i)perylene	33.0	1.022	0SMW002S 09MW001S 08MW008S 08MW006S 08MW006SD 02MW016D 26MW004S	10	U	10	UJ

003W	8/02/94 94M1BN2563	Hexachlorophene	97.7	0.004	0SMW002S 09MW001S 08MW008S 08MW006S 08MW006SD 02MW016D 26MW004S	500	U	500	R
003W	8/02/94 94M1BN2563	4-Aminobiphenyl	36.0	0.220	0SMW002S 09MW001S 08MW008S 08MW006S 08MW006SD 02MW016D 26MW004S	50	U	50	UJ
003W	8/02/94 94M1BN2563	3-Methylchol-anthrene	26.4	0.670	0SMW002S 09MW001S 08MW008S 08MW006S 08MW006SD 02MW016D 26MW004S	10	U	10	UJ
003W	8/02/94 94M1BN2563	1,4-Naphthoquinone	99.9	0.169	0SMW002S 09MW001S 08MW008S 08MW006S 08MW006SD 02MW016D 26MW004S	1000	U	1000	UJ
003W	8/02/94 94M1BN2563	4-Nitroquinoline-1-oxide	39.6	0.084	0SMW002S 09MW001S 08MW008S 08MW006S 08MW006SD 02MW016D 26MW004S	500	U	500	UJ
003W	8/02/94 94M1BN2563	Methapyrilene	30.2	0.393	0SMW002S 09MW001S 08MW008S 08MW006S 08MW006SD 02MW016D 26MW004S	50	U	50	UJ

003W	8/12/94 H0000596.D	Benzoic Acid	37.7	0.038	09MW003S 09MW002S 0SMW003S 08MW001S 28MW001S 22MW002S	50	U	50	R

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	%RSD	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
004W	8/12/94 H0000596.D-601.D	Benzoic Acid	60.2	0.062	26MW001S 26MW001SD 26MW002S	50	U	50	UJ
004W	8/12/94 H0000596.D-601.D	Benzoic Acid	60.2	0.062	26R005	57	--	57	J

SDG No.	CCAL Date and File/ Batch Number of Stds.	Affected Analyte	%RSD	RRF	Affected Samples	Lab Value ug/L	Lab Qual	EDS Value ug/L	EDS Qual
004W	8/15/94 H0000641.D	Hexachloro-phene	42.7	0.031	02MW037I 02MW035S 02MW030S 02MW029S	500	U	500	R
004W	8/15/94 H0000641.D	4-Nitro-quinoline-1-oxide	33.6	0.055	02MW037I 02MW035S 02MW030S 02MW029S	500	U	500	UJ
004W	8/15/94 H0000618.D	Benzoic Acid	21.6	0.048	130P004 26MW003S 02MW018I 02MW018S 02MW027I 02MW017I 02K002 02MW037S 02MW037SD 02MW036S 02MW035I 02MW036I	50	U	50	R

004W	8/15/94 H0000618.D	Hexachloro-phene	32.6	0.037	130P004 26MW003S 02MW018I 02MW018S 02MW027I 02MW017I 02K002 02MW037S 02MW037SD 02MW036S 02MW035I 02MW036I	500	U	500	R
004W	8/15/94 H0000618.D	4-Nitro-quinoline-1-oxide	28.8	0.059	130P004 26MW003S 02MW018I 02MW018S 02MW027I 02MW017I 02K002 02MW037S 02MW037SD 02MW036S 02MW035I 02MW036I	500	U	500	UJ

SDG No.	ICAL Date and File/ Batch Number of Stds.	Affected Analyte	%RSD	RRF	Affected Samples	Lab Value ug/L	Lab Qual	EDS Value ug/L	EDS Qual
005W	8/19/94 94M1BN274 9-2753	Hexachloro-propene	8.3	0.045	15MW003SRE	50	U	50	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%RSD	RRF	Affected Samples	Lab Value	Lab Qual	EDS Value	EDS Qual
005W	8/10/94 94M1BN2642	Aniline	33.9	1.446	020P005 020P005D 02R006 020P006 02MW021S 020P013	10	U	10	UJ

005W	8/10/94 94M1BN2642	4-Nitrophenol	31.7	0.133	020P005 020P005D 02R006 020P006 02MW021S 020P013	50	U	50	UJ
005W	8/10/94 94M1BN2642	Benzidine	99.9	0.461	020P005 020P005D 02R006 020P006 02MW021S 020P013	50	U	50	UJ
005W	8/10/94 94M1BN2643	1,4-Naphtho-quinone	99.9	0.169	020P005 020P005D 02R006 020P006 02MW021S 020P013	1000	U	1000	UJ
005W	8/10/94 94M1BN2643	4-Nitroquinoline -1-oxide	29.5	0.098	020P005 020P005D 02R006 020P006 02MW021S 020P013	500	U	500	UJ
005W	8/10/94 94M1BN2643	3,3-Dimethyl benzidine	31.1	0.409	020P005 020P005D 02R006 020P006 02MW021S 020P013	10	U	10	UJ
005W	8/10/94 94M1BN2643	Hexachloro-phene	89.1	0.019	020P005 020P005D 02R006 020P006 02MW021S 020P013	500	U	500	UJ
005W	8/10/94 94M1BN2643	p-Phenylene-diamine	31.9	0.269	020P005 020P005D 02R006 020P006 02MW021S 020P013	500	U	500	UJ

005W	8/12/94 94M1BN2674	2,4- Dinitrophenol	32.9	0.149	02MW031I 02MW031S 02MW032I 02MW032S 02MW033I 02MW033S 02MW034S 02MW034SD 15MW002S 15MW003S 15MW003SRE	50	U	50	UJ
005W	8/12/94 94M1BN2674	4-Nitrophenol	31.7	0.133	02MW031I 02MW031S 02MW032I 02MW032S 02MW033I 02MW033S 02MW034S 02MW034SD 15MW002S 15MW003S 15MW003SRE	50	U	50	UJ
005W	8/12/94 94M1BN2674	Benzidine	99.9	0.637	02MW031I 02MW031S 02MW032I 02MW032S 02MW033I 02MW033S 02MW034S 02MW034SD 15MW002S 15MW003S 15MW003SRE	50	U	50	UJ
005W	8/12/94 94M1BN2674	Indeno (1,2,3-cd) pyrene	28.8	1.315	02MW031I 02MW031S 02MW032I 02MW032S 02MW033I 02MW033S 02MW034S 02MW034SD 15MW002S 15MW003S 15MW003SRE	10	U	10	UJ

005W	8/12/94 94M1BN2674	Benzo (g,h,i) perylene	28.8	1.086	02MW031I 02MW031S 02MW032I 02MW032S 02MW033I 02MW033S 02MW034S 02MW034SD 15MW002S 15MW003S 15MW003SRE	10	U	10	UJ
005W	8/12/94 94M1BN2675	Hexachloro-phene	90.3	0.017	02MW031I 02MW031S 02MW032I 02MW032S 02MW033I 02MW033S 02MW034S 02MW034SD 15MW002S 15MW003S 15MW003SRE	500	U	500	R
005W	8/12/94 94M1BN2675	1-Naphthyl-amine	26.9	0.680	02MW031I 02MW031S 02MW032I 02MW032S 02MW033I 02MW033S 02MW034S 02MW034SD 15MW002S 15MW003S 15MW003SRE	50	U	50	UJ
005W	8/12/94 94M1BN2675	2- Naphthyl-amine	36.0	0.637	02MW031I 02MW031S 02MW032I 02MW032S 02MW033I 02MW033S 02MW034S 02MW034SD 15MW002S 15MW003S 15MW003SRE	50	U	50	UJ

005W	8/12/94 94M1BN2675	4-Aminobi- phenyl	37.8	0.474	02MW031I 02MW031S 02MW032I 02MW032S 02MW033I 02MW033S 02MW034S 02MW034SD 15MW002S 15MW003S 15MW003SRE	50	U	50	UJ
005W	8/12/94 94M1BN2675	Hexachloro- propene	33.7	0.063	02MW031I 02MW031S 02MW032I 02MW032S 02MW033I 02MW033S 02MW034S 02MW034SD 15MW002S 15MW003S 15MW003SRE	50	U	50	UJ
005W	8/12/94 94M1BN2675	1,4-Naphtho- quinone	99.9	0.158	02MW031I 02MW031S 02MW032I 02MW032S 02MW033I 02MW033S 02MW034S 02MW034SD 15MW002S 15MW003S 15MW003SRE	1000	U	1000	UJ
005W	8/12/94 94M1BN2675	4- Nitroquinoline -1-oxide	41.7	0.081	02MW031I 02MW031S 02MW032I 02MW032S 02MW033I 02MW033S 02MW034S 02MW034SD 15MW002S 15MW003S 15MW003SRE	500	U	500	UJ

005W	8/12/94 94M1BN2675	3,3-Dimethyl-benzidine	63.1	0.509	02MW031I 02MW031S 02MW032I 02MW032S 02MW033I 02MW033S 02MW034S 02MW034SD 15MW002S 15MW003S 15MW003SRE	10	U	10	UJ
005W	8/12/94 94M1BN2675	p-Phenylene-diamine	46.1	0.298	02MW031I 02MW031S 02MW032I 02MW032S 02MW033I 02MW033S 02MW034S 02MW034SD 15MW002S 15MW003S 15MW003SRE	500	U	500	UJ
005W	8/15/94 94M1BN2707	Hexachloro-phene	98.9	0.002	08MW005I 08MW005S 15MW004S	500	U	500	R
005W	8/15/94 94M1BN2707	Aniline	25.9	1.623	08MW005I 08MW005S 15MW004S	10	U	10	UJ
005W	8/15/94 94M1BN2707	4-Nitrophenol	32.7	0.134	08MW005I 08MW005S 15MW004S	50	U	50	UJ
005W	8/15/94 94M1BN2707	Benzidine	99.9	0.553	08MW005I 08MW005S 15MW004S	50	U	50	UJ
005W	8/15/94 94M1BN2707	Indeno (1,2,3-cd) pyrene	37.1	1.162	08MW005I 08MW005S 15MW004S	10	U	10	UJ
005W	8/15/94 94M1BN2707	Dibenz (a,h) anthracene	30.9	0.969	08MW005I 08MW005S 15MW004S	10	U	10	UJ
005W	8/15/94 94M1BN2707	Benzo (g,h,i) perylene	36.7	0.965	08MW005I 08MW005S 15MW004S	10	U	10	UJ

005W	8/15/94 94M1BN2707	3-Methyl-cholanthrene	26.0	0.673	08MW005I 08MW005S 15MW004S	10	U	10	UJ
005W	8/15/94 94M1BN2707	Hexachloro-propene	40.0	0.057	08MW005I 08MW005S 15MW004S	50	U	50	UJ
005W	8/15/94 94M1BN2707	4-Nitroquinoline -1-oxide	51.1	0.068	08MW005I 08MW005S 15MW004S	500	U	500	UJ
005W	8/15/94 94M1BN2707	Methapyriline	27.9	0.406	08MW005I 08MW005S 15MW004S	50	U	50	UJ
005W	8/15/94 94M1BN2707	3,3-Dimethyl-benzidine	47.1	0.457	08MW005I 08MW005S 15MW004S	10	U	10	UJ
005W	8/15/94 94M1BN2707	1,4-Naphtho-quinone	99.9	0.146	08MW005I 08MW005S 15MW004S	1000	U	1000	UJ
005W	8/15/94 94M1BN2707	p-Phenylene-diamine	46.1	0.273	08MW005I 08MW005S 15MW004S	500	U	500	UJ
005W	8/21/94 94M1BN2760	Benzoic Acid	26.5	0.200	15MW003SRE	50	U	50	UJ
005W	8/21/94 94M1BN2760	4-Chloroaniline	40.9	0.192	15MW003SRE	10	U	10	UJ
005W	8/21/94 94M1BN2760	2,4-Dinitrophenol	34.3	0.113	15MW003SRE	50	U	50	UJ
005W	8/21/94 94M1BN2760	Benzidine	57.5	0.137	15MW003SRE	50	U	50	UJ
005W	8/21/94 94M1BN2760	2-Naphthyl-amine	36.7	0.292	15MW003SRE	50	U	50	UJ
005W	8/21/94 94M1BN2760	Hexachloro-phene	26.6	0.094	15MW003SRE	500	U	500	UJ
005W	8/21/94 94M1BN2760	Hexachloro-propene	8.9	0.049	15MW003SRE	50	U	50	R
005W	8/21/94 94M1BN2760	p-Phenylene-diamine	43.2	0.133	15MW003SRE	500	U	500	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	%RSD	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
006W	8/19/94 94M1BN2749-2753	Hexachloro-propene	8.3	0.045	02MW020S 02MW026S 02MW026I 02MW024S 02K003 02R008 02MW011I 02MW011ID 02MW023S 02MW025S 02MW025I 02MW022S 02MW022SD 02MW022I 02MW038S	50	U	50	R
006W	8/19/94 94M1BN2925-2929	4-Nitro-quinoline-1-oxide	36.7	0.037	02MW023SRE 02K004 02MW028S 020P007	500	U	500	R
006W	9/07/94 94M1BN2925-2929	Hexachloro-phene	69.1	0.035	02MW023SRE 02K004 02MW028S 020P007	500	U	500	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value	Lab Qual	EDS Value	EDS Qual
006W	8/10/94 94M1BN2643	Hexachlorophene	89.1	0.019	15MW0051	500	U	500	R
006W	8/10/94 94M1BN2643	Aniline	33.9	1.446	15MW0051	10	U	10	UJ
006W	8/10/94 94M1BN2643	4-Nitrophenol	31.7	0.133	15MW005I	50	U	50	UJ
006W	8/10/94 94M1BN2643	Benzidine	99.9	0.461	15MW005I	50	U	50	UJ
006W	8/10/94 94M1BN2643	1,4-Naphthoquinone	99.9	0.169	15MW005I	1000	U	1000	UJ

006W	8/10/94 94M1BN2643	4-Nitroquinoline-1-oxide	29.5	0.098	15MW005I	500	U	500	UJ
006W	8/10/94 94M1BN2643	3,3-Dimethyl-benzidine	31.1	0.409	15MW005I	10	U	10	UJ
006W	8/10/94 94M1BN2643	p-Phenylenediamine	31.9	0.269	15MW005I	500	U	500	UJ
006W	8/15/94 94M1BN2706	Aniline	25.9	1.623	02MW023I 02MW019S	10	U	10	UJ
006W	8/15/94 94M1BN2706	4-Nitrophenol	32.7	0.134	02MW023I 02MW019S	50	U	50	UJ
006W	8/15/94 94M1BN2706	Benzidine	99.9	0.553	02MW023I 02MW019S	50	U	50	UJ
006W	8/15/94 94M1BN2706	Benzo(b) fluoranthene	25.4	1.493	02MW023I 02MW019S	10	U	10	UJ
006W	8/15/94 94M1BN2706	Indeno(1,2,3-cd) pyrene	37.1	1.309	02MW023I 02MW019S	10	U	10	UJ
006W	8/15/94 94M1BN2706	Dibenz(a,h) anthracene	30.9	0.969	02MW023I 02MW019S	10	U	10	UJ
006W	8/15/94 94M1BN2706	Benzo(g,h,i) perylene	36.7	0.965	02MW023I 02MW019S	10	U	10	UJ
006W	8/15/94 94M1BN2706	3-Methylchol anthrene	26.0	0.673	02MW023I 02MW019S	10	U	10	UJ
006W	8/15/94 94M1BN2706	Hexachloro-propene	40.0	0.057	02MW023I 02MW019S	50	U	50	UJ
006W	8/15/94 94M1BN2706	1,4-Naphthoquinone	99.9	0.146	02MW023I 02MW019S	1000	U	1000	UJ
006W	8/15/94 94M1BN2706	4-Nitroquinoline-1-oxide	51.1	0.068	02MW023I 02MW019S	500	U	500	UJ
006W	8/15/94 94M1BN2706	Methapyriline	27.9	0.406	02MW023I 02MW019S	50	U	50	UJ
006W	8/15/94 94M1BN2706	3,3'-Dimethyl-benzidine	47.1	0.459	02MW023I 02MW019S	10	U	10	UJ
006W	8/15/94 94M1BN2706	Hexachlorophene	98.9	0.002	02MW023I 02MW019S	500	U	500	R

006W	8/15/94 94M1BN2706	p- Phenylenediamine	46.1	0.298	02MW023I 02MW019S	500	U	500	UJ
006W	8/21/94 94M1BN2760	Benzoic Acid	26.5	0.200	02MW011I 02MW011ID 02MW023S 02K003 02R008	50	U	50	UJ
006W	8/21/94 94M1BN2760	4-Chloroaniline	40.9	0.192	02MW011I 02MW011ID 02MW023S 02K003 02R008	10	U	10	UJ
006W	8/21/94 94M1BN2760	2,4-Dinitrophenol	34.3	0.113	02MW011I 02MW011ID 02MW023S 02K003 02R008	50	U	50	UJ
006W	8/21/94 94M1BN2760	Benzidine	57.5	0.137	02MW011I 02MW011ID 02MW023S 02K003 02R008	50	U	50	UJ
006W	8/21/94 94M1BN2760	2-Naphthylamine	36.7	0.292	02MW011I 02MW011ID 02MW023S 02K003 02R008	50	U	50	UJ
006W	8/21/94 94M1BN2760	Hexachloro- propene	8.9	0.049	02MW011I 02MW011ID 02MW023S 02K003 02R008	50	U	50	R
006W	8/21/94 94M1BN2760	Hexachlorophene	26.6	0.094	02MW011I 02MW011ID 02MW023S 02K003 02R008	500	U	500	UJ
006W	8/21/94 94M1BN2760	p- Phenylenediamine	43.2	0.133	02MW011I 02MW011ID 02MW023S 02K003 02R008	500	U	500	UJ
006W	9/14/94 94M1BN3045	1,3,5- Trinitrobenzene	66.0	0.269	02MW023SRE	10	U	10	UJ

006W	9/14/94 94M1BN3045	4-Nitroquinoline-1-oxide	0.0	0.037	02MW023SRE	500	U	500	R
006W	9/14/94 94M1BN3045	Hexachlorophene	40.9	0.026	02MW023SRE	500	U	500	R
006W	9/14/94 94M1BN3045	p-Phenylenediamine	47.9	0.346	02MW023SRE	500	U	500	UJ
006W	8/26/94 94M1BN2839	3-Nitroaniline	54.1	0.302	02MW020S 02MW026S 02MW025S 02MW025I 02MW022S 02MW022SD 02MW022I 02MW038S	50	U	50	UJ
006W	8/26/94 94M1BN2839	4-Nitroaniline	31.0	0.304	02MW020S 02MW026S 02MW025S 02MW025I 02MW022S 02MW022SD 02MW022I 02MW038S	50	U	50	UJ
006W	8/26/94 94M1BN2839	Benzidine	99.9	0.386	02MW020S 02MW026S 02MW025S 02MW025I 02MW022S 02MW022SD 02MW022I 02MW038S	50	U	50	UJ
006W	8/26/94 94M1BN2839	4-Aminobiphenyl	63.4	0.402	02MW020S 02MW026S 02MW025S 02MW025I 02MW022S 02MW022SD 02MW022I 02MW038S	50	U	50	UJ

006W	8/26/94 94M1BN2839	1,4- Naphthoquinone	25.2	0.113	02MW020S 02MW026S 02MW025S 02MW025I 02MW022S 02MW022SD 02MW022I 02MW038S	1000	U	1000	UJ
006W	8/26/94 94M1BN2839	1,3,5- Trinitrobenzene	30.0	0.189	02MW020S 02MW026S 02MW025S 02MW025I 02MW022S 02MW022SD 02MW022I 02MW038S	10	U	10	UJ
006W	8/26/94 94M1BN2839	4-Nitroquinoline- 1-oxide	56.6	0.046	02MW020S 02MW026S 02MW025S 02MW025I 02MW022S 02MW022SD 02MW022I 02MW038S	500	U	500	R
006W	8/26/94 94M1BN2839	3,3'-Dimethyl- benzidine	67.1	0.411	02MW020S 02MW026S 02MW025S 02MW025I 02MW022S 02MW022SD 02MW022I 02MW038S	10	U	10	UJ
006W	8/26/94 94M1BN2839	Hexachlorophene	75.8	0.031	02MW020S 02MW026S 02MW025S 02MW025I 02MW022S 02MW022SD 02MW022I 02MW038S	500	U	500	R

006W	8/26/94 94M1BN2839	p- Phenylenediamine	56.4	0.366	02MW020S 02MW026S 02MW025S 02MW025I 02MW022S 02MW022SD 02MW022I 02MW038S	500	U	500	UJ
006W	8/25/94 94M1BN2823	4-Chloroaniline	34.8	0.438	02MW024S 02MW026I	10	U	10	UJ
006W	8/25/94 94M1BN2823	3-Nitroaniline	70.9	0.338	02MW024S 02MW026I	50	U	50	UJ
006W	8/25/94 94M1BN2823	2,4-Dinitrophenol	33.7	0.114	02MW024S 02MW026I	50	U	50	UJ
006W	8/25/94 94M1BN2823	3,3'-Dichloro- benzidine	28.2	0.427	02MW024S 02MW026I	20	U	20	UJ
006W	8/25/94 94M1BN2823	Benzidine	99.9	0.477	02MW024S 02MW026I	50	U	50	UJ
006W	8/25/94 94M1BN2823	4-Aminobiphenyl	29.7	0.319	02MW024S 02MW026I	50	U	50	UJ
006W	8/25/94 94M1BN2823	Hexachloro- propene	0.0	0.045	02MW024S 02MW026I	50	U	50	R
006W	8/25/94 94M1BN2823	4-Nitroquinoline- 1-oxide	46.2	0.057	02MW024S 02MW026I	500	U	500	UJ
006W	8/25/94 94M1BN2823	3,3'-Dimethyl- benzidine	66.7	0.410	02MW024S 02MW026I	10	U	10	UJ
006W	8/25/94 94M1BN2823	Hexachlorophene	58.6	0.053	02MW024S 02MW026I	500	U	500	UJ
006W	9/13/94 94M1BN3029	Benzoic Acid	99.9	0.590	02K004 02MW028S 020P007	50	U	50	UJ
006W	9/13/94 94M1BN3029	4-Nitrophenol	36.7	0.123	02K004 02MW028S 020P007	50	U	50	UJ
006W	9/13/94 94M1BN3029	1,3,5- Trinitrobenzene	46.3	0.237	02K004 02MW028S 020P007	10	U	10	UJ
006W	9/13/94 94M1BN3029	4-Nitroquinoline- 1-oxide	10.8	0.033	02K004 02MW028S 020P007	500	U	500	R

006W	9/13/94 94M1BN3029	Hexachlorophene	70.4	0.075	02K004 02MW028S 020P007	500	U	500	UJ
006W	9/13/94 94M1BN3029	p- Phenylenediamine	32.0	0.309	02K004 02MW028S 020P007	500	U	500	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
007W	9/07/94 94M1BN2925-2929	4-Nitroquinoline-1-oxide	36.7	0.037	10OP001 15OP001 02MW013S 05MW005S 15MW005SD 15MW001S	500	U	500	R
007W	9/07/94 94M1BN2925-2929	Hexachloro-phene	37.5	0.044	10OP001 15OP001 02MW013S 05MW005S 15MW005SD 15MW001S	500	U	500	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%RSD	RRF	Affected Samples	Lab Value ug/L	Lab Qual	EDS Value ug/L	EDS Qual
007W	9/27/94 94M1BN3168	Hexachlorophene	70.0	0.408	08MW017S 08MW016S 08MW016SD 08R019 08MW014S 08MW013S 08MW012S	500	U	500	UJ
007W	9/28/94 94M1BN3184	Hexachlorophene	25.8	0.302	02MW038D 02MW036D	500	U	500	UJ
007W	9/29/94 94M1BN3200	Hexachlorophene	80.4	0.047	08MW005D 02MW034I 08MW018S 02MW038I	500	U	500	R

007W	9/29/94 94MIBN3200	4-Nitroquinoline-1-oxide	71.9	0.039	08MW005D 02MW034I 08MW018S 02MW038I	500	U	500	R
007W	9/29/94 94MIBN3200	Hexachlorocyclo-pentadiene	27.8	0.215	08MW005D 02MW034I 08MW018S 02MW038I	10	U	10	UJ
007W	9/29/94 94MIBN3200	2,4-Dinitrophenol	36.3	0.128	08MW005D 02MW034I 08MW018S 02MW038I	50	U	50	UJ
007W	9/29/94 94MIBN3200	Pyrene	31.1	1.006	08MW005D 02MW034I 08MW018S 02MW038I	10	U	10	UJ
007W	9/29/94 94MIBN3200	Butylbenzyl-phthalate	28.3	0.527	08MW005D 02MW034I 08MW018S 02MW038I	10	U	10	UJ
007W	9/29/94 94MIBN3200	Methyl methanesulfonate	50.2	0.332	08MW005D 02MW034I 08MW018S 02MW038I	10	U	10	UJ
007W	9/29/94 94MIBN3200	P-(Dimethylamino azobenzene)	28.2	0.361	08MW005D 02MW034I 08MW018S 02MW038I	10	U	10	UJ
007W	9/29/94 94MIBN3200	Methapyrilene	31.6	0.728	08MW005D 02MW034I 08MW018S 02MW038I	50	U	50	UJ
007W	9/29/94 94MIBN3200	Aramite	35.7	0.072	08MW005D 02MW034I 08MW018S 02MW038I	50	U	50	UJ
007W	10/11/94 94MIBN3300	Hexachlorophene	99.6	0.001	02MW034IRE	500	U	500	R
007W	10/11/94 94MIBN3300	Methyl methanesulfonate	26.2	0.279	02MW034IRE	60	U	60	UJ
007W	10/11/94 94MIBN3300	Hexachlorophene	38.0	0.236	02MW034IRE	50	U	50	UJ

007W	10/11/94 94MIBN3300	1,4- Naphthoquinone	31.6	0.119	02MW034IRE	1000	U	1000	UJ
007W	10/11/94 94MIBN3300	4-Nitroquinoline- 1-oxide	62.6	0.052	02MW034IRE	500	U	500	UJ
007W	10/11/94 94MIBN3300	Pentachloronitro- benzene	32.9	0.097	02MW034IRE	50	U	50	UJ
007W	9/14/94 94M1BN3046	4-Nitroquinoline- 1-oxide	0.0	0.037	10OP001 15OP001 02MW013S 15MW005S 15MW005SD 15MW001S	500	U	500	R
007W	9/14/94 94M1BN3046	Hexachlorophene	40.9	0.026	10OP001 15OP001 02MW013S 15MW005S 15MW005SD 15MW001S	500	U	500	R
007W	9/14/94 94M1BN3046	4-Nitrophenol	41.1	0.127	10OP001 15OP001 02MW013S 15MW005S 15MW005SD 15MW001S	50	U	50	UJ
007W	9/14/94 94M1BN3046	1,3,5- Trinitrobenzene	66	0.269	10OP001 15OP001 02MW013S 15MW005S 15MW005SD 15MW001S	10	U	10	UJ
007W	9/14/94 94M1BN3046	p-Phenylene- diamine	47.9	0.346	10OP001 15OP001 02MW013S 15MW005S 15MW005SD 15MW001S	500	U	500	UJ
007W	9/27/94 94M1BN3168	Hexachlorophene	70.0	0.408	08MW009S	4000	U	4000	UJ
007W	9/27/94 94M1BN3168	Hexachlorophene	70.0	0.408	08MW004S	1000	U	1000	UJ

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/L	Lab Qual	EDS Value ug/L	EDS Qual
008W	9/30/94 94M1BN3214	Hexachloro-cyclo-pentadiene	43.6	0.168	08MW010S 08MW010SD 13R024	10	U	10	UJ
008W	9/30/94 94M1BN3214	2,4-Dinitrophenol	32.8	0.135	08MW010S 08MW010SD 13R024	50	U	50	UJ
008W	9/30/94 94M1BN3214	Pyrene	27.3	1.061	08MW010S 08MW010SD 13R024	10	U	10	UJ
008W	9/30/94 94M1BN3215	Methyl methane-sulfonate	65.2	0.365	08MW010S 08MW010SD 13R024	10	U	10	UJ
008W	9/30/94 94M1BN3215	Hexachloro-propene	26.1	0.126	08MW010S 08MW010SD 13R024	50	U	50	UJ
008W	9/30/94 94M1BN3215	4-Nitroquinoline -1-oxide	86.3	0.019	08MW010S 08MW010SD 13R024	500	U	500	R
008W	9/30/94 94M1BN3215	Methapyrilene	56.8	0.867	08MW010S 08MW010SD 13R024	50	U	50	UJ
008W	9/30/94 94M1BN3215	Aramite	33.0	0.075	08MW010S 08MW010SD 13R024	50	U	50	UJ
008W	9/30/94 94M1BN3215	Hexachloro-phene	97.9	2.005	08MW010S 08MW010SD 13R024	500	U	500	R
008W	10/04/94 94M1BN3230	Hexachloro-cyclo-pentadiene	30.2	0.208	13K005 08MW010SRE	10	U	10	UJ
008W	10/04/94 94M1BN3230	2,4-Dinitrophenol	51.2	0.098	13K005 08MW010SRE	50	U	50	UJ
008W	10/04/94 94M1BN3230	4,6-Dinitro-2-Methylphenol	36.0	0.114	13K005 08MW010SRE	50	U	50	UJ
008W	10/04/94 94M1BN3230	Benzidine	34.2	0.874	13K005 08MW010SRE	50	U	50	UJ

008W	10/04/94 94M1BN3231	Methyl methane-sulfonate	50.7	0.333	13K005 08MW010SRE	10	U	10	UJ
008W	10/04/94 94M1BN3231	2,3,4,6-Tetrachloro-phenol	25.4	0.191	13K005 08MW010SRE	10	U	10	UJ
008W	10/04/94 94M1BN3231	1,3,5-Trinitro-benzene	30.9	0.190	13K005 08MW010SRE	10	U	10	UJ
008W	10/04/94 94M1BN3231	4-Nitroquinoline -1-oxide	62.6	0.052	13K005 08MW010SRE	500	U	500	UJ
008W	10/04/94 94M1BN3231	Methapyrilene	46.1	0.808	13K005 08MW010SRE	50	U	50	UJ
008W	10/04/94 94M1BN3231	Hexachloro-phene	87.5	0.030	13K005 08MW010SRE	500	U	500	R
008W	10/10/94 94M1BN3283	4-Nitroquinoline -1-oxide	38.8	0.085	13MW009S 13MW008S 13MW007S 13MW010S 56MW001S	500	U	500	UJ
008W	10/10/94 94M1BN3283	Hexachloro-phene	70.0	0.072	13MW009S 13MW008S 13MW007S 13MW010S 56MW001S	500	U	500	UJ
008W	10/12/94 94M1BN3315	2,4-Dinitrophenol	30.0	0.145	08MW013I 08MW019S 08MW019SD	50	U	50	UJ
008W	10/12/94 94M1BN3316	3-Methylchol-anthrene	25.6	0.606	08MW013I 08MW019S 08MW019SD	10	U	10	UJ
008W	10/12/94 94M1BN3316	4-Nitroquinoline -1-oxide	48.9	0.071	08MW013I 08MW019S 08MW019SD	500	U	500	UJ
008W	10/12/94 94M1BN3316	Hexachloro-phene	95.0	0.012	08MW013I 08MW019S 08MW019SD	500	U	500	R
008W	10/24/94 94M1BN3332	N-Nitroso-piperidine	30.6	0.267	08MW015I	10	U	10	UJ

008W	10/24/94 94M1BN3332	4-Nitroquinoline -1-oxide	42.4	0.080	08MW015I	500	U	500	UJ
008W	10/24/94 94M1BN3332	Hexachloro-phene	88.3	0.028	08MW015I	500	U	500	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/L	Lab Qual	EDS Value ug/L	EDS Qual
011W	12/8/94 94M1BN3571	4-Chloroaniline	33.8	0.262	08MW020S 08MW020SD 08R034	10	U	10	UJ
011W	12/8/94 94M1BN3571	Benzidine	28.1	0.164	08MW020S 08MW020SD 08R034	50	U	50	UJ
011W	12/8/94 94M1BN3572	Methyl methane-sulfonate	36.9	0.219	08MW020S 08MW020SD 08R034	10	U	10	UJ
011W	12/8/94 94M1BN3572	1,4-Naphtho-quinone	27.5	0.190	08MW020S 08MW020SD 08R034	1000	U	1000	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	%RSD	RRF	Affected Samples	Lab Value ug/L	Lab Qual	EDS Value ug/L	EDS Qual
001SW	9/07/94 94M1BN2925-2929	4-Nitro quinoline-1-oxide	36.7	0.037	02SW016 02SW018 02SW019 02SW022 02SW031 02SW031D 02SW032 02SW039 02R010 02SW030 02SW029 02SW029D 02SW017 02SW015	500	U	500	R

001SW	9/07/94 94M1BN2925-2929	Hexachloro-phene	37.5	0.044	02SW016 02SW018 02SW019 02SW022 02SW031 02SW031D 02SW032 02SW039 02R010 02SW030 02SW029 02SW029D 02SW017 02SW015	500	U	500	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	% D	RRF	Affected Samples	Lab Value ug/L	Lab Qual	EDS Value ug/L	EDS Qual
001SW	8/11/94 94M1BN2659	Hexachlorophene	84.6	0.027	02SW012 02SW011 02SW014 02SW013	500	U	500	R
001SW	8/11/94 94M1BN2658	Aniline	30.6	1.518	02SW012 02SW011 02SW014 02SW013	10	U	10	UJ
001SW	8/11/94 94M1BN2658	4-Nitrophenol	36.6	0.138	02SW012 02SW011 02SW014 02SW013	50	U	50	UJ
001SW	8/11/94 94M1BN2658	Benzidine	99.9	0.457	02SW012 02SW011 02SW014 02SW013	50	U	50	UJ
001SW	8/11/94 94M1BN2659	Hexachloro-propene	26.3	0.070	02SW012 02SW011 02SW014 02SW013	50	U	50	UJ
001SW	8/11/94 94M1BN2659	1,4-Naphthoquinone	99.9	0.163	02SW012 02SW011 02SW014 02SW013	1000	U	1000	UJ

001SW	8/11/94 94M1BN2659	4-Nitroquinoline-1-oxide	38.1	0.086	02SW012 02SW011 02SW014 02SW013	500	U	500	UJ
001SW	8/11/94 94M1BN2659	3,3'-Dimethyl-benzidine	44.2	0.450	02SW012 02SW011 02SW014 02SW013	10	U	10	UJ
001SW	9/11/94 94M1BN2998	4-Nitroquinoline-1-oxide	56.8	0.016	02SW016 02SW019 02SW022 02SW031 02SW018	500	U	500	R
001SW	9/11/94 94M1BN2998	Hexachlorophene	93.2	0.003	02SW016 02SW019 02SW022 02SW031 02SW018	500	U	500	R
001SW	9/11/94 94M1BN2997	Benzoic Acid	99.9	0.608	02SW016 02SW019 02SW022 02SW031 02SW018	50	U	50	UJ
001SW	9/11/94 94M1BN2997	Hexachlorocyclo-pentadine	33.6	0.182	02SW016 02SW019 02SW022 02SW031 02SW018	10	U	10	UJ
001SW	9/11/94 94M1BN2999	p-Phenylene-diamine	53.4	0.359	02SW016 02SW019 02SW022 02SW031 02SW018	500	U	500	UJ
001SW	9/12/94 94M1BN3014	4-Nitroquinoline-1-oxide	8.1	0.034	02SW031D	500	U	500	R
001SW	9/12/94 94M1BN3013	4-Nitrophenol	30.0	0.117	02SW031D	50	U	50	UJ
001SW	9/12/94 94M1BN3014	1,3,5-Trinitrobenzene	29.6	0.210	02SW031D	10	U	10	UJ
001SW	9/12/94 94M1BN3014	Hexachlorophene	54.6	0.068	02SW031D	500	U	500	R

001SW	9/12/94 94M1BN3015	p-Phenylene-diamine	28.2	0.300	02SW031D	500	U	500	UJ
001SW	9/9/94 94M1BN2965	Hexachlorocyclo-pentadine	30.3	0.191	02R010 02SW032 02SW039 02SW030 02SW029 02SW029D	10	U	10	UJ
001SW	9/9/94 94M1BN2966	4-Nitroquinoline-1-oxide	18.9	0.030	02R010 02SW032 02SW039 02SW030 02SW029 02SW029D	500	U	500	R
001SW	9/9/94 94M1BN2966	Hexachlorophene	93.2	0.003	02R010 02SW032 02SW039 02SW030 02SW029 02SW029D	500	U	500	R
001SW	9/9/94 94M1BN2965	2,4-Dinitrophenol	40.0	0.123	02R010 02SW032 02SW039 02SW030 02SW029 02SW029D	50	U	50	UJ
001SW	9/9/94 94M1BN2965	4,6-Dinitro-2-methylphenol	26.3	0.140	02R010 02SW032 02SW039 02SW030 02SW029 02SW029D	50	U	50	UJ
001SW	9/9/94 94M1BN2965	3,3'-Dichloro-benzidine	26.9	0.491	02R010 02SW032 02SW039 02SW030 02SW029 02SW029D	20	U	20	UJ
001SW	9/9/94 94M1BN2967	p-Phenylene-diamine	65.4	0.387	02R010 02SW032 02SW039 02SW030 02SW029 02SW029D	500	U	500	UJ

001SW	9/10/94 94M1BN2982	4-Nitroquinoline-1-oxide	46.0	0.020	02SW017 02SW015	500	U	500	R
001SW	9/10/94 94M1BN2982	Hexachlorophene	18.2	0.036	02SW017 02SW015	500	U	500	R
001SW	9/10/94 94M1BN2981	Hexachlorocyclo-pentadine	37.2	0.172	02SW017 02SW015	10	U	10	UJ
001SW	9/10/94 94M1BN2981	2,4-Dinitrophenol	25.8	0.152	02SW017 02SW015	50	U	50	UJ
001SW	9/10/94 94M1BN2983	p-Phenylene-diamine	42.7	0.334	02SW017 02SW015	500	U	500	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Samples	Lab Value ug/L	Lab Qual	EDS Value ug/L	EDS Qual
002SW	94M1BN2887-2891 9/02/94	4-Nitroquinoline-1-oxide	36.7	0.037	02SW038 02SW038D 02SW037 02SW036 02SW033 02SW035 02SW020 02SW020D 02SW028 02SW025 02SW010	500	U	500	R
002SW	94M1BN2887-2891 9/02/94	Hexachloro-phene	37.5	0.044	02SW038 02SW038D 02SW037 02SW036 02SW033 02SW035 02SW020 02SW020D 02SW028 02SW025 02SW010	500	U	500	R

002SW	H0000596.D H0000598.D H0000599.D H0000600.D H0000601.D 8/12/94	Benzoic acid	60.2	0.117	49SW010 49SW009 49SW012 49SW011	50	U	50	-
002SW	94M1BN2749 94M1BN2750 94M1BN2751 94M1BN2752 94M1BN2753 8/19/94	Hexachloro-phene	43.3	0.128	02SW024 02SW023 02SW034 02SW027 02SW026	500	U	500	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Samples	Lab Value ug/L	Lab Qual	EDS Value ug/L	EDS Qual
002SW	94M1BN2950 9/08/94	4-Nitroquinoline-1-oxide	24.3	0.028	02SW038 02SW038D 02SW037	500	U	500	R
002SW	94M1BN2950 9/08/94	Hexachlorophene	88.6	0.005	02SW038 02SW038D 02SW037	500	U	500	R
002SW	94M1BN2950 9/08/94	p-Phenylenediamine	62.0	0.379	02SW038 02SW038D 02SW037	500	U	500	UJ
002SW	94M1BN7966 9/09/94	4-Nitroquinoline-1-oxide	18.9	0.030	02SW036	500	U	500	R
002SW	94M1BN7966 9/09/94	Hexachlorophene	93.2	0.003	02SW036	500	U	500	R
002SW	94M1BN7966 9/09/94	2,4-Dinitrophenol	40.0	0.123	02SW036	50	U	50	UJ
002SW	94M1BN7966 9/09/94	4,6-Dinitro-2-methylphenol	26.3	0.140	02SW036	50	U	50	UJ
002SW	94M1BN7966 9/09/94	3,3-Dichloro-benzidine	26.9	0.491	02SW036	20	U	20	UJ
002SW	94M1BN7966 9/09/94	Hexachlorocyclo-pentadiene	30.3	0.191	02SW036	10	U	10	UJ
002SW	94M1BN7966 9/09/94	p-Phenylenediamine	65.4	0.387	02SW036	500	U	500	UJ

002SW	94M1BN2949 9/08/94	Hexachlorocyclo- pentadiene	30.3	0.191	02SW038 02SW038D 02SW037	10	U	10	UJ
002SW	H0000687.D 8/16/94	Benzoic acid	33.2	0.041	49SW010 49SW009 49SW012 49SW011	50	U	50	R
002SW	H0000687.D 8/16/94	Hexachlorophene	80.5	0.011	49SW010 49SW009 49SW012 49SW011	500	U	500	R
002SW	H0000687.D 8/16/94	Benzidine	25.1	0.434	49SW010 49SW009 49SW012 49SW011	50	U	50	UJ
002SW	H0000687.D 8/16/94	Hexachlorocyclo- pentadiene	30.8	0.236	49SW010 49SW009 49SW012 49SW011	10	U	10	UJ
002SW	H0000687.D 8/16/94	4-Nitroquinoline- 1-oxide	55.8	0.037	49SW010 49SW009 49SW012 49SW011	500	U	500	R
002SW	94M1BN290 9/06/94	4-Nitroquinoline- 1-oxide	67.9	0.034	02SW023 02SW034 02SW024	500	U	500	R
002SW	94M1BN290 9/06/94	Hexachlorophene	84.4	0.020	02SW023 02SW034 02SW024	500	U	500	R
002SW	94M1BN290 9/06/94	Phenyl-tert- butylamine	32.6	1.531	02SW023 02SW034 02SW024	50	U	50	UJ
002SW	94M1BN290 9/06/94	1-Naphthylamine	71.3	0.956	02SW023 02SW034 02SW024	50	U	50	UJ
002SW	94M1BN290 9/06/94	2-Naphthylamine	99.9	1.037	02SW023 02SW034 02SW024	50	U	50	UJ
002SW	94M1BN290 9/06/94	4-Aminobiphenyl	99.9	0.754	02SW023 02SW034 02SW024	50	U	50	UJ

002SW	94M1BN290 9/06/94	N-Nitrosodi-methylamine	25.6	0.428	02SW023 02SW034 02SW024	10	U	10	UJ
002SW	94M1BN290 9/06/94	Hexachlopropene	99.9	0.145	02SW023 02SW034 02SW024	50	U	50	UJ
002SW	94M1BN290 9/06/94	1,3,5-Trinitrobenzene	40.4	0.161	02SW023 02SW034 02SW024	10	U	10	UJ
002SW	94M1BN290 9/06/94	Aramite	61.3	0.121	02SW023 02SW034 02SW024	50	U	50	UJ
002SW	94M1BN290 9/06/94	3,3-Dimethylbenzidine	99.9	0.679	02SW023 02SW034 02SW024	10	U	10	UJ
002SW	94M1BN290 9/06/94	P-Phenylenediamine	82.5	0.427	02SW023 02SW034 02SW024	500	U	500	UJ
002SW	94M1BN2930 9/07/94	4-Nitroquinoline-1-oxide	2.7	0.038	02SW033 02SW035 02SW020 02SW020D 02SW028 02SW025 02SW010 02R011	500	U	500	R
002SW	94M1BN2930 9/07/94	Hexachlorophene	52.3	0.021	02SW033 02SW035 02SW020 02SW020D 02SW028 02SW025 02SW010 02R011	500	U	500	R
002SW	94M1BN2855 8/29/94	Bis(2-chloroisopropyl) ether	58.8	1.145	02SW026 02SW027	10	U	10	UJ
002SW	94M1BN2855 8/29/94	3-Nitroaniline	60.2	0.314	02SW026 02SW027	50	U	50	UJ
002SW	94M1BN2855 8/29/94	4-Nitroaniline	36.2	0.316	02SW026 02SW027	50	U	50	UJ

002SW	94M1BN2855 8/29/94	Benzidine	99.9	0.455	02SW026 02SW027	50	U	50	UJ
002SW	94M1BN2856 8/29/94	4-Aminobiphenyl	76.4	0.434	02SW026 02SW027	50	U	50	UJ
002SW	94M1BN2856 8/29/94	4-Nitroquinoline-1-oxide	55.7	0.047	02SW026 02SW027	500	U	500	R
002SW	94M1BN2856 8/29/94	3,3'-Dimethylbenzidine	87.4	0.461	02SW026 02SW027	10	U	10	UJ
002SW	94M1BN2856 8/29/94	Hexachlorophene	94.5	0.007	02SW026 02SW027	500	U	500	R
002SW	94M1BN2856 8/29/94	Hexachloropropene	6.7	0.048	02SW026 02SW027	50	U	50	R
002SW	94M1BN2856 8/29/94	p-Phenylenediamine	69.2	0.396	02SW026 02SW027	500	U	500	UJ

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/L	Lab Qual	EDS Value ug/L	EDS Qual
003SW	H0000759.D 8/19/94	bis(2-chloro-isopropyl) ether	32.3	1.205	00SW001 49R014 02SW043 02SW042 02SW042D 02SW041 02SW040 02R015	10	U U U U U	10	UJ UJ UJ UJ UJ
003SW	H0000759.D 8/19/94	2-Nitroaniline	26.1	0.395	00SW001 49R014 02SW043 02SW042 02SW042D 02SW041 02SW040 02R015	50	U U U U U	50	UJ UJ UJ UJ UJ

003SW	H0000759.D 8/19/94	Aniline	55.6	1.466	00SW001 49R014 02SW043 02SW042 02SW042D 02SW041 02SW040 02R015	10	U U U U U	10	UJ UJ UJ UJ UJ
003SW	H0000759.D 8/19/94	Benzoic Acid	131	0.143	00SW001 49R014 02SW043 02SW042 02SW042D 02SW041 02SW040 02R015	50	U U U U U	50	UJ UJ UJ UJ UJ
003SW	H0000759.D 8/19/94	Phenyl-tert- butylamine	39.0	0.667	00SW001 49R014 02SW043 02SW042 02SW042D 02SW041 02SW040 02R015	50	U U U U U	50	UJ UJ UJ UJ UJ
003SW	H0000759.D 8/19/94	1,3- Dinitrobenzene	30.3	0.211	00SW001 49R014 02SW043 02SW042 02SW042D 02SW041 02SW040 02R015	10	U U U U U	10	UJ UJ UJ UJ UJ
003SW	H0000759.D 8/19/94	Phenacetin	30.0	0.683	00SW001 49R014 02SW043 02SW042 02SW042D 02SW041 02SW040 02R015	10	U U U U U	10	UJ UJ UJ UJ UJ

003SW	H0000759.D 8/19/94	Methapyriline	50.4	0.210	00SW001 49R014 02SW043 02SW042 02SW042D 02SW041 02SW040 02R015	50	U U U U U	50	UJ UJ UJ UJ UJ
003SW	H0000759.D 8/19/94	Ethyl Methane-sulfonate	25.1	0.892	00SW001 49R014 02SW043 02SW042 02SW042D 02SW041 02SW040 02R015	10	U U U U U	10	UJ UJ UJ UJ UJ
003SW	H0000759.D 8/19/94	1,2-Diphenyl-hydrazine	32.0	0.698	00SW001 49R014 02SW043 02SW042 02SW042D 02SW041 02SW040 02R015	10	U U U U U	10	UJ UJ UJ UJ UJ

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/L	Lab Qual	EDS Value ug/L	EDS Qual
001S	7/20/94 94M1BN2385	Hexachloro-phene	87.4	0.022	19SS001 19SS001D	33000 33000	U U	33000 33000	R R
001S	7/20/94 94M1BN2385	Hexachloro-phene	87.4	0.022	19SS003 19SS004	33000 34000	U U	33000 34000	R R
001S	7/20/94 94M1BN2385	Aniline	26.4	1.610	19SS001 19SS001D	680 680	U U	680 680	UJ UJ
001S	7/20/94 94M1BN2385	Aniline	26.4	1.610	19SS003 19SS004	690 690	U U	690 690	UJ UJ
001S	7/20/94 94M1BN2385	4-Chloroaniline	30.4	0.297	19SS001 19SS001D	680 680	U U	680 680	UJ UJ
001S	7/20/94 94M1BN2385	4-Chloroaniline	30.4	0.297	19SS003 19SS004	690 690	U U	690 690	UJ UJ

001S	7/20/94 94M1BN2385	3-Nitroaniline	28.7	0.229	19SS001 19SS001D	3300 3300	U U	3300 3300	UJ UJ
001S	7/20/94 94M1BN2385	3-Nitroaniline	28.7	0.229	19SS003 19SS004	3300 3400	U U	3300 3400	UJ UJ
001S	7/20/94 94M1BN2385	2,4- Dinitrophenol	37.4	0.139	19SS001 19SS001D	3300 3300	U U	3300 3300	UJ UJ
001S	7/20/94 94M1BN2385	2,4- Dinitrophenol	37.4	0.139	19SS003 19SS004	3300 3400	U U	3300 3400	UJ UJ
001S	7/20/94 94M1BN2385	4,6-Dinitro-2- Methyl phenol	28.4	0.139	19SS001 19SS001D	3300 3300	U U	3300 3300	UJ UJ
001S	7/20/94 94M1BN2385	4,6-Dinitro-2- Methyl phenol	28.4	0.139	19SS003 19SS004	3300 3400	U U	3300 3400	UJ UJ
001S	7/20/94 94M1BN2385	Benzidine	99.9	0.308	19SS001 19SS001D	3300 3300	U U	3300 3300	UJ UJ
001S	7/20/94 94M1BN2385	Benzidine	99.9	0.308	19SS003 19SS004	3300 3400	U U	3300 3400	UJ UJ
001S	7/20/94 94M1BN2385	N-Nitroso- piperidine	31.7	0.241	19SS001 19SS001D	680 680	U U	680 680	UJ UJ
001S	7/20/94 94M1BN2385	N-Nitroso- piperidine	31.7	0.241	19SS003 19SS004	690 690	U U	690 690	UJ UJ
001S	7/20/94 94M1BN2385	1,3,5-Trinitro- benzene	36.7	0.150	19SS001 19SS001D	680 680	U U	680 680	UJ UJ
001S	7/20/94 94M1BN2385	1,3,5-Trinitro- benzene	36.7	0.150	19SS003 19SS004	690 690	U U	690 690	UJ UJ
001S	7/20/94 94M1BN2385	4- Nitroquinoline -1- oxide	41.0	0.082	19SS001 19SS001D	33000 33000	U U	33000 33000	UJ UJ
001S	7/20/94 94M1BN2385	4- Nitroquinoline -1- oxide	41.0	0.082	19SS003 19SS004	33000 34000	U U	33000 34000	UJ UJ
001S	7/20/94 94M1BN2385	P-Phenylene- diamine	32.8	0.137	19SS001 19SS001D	33000 33000	U U	33000 33000	UJ UJ
001S	7/20/94 94M1BN2385	P-Phenylene- diamine	32.8	0.137	19SS003 19SS004	33000 34000	U U	33000 34000	UJ UJ

001S	7/21/94 94M1BN2400	Aniline	26.9	1.601	19SS002 19SS005	690 690	U U	690 690	UJ UJ
001S	7/21/94 94M1BN2400	Aniline	26.9	1.601	19SS006	680	U	680	UJ
001S	7/21/94 94M1BN2400	2,4- Dinitrophenol	54.0	0.102	19SS002 19SS005	3300 3300	U U	3300 3300	UJ UJ
001S	7/21/94 94M1BN2400	2,4- Dinitrophenol	54.0	0.102	19SS006	3300	U	3300	UJ
001S	7/21/94 94M1BN2400	4,6-Dinitro-2- Methyl Phenol	39.7	0.117	19SS002 19SS005	3300 3300	U U	3300 3300	UJ UJ
001S	7/21/94 94M1BN2400	4,6-Dinitro-2- Methyl Phenol	39.7	0.117	19SS006	3300	U	3300	UJ
001S	7/21/94 94M1BN2400	Benzidine	85.9	0.777	19SS002 19SS005	3300 3300	U U	3300 3300	UJ UJ
001S	7/21/94 94M1BN2400	Benzidine	85.9	0.777	19SS006	3300	U	3300	UJ
001S	7/21/94 94M1BN2401	1,3,5-Trinitro- benzene	35.9	0.152	19SS002 19SS005	690 690	U U	690 690	UJ UJ
001S	7/21/94 94M1BN2401	1,3,5-Trinitro- benzene	35.9	0.152	19SS006	680	U	680	UJ
001S	7/21/94 94M1BN2401	4- Nitroquinoline -1- oxide	45.3	0.076	19SS002 19SS005	33000 33000	U U	33000 33000	UJ UJ
001S	7/21/94 94M1BN2401	4- Nitroquinoline -1- oxide	45.3	0.076	19SS006	33000	U	33000	UJ
001S	7/21/94 94M1BN2401	Methapyrilene	30.0	0.394	19SS002 19SS005	3300 3300	U U	3300 3300	UJ UJ
001S	7/21/94 94M1BN2401	Methapyrilene	30.0	0.394	19SS006	3300	U	3300	UJ
001S	7/21/94 94M1BN2401	Hexachloro- phene	61.1	0.068	19SS002 19SS005	33000 33000	U U	33000 33000	UJ UJ
001S	7/21/94 94M1BN2401	Hexachloro- phene	61.1	0.068	19SS006	33000	U	33000	UJ

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%RSD	RRF	Affected Samples	Lab Value ug/L	Lab Qual	EDS Value ug/L	EDS Qual
002S	7/21/94 94M1BN2400	Aniline	26.9	1.601	19BS001 19BS001D	730 740	U U	730 740	UJ
002S	7/21/94 94M1BN2400	Aniline	26.9	1.601	19BS002	690	U	690	UJ
002S	7/21/94 94M1BN2400	2,4-Dinitrophenol	54.0	0.102	19BS001 19BS001D	3600 3600	U	3600 3600	UJ
002S	7/21/94 94M1BN2400	2,4-Dinitrophenol	54.0	0.102	19BS002	3400	U	3400	UJ
002S	7/21/94 94M1BN2400	4,6-Dinitro-2-Methyl phenol	39.7	0.117	19BS001 19BS001D	3600 3600	U	3600 3600	UJ
002S	7/21/94 94M1BN2400	4,6-Dinitro-2-Methyl phenol	39.7	0.117	19BS002	3400	U	3400	UJ
002S	7/21/94 94M1BN2400	Benzidine	85.9	0.227	19BS001 19BS001D	3600 3600	U	3600 3600	UJ
002S	7/21/94 94M1BN2400	Benzidine	85.9	0.227	19BS002	3400	U	3400	UJ
002S	7/21/94 94M1BN2400	1,3,5-Trinitro-benzene	35.9	0.152	19BS001 19BS001D	730 740	U	730 740	UJ
002S	7/21/94 94M1BN2400	1,3,5-Trinitro-benzene	35.9	0.152	19BS002	690	U	690	UJ
002S	7/21/94 94M1BN2400	4-Nitroquinoline -1-oxide	45.3	0.076	19BS001 19BS001D	36000 36000	U	36000 36000	UJ
002S	7/21/94 94M1BN2400	4-Nitroquinoline -1-oxide	45.3	0.076	19BS002	34000	U	34000	UJ
002S	7/21/94 94M1BN2400	Methapyriline	30.0	0.394	19BS001 19BS001D	3600 3600	U	3600 3600	UJ
002S	7/21/94 94M1BN2400	Methapyriline	30.0	0.394	19BS002	3400	U	3400	UJ

002S	7/21/94 94M1BN2400	Hexachloro-phene	61.1	0.068	19BS001 19BS001D	36000 36000	U	36000 36000	UJ
002S	7/21/94 94M1BN2400	Hexachloro-phene	61.1	0.068	19BS002	34000	U	34000	UJ
002S	7/22/94 94M1BN2415	Aniline	31.0	1.510	19BS003 19BS004	800 840	U	800 840	UJ
002S	7/22/94 94M1BN2415	Aniline	31.0	1.510	19BS005 19BS006	740 740	U	740 740	UJ
002S	7/22/94 94M1BN2415	4-Chloroaniline	26.7	0.312	19BS003 19BS004	800 840	U	800 840	UJ
002S	7/22/94 94M1BN2415	4-Chloroaniline	26.7	0.312	19BS005 19BS006	740 740	U	740 740	UJ
002S	7/22/94 94M1BN2415	3-Nitroaniline	26.5	0.236	19BS003 19BS004	3900 4100	U	3900 4100	UJ
002S	7/22/94 94M1BN2415	3-Nitroaniline	26.5	0.236	19BS005 19BS006	3600 3600	U	3600 3600	UJ
002S	7/22/94 94M1BN2415	2,4-Dinitrophenol	49.6	0.112	19BS003 19BS004	3900 4100	U	3900 4100	UJ
002S	7/22/94 94M1BN2415	2,4-Dinitrophenol	49.6	0.112	19BS005 19BS006	3600 3600	U	3600 3600	UJ
002S	7/22/94 94M1BN2415	4,6-Dinitro-2-Methyl phenol	43.3	0.110	19BS003 19BS004	3900 4100	U	3900 4100	UJ
002S	7/22/94 94M1BN2415	4,6-Dinitro-2-Methyl phenol	43.3	0.110	19BS005 19BS006	3600 3600	U	3600 3600	UJ
002S	7/22/94 94M1BN2415	Benzidine	99.9	0.380	19BS003 19BS004	3900 4100	U	3900 4100	UJ
002S	7/22/94 94M1BN2415	Benzidine	99.9	0.380	19BS005 19BS006	3600 3600	U	3600 3600	UJ
002S	7/22/94 94M1BN2415	N-Nitroso-piperidine	35.7	0.227	19BS003 19BS004	800 840	U	800 840	UJ
002S	7/22/94 94M1BN2415	N-Nitroso-piperidine	35.7	0.227	19BS005 19BS006	740 740	U	740 740	UJ
002S	7/22/94 94M1BN2416	Phenacetin	27.8	0.306	19BS003 19BS004	800 840	U	800 840	UJ

002S	7/22/94 94M1BN2416	Phenacetin	27.8	0.306	19BS005 19BS006	740 740	U	740 740	UJ
002S	7/22/94 94M1BN2416	1,4- Naphthoquinon e	99.9	0.178	19BS003 19BS004	80000 84000	U	80000 84000	UJ
002S	7/22/94 94M1BN2416	1,4- Naphthoquinon e	99.9	0.178	19BS005 19BS006	74000 74000	U	74000 74000	UJ
002S	7/22/94 94M1BN2416	4- Nitroquinoline -1- oxide	48.2	0.072	19BS003 19BS004	39000 41000	U	39000 41000	UJ
002S	7/22/94 94M1BN2416	4- Nitroquinoline -1- oxide	48.2	0.072	19BS005 19BS006	36000 36000	U	36000 36000	UJ
002S	7/22/94 94M1BN2416	Methapyrilene	30.2	0.393	19BS003 19BS004	3900 4100	U	3900 4100	UJ
002S	7/22/94 94M1BN2416	Methapyrilene	30.2	0.393	19BS005 19BS006	3600 3600	U	3600 3600	UJ
002S	7/22/94 94M1BN2416	Hexachloro- phene	41.7	0.102	19BS003 19BS004	39000 41000	U	39000 41000	UJ
002S	7/22/94 94M1BN2416	Hexachloro- phene	41.7	0.102	19BS005 19BS006	36000 36000	U	36000 36000	UJ
002S	7/22/94 94M1BN2416	1,3,5-Trinitro- benzene	25.3	0.177	19BS003 19BS004 19BS005 19BS006	800 840 740 740	U	800 840 740 740	UJ

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
003S	94M1BN2431 7/23/94	Aniline	30.3	1.525	19SD001 19SD001D 19SD002 19SD003	860 790 780 800	U	860 790 780 800	UJ

003S	94M1BN2431 7/23/94	4-Chloroaniline	32.3	0.289	19SD001 19SD001D 19SD002 19SD003	860 790 780 800	U	860 790 780 800	UJ
003S	94M1BN2431 7/23/94	3-Nitroaniline	25.2	0.240	19SD001 19SD001D 19SD002 19SD003	4200 3800 3800 3900	U	4200 3800 3800 3900	UJ
003S	94M1BN2431 7/23/94	2,4- Dinitrophenol	27.0	0.162	19SD001 19SD001D 19SD002 19SD003	4200 3800 3800 3900	U	4200 3800 3800 3900	UJ
003S	94M1BN2431 7/23/94	4,6-Dinitro-2- methylphenol	28.9	0.138	19SD001 19SD001D 19SD002 19SD003	4200 3800 3800 3900	U	4200 3800 3800 3900	UJ
003S	94M1BN2431 7/23/94	Benzidine	46.3	0.218	19SD001 19SD001D 19SD002 19SD003	4200 3800 3800 3900	U	4200 3800 3800 3900	UJ
003S	94M1BN2431 7/23/94	N-Nitroso-di-n- butylamine	39.9	0.212	19SD001 19SD001D 19SD002 19SD003	860 790 780 800	U	860 790 780 800	UJ
003S	94M1BN2431 7/23/94	1- Naphthylamine	43.8	0.771	19SD001 19SD001D 19SD002 19SD003	4200 3800 3800 3900	U	4200 3800 3800 3900	UJ
003S	94M1BN2431 7/23/94	2- Naphthylamine	36.8	0.297	19SD001 19SD001D 19SD002 19SD003	4200 3800 3800 3900	U	4200 3800 3800 3900	UJ
003S	94M1BN2431 7/23/94	4- Aminobiphenyl	33.1	0.230	19SD001 19SD001D 19SD002 19SD003	4200 3800 3800 3900	U	4200 3800 3800 3900	UJ
003S	94M1BN2431 7/23/94	1,4- Naphthoquinone	99.9	0.163	19SD001 19SD001D 19SD002 19SD003	86000 79000 78000 80000	U	86000 79000 78000 80000	UJ

003S	94M1BN2431 7/23/94	4- Nitroquinoline- 1- oxide	46.0	0.075	19SD001 19SD001D 19SD002 19SD003	42000 38000 38000 39000	U	42000 38000 38000 39000	UJ
003S	94M1BN2431 7/23/94	Methapyrilene	27.9	0.406	19SD001 19SD001D 19SD002 19SD003	4200 3800 3800 3900	U	4200 3800 3800 3900	UJ
003S	94M1BN2431 7/23/94	3,3-Dimethyl- benzidine	40.7	0.185	19SD001 19SD001D 19SD002 19SD003	860 790 780 800	U	860 790 780 800	UJ
003S	94M1BN2431 7/23/94	Hexachloro- phene	44.6	0.097	19SD001 19SD001D 19SD002 19SD003	42000 38000 38000 39000	U	42000 38000 38000 39000	UJ

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
004S	94M1BN2431 7/23/94	Aniline	30.3	1.525	AASS001 19R004*	690 10	U	690 10	UJ
004S	94M1BN2431 7/23/94	4-Chloroaniline	32.3	0.289	AASS001 19R004*	690 10	U	690 10	UJ
004S	94M1BN2431 7/23/94	3-Nitroaniline	25.2	0.240	AASS001 19R004*	3400 50	U	3400 50	UJ
004S	94M1BN2431 7/23/94	2,4- Dinitrophenol	27.0	0.162	AASS001 19R004*	3400 50	U	3400 50	UJ
004S	94M1BN2431 7/23/94	4,6-Dinitro-2- methylphenol	28.9	0.138	AASS001 19R004*	3400 50	U	3400 50	UJ
004S	94M1BN2431 7/23/94	Benzidine	46.3	0.218	AASS001 19R004*	3400 50	U	3400 50	UJ
004S	94M1BN2431 7/23/94	N-Nitroso- piperidine	39.9	0.212	AASS001 19R004*	690 10	U	690 10	UJ
004S	94M1BN2431 7/23/94	1- Naphthylamine	43.8	0.771	AASS001 19R004*	3400 50	U	3400 50	UJ
004S	94M1BN2431 7/23/94	2- Naphthylamine	36.8	0.297	AASS001 19R004*	3400 50	U	3400 50	UJ

004S	94M1BN2431 7/23/94	4- Aminobiphenyl	33.1	0.230	AASS001 19R004*	3400 50	U	3400 50	UJ
004S	94M1BN2431 7/23/94	1,4- Naphthoquinone	99.9	0.163	AASS001 19R004*	69000 1000	U	69000 1000	UJ
004S	94M1BN2431 7/23/94	4- Nitroquinoline- 1- oxide	46.0	0.075	AASS001 19R004*	34000 500	U	34000 500	UJ
004S	94M1BN2431 7/23/94	Methapyrilene	27.9	0.406	AASS001 19R004*	3400 50	U	3400 50	UJ
004S	94M1BN2431 7/23/94	3,3-Dimethyl- benzidine	40.7	0.185	AASS001 19R004*	690 10	U	690 10	UJ
004S	94M1BN2431 7/23/94	Hexachloro- phene	44.6	0.097	AASS001 19R004*	34000 500	U	34000 500	UJ
004S	94M1BN2447 7/24/94	N- Nitrosodimethyl amine	28.4	0.699	AASS001D AASS002	690 690	U	690 690	UJ
004S	94M1BN2447 7/24/94	Aniline	37.5	1.369	AASS001D AASS002	690 690	U	690 690	UJ
004S	94M1BN2447 7/24/94	Benzoic acid	27.2	0.193	AASS001D AASS002	3300 3300	U	3300 3300	UJ
004S	94M1BN2447 7/24/94	4-Chloroaniline	41.7	0.249	AASS001D AASS002	690 690	U	690 690	UJ
004S	94M1BN2447 7/24/94	3-Nitroaniline	25.6	0.239	AASS001D AASS002	3300 3300	U	3300 3300	UJ
004S	94M1BN2447 7/24/94	2,4- Dinitrophenol	33.8	0.147	AASS001D AASS002	3300 3300	U	3300 3300	UJ
004S	94M1BN2447 7/24/94	4,6-Dinitro-2- methylphenol	33.0	0.130	AASS001D AASS002	3300 3300	U	3300 3300	UJ
004S	94M1BN2447 7/24/94	Benzo(b)- fluoranthene	30.9	1.384	AASS001D AASS002	920 160	- J	920 160	J J
004S	94M1BN2447 7/24/94	Benzo(g,h,i)- perylene	27.9	1.099	AASS001D AASS002	180 690	J U	180 690	J UJ
004S	94M1BN2448 7/24/94	N-Nitroso- pyrrolidine	43.1	0.201	AASS001D AASS002	690 690	U	690 690	UJ
004S	94M1BN2448 7/24/94	N-Nitroso-di-n- butylamine	29.2	0.194	AASS001D AASS002	690 690	U	690 690	UJ

004S	94M1BN2448 7/24/94	2-Naphthylamine	41.3	0.276	AASS001D AASS002	3300 3300	U	3300 3300	UJ
004S	94M1BN2448 7/24/94	Phenacetin	30.2	0.296	AASS001D AASS002	690 690	U	690 690	UJ
004S	94M1BN2448 7/24/94	4-Aminobiphenyl	46.5	0.184	AASS001D AASS002	3300 3300	U	3300 3300	UJ
004S	94M1BN2448 7/24/94	7,12-Dimethylbenz (a)anthracene	28.3	0.680	AASS001D AASS002	690 690	U	690 690	UJ
004S	94M1BN2448 7/24/94	3-Methylchol anthrene	25.2	0.681	AASS001D AASS002	690 690	U	690 690	UJ
004S	94M1BN2448 7/24/94	1,4-Naphthoquinone	99.9	0.170	AASS001D AASS002	69000 69000	U	69000 69000	UJ
004S	94M1BN2448 7/24/94	4-Nitroquinoline-1-oxide	46.8	0.074	AASS001D AASS002	33000 33000	U	33000 33000	UJ
004S	94M1BN2448 7/24/94	Methapyrilene	33.6	0.374	AASS001D AASS002	3300 3300	U	3300 3300	UJ
004S	94M1BN2448 7/24/94	3,3-Dimethyl benzidine	57.0	0.134	AASS001D AASS002	690 690	U	690 690	UJ

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
005S	94M1BN2447 7/24/94	N-Nitrosodi-methylamine	28.4	0.699	AABS001 AABS001D AABS002	700 700 690	U	700 700 690	UJ
005S	94M1BN2447 7/24/94	Aniline	37.5	1.369	AABS001 AABS001D AABS002	700 700 690	U	700 700 690	UJ
005S	94M1BN2447 7/24/94	Benzoic acid	27.2	0.193	AABS001 AABS001D AABS002	3400 3400 3400	U	3400 3400 3400	UJ
005S	94M1BN2447 7/24/94	4-Chloroaniline	41.7	0.249	AABS001 AABS001D AABS002	700 700 690	U	700 700 690	UJ

005S	94M1BN2447 7/24/94	3-Nitroaniline	25.6	0.239	AABS001 AABS001D AABS002	3400 3400 3400	U	3400 3400 3400	UJ
005S	94M1BN2447 7/24/94	2,4-Dinitrophenol	33.8	0.147	AABS001 AABS001D AABS002	3400 3400 3400	U	3400 3400 3400	UJ
005S	94M1BN2447 7/24/94	4,6-Dinitro-2-methylphenol	33.0	0.130	AABS001 AABS001D AABS002	3400 3400 3400	U	3400 3400 3400	UJ
005S	94M1BN2447 7/24/94	Benzo(b)-fluoranthene	30.9	1.384	AABS001 AABS001D AABS002	71 700 690	J U U	71 700 690	J UJ UJ
005S	94M1BN2447 7/24/94	Benzo(g,h,i)-perylene	27.9	1.099	AABS001 AABS001D AABS002	700 700 690	U	700 700 690	UJ
005S	94M1BN2447 7/24/94	N-Nitrosopiperidine	43.1	0.201	AABS001 AABS001D AABS002	700 700 690	U	700 700 690	UJ
005S	94M1BN2447 7/24/94	N-Nitroso-di-n-butylamine	29.2	0.194	AABS001 AABS001D AABS002	700 700 690	U	700 700 690	UJ
005S	94M1BN2447 7/24/94	2-Naphthylamine	41.3	0.276	AABS001 AABS001D AABS002	3400 3400 3400	U	3400 3400 3400	UJ
005S	94M1BN2447 7/24/94	Phenacetin	30.2	0.296	AABS001 AABS001D AABS002	700 700 690	U	700 700 690	UJ
005S	94M1BN2447 7/24/94	4-Aminobiphenyl	46.5	0.184	AABS001 AABS001D AABS002	3400 3400 3400	U	3400 3400 3400	UJ
005S	94M1BN2447 7/24/94	7,12-Dimethylbenz(a)anthracene	28.3	0.680	AABS001D AABS001D AABS002	700 700 690	U	700 700 690	UJ
005S	94M1BN2447 7/24/94	1,4-Naphthoquinone	99.9	0.170	AABS001 AABS001D AABS002	70000 70000 69000	U	70000 70000 69000	UJ
005S	94M1BN2447 7/24/94	4-Nitroquinoline-1-oxide	46.8	0.074	AABS001 AABS001D AABS002	34000 34000 34000	U	34000 34000 34000	UJ

005S	94M1BN2447 7/24/94	Methapyrilene	33.6	0.324	AABS001 AABS001D AABS002	3400 3400 3400	U	3400 3400 3400	UJ
005S	94M1BN2447 7/24/94	3,3-Dimethyl-benzidine	57.0	0.134	AABS001 AABS001D AABS002	700 700 690	U	700 700 690	UJ
005S	94M1BN2447 7/24/94	Hexachlorophene	58.3	0.073	AABS001 AABS001D AABS002	34000 34000 34000	U	34000 34000 34000	UJ
005S	94M1BN2447 7/24/94	3-Methylchol anthrene	25.2	0.681	AABS001 AABS001D AABS002	700 700 690	U	700 700 690	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
001SED	8/18/94 94M1BN 2749-2753	Hexachloro-propene	8.3	0.045	02SD016 02SD018 02SD019 02SD022 02SD031 02SD031D	7100 5000 6700 5500 4100 4200	U U U U U U	7100 5000 6700 5500 4100 4200	R R R R R R
001SED	9/07/94 94M1BN 2925-2929	4-Nitro-quinoline-1-oxide	36.7	0.037	02SD017 02SD032 02SD030 02SD029 02SD029D 02SD015	110000 82000 43000 150000 130000 91000	U U U U U U	110000 820000 43000 150000 130000 91000	R R R R R R
001SED	9/07/94 94M1BN 2925-2929	Hexachloro-phene	37.5	0.044	02SD017 02SD032 02SD030 02SD029 02SD029D 02SD015	110000 82000 43000 150000 130000 91000	U U U U U U	110000 82000 43000 150000 130000 91000	R R R R R R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
001SED	94M1BN2659 8/11/94	Hexachloro-phene	84.6	0.027	02SD012	120000	U	120000	R

001SED	94M1BN2658 8/11/94	Aniline	30.6	1.518	02SD012	2600	U	2600	UJ
001SED	94M1BN2658 8/11/94	4- Nitrophenol	36.6	0.138	02SD012	12000	U	12000	UJ
001SED	94M1BN2658 8/11/94	Benzidine	99.9	0.457	02SD012	12000	U	12000	UJ
001SED	94M1BN2659 8/11/94	Hexachloro- propene	26.3	0.070	02SD012	12000	U	12000	UJ
001SED	94M1BN2659 8/11/94	1,4-Naphtho- quinone	99.9	0.163	02SD012	260000	U	260000	UJ
001SED	94M1BN2659 8/11/94	4-Nitro- quinoline-1- oxide	38.1	0.086	02SD012	120000	U	120000	UJ
001SED	94M1BN2659 8/11/94	3,3-Dimethyl benzidine	44.2	0.450	02SD012	2600	U	2600	UJ
001SED	94M1BN2706 8/15/94	Hexachloro- phene	98.9	0.002	02SD011 02SD014 02SD013	49000 62000 57000	U	49000 62000 57000	R
001SED	94M1BN2706 8/15/94	Aniline	25.9	1.623	02SD011 02SD014 02SD013	1000 1300 1200	U	1000 1300 1200	UJ
001SED	94M1BN2706 8/15/94	4- Nitrophenol	32.7	0.134	02SD011 02SD014 02SD013	4900 6200 5700	U	4900 6200 5700	UJ
001SED	94M1BN2706 8/15/94	Benzidine	99.9	0.553	02SD011 02SD014 02SD013	4900 6200 5700	U	4900 6200 5700	UJ
001SED	94M1BN2706 8/15/94	Indeno(1,2,3- cd) pyrene	37.1	1.162	02SD011 02SD014 02SD013	1000 1300 1200	U	1000 1300 1200	UJ
001SED	94M1BN2706 8/15/94	Dibenz(a,h) anthracene	30.9	0.969	02SD011 02SD014 02SD013	1000 1300 1200	U	1000 1300 1200	UJ
001SED	94M1BN2706 8/15/94	Benzo(b) fluoranthene	25.4	1.493	02SD011 02SD014 02SD013	1000 1300 1200	U	1000 1300 1200	UJ
001SED	94M1BN2706 8/15/94	Benzo(g,h,i) perylene	36.7	0.965	02SD011 02SD014 02SD013	1000 1300 1200	U	1000 1300 1200	UJ

001SED	94M1BN2707 8/15/94	3-Methylchol anthrene	26.0	0.673	02SD011 02SD014 02SD013	1000 1300 1200	U	1000 1300 1200	UJ
001SED	94M1BN2707 8/15/94	Hexachloro- propene	40.0	0.057	02SD011 02SD014 02SD013	4900 6200 5700	U	4900 6200 5700	UJ
001SED	94M1BN2707 8/15/94	1,4-Naphtho- quinone	99.9	0.146	02SD011 02SD014 02SD013	100000 130000 120000	U	100000 130000 120000	UJ
001SED	94M1BN2707 8/15/94	4-Nitro- quinoline-1- oxide	51.1	0.668	02SD011 02SD014 02SD013	49000 62000 57000	U	49000 62000 57000	UJ
001SED	94M1BN2707 8/15/94	Metha- pyriline	27.9	0.406	02SD011 02SD014 02SD013	4900 6200 5700	U	4900 6200 5700	UJ
001SED	94M1BN2707 8/15/94	3,3-Dimethyl benzidine	47.1	0.459	02SD011 02SD014 02SD013	1000 1300 1200	U	1000 1300 1200	UJ
001SED	94M1BN2708 8/15/94	p-Phenylene diamine	46.1	0.298	02SD011 02SD014 02SD013	49000 62000 75000	U	49000 62000 75000	UJ
001SED	94M1BN28568/ 29/94	Hexachloro- propene	6.7	0.048	02SD016 02SD018 02SD019 02SD022 02SD031 02SD031D	7100 5000 6700 5500 4100 4200	U	7100 5000 6700 5500 4100 4200	R
001SED	94M1BN28568/ 29/94	4-Nitro- quinoline-1- oxide	55.7	0.047	02SD016 02SD018 02SD019 02SD022 02SD031 02SD031D	71000 50000 67000 55000 41000 42000	U	71000 50000 67000 55000 41000 42000	R
001SED	94M1BN28568/ 29/94	Hexachloro- phene	94.5	0.007	02SD016 02SD018 02SD019 02SD022 02SD031 02SD031D	71000 50000 67000 55000 41000 42000	U	71000 50000 67000 55000 41000 42000	R

001SED	94M1BN28558/ 29/94	3- Nitroaniline	60.2	0.314	02SD016 02SD018 02SD019 02SD022 02SD031 02SD031D	7100 5000 6700 5500 4100 4200	U	7100 5000 6700 5500 4100 4200	UJ
001SED	94M1BN28558/ 29/94	bis(2-Chloro-isopropyl) ether	58.8	1.145	02SD016 02SD018 02SD019 02SD022 02SD031 02SD031D	1500 1000 1400 1100 840 860	U	1500 1000 1400 1100 840 860	UJ
001SED	94M1BN28558/ 29/94	4- Nitroaniline	36.2	0.316	02SD016 02SD018 02SD019 02SD022 02SD031 02SD031D	7100 5000 6700 5500 4100 4200	U	7100 5000 6700 5500 4100 4200	UJ
001SED	94M1BN28558/ 29/94	Benzidine	99.9	0.455	02SD016 02SD018 02SD019 02SD022 02SD031 02SD031D	7100 5000 6700 5500 4100 4200	U	7100 5000 6700 5500 4100 4200	UJ
001SED	94M1BN28568/ 29/94	4-Amino-biphenyl	76.4	0.434	02SD016 02SD018 02SD019 02SD022 02SD031 02SD031D	7100 5000 6700 5500 4100 4200	U	7100 5000 6700 5500 4100 4200	UJ
001SED	94M1BN28568/ 29/94	3,3-Dimethyl benzidine	87.4	0.601	02SD016 02SD018 02SD019 02SD022 02SD031 02SD031D	1500 1000 1400 1100 840 860	U	1500 1000 1400 1100 840 860	UJ
001SED	94M1BN28578/ 29/94	p-Phenylene diamine	69.2	0.396	02SD016 02SD018 02SD019 02SD022 02SD031 02SD031D	71000 50000 67000 55000 41000 42000	U	71000 50000 67000 55000 41000 42000	UJ

001SED	94M1BN29509/ 08/94	4-Nitro-quinoline-1-oxide	24.3	0.028	02SD017 02SD032 02SD030 02SD029 02SD029D 02SD015	110000 82000 43000 150000 130000 91000	U	110000 82000 43000 150000 130000 91000	R
001SED	94M1BN29509/ 08/94	Hexachloro-phene	88.6	0.005	02SD017 02SD032 02SD030 02SD029 02SD029D 02SD015	110000 82000 43000 150000 130000 91000	U	110000 82000 43000 150000 130000 91000	R
001SED	94M1BN29499/ 08/94	Hexachloro-cyclo pentadiene	30.3	0.191	02SD017 02SD032 02SD030 02SD029 02SD029D 02SD015	2200 1700 890 3000 2700 1900	U	2200 1700 890 3000 2700 1900	UJ
001SED	94M1BN29519/ 08/94	p-Phenylene diamine	62.0	0.379	02SD017 02SD032 02SD030 02SD029 02SD029D 02SD015	110000 82000 43000 150000 130000 91000	U	110000 82000 43000 150000 130000 91000	UJ

SDG No.	CCAL Date and File/ Batch Number of Stds.	Affected Analyte	% RSD	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
002SED	8/18/94 H0000735.D	Bis (2-chloro isopropyl) ether	27.9	1.283	02SD038 02SD038D	680	U	680	UJ
002SED	8/18/94 H0000735.D	Aniline	64.4	1.550	02SD038 02SD038D	680	U	680	UJ
002SED	8/18/94 H0000735.D	Hexachloro-phene	28.1	0.070	02SD038 02SD038D	34000	U	34000	UJ
002SED	8/18/94 H0000735.D	1,2-Diphenyl-hydrazine	28.2	0.737	02SD038 02SD038D	680	U	680	UJ
002SED	8/19/94 H0000759.D	Ethyl Methane-sulfonate	25.1	0.892	02SD037DL	20000	U	20000	UJ

002SED	8/19/94 H0000759.D	Bis(2-chloroisopropyl) ether	32.3	1.205	02SD037DL	20000	U	20000	UJ
002SED	8/19/94 H0000759.D	2-Nitroaniline	26.1	0.395	02SD037DL	20000	U	20000	UJ
002SED	8/19/94 H0000759.D	Aniline	55.6	1.466	02SD037DL	20000	U	20000	UJ
002SED	8/19/94 H0000759.D	Phenyl-tert-butylamine	39.0	0.667	02SD037DL	97000	U	97000	UJ
002SED	8/19/94 H0000759.D	1,3-Dinitrobenzene	30.3	0.211	02SD037DL	20000	U	20000	UJ
002SED	8/19/94 H0000759.D	Phenacetin	30.0	0.683	02SD037DL	20000	U	20000	UJ
002SED	8/19/94 H0000759.D	Methapyriline	50.4	0.210	02SD037DL	97000	U	97000	UJ
002SED	8/19/94 H0000759.D	1,2-Diphenyl-hydrazine	32.0	0.698	02SD037DL	20000	U	20000	UJ
002SED	8/18/94 H0000735.D	Bis(2-chloroisopropyl) ether	27.9	1.283	02SD037 02SD036	2000 5000	U	2000 5000	UJ
002SED	8/18/94 H0000735.D	Aniline	64.4	1.550	02SD037 02SD036	2000 5000	U	2000 5000	UJ
002SED	8/18/94 H0000735.D	Hexachloro-phene	28.1	0.070	02SD037 02SD036	97000 250000	U	97000 25000	UJ
002SED	8/18/94 H0000735.D	1,2-Diphenyl-hydrazine	28.2	0.737	02SD037 02SD036	2000 5000	U	2000 5000	UJ
002SED	8/18/94 H0000735.D	Benzoic Acid	32.8	0.264	02SD038 02SD038D 02SD037 02SD036	3400 3400 9700 25000	U	3400 3400 9700 25000	UJ
002SED	8/18/94 H0000735.D	Benzoic Acid	131	0.143	02SD037DL	97000	U	97000	UJ
002SED	8/19/94 H0000759.D	Bis(2-chloroisopropyl) ether	27.9	1.283	49SD010 49SD009 49SD011 49SD012	11000 13000 14000 12000	U	11000 13000 14000 12000	UJ

002SED	8/19/94 H0000735.D	Aniline	64.4	1.550	49SD010 49SD009 49SD011 49SD012	11000 13000 14000 12000	U	11000 13000 14000 12000	UJ
002SED	8/19/94 H0000735.D	Benzoic Acid	32.8	0.264	49SD010 49SD009 49SD011 49SD012	53000 66000 69000 61000	U	53000 66000 69000 61000	UJ
002SED	8/19/94 H0000735.D	Hexachloro- phene	28.1	0.70	49SD010 49SD009 49SD011 49SD012	530000 660000 690000 610000	U	530000 660000 690000 610000	UJ
002SED	8/19/94 H0000735.D	1,2-Diphenyl- hydrazine	28.2	0.737	49SD010 49SD009 49SD011 49SD012	11000 13000 14000 12000	U	11000 13000 14000 12000	UJ
002SED	8/17/94 H0000707.D	Benzoic Acid	46.2	0.033	02SD027 02SD026 02SD023 02SD033 02SD034 02SD028 02SD025 02SD010 02SD024 02SD021 02SD035 02SD020 02SD020DD	3900 3800 6600 3500 750 5000 6600 3000 4100 7500 2800 4300 4400	U	3900 3800 6600 3500 750 5000 6600 3000 4100 7500 2800 4300 4400	R
002SED	8/17/94 H0000707.D	Hexachloro- phene	43.4	0.031	02SD027 02SD026 02SD023 02SD033 02SD034 02SD028 02SD025 02SD010 02SD024 02SD021 02SD035 02SD020 02SD020DD	39000 38000 66000 35000 7500 50000 66000 30000 41000 75000 28000 43000 44000	U	39000 38000 66000 35000 7500 50000 66000 30000 41000 75000 28000 43000 44000	R

002SED	8/17/94 H0000707.D	Di-n- butylphthalate	33.2	1.646	02SD027 02SD026 02SD023 02SD033 02SD034 02SD028 02SD025 02SD010 02SD024 02SD021 02SD035 02SD020 02SD020DD	790 760 1300 710 150 1000 1300 620 830 1500 560 880 900	U	790 760 1300 710 150 1000 1300 620 830 1500 560 880 900	UJ
002SED	8/17/94 H0000707.D	Phenyl-tert- butylamine	39.0	0.666	02SD027 02SD026 02SD023 02SD033 02SD034 02SD028 02SD025 02SD010 02SD024 02SD021 02SD035 02SD020 02SD020DD	3900 3800 6600 3500 750 5000 6600 3000 4100 7500 2800 4300 4400	U	3900 3800 6600 3500 750 5000 6600 3000 4100 7500 2800 4300 4400	UJ
002SED	8/17/94 H0000707.D	p-Phenylene- diamine	33.5	0.162	02SD027 02SD026 02SD023 02SD033 02SD034 02SD028 02SD025 02SD010 02SD024 02SD035 02SD020 02SD020DD 02SD021	39000 38000 66000 35000 75000 50000 66000 30000 41000 28000 43000 44000 75000	U	39000 38000 66000 35000 75000 50000 66000 30000 41000 28000 43000 44000 75000	UJ

002SED	8/17/94 H0000707.D	1,3,5- Trinitrobenzene	25.2	0.399	02SD027 02SD026 02SD023 02SD033 02SD034 02SD028 02SD025 02SD010 02SD024 02SD035 02SD020 02SD020DD 02SD021	790 760 1300 710 150 1000 1300 620 830 1500 560 880 900	U	790 760 1300 710 150 1000 1300 620 830 1500 560 880 900	UJ
002SED	8/17/94 H0000707.D	Methapyrilene	28.3	0.303	02SD027 02SD026 02SD023 02SD033 02SD034 02SD028 02SD025 02SD010 02SD024 02SD021 02SD035 02SD020 02SD020DD	3900 3800 6600 3500 750 5000 6600 3000 4100 7500 2800 4300 4400	U	3900 3800 6600 3500 750 5000 6600 3000 4100 7500 2800 4300 4400	UJ
002SED	8/18/94 H0000735.D	Bis(2- chloroisopropyl) ether	27.9	1.283	02SD027DL 02SD026DL 02SD024DL 02SD035DL 02SD010DL 02SD023RE	7900 7600 4200 5600 6200 13000	U	7900 7600 4200 5600 6200 13000	UJ
002SED	8/18/94 H0000735.D	Aniline	64.4	1.550	02SD027DL 02SD026DL 02SD024DL 02SD035DL 02SD010DL 02SD023RE	7900 7600 4200 56000 6200 13000	U	7900 7600 4200 56000 6200 13000	UJ
002SED	8/18/94 H0000735.D	Hexachloro- phene	28.1	0.070	02SD027DL 02SD026DL 02SD024DL 02SD035DL 02SD010DL 02SD023RE	390000 380000 210000 280000 30000 660000	U	390000 380000 210000 280000 30000 660000	UJ

002SED	8/18/94 H0000735.D	1,2-Diphenyl-hydrazine	28.2	0.737	02SD027DL 02SD026DL 02SD024DL 02SD035DL 02SD010DL 02SD023RE	7900 7600 4200 5600 6200 13000	U	7900 7600 4200 5600 6200 13000	UJ
002SED	8/18/94 H0000735.D	Benzoic Acid	32.8	0.264	02SD027DL 02SD026DL 02SD024DL 02SD035DL 02SD010DL 02SD023RE	39000 38000 21000 28000 30000 66000	U	39000 38000 21000 28000 30000 66000	UJ

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
003SED	H0000758.D 8/19/94	bis(2-chloro-isopropyl) ether	32.3	1.205	00SD001 02SD043 02SD042 02SD042D 02SD040	7200 7400 5600 5100 24000	U U U U U	7200 7400 5600 5100 24000	UJ UJ UJ UJ UJ
003SED	H0000758.D 8/19/94	2-Nitroaniline	26.1	0.395	00SD001 02SD043 02SD042 02SD042D 02SD040	36000 37000 28000 25000 120000	U U U U U	36000 37000 28000 25000 120000	UJ UJ UJ UJ UJ
003SED	H0000758.D 8/19/94	Aniline	55.6	1.466	00SD001 02SD043 02SD042 02SD042D 02SD040	7200 7400 5600 5100 24000	U U U U U	7200 7400 5600 5100 24000	UJ UJ UJ UJ UJ
003SED	H0000758.D 8/19/94	Benzoic Acid	131	0.143	00SD001 02SD043 02SD042 02SD042D 02SD040	36000 37000 28000 25000 120000	U U U U U	36000 37000 28000 25000 120000	UJ UJ UJ UJ UJ
003SED	H0000758.D 8/19/94	Phenyl-tert-butylamine	39.0	0.667	00SD001 02SD043 02SD042 02SD042D 02SD040	36000 37000 28000 25000 120000	U U U U U	36000 37000 28000 25000 120000	UJ UJ UJ UJ UJ

003SED	H0000758.D 8/19/94	1,3-Dinitrobenzene	30.3	0.211	00SD001 02SD043 02SD042 02SD042D 02SD040	7200 7400 5600 5100 24000	U U U U U	7200 7400 5600 5100 24000	UJ UJ UJ UJ UJ
003SED	H0000758.D 8/19/94	Phenacetin	30.0	0.683	00SD001 02SD043 02SD042 02SD042D 02SD040	7200 7400 5600 5100 24000	U U U U U	7200 7400 5600 5100 24000	UJ UJ UJ UJ UJ
003SED	H0000758.D 8/19/94	Methapyriline	50.4	0.210	00SD001 02SD043 02SD042 02SD042D 02SD040	36000 37000 28000 25000 120000	U U U U U	36000 37000 28000 25000 120000	UJ UJ UJ UJ UJ
003SED	H0000758.D 8/19/94	1,2-Diphenyl-hydrazine	32.0	0.698	00SD001 02SD043 02SD042 02SD042D 02SD040	7200 7400 5600 5100 24000	U U U U U	7200 7400 5600 5100 24000	UJ UJ UJ UJ UJ
003SED	H0000781.D 8/22/94	Hexachloro-phene	10.0	0.049	02SD041	230000	U	230000	R
003SED	H0000781.D 8/22/94	bis(2-chloro-isopropyl) ether	32.9	1.193	02SD041	4600	U	4600	UJ
003SED	H0000781.D 8/22/94	Aniline	62.4	0.531	02SD041	4600	U	4600	UJ
003SED	H0000781.D 8/22/94	Benzoic Acid	84.3	0.114	02SD041	23000	U	23000	UJ
003SED	H0000781.D 8/22/94	Phenyl-tert-butylamine	27.4	0.793	02SD041	23000	U	23000	UJ
003SED	H0000781.D 8/22/94	Methapyriline	48.4	0.218	02SD041	23000	U	23000	UJ
003SED	H0000781.D 8/22/94	1,2-Diphenyl-hydrazine	37.0	0.647	02SD041	4600	U	4600	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Samples	Lab Value ug/L	Lab Qual	EDS Value ug/L	EDS Qual

BGROU ND-SW	9/12/94 H0001054.D-H0001058.D	Hexachloro-phene	35.3	0.027	0BSW011 0BSW010 0BSW012D 0BSW012 0BSW013 0BSW015 0BSW014	500	U	500	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/l	Lab Qual	EDS Value ug/l	EDS Qual
BGROU ND-SW	H0001151.D 9/21/94	Hexachloro-phene	22.0	0.085	0BSW010 0BSW011 0BSW015 0BSW014 0BSW013 0BSW012 0BSW012D	500	U	500	R
BGROU ND-SW	H0001151.D 9/21/94	Benzoic Acid	56.4	0.140	0BSW010 0BSW011 0BSW015 0BSW014 0BSW013 0BSW012 0BSW012D	50	U	50	UJ
BGROU ND-SW	H0001151.D 9/21/94	4-Nitroquinoline -1-oxide	29.7	0.092	0BSW010 0BSW011 0BSW015 0BSW014 0BSW013 0BSW012 0BSW012D	500	U	500	UJ
BGROU ND-SW	H0001151.D 9/21/94	Aramite	33.0	0.095	0BSW010 0BSW011 0BSW015 0BSW014 0BSW013 0BSW012 0BSW012D	50	U	50	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
BGROUND-SED	9/12/94 H0001054.D-H0001058.D	Hexachloro-phene	35.3	0.027	0BSD015 0BSD014 0BSD013 0BSD012 0BSD012D 0BSD010 0BSD011	20000 21000 20000 24000 24000 87000 82000	U	20000 21000 20000 24000 24000 87000 82000	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
BGROUND-SED	H0001123.D 9/15/94	Hexachloro-phene	35.4	0.017	0BSD015 0BSD014 0BSD013 0BSD012 0BSD012D 0BSD010 0BSD011	20000 21000 20000 24000 24000 87000 82000	U	20000 21000 20000 24000 24000 87000 82000	R
BGROUND-SED	H0001123.D 9/15/94	Benzoic Acid	64.8	0.113	0BSD015 0BSD014 0BSD013 0BSD012 0BSD012D 0BSD010 0BSD011	29 2100 2000 2400 2400 8700 8200	J U U U U U U	29 2100 2000 2400 2400 8700 8200	J UJ UJ UJ UJ UJ UJ
BGROUND-SED	H0001123.D 9/15/94	4-Nitroquinoline -1-oxide	27.7	0.094	0BSD015 0BSD014 0BSD013 0BSD012 0BSD012D 0BSD010 0BSD011	20000 21000 20000 24000 24000 87000 82000	U	20000 21000 20000 24000 24000 87000 82000	UJ
BGROUND-SED	H0001123.D 9/15/94	Aramite	40.8	0.101	0BSD015 0BSD014 0BSD013 0BSD012 0BSD012D 0BSD010 0BSD011	2000 2100 2000 2400 2400 8700 8200	U	2000 2100 2000 2400 2400 8700 8200	UJ

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%RSD	RRF	Affected Samples	Lab Value ug/l	Lab Qual	EDS Value ug/l	EDS Qual
LWW SEW	94M1BN3230 10/04/94	Hexachloro-cyclo pentadiene	30.2	0.208	LWR025 LWR026	10	U	10	UJ
LWW SEW	94M1BN3230 10/04/94	2,4-Dinitrophenol	51.2	0.098	LWR025 LWR026	50	U	50	UJ
LWW SEW	94M1BN3230 10/04/94	4,6-Dinitro-2-methylphenol	36.0	0.114	LWR025 LWR026	50	U	50	UJ
LWW SEW	94M1BN3230 10/04/94	Benzidine	34.2	0.874	LWR025 LWR026	50	U	50	UJ
LWW SEW	94M1BN3231 10/04/94	Methyl methane sulfonate	50.7	0.333	LWR025 LWR026	10	U	10	UJ
LWW SEW	94M1BN3231 10/04/94	2,3,4,6-Tetrachloro phenol	25.4	0.191	LWR025 LWR026	10	U	10	UJ
LWW SEW	94M1BN3231 10/04/94	1,3,5-Trinitro-benzene	30.9	0.190	LWR025 LWR026	10	U	10	UJ
LWW SEW	94M1BN3231 10/04/94	4-Nitroquinoline -1-oxide	62.6	0.052	LWR025 LWR026	500	U	500	UJ
LWW SEW	94M1BN3231 10/04/94	Methapyriline	46.1	0.808	LWR025 LWR026	50	U	50	UJ
LWW SEW	94M1BN3231 10/04/94	Hexachlorophe ne	87.5	0.030	LWR025 LWR026	500	U	500	UJ
LWW SEW	94M1BN3262 10/06/94	Hexachloro-cyclo-pentadiene	27.5	0.216	LWSW001 LWSW002 LWSW003 LWSW004 LWSW005 LWSW005D LWSW006 LWSW008 LWSW009	10	U	10	UJ

LWW SEW	94M1BN3262 10/06/94	Benzidine	52.5	0.993	LWSW001 LWSW002 LWSW003 LWSW004 LWSW005 LWSW005D LWSW006 LWSW008 LWSW009	50	U	50	UJ
LWW SEW	94M1BN3262 10/06/94	Benzo(k) fluoranthene	26.6	1.203	LWSW001 LWSW002 LWSW003 LWSW004 LWSW005 LWSW005D LWSW006 LWSW008 LWSW009	10	U	10	UJ
LWW SEW	94M1BN3263 10/06/94	4-Nitroquinoline 1-oxide	54.7	0.063	LWSW001 LWSW002 LWSW003 LWSW004 LWSW005 LWSW005D LWSW006 LWSW008 LWSW009	500	U	500	UJ
LWW SEW	94M1BN3263 10/06/94	Methapyrilene	36.9	0.757	LWSW001 LWSW002 LWSW003 LWSW004 LWSW005 LWSW005D LWSW006 LWSW008 LWSW009	50	U	50	UJ
LWW SEW	94M1BN3263 10/06/94	Hexachloro-phene	68.8	0.075	LWSW001 LWSW002 LWSW003 LWSW004 LWSW005 LWSW005D LWSW006 LWSW008 LWSW009	500	U	500	UJ

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
LWW SED	94M1BN3231 10/04/94	Hexachloro-phene	87.5	0.030	LWSD001 LWSD002 LWSD003 LWSD004	44000 43000 43000 44000	U	44000 43000 43000 44000	R
LWW SED	94MB1N3230 10/04/94	Hexachloro-cyclo-pentadiene	30.2	0.208	LWSD001 LWSD002 LWSD003 LWSD004	920 830 1000 920	U	920 830 1000 920	UJ
LWW SED	94MB1N3230 10/04/94	2,4-Dinitrophenol	51.2	0.098	LWSD001 LWSD002 LWSD003 LWSD004	4400 4300 4800 4400	U	4400 4300 4800 4400	UJ
LWW SED	94MB1N3230 10/04/94	4,6-Dinitro-2-methylphenol	36.0	0.114	LWSD001 LWSD002 LWSD003 LWSD004	4400 4300 4800 4400	U	4400 4300 4800 4400	UJ
LWW SED	94MB1N3230 10/04/94	Benzidine	34.2	0.874	LWSD001 LWSD002 LWSD003 LWSD004	4400 4300 4800 4400	U	4400 4300 4800 4400	UJ
LWW SED	94M1BN3231 10/04/94	Methyl methane-sulfonate	50.7	0.333	LWSD001 LWSD002 LWSD003 LWSD004	920 880 1000 920	U	920 880 1000 920	UJ
LWW SED	94M1BN3231 10/04/94	2,3,4,6-Tetra-chlorophenol	25.4	0.191	LWSD001 LWSD002 LWSD003 LWSD004	920 880 1000 920	U	920 880 1000 920	UJ
LWW SED	94M1BN3231 10/04/94	1,3,5-Trinitro-benzene	30.9	0.190	LWSD001 LWSD002 LWSD003 LWSD004	920 880 1000 920	U	920 880 1000 920	UJ
LWW SED	94M1BN3231 10/04/94	4-Nitroquinoline 1-oxide	62.6	0.052	LWSD001 LWSD002 LWSD003 LWSD004	44000 43000 43000 4400	U	44000 43000 43000 4400	UJ

LWW SED	94M1BN3231 10/04/94	Methapyrilene	46.1	0.808	LWSD001 LWSD002 LWSD003 LWSD004	4400 4300 4800 4400	U	4400 4300 4800 4400	UJ
LWW SED	94M1BN3246 10/05/94	Hexachloro-cyclo-pentadiene	28.2	0.214	LWSD005 LWSD005D LWSD006 LWSD007 LWSD008 LWSD009	1400 1600 1400 1000 1300 1200	U	1400 1600 1400 1000 1300 1200	UJ
LWW SED	94M1BN3246 10/05/94	Benzidine	43.5	0.934	LWSD005 LWSD005D LWSD006 LWSD007 LWSD008 LWSD009	7000 7600 6700 4900 6500 5700	U	7000 7600 6700 4900 6500 5700	UJ
LWW SED	94M1BN3246 10/05/94	Benzo(k) fluoranthene	25.1	1.228	LWSD005 LWSD005D LWSD006 LWSD007 LWSD008 LWSD009	1400 1600 320 1000 1300 1200	U	1400 1600 320 1000 1300 1200	UJ
LWW SED	94M1BN3247 10/05/94	Methyl methane-sulfonate	37.6	0.304	LWSD005 LWSD005D LWSD006 LWSD007 LWSD008 LWSD009	1400 1600 1400 1000 1300 1200	U	1400 1600 1400 1000 1300 1200	UJ
LWW SED	94M1BN3247 10/05/94	4-Nitroquinoline 1-oxide	48.9	0.071	LWSD005 LWSD005D LWSD006 LWSD007 LWSD008 LWSD009	70000 76000 67000 49000 65000 57000	U	70000 76000 67000 49000 65000 57000	UJ
LWW SED	94M1BN3247 10/05/94	Methapyrilene	42.7	0.789	LWSD005 LWSD005D LWSD006 LWSD007 LWSD008 LWSD009	7000 7600 6700 4900 6500 5700	U	7000 7600 6700 4900 6500 5700	UJ

LWW SED	94M1BN3247 10/05/94	Hexachloro-phene	75.8	0.058	LWSD005 LWSD005D LWSD006 LWSD007 LWSD008 LWSD009	70000 76000 67000 49000 65000 57000	U	70000 76000 67000 49000 65000 57000	UJ

SDG No.	CCAL Date and File/ Batch Number of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
08/SL-01	8/22/94 H0000781.D	Hexachloro-phene	10.0	0.049	08SL01101 08SL01102 08SL01201 08SL01202 08SL01301 08SL01302	1500000 520000 200000 180000 180000 180000	U	1500000 520000 200000 180000 180000 180000	R
08/SL-01	8/22/94 H0000781.D	Bis(2-chloro isopropyl) ether	32.9	1.193	08SL01101 08SL01102 08SL01201 08SL01202 08SL01301 08SL01302	30000 10000 4000 3700 3700 3700	U	30000 10000 4000 3700 3700 3700	UJ
08/SL-01	8/22/94 H0000781.D	Aniline	62.4	1.531	08SL01101 08SL01102 08SL01201 08SL01202 08SL01301 08SL01302	30000 10000 4000 3700 3700 3700	U	30000 10000 4000 3700 3700 3700	UJ
08/SL-01	8/22/94 H0000781.D	Benzoic Acid	84.3	0.114	08SL01101 08SL01102 08SL01201 08SL01202 08SL01301 08SL01302	150000 52000 20000 18000 18000 18000	U	150000 52000 20000 18000 18000 18000	UJ
08/SL-01	8/22/94 H0000781.D	Phenyl-tert-butylamine	27.4	0.793	08SL01101 08SL01102 08SL01201 08SL01202 08SL01301 08SL01302	150000 52000 20000 18000 18000 18000	U	150000 52000 20000 18000 18000 18000	UJ

08/SL-01	8/22/94 H0000781.D	Metha-pyriline	48.4	0.218	08SL01101 08SL01102 08SL01201 08SL01202 08SL01301 08SL01302	150000 52000 20000 18000 18000 18000	U	150000 52000 20000 18000 18000 18000	UJ
08/SL-01	8/22/94 H0000781.D	1,2-Diphenyl hydrazine	37.0	0.647	08SL01101 08SL01102 08SL01201 08SL01202 08SL01301 08SL01302	30000 10000 4000 3700 3700 3700	U	30000 10000 4000 3700 3700 3700	UJ
08/SL-01	8/23/94 H0000803.D	Bis(2-chloro isopropyl) ether	30.4	1.239	08SL00801 08SL00901 08SL01001 08SL01001D 08SL01006	3800 91000 7000 6900 3700	U	3800 91000 7000 6900 3700	UJ
08/SL-01	8/23/94 H0000803.D	2-Nitroaniline	27.1	0.390	08SL00801 08SL00901 08SL01001 08SL01001D 08SL01006	19000 450000 35000 34000 18000	U	19000 450000 35000 34000 18000	UJ
08/SL-01	8/23/94 H0000803.D	Aniline	62.7	1.533	08SL00801 08SL00901 08SL01001 08SL01001D 08SL01006	3800 91000 7000 6900 3700	U	3800 91000 7000 6900 3700	UJ
08/SL-01	8/23/94 H0000803.D	Benzoic Acid	41.7	0.087	08SL00801 08SL00901 08SL01001 08SL01001D 08SL01006	19000 450000 35000 34000 18000	U	19000 450000 35000 34000 18000	UJ
08/SL-01	8/23/94 H0000803.D	Phenyl-tert-butylamine	43.4	0.619	08SL00801 08SL00901 08SL01001 08SL01001D 08SL01006	19000 450000 35000 34000 18000	U	19000 450000 35000 34000 18000	UJ
08/SL-01	8/23/94 H0000803.D	p-Phenylene diamine	32.8	0.163	08SL00801 08SL00901 08SL01001 08SL01001D 08SL01006	190000 4500000 350000 340000 180000	U	190000 4500000 350000 340000 180000	UJ

08/SL-01	8/23/94 H0000803.D	1,3-Dinitro-benzene	30.3	0.211	08SL00801 08SL00901 08SL01001 08SL01001D 08SL01006	3800 91000 7000 6900 3700	U	3800 91000 7000 6900 3700	UJ
08/SL-01	8/23/94 H0000803.D	1,2-Diphenyl hydrazine	35.4	0.663	08SL00801 08SL00901 08SL01001 08SL01001D 08SL01006	3800 91000 7000 6900 3700	U	3800 91000 7000 6900 3700	UJ
08/SL-01	8/24/94 H0000825.D	Hexachloro-phene	28.2	0.039	08SL00906 08SL00806 08SL00501 08SL00601 08SL00605 08SL00701 08SL00701D 08SL00705 08SL01006DL 08SL00906DL 08SL00501DL 08SL00505	180000 180000 180000 920000 190000 370000 350000 190000 540000 730000 360000 400000	U	180000 180000 180000 920000 190000 370000 350000 190000 540000 730000 360000 400000	R
08/SL-01	8/24/94 H0000825.D	Bis-2 (chloro isopropyl) ether	35.8	1.143	08SL00906 08SL00806 08SL00501 08SL00601 08SL00605 08SL00701 08SL00701D 08SL00705 08SL01006DL 08SL00906DL 08SL00501DL 08SL00505	3700 3600 3600 18000 3900 7500 7100 3900 11000 15000 7200 8000	U	3700 3600 3600 18000 3900 7500 7100 3900 11000 15000 7200 8000	UJ
08/SL-01	8/24/94 H0000825.D	Ethyl-methane sulfonate	27.0	0.870	08SL00906 08SL00806 08SL00501 08SL00601 08SL00605 08SL00701 08SL00701D 08SL00705 08SL01006DL 08SL00906DL 08SL00501DL 08SL00505	3700 3600 3600 18000 3900 7500 7100 3900 11000 15000 7200 8000	U	3700 3600 3600 18000 3900 7500 7100 3900 11000 15000 7200 8000	UJ

08/SL-01	8/24/94 H0000825.D	Benzoic Acid	57.6	0.097	08SL00906	18000	U	18000	UJ
					08SL00806	18000		18000	
					08SL00501	18000		18000	
					08SL00601	92000		92000	
					08SL00605	19000		19000	
					08SL00701	37000		37000	
					08SL00701D	35000		35000	
					08SL00705	19000		19000	
					08SL01006DL	54000		54000	
					08SL00906DL	73000		73000	
					08SL00501DL	36000		36000	
					08SL00505	40000		40000	
08/SL-01	8/24/94 H0000825.D	Phenyl-tert-butylamine	26.5	0.803	08SL00906	18000	U	18000	UJ
					08SL00806	18000		18000	
					08SL00501	18000		18000	
					08SL00601	92000		92000	
					08SL00605	19000		19000	
					08SL00701	37000		37000	
					08SL00701D	35000		35000	
					08SL00705	19000		19000	
					08SL01006DL	54000		54000	
					08SL00906DL	73000		73000	
					08SL00501DL	36000		36000	
					08SL00505	40000		40000	
08/SL-01	8/24/94 H0000825.D	2,3,4,6-Tetrachloro phenol	26.4	0.453	08SL00906	3700	U	3700	UJ
					08SL00806	3600		3600	
					08SL00501	3600		3600	
					08SL00601	18000		18000	
					08SL00605	3900		3900	
					08SL00701	7500		7500	
					08SL00701D	7100		7100	
					08SL00705	3900		3900	
					08SL01006DL	11000		11000	
					08SL00906DL	15000		15000	
					08SL00501DL	7200		7200	
					08SL00505	8000		8000	
08/SL-01	8/24/94 H0000825.D	Metha-pyrilene	57.5	0.179	08SL00906	18000	U	18000	UJ
					08SL00806	18000		18000	
					08SL00501	18000		18000	
					08SL00601	92000		92000	
					08SL00605	19000		19000	
					08SL00701	37000		37000	
					08SL00701D	35000		35000	
					08SL00705	19000		19000	
					08SL01006DL	54000		54000	
					08SL00906DL	73000		73000	
					08SL00501DL	36000		36000	
					08SL00505	40000		40000	

08/SL-01	8/24/94 H0000825.D	1,2-Diphenyl hydrazine	39.6	0.620	08SL00906 08SL00806 08SL00501 08SL00601 08SL00605 08SL00701 08SL00701D 08SL00705 08SL01006DL 08SL00906DL 08SL00501DL 08SL00505	3700 3600 3600 18000 3900 7500 7100 3900 11000 15000 7200 8000	U	3700 3600 3600 18000 3900 7500 7100 3900 11000 15000 7200 8000	UJ
08/SL-01	8/25/94 H0000847.D	Benzoic Acid	54.2	0.028	08SL00806DL	72000	U	72000	R
08/SL-01	8/25/94 H0000847.D	Hexachloro-phene	19.4	0.044	08SL00806DL	720000	U	720000	R
08/SL-01	8/25/94 H0000847.D	Bis-2 (chloro isopropyl) ether	32.6	1.199	08SL00806DL	14000	U	14000	UJ
08/SL-01	8/25/94 H0000847.D	2-Nitroaniline	28.6	0.382	08SL00806DL	72000	U	72000	UJ
08/SL-01	8/25/94 H0000847.D	4-Nitroaniline	28.3	0.371	08SL00806DL	72000	U	72000	UJ
08/SL-01	8/25/94 H0000847.D	Hexachloro-benzene	26.1	0.309	08SL00806DL	14000	U	14000	UJ
08/SL-01	8/25/94 H0000847.D	Phenyl-tert-butylamine	42.6	0.627	08SL00806DL	72000	U	72000	UJ
08/SL-01	8/25/94 H0000847.D	p-Phenylene diamine	43.5	0.137	08SL00806DL	72000	U	72000	UJ
08/SL-01	8/25/94 H0000847.D	Metha-pyrilene	27.3	0.307	08SL00806DL	72000	U	72000	UJ
08/SL-01	8/25/94 H0000847.D	Fluor-anthene	25.1	1.073	08SL00806DL	14000	U	14000	UJ

08/SL-01	8/25/94 H0000847.D	Phenacetin	25.2	0.730	08SL00806DL	14000	U	14000	UJ
08/SL-01	8/25/94 H0000847.D	1,2-Diphenyl hydrazine	36.6	0.651	08SL00806DL	14000	U	14000	UJ

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
08/SL-02	11/21/94 94M1BN3504	4-Chloroaniline	33.6	0.287	08SL00401 08SL00401D 08R033*	870 900 10	U	870 900 10	UJ
08/SL-02	11/21/94 94M1BN3504	Pyridine	30.4	0.977	08SL00401 08SL00401D 08R033*	4200 4400 50	U	4200 4400 50	UJ
08/SL-02	11/21/94 94M1BN3504	Aniline	34.3	1.336	08SL00401 08SL00401D 08R033*	870 900 10	U	870 900 10	UJ
08/SL-02	11/21/94 94M1BN3505	Phenacetin	27.2	0.316	08SL00401 08SL00401D 08R033*	870 900 10	U	870 900 10	UJ
08/SL-02	11/21/94 94M1BN3505	Methapyrilene	34.0	0.339	08SL00401 08SL00401D 08R033*	4200 4400 50	U	4200 4400 50	UJ
08/SL-02	11/21/94 94M1BN3505	Hexachloro-phene	62.7	0.087	08SL00401 08SL00401D 08R033*	42000 44000 500	U	42000 44000 500	UJ
08/SL-02	11/21/94 94M1BN3505	3-Methylchol-anthrene	84.3	0.562	08SL00401 08SL00401D 08R033*	870 900 10	U	870 900 10	UJ

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
2&4-001	H0000641.D 8/15/94	Hexachloro-phene	42.7	0.031	02R012*	500	U	500	R

2&4-001	H0000641.D 8/15/94	4-Nitro- quinoline-1- oxide	33.6	0.055	02R012*	500	U	500	UJ
2&4-001	H0000781.D 8/22/94	bis(2-Chloro- isopropyl) ether	32.9	1.193	02SS00101 04SS00801 04BS00810 04SS00401	370 1700 430 1800	U	370 1700 430 1800	UJ
2&4-001	H0000781.D 8/22/94	Aniline	62.4	1.531	02SS00101 04SS00801 04BS00810 04SS00401	370 1700 430 1800	U	370 1700 430 1800	UJ
2&4-001	H0000781.D 8/22/94	Benzoic Acid	84.3	0.114	02SS00101 04SS00801 04BS00810 04SS00401	1800 8400 2100 9000	U	1800 8400 2100 9000	UJ
2&4-001	H0000781.D 8/22/94	Phenyl-tert- butylamine	27.4	0.793	02SS00101 04SS00801 04BS00810 04SS00401	1800 8400 2100 9000	U	1800 8400 2100 9000	UJ
2&4-001	H0000781.D 8/22/94	Metha- pyrilene	48.4	0.218	02SS00101 04SS00801 04BS00810 04SS00401	1800 8400 2100 9000	U	1800 8400 2100 9000	UJ
2&4-001	H0000781.D 8/22/94	1,2-Diphenyl hydrazine	37.0	0.647	02SS00101 04SS00801 04BS00810 04SS00401	370 1700 430 1800	U	370 1700 430 1800	UJ
2&4-001	H0000781.D 8/22/94	Hexachloro- phene	10.0	0.049	02SS00101 04SS00801 04BS00810 04SS00401	18000 84000 21000 90000	U	18000 84000 21000 90000	R
2&4-001	H0000803.D 8/23/94	bis(2-Chloro- isopropyl) ether	30.4	1.239	04BS00405 04BS00905 04BS01008 04BS01008D	2000 9900 390 380	U	2000 9900 390 380	UJ
2&4-001	H0000803.D 8/23/94	2- Nitroaniline	27.1	0.390	04BS00405 04BS00905 04BS01008 04BS01008D	9700 49000 1900 1900	U	9700 49000 1900 1900	UJ
2&4-001	H0000803.D 8/23/94	Aniline	62.7	1.533	04BS00405 04BS00905 04BS01008 04BS01008D	2000 9900 390 380	U	2000 9900 390 380	UJ

2&4-001	H0000803.D 8/23/94	Benzoic Acid	41.7	0.087	04BS00405 04BS00905 04BS01008 04BS01008D	9700 49000 1900 1900	U	9700 49000 1900 1900	UJ
2&4-001	H0000803.D 8/23/94	Phenyl-tert-butylamine	43.4	0.619	04BS00405 04BS00905 04BS01008 04BS01008D	9700 49000 1900 1900	U	9700 49000 1900 1900	UJ
2&4-001	H0000803.D 8/23/94	p-Phenylene diamine	32.8	0.163	04BS00405 04BS00905 04BS01008 04BS01008D	97000 490000 19000 19000	U	97000 490000 19000 19000	UJ
2&4-001	H0000803.D 8/23/94	1,3-Dinitro-benzene	30.3	0.211	04BS00405 04BS00905 04BS01008 04BS01008D	2000 9900 390 380	U	2000 9900 390 380	UJ
2&4-001	H0000803.D 8/23/94	1,2-Diphenyl hydrazine	35.4	0.663	04BS00405 04BS00905 04BS01008 04BS01008D	2000 9900 390 380	U	2000 9900 390 380	UJ
2&4-001	H0000847.D 8/25/94	bis(2-Chloro-isopropyl) ether	32.6	1.199	04SS01001 04SS00901 04SS00401 04SS00401D 04SS00801 04SS00701 04SS00301	370 370 1400 360 3500 350 3900	U	370 370 1400 360 3500 350 3900	UJ
2&4-001	H0000847.D 8/25/94	2-Nitroaniline	28.6	0.382	04SS01001 04SS00901 04SS00401 04SS00401D 04SS00801 04SS00701 04SS00301	1800 1800 7200 1800 18000 1700 19000	U	1800 1800 7200 1800 18000 1700 19000	UJ
2&4-001	H0000847.D 8/25/94	4-Nitroaniline	28.3	0.371	04SS01001 04SS00901 04SS00401 04SS00401D 04SS00801 04SS00701 04SS00301	1800 1800 7200 1800 18000 1700 19000	U	1800 1800 7200 1800 18000 1700 19000	UJ

2&4-001	H0000847.D 8/25/94	Hexachloro- benzene	26.1	0.309	04SS01001 04SS00901 04SS00401 04SS00401D 04SS00801 04SS00701 04SS00301	370 370 1400 360 3500 350 3900	U	370 370 1400 360 3500 350 3900	UJ
2&4-001	H0000847.D 8/25/94	Fluoranthene	25.1	1.073	04SS01001 04SS00901 04SS00401 04SS00401D 04SS00801 04SS00701 04SS00301	140 370 1400 360 3500 350 3900	J U U U U U U	370 370 1400 360 3500 350 3900	J UJ UJ UJ UJ UJ UJ
2&4-001	H0000847.D 8/25/94	Benzoic Acid	54.2	0.028	04SS01001 04SS00901 04SS00401 04SS00401D 04SS00801 04SS00701 04SS00301	1800 1800 7200 1800 18000 1700 19000	U	1800 1800 7200 1800 18000 1700 19000	R
2&4-001	H0000847.D 8/25/94	Phenyl-tert- butylamine	42.6	0.627	04SS01001 04SS00901 04SS00401 04SS00401D 04SS00801 04SS00701 04SS00301	1800 1800 7200 1800 18000 1700 19000	U	1800 1800 7200 1800 18000 1700 19000	UJ
2&4-001	H0000847.D 8/25/94	p-Phenylene diamine	43.5	0.137	04SS01001 04SS00901 04SS00401 04SS00401D 04SS00801 04SS00701 04SS00301	18000 18000 72000 18000 180000 17000 190000	U	18000 18000 72000 18000 180000 17000 190000	UJ
2&4-001	H0000847.D 8/25/94	Phenacetin	25.2	0.730	04SS01001 04SS00901 04SS00401 04SS00401D 04SS00801 04SS00701 04SS00301	370 370 1400 360 3500 350 3900	U	370 370 1400 360 3500 350 3900	UJ

2&4-001	H0000847.D 8/25/94	Metha- pyrilene	27.3	0.307	04SS01001 04SS00901 04SS00401 04SS00401D 04SS00801 04SS00701 04SS00301	1800 1800 7200 1800 18000 1700 19000	U	1800 1800 7200 1800 18000 1700 19000	UJ
2&4-001	H0000847.D 8/25/94	1,2-Diphenyl hydrazine	36.6	0.651	04SS01001 04SS00901 04SS00401 04SS00401D 04SS00801 04SS00701 04SS00301	370 370 1400 360 3500 350 3900	U	370 370 1400 360 3500 350 3900	UJ
2&4-001	H0000847.D 8/25/94	Hexachloro- phene	19.4	0.044	04SS01001 04SS00901 04SS00401 04SS00401D 04SS00801 04SS00701 04SS00301	18000 18000 72000 18000 180000 17000 190000	U	18000 18000 72000 18000 180000 17000 190000	R
2&4-001	H0000869.D 8/26/94	bis(2-Chloro- isopropyl) ether	26.7	1.305	04SS00601 04SS00501 04SS00201 04SS00101 04BS00310	380 370 3500 3700 380	U	380 370 3500 3700 380	UJ
2&4-001	H0000869.D 8/26/94	2- Nitroaniline	27.7	0.387	04SS00601 04SS00501 04SS00201 04SS00101 04BS00310	1900 1800 18000 18000 1900	U	1900 1800 18000 18000 1900	UJ
2&4-001	H0000869.D 8/26/94	4- Nitrophenol	25.9	0.304	04SS00601 04SS00501 04SS00201 04SS00101 04BS00310	1900 1800 18000 18000 1900	U	1900 1800 18000 18000 1900	UJ
2&4-001	H0000869.D 8/26/94	4- Nitroaniline	27.3	0.376	04SS00601 04SS00501 04SS00201 04SS00101 04BS00310	1900 1800 18000 18000 1900	U	1900 1800 18000 18000 1900	UJ

2&4-001	H0000869.D 8/26/94	Phenyl-tert- butylamine	33.3	0.729	04SS00601 04SS00501 04SS00201 04SS00101 04BS00310	1900 1800 18000 18000 1900	U	1900 1800 18000 18000 1900	UJ
2&4-001	H0000869.D 8/26/94	p-Phenylene diamine	35.5	0.157	04SS00601 04SS00501 04SS00201 04SS00101 04BS00310	19000 18000 180000 180000 19000	U	19000 18000 180000 180000 19000	UJ
2&4-001	H0000869.D 8/26/94	1,3-Dinitro- benzene	33.6	0.201	04SS00601 04SS00501 04SS00201 04SS00101 04BS00310	380 370 3500 3700 380	U	380 370 3500 3700 380	UJ
2&4-001	H0000869.D 8/26/94	1,3,5- Trinitro- benzene	40.0	0.320	04SS00601 04SS00501 04SS00201 04SS00101 04BS00310	380 370 3500 3700 380	U	380 370 3500 3700 380	UJ
2&4-001	H0000869.D 8/26/94	Phenacetin	28.5	0.697	04SS00601 04SS00501 04SS00201 04SS00101 04BS00310	380 370 3500 3700 380	U	380 370 3500 3700 380	UJ
2&4-001	H0000869.D 8/26/94	Metha- pyrilene	33.1	0.282	04SS00601 04SS00501 04SS00201 04SS00101 04BS00310	1900 1800 18000 18000 1900	U	1900 1800 18000 18000 1900	UJ
2&4-001	H0000869.D 8/26/94	1,2-Diphenyl hydrazine	37.9	0.638	04SS00601 04SS00501 04SS00201 04SS00101 04BS00310	380 370 3500 3700 380	U	380 370 3500 3700 380	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	%RSD	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual

2&4-002	H0001054.D-H0001058.D 9/12/94	Hexachloro-phene	35.3	0.027	04BS00705 04BS00611 04BS00209 02BS00107 02SS00301 02BS00307 02SS00401 02BS00407 02BS00407D 02SS00201 02BS00203 04BS00509 04BS00111 04BS00111D 04R020*	37000 40000 42000 21000 18000 20000 18000 21000 21000 18000 20000 19000 36000 38000 500	U	37000 40000 42000 21000 18000 20000 18000 21000 21000 18000 20000 19000 36000 38000 500	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
2&4-002	H0001167.D 9/26/94	Pyridine	25.3	0.851	04BS00705 04BS00611 04BS00209 04R020* 02BS00107 02SS00301 02BS00307 02SS00401 02BS00407 02BS00407D 02SS00201 02BS00203	3700 4000 4200 50 2100 1800 2000 1800 2100 2100 1800 2000	U	3700 4000 4200 50 2100 1800 2000 1800 2100 2100 1800 2000	UJ
2&4-002	H0001167.D 9/26/94	Phenyl-tert-butylamine	37.8	0.786	04BS00705 04BS00611 04BS00209 04R020* 02BS00107 02SS00301 02BS00307 02SS00401 02BS00407 02BS00407D 02SS00201 02BS00203	3700 4000 4200 50 2100 1800 2000 1800 2100 2100 1800 2000	U	3700 4000 4200 50 2100 1800 2000 1800 2100 2100 1800 2000	UJ

2&4-002	H0001167.D 9/26/94	p-Phenylene- diamine	39.6	0.261	04BS00705 04BS00611 04BS00209 04R020* 02BS00107 02SS00301 02BS00307 02SS00401 02BS00407 02BS00407D 02SS00201 02BS00203	37000 40000 42000 500 21000 18000 20000 18000 21000 21000 18000 20000	U	37000 40000 42000 500 21000 18000 20000 18000 21000 21000 18000 20000	UJ
2&4-002	H0001167.D 9/26/94	Aramite	31.0	0.094	04BS00705 04BS00611 04BS00209 04R020* 02BS00107 02SS00301 02BS00307 02SS00401 02BS00407 02BS00407D 02SS00201 02BS00203	3700 4000 4200 50 2100 1800 2000 1800 2100 2100 1800 2000	U	3700 4000 4200 50 2100 1800 2000 1800 2100 2100 1800 2000	UJ
2&4-002	H0001167.D 9/26/94	Hexachloro- phene	40.7	0.016	04BS00705 04BS00611 04BS00209 04R020* 02BS00107 02SS00301 02BS00307 02SS00401 02BS00407 02BS00407D 02SS00201 02BS00203	37000 40000 42000 500 21000 18000 20000 18000 21000 21000 18000 20000	U	37000 40000 42000 500 21000 18000 20000 18000 21000 21000 18000 20000	R
2&4-002	H0001188.D 9/27/94	Pyridine	26.7	0.835	04BS00509 04BS00111 04BS00111D	1900 3600 3800	U	1900 3600 3800	UJ
2&4-002	H0001188.D 9/27/94	N-Nitroso- pyrrolidine	27.0	0.523	04BS00509 04BS00111 04BS00111D	380 720 770	U	380 720 770	UJ
2&4-002	H0001188.D 9/27/94	Benzoic Acid	64.4	0.114	04BS00509 04BS00111 04BS00111D	1900 76 3800	U J U	1900 76 3800	UJ J UJ

2&4-002	H0001188.D 9/27/94	Phenyl-tert-butylamine	30.4	0.880	04BS00509 04BS00111 04BS00111D	1900 3600 3800	U	1900 3600 3800	UJ
2&4-002	H0001188.D 9/27/94	p-Phenylene-diamine	34.8	0.282	04BS00509 04BS00111 04BS00111D	19000 36000 38000	U	19000 36000 38000	UJ
2&4-002	H0001188.D 9/27/94	Methapyrilene	40.5	0.335	04BS00509 04BS00111 04BS00111D	1900 3600 3800	U	1900 3600 3800	UJ
2&4-002	H0001188.D 9/27/94	Aramite	40.4	0.101	04BS00509 04BS00111 04BS00111D	1900 3600 3800	U	1900 3600 3800	UJ
2&4-002	H0001188.D 9/27/94	Hexachloro-phene	18.3	0.031	04BS00509 04BS00111 04BS00111D	19000 36000 38000	U	19000 36000 38000	R

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	%RSD	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
28-001	8/19/94 94M1BN2749-94M1BN2753	Hexachloro-propene	8.3	0.045	28SS02401 28SS02501	1700 1700	U	1700 1700	R
28-001	8/19/94 94M1BN2749-94M1BN2753	Hexachloro-propene	8.3	0.045	28SS02601 28SS02701	1700 1700	U	17001 700	R
28-001	8/19/94 94M1BN2749-94M1BN2753	Hexachloro-propene	8.3	0.045	28SS02801 28SS02901	1700 1700	U	1700 1700	R
28-001	8/19/94 94M1BN2749-94M1BN2753	Hexachloro-propene	8.3	0.045	28SS03001 28SS00301	1600 3500	U	1600 3500	R
28-001	8/19/94 94M1BN2749-94M1BN2753	Hexachloro-propene	8.3	0.045	28SS00401 28SS00501	6700 6800	U	6700 6800	R
28-001	8/19/94 94M1BN2749-94M1BN2753	Hexachloro-propene	8.3	0.045	28SS00601 28SS00701	3400 1700	U	3400 1700	R

28-001	8/19/94 94M1BN2749- 94M1BN2753	Hexachloro- propene	8.3	0.045	28SS02101 28SS02101D	3400 1700	U	3400 1700	R
28-001	8/19/94 94M1BN2749- 94M1BN2753	Hexachloro- propene	8.3	0.045	28SS02201 28SS02301	1700 1600	U	1700 1600	R
28-001	8/19/94 94M1BN2749- 94M1BN2753	Hexachloro- propene	8.3	0.045	28SS00901 28SS03001D	1700 1900	U	1700 1900	R
28-001	8/19/94 94M1BN2749- 94M1BN2753	Hexachloro- propene	8.3	0.045	28R016	50	U	50	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
28-001	94M1BN2792 8/23/94	Hexachloro- propene	2.2	0.046	28SS02401 28SS02501 28SS02601 28SS02701 28SS02801 28SS02901 28SS03001	1700 1700 1700 1700 1700 1700 1600	U	1700 1700 1700 1700 1700 1700 1600	R
28-001	94M1BN2791 8/23/94	3-Nitroaniline	35.2	0.265	28SS02401 28SS02501 28SS02601 28SS02701 28SS02801 28SS02901 28SS03001	1700 1700 1700 1700 1700 1700 1600	U	1700 1700 1700 1700 1700 1700 1600	UJ
28-001	94M1BN2791 8/23/94	2,4- Dinitrophenol	30.2	0.120	28SS02401 28SS02501 28SS02601 28SS02701 28SS02801 28SS02901 28SS03001	1700 1700 1700 1700 1700 1700 1600	U	1700 1700 1700 1700 1700 1700 1600	UJ

28-001	94M1BN2791 8/23/94	4-Nitroaniline	27.2	0.295	28SS02401 28SS02501 28SS02601 28SS02701 28SS02801 28SS02901 28SS03001	1700 1700 1700 1700 1700 1700 1600	U	1700 1700 1700 1700 1700 1700 1600	UJ
28-001	94M1BN2791 8/23/94	Benzidine	99.9	0.329	28SS02401 28SS02501 28SS02601 28SS02701 28SS02801 28SS02901 28SS03001	1700 1700 1700 1700 1700 1700 1600	U	1700 1700 1700 1700 1700 1700 1600	UJ
28-001	94M1BN2792 8/23/94	2- Naphthylamine	36.2	0.294	28SS02401 28SS02501 28SS02601 28SS02701 28SS02801 28SS02901 28SS03001	1700 1700 1700 1700 1700 1700 1600	U	1700 1700 1700 1700 1700 1700 1600	UJ
28-001	94M1BN2792 8/23/94	4-Aminobi- phenyl	35.8	0.334	28SS02401 28SS02501 28SS02601 28SS02701 28SS02801 28SS02901 28SS03001	1700 1700 1700 1700 1700 1700 1600	U	1700 1700 1700 1700 1700 1700 1600	UJ
28-001	94M1BN2792 8/23/94	4- Nitroquinoline 1-oxide	37.7	0.066	28SS02401 28SS02501 28SS02601 28SS02701 28SS02801 28SS02901 28SS03001	17000 17000 17000 17000 17000 17000 16000	U	17000 17000 17000 17000 17000 17000 16000	UJ
28-001	94M1BN2792 8/23/94	Aramite	32.0	0.099	28SS02401 28SS02501 28SS02601 28SS02701 28SS02801 28SS02901 28SS03001	1700 1700 1700 1700 1700 1700 1600	U	1700 1700 1700 1700 1700 1700 1600	UJ

28-001	94M1BN2792 8/23/94	3,3'-Dimethyl benzidine	46.8	0.361	28SS02401 28SS02501 28SS02601 28SS02701 28SS02801 28SS02901 28SS03001	350 350 350 340 350 350 340	U	350 350 350 340 350 350 340	UJ
28-001	94M1BN2792 8/23/94	Hexachlorophene	27.3	0.093	28SS02401 28SS02501 28SS02601 28SS02701 28SS02801 28SS02901 28SS03001	17000 17000 17000 17000 17000 17000 16000	U	17000 17000 17000 17000 17000 17000 16000	UJ
28-001	94M1BN2808 8/24/94	Hexachloro-propene	8.9	0.049	28SS00701 28SS00601 28SS00501 28SS00401 28SS00301 28SS2101D 28SS2101 28SS2201 28SS2301	1700 3400 6800 6700 3500 1700 3400 1700 1600	U	1700 3400 6800 6700 3500 1700 3400 1700 1600	R
28-001	94M1BN2807 8/24/94	3-Nitroaniline	26.0	0.247	28SS00701 28SS00601 28SS00501 28SS00401 28SS00301 28SS2101D 28SS2101 28SS2201 28SS2301	1700 3400 6800 6700 3500 1700 3400 1700 1600	U	1700 3400 6800 6700 3500 1700 3400 1700 1600	UJ
28-001	94M1BN2807 8/24/94	Benzidine	99.9	0.309	28SS00701 28SS00601 28SS00501 28SS00401 28SS00301 28SS2101D 28SS2101 28SS2201 28SS2301	1700 3400 6800 6700 3500 1700 3400 1700 1600	U	1700 3400 6800 6700 3500 1700 3400 1700 1600	UJ

28-001	94M1BN2808 8/24/94	Methyl methanesul- fonate	25.1	0.158	28SS00701 28SS00601 28SS00501 28SS00401 28SS00301 28SS2101D 28SS2101 28SS2201 28SS2301	350 700 1400 1400 720 360 710 350 340	U	350 700 1400 1400 720 360 710 350 340	UJ
28-001	94M1BN2808 8/24/94	2- Naphthylamine	27.1	0.336	28SS00701 28SS00601 28SS00501 28SS00401 28SS00301 28SS2101D 28SS2101 28SS2201 28SS2301	1700 3400 6800 6700 3500 1700 3400 1700 1600	U	1700 3400 6800 6700 3500 1700 3400 1700 1600	UJ
28-001	94M1BN2808 8/24/94	Phenacetin	29.2	0.296	28SS00701 28SS00601 28SS00501 28SS00401 28SS00301 28SS2101D 28SS2101 28SS2201 28SS2301	350 710 1400 1400 720 360 710 350 340	U	350 710 1400 1400 720 360 710 350 340	UJ
28-001	94M1BN2808 8/24/94	4-Aminobi- phenyl	37.4	0.338	28SS00701 28SS00601 28SS00501 28SS00401 28SS00301 28SS2101D 28SS2101 28SS2201 28SS2301	1700 3400 6800 6700 3500 1700 3400 1700 1600	U	1700 3400 6800 6700 3500 1700 3400 1700 1600	UJ
28-001	94M1BN2808 8/24/94	4- Nitroquinoline - 1-oxide	33.0	0.071	28SS00701 28SS00601 28SS00501 28SS00401 28SS00301 28SS2101D 28SS2101 28SS2201 28SS2301	17000 34000 68000 67000 35000 17000 34000 17000 16000	U	17000 34000 68000 67000 35000 17000 34000 17000 16000	UJ

28-001	94M1BN2808 8/24/94	Methapyrilene	29.8	0.387	28SS00701 28SS00601 28SS00501 28SS00401 28SS00301 28SS2101D 28SS2101 28SS2201 28SS2301	1700 3400 6800 6700 3500 1700 3400 1700 1600	U	1700 3400 6800 6700 3500 1700 3400 1700 1600	UJ
28-001	94M1BN2808 8/24/94	3,3'-Dimethyl-benzidine	48.4	0.365	28SS00701 28SS00601 28SS00501 28SS00401 28SS00301 28SS2101D 28SS2101 28SS2201 28SS2301	350 710 1400 1400 720 360 710 350 340	U	350 710 1400 1400 720 360 710 350 340	UJ
28-001	94M1BN2808 8/24/94	Hexachloro-phene	32.8	0.086	28SS00701 28SS00601 28SS00501 28SS00401 28SS00301 28SS2101D 28SS2101 28SS2201 28SS2301	17000 34000 68000 67000 35000 17000 34000 17000 16000	U	17000 34000 68000 67000 35000 17000 34000 17000 16000	UJ
28-001	94M1BN2824 8/25/94	Hexachloro-propene	0.0	0.045	28SS00901 28SS03001D 28R016*	1700 1900 50	U	1700 1900 50	R
28-001	94M1BN2823 8/25/94	4-Chloroaniline	34.8	0.438	28SS00901 28SS03001D 28R016*	350 390 10	U	350 390 10	UJ
28-001	94M1BN2823 8/25/94	3-Nitroaniline	70.9	0.335	28SS00901 28SS03001D 28R016*	1700 1900 50	U	1700 1900 50	UJ
28-001	94M1BN2823 8/25/94	2,4-Dinitrophenol	33.7	0.114	28SS00901 28SS03001D 28R016*	1700 1900 50	U	1700 1900 50	UJ
28-001	94M1BN2823 8/25/94	Benzidine	99.9	0.477	28SS00901 28SS03001D 28R016*	1700 1900 50	U	1700 1900 50	UJ

28-001	94M1BN2823 8/25/94	3,3'-Dichloro-benzidine	28.2	0.427	28SS00901 28SS03001D 28R016*	690 390 20	U	690 390 20	UJ
28-001	94M1BN2824 8/25/94	4-Aminobi-phenyl	29.7	0.319	28SS00901 28SS03001D 28R016*	1700 1900 50	U	1700 1900 50	UJ
28-001	94M1BN2824 8/25/94	4-Nitroquinoline 1-oxide	46.2	0.057	28SS00901 28SS03001D 28R016*	17000 19000 500	U	17000 19000 500	UJ
28-001	94M1BN2824 8/25/94	3,3'-Dimethyl-benzidine	66.7	0.410	28SS00901 28SS03001D 28R016*	350 390 10	U	350 390 10	UJ
28-001	94M1BN2823 94M1BN2824 94M1BN2825 8/25/94	Hexachloro-phene	58.6	0.053	28SS00901 28SS03001D 28R016*	17000 19000 500	U	17000 19000 500	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	%RSD	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
28-002	9/07/94 94M1BN2925- 94M1BN2929	4-Nitro-quinoline-1-oxide	36.7	0.037	28SS00101 28SS00201 28SS00201D 28SS01901 28SS02001 28BS00106 28BS00504 28BS02204 28SS01101 28SS01001 28SS01201 28SS01301 28SS01401 28SS01501 28SS01601 28SS01701 28SS01801 28BS01004 28BS01704	18000 18000 18000 17000 17000 17000 29000 81000 17000 17000 17000 17000 17000 17000 17000 18000 17000 21000 19000	U	18000 18000 18000 17000 17000 17000 29000 81000 17000 17000 17000 17000 17000 17000 17000 18000 17000 21000 19000	R

28-002	9/07/94 94M1BN2925- 94M1BN2929	Hexachloro- phene	37.5	0.044	28SS00101 28SS00201 28SS00201D 28SS01901 28SS02001 28BS00106 28BS00504 28BS02204 28SS01101 28SS01001 28SS01201 28SS01301 28SS01401 28SS01501 28SS01601 28SS01701 28SS01801 28BS01004 28BS01704	18000 18000 18000 17000 17000 17000 29000 81000 17000 17000 17000 17000 17000 17000 17000 18000 17000 21000 19000	U	18000 18000 18000 17000 17000 17000 29000 81000 17000 17000 17000 17000 17000 17000 17000 18000 17000 21000 19000	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
28-002	94M1BN3061 9/02/94	Hexachloro- cyclo- pentadiene	27.4	0.199	28SS00101 28SS00201 28SS00201D 28SS02001	370 360 360 350	U	370 360 360 350	UJ
28-002	94M1BN3061 9/02/94	2,4- Dinitrophenol	30.7	0.142	28SS00101 28SS00201 28SS00201D 28SS02001	1800 1800 1800 1700	U	1800 1800 1800 1700	UJ
28-002	94M1BN3061 9/02/94	4-Nitrophenol	27.8	0.115	28SS00101 28SS00201 28SS00201D 28SS02001	1800 1800 1800 1700	U	1800 1800 1800 1700	UJ
28-002	94M1BN3061 9/02/94	3,3'-Dichloro- benzidine	25.3	0.485	28SS00101 28SS00201 28SS00201D 28SS02001	750 730 730 700	U	750 730 730 700	UJ
28-002	94M1BN3062 9/15/94	4- Nitroquinoline -1-oxide	51.4	0.018	28SS00101 28SS00201 28SS00201D 28SS02001	18000 18000 18000 17000	U	18000 18000 18000 17000	R

28-002	94M1BN3062 9/15/94	Methapyriline	25.5	0.512	28SS00101 28SS00201 28SS00201D 28SS02001	1800 1800 1800 1700	U	1800 1800 1800 1700	UJ
28-002	94M1BN3062 9/15/94	Aramite	27.8	0.083	28SS00101 28SS00201 28SS00201D 28SS02001	1800 1800 1800 1700	U	1800 1800 1800 1700	UJ
28-002	94M1BN3062 9/15/94	Hexachloro- phene	90.9	0.004	28SS00101 28SS00201 28SS00201D 28SS02001	18000 18000 18000 17000	U	18000 18000 18000 17000	R
28-002	94M1BN3063 9/15/94	p-Phenylene- diamine	32.0	0.309	28SS00101 28SS00201 28SS00201D 28SS02001	18000 18000 18000 17000	U	18000 18000 18000 17000	UJ
28-002	94M1BN3086 9/20/94	2-Picoline	26.4	1.230	28BS00504 28BS02204 28SS01101 28SS01001 28SS01201 28SS01301 28SS01401 28SS01401D	2900 8100 1700 1700 1700 1700 1700 1700	U	2900 8100 1700 1700 1700 1700 1700 1700	UJ
28-002	94M1BN3086 9/20/94	Ethyl Methane- sulfonate	39.4	0.842	28BS00504 28BS02204 28SS01101 28SS01001 28SS01201 28SS01301 28SS01401 28SS01401D	600 1700 360 360 360 350 350 350	U	600 1700 360 360 360 350 350 350	UJ
28-002	94M1BN3086 9/20/94	Acetophenone	31.6	1.433	28BS00504 28BS02204 28SS01101 28SS01001 28SS01201 28SS01301 28SS01401 28SS01401D	600 1700 360 360 360 350 350 350	U	600 1700 360 360 360 350 350 350	UJ

28-002	94M1BN3086 9/20/94	N-Nitroso- piperidine	29.9	0.387	28BS00504 28BS02204 28SS01101 28SS01001 28SS01201 28SS01301 28SS01401 28SS01401D	600 1700 360 360 360 350 350 350	U	600 1700 360 360 360 350 350 350	UJ
28-002	94M1BN3086 9/20/94	N-Nitrosodi-n- butylamine	31.8	0.352	28BS00504 28BS02204 28SS01101 28SS01001 28SS01201 28SS01301 28SS01401 28SS01401D	600 1700 360 360 360 350 350 350	U	600 1700 360 360 360 350 350 350	UJ
28-002	94M1BN3086 9/20/94	Phenacetin	58.9	0.529	28BS00504 28BS02204 28SS01101 28SS01001 28SS01201 28SS01301 28SS01401 28SS01401D	600 1700 360 360 360 350 350 350	U	600 1700 360 360 360 350 350 350	UJ
28-002	94M1BN3086 9/20/94	p- Dimethylamin o-azobenzene	36.3	0.646	28BS00504 28BS02204 28SS01101 28SS01001 28SS01201 28SS01301 28SS01401 28SS01401D	600 1700 360 360 360 350 350 350	U	600 1700 360 360 360 350 350 350	UJ
28-002	94M1BN3086 9/20/94	Pyridine	32.5	1.190	28BS00504 28BS02204 28SS01101 28SS01001 28SS01201 28SS01301 28SS01401 28SS01401D	2900 8100 1700 1700 1700 1700 1700 1700	U	2900 8100 1700 1700 1700 1700 1700 1700	UJ

28-002	94M1BN3086 9/20/94	N- Nitrosomethyl ethyl amine	36.4	0.644	28BS00504 28BS02204 28SS01101 28SS01001 28SS01201 28SS01301 28SS01401 28SS01401D	600 1700 360 360 360 350 350 350	U	600 1700 360 360 360 350 350 350	UJ
28-002	94M1BN3086 9/20/94	N-Nitroso- pyrrolidine	30.4	0.717	28BS00504 28BS02204 28SS01101 28SS01001 28SS01201 28SS01301 28SS01401 28SS01401D	600 1700 360 360 360 350 350 350	U	600 1700 360 360 360 350 350 350	UJ
28-002	94M1BN3086 9/20/94	N-Nitroso- morpholine	38.0	0.807	28BS00504 28BS02204 28SS01101 28SS01001 28SS01201 28SS01301 28SS01401 28SS01401D	600 1700 360 360 360 350 350 350	U	600 1700 360 360 360 350 350 350	UJ
28-002	94M1BN3086 9/20/94	o-Toluidine	27.4	1.696	28BS00504 28BS02204 28SS01101 28SS01001 28SS01201 28SS01301 28SS01401 28SS01401D	600 1700 360 360 360 350 350 350	U	600 1700 360 360 360 350 350 350	UJ
28-002	94M1BN3086 9/20/94	1,3- Dinitrobenzene	42.8	0.297	28BS00504 28BS02204 28SS01101 28SS01001 28SS01201 28SS01301 28SS01401 28SS01401D	600 1700 360 360 360 350 350 350	U	600 1700 360 360 360 350 350 350	UJ

28-002	94M1BN3086 9/20/94	1,3,5-Trinitro- benzene	99.9	0.326	28BS00504 28BS02204 28SS01101 28SS01001 28SS01201 28SS01301 28SS01401 28SS01401D	600 1700 360 360 360 350 350 350	U	600 1700 360 360 360 350 350 350	UJ
28-002	94M1BN3086 9/20/94	4- Nitroquinoline -1-oxide	43.2	0.053	28BS00504 28BS02204 28SS01101 28SS01001 28SS01201 28SS01301 28SS01401 28SS01401D	29000 81000 17000 17000 17000 17000 17000 17000	U	29000 81000 17000 17000 17000 17000 17000 17000	UJ
28-002	94M1BN3086 9/20/94	Methapyriline	33.5	0.917	28BS00504 28BS02204 28SS01101 28SS01001 28SS01201 28SS01301 28SS01401 28SS01401D	2900 8100 1700 1700 1700 1700 1700 1700	U	2900 8100 1700 1700 1700 1700 1700 1700	UJ
28-002	94M1BN3086 9/20/94	Hexachloro- phene	6.8	0.047	28BS00504 28BS02204 28SS01101 28SS01001 28SS01201 28SS01301 28SS01401 28SS01401D	29000 81000 17000 17000 17000 17000 17000 17000	U	29000 81000 17000 17000 17000 17000 17000 17000	R
28-002	94M1BN3086 9/20/94	p-Phenylene- diamine	80.3	0.422	28BS00504 28BS02204 28SS01101 28SS01001 28SS01201 28SS01301 28SS01401 28SS01401D	29000 81000 17000 17000 17000 17000 17000 17000	U	29000 81000 17000 17000 17000 17000 17000 17000	UJ

28-002	94M1BN3101 9/21/94	Hexachloro- cyclo- pentadiene	37.6	0.154	28SS01901 28BS00106 28SS01501 28SS01601 28SS01701 28SS01801 28BS01004 28BS01704	360 350 350 350 370 360 420 390	U	360 350 350 350 370 360 420 390	UJ
28-002	94M1BN3102 9/21/94	Phenacetin	36.9	0.456	28SS01901 28BS00106 28SS01501 28SS01601 28SS01701 28SS01801 28BS01004 28BS01704	360 350 350 350 370 360 420 390	U	360 350 350 350 370 360 420 390	UJ
28-002	94M1BN3102 9/21/94	Phenyl-tert- butylamine	48.8	0.866	28SS01901 28BS00106 28SS01501 28SS01601 28SS01701 28SS01801 28BS01004 28BS01704	1700 1700 1700 1700 1800 1700 2100 1900	U	1700 1700 1700 1700 1800 1700 2100 1900	UJ
28-002	94M1BN3102 9/21/94	4- Nitroquinoline -1-oxide	40.5	0.022	28SS01901 28BS00106 28SS01501 28SS01601 28SS01701 28SS01801 28BS01004 28BS01704	17000 17000 17000 17000 18000 17000 21000 19000	U	17000 17000 17000 17000 18000 17000 21000 19000	R
28-002	94M1BN3102 9/21/94	Hexachloro- propene	32.4	0.115	28SS01901 28BS00106 28SS01501 28SS01601 28SS01701 28SS01801 28BS01004 28BS01704	1700 1700 1700 1700 1800 1700 2100 1900	U	1700 1700 1700 1700 1800 1700 2100 1900	UJ

28-002	94M1BN3102 9/21/94	1,3,5-Trinitro- benzene	61.7	0.262	28SS01901 28BS00106 28SS01501 28SS01601 28SS01701 28SS01801 28BS01004 28BS01704	360 350 350 350 370 360 420 390	U	360 350 350 350 370 360 420 390	UJ
28-002	94M1BN3102 9/21/94	Aramite	28.7	0.082	28SS01901 28BS00106 28SS01501 28SS01601 28SS01701 28SS01801 28BS01004 28BS01704	1700 1700 1700 1700 1800 1700 2100 1900	U	1700 1700 1700 1700 1800 1700 2100 1900	UJ
28-002	94M1BN3102 9/21/94	Hexachloro- phene	59.1	0.018	28SS01901 28BS00106 28SS01501 28SS01601 28SS01701 28SS01801 28BS01004 28BS01704	17000 17000 17000 17000 18000 17000 21000 19000	U	17000 17000 17000 17000 18000 17000 21000 19000	R
28-002	94M1BN3103 9/21/94	p-Phenylene- diamine	51.3	0.354	28SS01901 28BS00106 28SS01501 28SS01601 28SS01701 28SS01801 28BS01004 28BS01704	17000 17000 17000 17000 18000 17000 21000 19000	U	17000 17000 17000 17000 18000 17000 21000 19000	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
28-003	9/7/94 94M1BN2925- 94M1BN2929	4- Nitroquinoline -1-oxide	36.7	0.037	28SS03101	17000	U	17000	R
28-003	9/7/94 94M1BN2925- 94M1BN2929	Hexachloro- phene	37.5	0.044	28SS03101	17000	U	17000	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
28-003	8/22/94 H0000781.D	Bis(2-chloroisopropyl) ether	32.9	1.193	28BS03104D 28SS03301	370 350	U U	370 350	UJ UJ
28-003	8/22/94 H0000781.D	Aniline	62.4	1.531	28BS03104D 28SS03301	370 350	U U	370 350	UJ UJ
28-003	8/22/94 H0000781.D	Benzoic Acid	84.3	0.114	28BS03104D 28SS03301	1800 1700	U U	1800 1700	UJ UJ
28-003	8/22/94 H0000781.D	Phenyl-tert-butylamine	27.4	0.793	28BS03104D 28SS03301	1800 1700	U U	1800 1700	UJ UJ
28-003	8/22/94 H0000781.D	Methapyriline	48.4	0.218	28BS03104D 28SS03301	1800 1700	U U	1800 1700	UJ UJ
28-003	8/22/94 H0000781.D	1,2-Diphenyl-hydrazine	37.0	0.647	28BS03104D 28SS03301	370 350	U U	370 350	UJ UJ
28-003	8/22/94 H0000781.D	Hexachloro-phene	10.0	0.049	28BS03104D 28SS03301	1800 1700	U U	1800 1700	R R
28-003	8/23/94 H0000803.D	Bis(2-chloroisopropyl) ether	30.4	1.239	28SS03201 28BS03104	360 360	U U	360 360	UJ UJ
28-003	8/23/94 H0000803.D	2-Nitroaniline	27.1	0.390	28SS03201 28BS03104	1800 1800	U U	1800 1800	UJ UJ
28-003	8/23/94 H0000803.D	Aniline	62.7	1.533	28SS03201 28BS03104	360 360	U U	360 360	UJ UJ
28-003	8/23/94 H0000803.D	Benzoic Acid	41.7	0.087	28SS03201 28BS03104	1800 1800	U U	1800 1800	UJ UJ
28-003	8/23/94 H0000803.D	Phenyl-tert-butylamine	43.4	0.619	28SS03201 28BS03104	1800 1800	U U	1800 1800	UJ UJ
28-003	8/23/94 H0000803.D	p-Phenylene-diamine	32.8	0.163	28SS03201 28BS03104	18000 18000	U U	18000 18000	UJ UJ
28-003	8/23/94 H0000803.D	1,3-Dinitrobenzene	30.3	0.211	28SS03201 28BS03104	360 360	U U	360 360	UJ UJ
28-003	8/23/94 H0000803.D	1,2-Diphenyl-hydrazine	35.4	0.663	28SS03201 28BS03104	360 360	U U	360 360	UJ UJ
28-003	9/15/94 94M1BN3061	Hexachloro-cyclopentadiene	27.4	0.199	28SS03101	350	U	350	U

28-003	9/15/94 94M1BN3061	2,4- Dinitrophenol	30.7	0.142	28SS03101	1700	U	1700	UJ
28-003	9/15/94 94M1BN3061	4-Nitrophenol	27.8	0.115	28SS03101	1700	U	1700	UJ
28-003	9/15/94 94M1BN3061	3,3'-Dichloro- benzidine	25.3	0.485	28SS03101	710	U	710	UJ
28-003	9/15/94 94M1BN3062	4- Nitroquinoline- 1-oxide	51.4	0.018	28SS03101	17000	U	17000	R
28-003	9/15/94 94M1BN3062	Methapyriline	25.5	0.512	28SS03101	1700	U	1700	UJ
28-003	9/15/94 94M1BN3062	Aramite	27.8	0.083	28SS03101	1700	U	1700	UJ
28-003	9/15/94 94M1BN3062	Hexachloro- phene	90.9	0.004	28SS03101	17000	U	17000	R
28-003	9/15/94 94M1BN3063	p-Phenylene- diamine	32.0	0.309	28SS03101	17000	U	17000	UJ
28-003	8/25/94 H0000847.D	bis(2- chloroisopropyl) ether	32.6	1.199	48SS00101 48SS00201 48BS00205 48SS00501 48BS00505 48SS00301 48SS00401 48SS00401D	1800 350 380 1800 350 350 350 350	U U U U U U U U	1800 350 380 1800 350 350 350 350	UJ UJ UJ UJ UJ UJ UJ UJ
28-003	8/25/94 H0000847.D	2-Nitroaniline	28.6	0.382	48SS00101 48SS00201 48BS00205 48SS00501 48BS00505 48SS00301 48SS00401 48SS00401D	8700 1800 1900 8800 1700 1700 1800 1700	U U U U U U U U	8700 1800 1900 8800 1700 1700 1800 1700	UJ UJ UJ UJ UJ UJ UJ UJ
28-003	8/25/94 H0000847.D	4-Nitroaniline	28.3	0.371	48SS00101 48SS00201 48BS00205 48SS00501 48BS00505 48SS00301 48SS00401 48SS00401D	8700 1800 1900 8800 1700 1700 1800 1700	U U U U U U U U	8700 1800 1900 8800 1700 1700 1800 1700	UJ UJ UJ UJ UJ UJ UJ UJ

28-003	8/25/94 H0000847.D	Hexachloro-benzene	26.1	0.309	48SS00101	1800	U	1800	UJ
					48SS00201	350	U	350	UJ
					48BS00205	380	U	380	UJ
					48SS00501	1800	U	1800	UJ
					48BS00505	350	U	350	UJ
					48SS00301	350	U	350	UJ
					48SS00401	350	U	350	UJ
					48SS00401D	350	U	350	UJ
28-003	8/25/94 H0000847.D	Fluoranthene	25.1	1.073	48SS00101	1800	U	1800	UJ
					48SS00201	350	U	350	UJ
					48BS00205	380	U	380	UJ
					48SS00501	1800	U	1800	UJ
					48BS00505	350	U	350	UJ
					48SS00301	350	U	350	UJ
					48SS00401	350	U	350	UJ
					48SS00401D	32	J	32	J
28-003	8/25/94 H0000847.D	Benzoic Acid	54.2	0.028	48SS00101	8700	U	8700	R
					48SS00201	1800	U	1800	R
					48BS00205	1900	U	1900	R
					48SS00501	8800	U	8800	R
					48BS00505	1700	U	1700	R
					48SS00301	1700	U	1700	R
					48SS00401	1800	U	1800	R
					48SS00401D	1700	U	1700	R
28-003	8/25/94 H0000847.D	Phenyl-tert-butylamine	42.6	0.627	48SS00101	8700	U	8700	UJ
					48SS00201	1800	U	1800	UJ
					48BS00205	1900	U	1900	UJ
					48SS00501	8800	U	8800	UJ
					48BS00505	1700	U	1700	UJ
					48SS00301	1700	U	1700	UJ
					48SS00401	1800	U	1800	UJ
					48SS00401D	1700	U	1700	UJ
28-003	8/25/94 H0000847.D	p-Phenylene-diamine	43.5	0.137	48SS00101	87000	U	87000	UJ
					48SS00201	18000	U	18000	UJ
					48BS00205	19000	U	19000	UJ
					48SS00501	88000	U	88000	UJ
					48BS00505	17000	U	17000	UJ
					48SS00301	17000	U	17000	UJ
					48SS00401	18000	U	18000	UJ
					48SS00401D	17000	U	17000	UJ

28-003	8/25/94 H0000847.D	Phenacetin	25.2	0.730	48SS00101	1800	U	1800	UJ
					48SS00201	350	U	350	UJ
					48BS00205	380	U	380	UJ
					48SS00501	1800	U	1800	UJ
					48BS00505	350	U	350	UJ
					48SS00301	350	U	350	UJ
					48SS00401	350	U	350	UJ
					48SS00401D	350	U	350	UJ
28-003	8/25/94 H0000847.D	Methapyriline	27.3	0.307	48SS00101	8700	U	8700	UJ
					48SS00201	1800	U	1800	UJ
					48BS00205	1900	U	1900	UJ
					48SS00501	8800	U	8800	UJ
					48BS00505	1700	U	1700	UJ
					48SS00301	1700	U	1700	UJ
					48SS00401	1800	U	1800	UJ
					48SS00401D	1700	U	1700	UJ
28-003	8/25/94 H0000847.D	1,2-Diphenyl-hydrazine	36.6	0.651	48SS00101	1800	U	1800	UJ
					48SS00201	350	U	350	UJ
					48BS00205	380	U	380	UJ
					48SS00501	1800	U	1800	UJ
					48BS00505	350	U	350	UJ
					48SS00301	350	U	350	UJ
					48SS00401	350	U	350	UJ
					48SS00401D	350	U	350	UJ
28-003	8/25/94 H0000847.D	Hexachloro-phene	19.4	0.044	48SS00101	87000	U	87000	R
					48SS00201	18000	U	18000	R
					48BS00205	19000	U	19000	R
					48SS00501	88000	U	88000	R
					48BS00505	17000	U	17000	R
					48SS00301	17000	U	17000	R
					48SS00401	18000	U	18000	R
					48SS00401D	17000	U	17000	R
28-003	8/26/94 H0000869.D	bis(2-chloroisopropyl) ether	26.7	1.305	28SS03501	370	U	370	UJ
					28SS03401	3600	U	3600	UJ
					28SS00801	350	U	350	UJ
28-003	8/26/94 H0000869.D	2-Nitroaniline	27.7	0.387	28SS03501	1800	U	1800	UJ
					28SS03401	18000	U	18000	UJ
					28SS00801	1800	U	1800	UJ
28-003	8/26/94 H0000869.D	4-Nitrophenol	25.9	0.304	28SS03501	1800	U	1800	UJ
					28SS03401	18000	U	18000	UJ
					28SS00801	1800	U	1800	UJ
28-003	8/26/94 H0000869.D	4-Nitroaniline	27.3	0.376	28SS03501	1800	U	1800	UJ
					28SS03401	18000	U	18000	UJ
					28SS00801	1800	U	1800	UJ

28-003	8/26/94 H0000869.D	Phenyl-tert-butylamine	33.3	0.729	28SS03501 28SS03401 28SS00801	1800 18000 1800	U U U	1800 18000 1800	UJ UJ UJ
28-003	8/26/94 H0000869.D	p-Phenylene-diamine	35.5	0.157	28SS03501 28SS03401 28SS00801	18000 18000 18000	U U U	18000 18000 18000	UJ UJ UJ
28-003	8/26/94 H0000869.D	1,3-Dinitrobenzene	33.6	0.201	28SS03501 28SS03401 28SS00801	370 3600 350	U U U	370 3600 350	UJ UJ UJ
28-003	8/26/94 H0000869.D	1,3,5-Trinitrobenzene	40.0	0.320	28SS03501 28SS03401 28SS00801	370 3600 350	U U U	370 3600 350	UJ UJ UJ
28-003	8/26/94 H0000869.D	Phenacetin	28.5	0.697	28SS03501 28SS03401 28SS00801	370 3600 350	U U U	370 3600 350	UJ UJ UJ
28-003	8/26/94 H0000869.D	Methapyriline	33.1	0.282	28SS03501 28SS03401 28SS00801	1800 18000 1800	U U U	1800 18000 1800	UJ UJ UJ
28-003	8/26/94 H0000869.D	1,2-Diphenyl-hydrazine	37.9	0.638	28SS03501 28SS03401 28SS00801	370 3600 350	U U U	370 3600 350	UJ UJ UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
5-001	9/07/94 94M1BN 2925-2929	4-Nitroquinoline-1-oxide	36.7	0.037	05SS01001 05SS01001D 05SS01301 05SS00501 05SS00601 05SS00901	17000 17000 18000 17000 18000 18000	U U U U U U	17000 17000 18000 17000 18000 18000	R R R R R R
5-001	9/07/94 94M1BN 2925-2929	Hexachloro-phene	37.5	0.044	05SS01001 05SS01001D 05SS01301 05SS00501 05SS00601 05SS00901	17000 17000 18000 17000 18000 18000	U U U U U U	17000 17000 18000 17000 18000 18000	R R R R R R

5-001	9/07/94 94M1BN 2925-2929	4- Nitroquinoline- 1-oxide	36.7	0.037	05SS01701 05SS00101 05SS00201 05SS00401 05SS00801 05SS01201 05SS01401 05R018*	17000 17000 19000 22000 20000 18000 19000 500	U U U U U U U U	17000 17000 19000 22000 20000 18000 19000 500	R R R R R R R R
5-001	9/07/94 94M1BN 2925-2929	Hexachloro- phene	37.5	0.044	05SS01701 05SS00101 05SS00201 05SS00401 05SS00801 05SS01201 05SS01401 05R018*	17000 17000 19000 22000 20000 18000 19000 500	U U U U U U U U	17000 17000 19000 22000 20000 18000 19000 500	R R R R R R R R
5-001	9/26/94 94M1BN 3156-3160	1,3,5- Trinitrobenzene	46.1	0.275	05BS00107 05BS00208 05BS00306 05BS00606 05BS00606D 05BS01307	All results are un-detected	--	--	--

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
5-001	94M1BN3 014 9/12/94	4-Nitroquinoline- 1-oxide	8.1	0.034	05SS01001 05SS01001D 05SS01301 05SS00501 05SS00601 05SS00901	17000 17000 18000 17000 18000 18000	U	17000 17000 18000 17000 18000 18000	R
5-001	94M1BN3 013 9/12/94	4-Nitrophenol	30.0	0.117	05SS01001 05SS01001D 05SS01301 05SS00501 05SS00601 05SS00901	1700 1700 1800 1700 1800 1800	U	1700 1700 1800 1700 1800 1800	UJ
5-001	94M1BN3 014 9/12/94	1,3,5- Trinitrobenzene	29.6	0.210	05SS01001 05SS01001D 05SS01301 05SS00501 05SS00601 05SS00901	340 340 380 340 360 360	U	340 340 380 340 360 360	UJ

5-001	94M1BN3 014 9/12/94	Hexachlorophene	54.6	0.068	05SS01001 05SS01001D 05SS01301 05SS00501 05SS00601 05SS00901	17000 17000 18000 17000 18000 18000	U	17000 17000 18000 17000 18000 18000	UJ
5-001	94M1BN3 014 9/12/94	p-Phenylene diamine	28.2	0.300	05SS01001 05SS01001D 05SS01301 05SS00501 05SS00601 05SS00901	17000 17000 18000 17000 18000 18000	U	17000 17000 18000 17000 18000 18000	UJ
5-001	94M1BN2 982 9/10/94	4-Nitroquinoline-1-oxide	46.0	0.020	05R018*	500	U	500	R
5-001	94M1BN2 982 9/10/94	Hexachlorophene	18.2	0.036	05R018*	500	U	500	R
5-001	94M1BN2 981 9/10/94	Hexachlorocyclo pentadiene	37.2	0.172	05R018*	10	U	10	UJ
5-001	94M1BN2 981 9/10/94	2,4-Dinitrophenol	25.8	0.152	05R018*	50	U	50	UJ
5-001	94M1BN2 983 9/10/94	p-Phenylene diamine	42.7	0.334	05R018*	500	U	500	UJ
5-001	94M1BN3 030 9/13/94	4-Nitroquinoline-1-oxide	10.8	0.033	05SS01701 05SS00101 05SS00201 05SS00401 05SS00801 05SS01201 05SS01401	17000 17000 19000 22000 20000 18000 19000	U	17000 17000 19000 22000 20000 18000 19000	R
5-001	94M1BN3 030 9/13/94	1,3,5-Trinitrobenzene	46.3	0.237	05SS01701 05SS00101 05SS00201 05SS00401 05SS00801 05SS01201 05SS01401	350 360 390 450 400 370 400	U	350 360 390 450 400 370 400	UJ

5-001	94M1BN3 030 9/13/94	Hexachlorophene	70.4	0.075	05SS01701 05SS00101 05SS00201 05SS00401 05SS00801 05SS01201 05SS01401	17000 17000 19000 22000 20000 18000 19000	U	17000 17000 19000 22000 20000 18000 19000	UJ
5-001	94M1BN3 029 9/13/94	Benzoic Acid	99.9	0.590	05SS01701 05SS00101 05SS00201 05SS00401 05SS00801 05SS01201 05SS01401	1700 1700 1900 2200 2000 1800 1900	U	1700 1700 1900 2200 2000 1800 1900	UJ
5-001	94M1BN3 029 9/13/94	4-Nitrophenol	36.7	0.123	05SS01701 05SS00101 05SS00201 05SS00401 05SS00801 05SS01201 05SS01401	1700 1700 1900 2200 2000 1800 1900	U	1700 1700 1900 2200 2000 1800 1900	UJ
5-001	94M1BN3 031 9/13/94	p-Phenylene diamine	32.0	0.305	05SS01701 05SS00101 05SS00201 05SS00401 05SS00801 05SS01201 05SS01401	17000 17000 19000 22000 20000 18000 19000	U	17000 17000 19000 22000 20000 18000 19000	UJ
5-001	94M1BN3 184 9/28/94	Hexachlorophene	25.8	0.302	05BS00107 05BS00208	23000 30000	U	23000 30000	UJ
5-001	94M1BN3 184 9/28/94	Methapyriline	25.1	0.692	05BS00107 05BS00208	2300 3000	U	2300 3000	UJ
5-001	94M1BN3 184 9/28/94	Methylmethane sulfonate	71.0	0.378	05BS00107 05BS00208	470 620	U	470 620	UJ
5-001	94M1BN3 200 9/29/94	4-Nitroquinoline-1-oxide	71.9	0.039	05BS00306 05BS00606 05BS01307	32000 40000 21000	U	32000 40000 21000	R
5-001	94M1BN3 200 9/29/94	Hexachlorophene	80.4	0.047	05BS00306 05BS00606 05BS01307	32000 40000 21000	U	32000 40000 21000	R

5-001	94M1BN3 199 9/29/94	Hexachlorocyclo pentadiene	27.8	0.215	05BS00306 05BS00606 05BS01307	660 820 430	U	660 820 430	UJ
5-001	94M1BN3 199 9/29/94	2,4-Dinitrophenol	36.3	0.128	05BS00306 05BS00606 05BS01307	3200 4000 2100	U	3200 4000 2100	UJ
5-001	94M1BN3 199 9/29/94	Pyrene	31.1	1.006	05BS00306 05BS00606 05BS01307	660 370 430	U J U	660 370 430	UJ J UJ
5-001	94M1BN3 199 9/29/94	Butylbenzyl phthalate	28.3	0.527	05BS00306 05BS00606 05BS01307	130 700 110	J	130 700 110	J
5-001	94M1BN3 200 9/29/94	Methylmethane sulfonate	50.2	0.332	05BS00306 05BS00606 05BS01307	660 820 430	U	660 820 430	UJ
5-001	94M1BN3 200 9/29/94	p-(dimethylamine) azobenzene	28.2	0.361	05BS00306 05BS00606 05BS01307	660 820 430	U	660 820 430	UJ
5-001	94M1BN3 200 9/29/94	Methapyriline	31.6	0.728	05BS00306 05BS00606 05BS01307	3200 4000 2100	U	3200 4000 2100	UJ
5-001	94M1BN3 200 9/29/94	Aramite	35.7	0.072	05BS00306 05BS00606 05BS01307	3200 4000 2100	U	3200 4000 2100	UJ
5-001	94M1BN3 215 9/30/94	4-Nitroquinoline-1-oxide	86.3	0.019	05BS00606D	300000	U	300000	R
5-001	94M1BN3 215 9/30/94	Hexachlorophene	97.9	0.005	05BS00606D	300000	U	300000	R
5-001	94M1BN3 214 9/30/94	Hexachlorocyclo pentadiene	43.6	0.168	05BS00606D	6100	U	6100	UJ
5-001	94M1BN3 214 9/30/94	2,4-Dinitrophenol	32.8	0.135	05BS00606D	30000	U	30000	UJ
5-001	94M1BN3 214 9/30/94	Pyrene	27.3	1.061	05BS00606D	6100	U	6100	UJ

5-001	94M1BN3 215 9/30/94	Methylmethane sulfonate	65.2	0.365	05BS00606D	6100	U	6100	UJ
5-001	94M1BN3 215 9/30/94	Hexachloro propene	26.3	0.126	05BS00606D	30000	U	30000	UJ
5-001	94M1BN3 215 9/30/94	Methapyrilene	56.8	0.867	05BS00606D	30000	U	30000	UJ
5-001	94M1BN3 215 9/30/94	Aramite	33.0	0.075	05BS00606D	30000	U	30000	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
5-002	H0001054.D H0001055.D H0001056.D H0001052.D H0001058.D 9/12/94	Hexachlorophene	35.3	0.027	05BS02107 05SS02001	20000 19000	U	20000 19000	R
5-002	H0001054.D H0001055.D H0001056.D H0001052.D H0001058.D 9/12/94	Hexachlorophene	35.3	0.027	05SS02001D 05BS02009	18000 21000	U	18000 21000	R
5-002	H0001054.D H0001055.D H0001056.D H0001052.D H0001058.D 9/12/94	Hexachlorophene	35.3	0.027	05SS01901 05BS01909	19000 22000	U	19000 22000	R
5-002	H0001054.D H0001055.D H0001056.D H0001052.D H0001058.D 9/12/94	Hexachlorophene	35.3	0.027	05BS00409 05SS00701	38000 21000	U	38000 21000	R

5-002	H0001054.D H0001055.D H0001056.D H0001052.D H0001058.D 9/12/94	Hexachlorophene	35.3	0.027	05BS00704 05SS01101	22000 19000	U	22000 19000	R
5-002	H0001054.D H0001055.D H0001056.D H0001052.D H0001058.D 9/12/94	Hexachlorophene	35.3	0.027	05BS01107 05R021*	20000 500	U	20000 500	R
5-002	H0001054.D H0001055.D H0001056.D H0001052.D H0001058.D 9/12/94	Hexachlorophene	35.3	0.027	05BS00909 05BS00909D 05BS01009 05BS00509	29000 25000 25000 30000	U	29000 25000 25000 30000	R
5-002	H0001054.D H0001055.D H0001056.D H0001052.D H0001058.D 9/12/94	Hexachlorophene	35.3	0.027	05SS02101 05BS01610	18000 19000	U	18000 19000	R
5-002	H0001054.D H0001055.D H0001056.D H0001052.D H0001058.D 9/12/94	Hexachlorophene	35.3	0.027	05BS01807 05BS01509	39000 81000	U	39000 81000	R
5-002	H0001054.D H0001055.D H0001056.D H0001052.D H0001058.D 9/12/94	Hexachlorophene	35.3	0.027	05BS01709	22000	U	22000	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
5-002	H0001060.D 9/12/94	Hexachlorophene	16.4	0.031	05BS02107 05SS02001	20000 19000	U	20000 19000	R

5-002	H0001060.D 9/12/94	Hexachlorophene	16.4	0.031	05BS02001D 05BS02009	18000 21000	U	18000 21000	R
5-002	H0001060.D 9/12/94	Hexachlorophene	16.4	0.031	05SS01901 05BS01909	19000 22000	U	19000 22000	R
5-002	H0001060.D 9/12/94	Hexachlorophene	16.4	0.031	05BS00409 05SS00701	38000 21000	U	38000 21000	R
5-002	H0001060.D 9/12/94	Hexachlorophene	16.4	0.031	05BS00704 05SS01101	22000 19000	U	22000 19000	R
5-002	H0001060.D 9/12/94	Hexachlorophene	16.4	0.031	05BS01107	20000	U	20000	R
5-002	H0001081.D 9/13/94	Hexachlorophene	10.9	0.024	05R021*	500	U	500	R
5-002	H0001081.D 9/13/94	Benzoic acid	80.8	0.062	05R021*	50	U	50	UJ
5-002	H0001081.D 9/13/94	Phenyl-tert-butylamine	25.5	0.941	05R021*	50	U	50	UJ
5-002	H0001081.D 9/13/94	p-Phenylenediamine	27.3	0.314	05R021*	500	U	500	UJ
5-002	H0001081.D 9/13/94	Methapyrilene	32.9	0.377	05R021*	50	U	50	UJ
5-002	H0001081.D 9/13/94	Aramite	37.6	0.099	05R021*	50	U	50	UJ
5-002	H0001081.D 9/13/94	Hexachlorophene	10.9	0.24	05BS01009 05BS00509	25000 30000	U	25000 30000	UJ
5-002	H0001081.D 9/13/94	Hexachlorophene	10.9	0.24	05BS00909 05BS00909D	29000 25000	U	29000 25000	UJ
5-002	H0001081.D 9/13/94	Hexachlorophene	10.9	0.24	05SS02101 05BS01610	18000 19000	U	18000 19000	UJ
5-002	H0001081.D 9/13/94	Hexachlorophene	10.9	0.24	05BS01807 05BS01509	39000 81000	U	39000 81000	UJ
5-002	H0001081.D 9/13/94	Hexachlorophene	10.9	0.24	05BS01709	22000	U	22000	UJ
5-002	H0001081.D 9/13/94	Benzoic acid	80.8	0.062	05BS01009 05BS00509	2500 3000	U	2500 3000	UJ
5-002	H0001081.D 9/13/94	Benzoic acid	80.8	0.062	05BS00909 05BS00909D	2900 2500	U	2900 2500	UJ
5-002	H0001081.D 9/13/94	Benzoic acid	80.8	0.062	05SS02101 05BS01610	1800 1900	U	1800 1900	UJ

5-002	H0001081.D 9/13/94	Benzoic acid	80.8	0.062	05BS01807 05BS01509	3900 8100	U	3900 8100	UJ
5-002	H0001081.D 9/13/94	Benzoic acid	80.8	0.062	05BS01709	2200	U	2200	UJ
5-002	H0001081.D 9/13/94	Phenyl-tert-butylamine	25.5	0.941	05BS01009 05BS00509	2500 3000	U	2500 3000	UJ
5-002	H0001081.D 9/13/94	Phenyl-tert-butylamine	25.5	0.941	05BS00909 05BS00909D	2900 2500	U	2900 2500	UJ
5-002	H0001081.D 9/13/94	Phenyl-tert-butylamine	25.5	0.941	05SS02101 05BS01610	1800 1900	U	1800 1900	UJ
5-002	H0001081.D 9/13/94	Phenyl-tert-butylamine	25.5	0.941	05BS01807 05BS01509	3900 8100	U	3900 8100	UJ
5-002	H0001081.D 9/13/94	Phenyl-tert-butylamine	25.5	0.941	05BS01709	2200	U	2200	UJ
5-002	H0001081.D 9/13/94	p-Phenylenediamine	27.3	0.314	05BS01009 05BS00509	25000 30000	U	25000 30000	UJ
5-002	H0001081.D 9/13/94	p-Phenylenediamine	27.3	0.314	05BS00909 05SS00909D	29000 25000	U	29000 25000	UJ
5-002	H0001081.D 9/13/94	p-Phenylenediamine	27.3	0.314	05SS02101 05BS01610	18000 19000	U	18000 19000	UJ
5-002	H0001081.D 9/13/94	p-Phenylenediamine	27.3	0.314	05BS01807 05BS01509 05BS01709	39000 81000 22000	U	39000 81000 22000	UJ
5-002	H0001081.D 9/13/94	Methapyrilene	32.9	0.372	05BS01009 05BS00509	2500 3000	U	2500 3000	UJ
5-002	H0001081.D 9/13/94	Methapyrilene	32.9	0.372	05BS00909 05BS00909D	2900 2500	U	2900 2500	UJ
5-002	H0001081.D 9/13/94	Methapyrilene	32.9	0.372	05SS02101 05BS01610	1800 1900	U	1800 1900	UJ
5-002	H0001081.D 9/13/94	Methapyrilene	32.9	0.372	05BS01807 05BS01509 05BS01709	3900 8100 2200	U	3900 8100 2200	UJ
5-002	H0001081.D 9/13/94	Aramite	37.6	0.099	05BS01009 05BS00509	2500 3000	U	2500 3000	UJ
5-002	H0001081.D 9/13/94	Aramite	37.6	0.099	05BS00909 05BS00909D	2900 2500	U	2900 2500	UJ

5-002	H0001081.D 9/13/94	Aramite	37.6	0.099	05SS02101 05BS01610	1800 1900	U	1800 1900	UJ
5-002	H0001081.D 9/13/94	Aramite	37.6	0.099	05BS01807 05BS01509 05BS01709	3900 8100 2200	U	3900 8100 2200	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
5-003	H0001054.D- H0001058.D 9/12/94	Hexachloro-phene	35.3	0.027	05R023* 05SS00301D 05SS01501 05SS01801 05SS01601	500 36000 38000 37000 34000	U	500 36000 38000 37000 34000	R
5-003	94M1BN3156- 94M1BN3160 9/26/94	1,3,5-Trinitro-benzene	46.1	0.275	05SS00301RE	360	--	--	--

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
5-003	H0001167.D 9/26/94	Hexachloro-phene	40.7	0.016	05R023*	500	U	500	R
5-003	H0001167.D 9/26/94	Pyridine	25.3	0.851	05R023*	50	U	50	UJ
5-003	H0001167.D 9/26/94	Phenyl-tert-butylamine	37.8	0.786	05R023*	50	U	50	UJ
5-003	H0001167.D 9/26/94	p-Phenylene-diamine	39.6	0.261	05R023*	500	U	500	UJ
5-003	H0001167.D 9/26/94	Aramite	31.0	0.094	05R023*	50	U	50	UJ
5-003	H0001212.D 9/28/94	Hexachloro-phene	42.5	0.038	05SS00301D 05SS01501 05SS01601 05SS01801	36000 38000 34000 37000	U	36000 38000 34000 37000	R

5-003	H0001212.D 9/28/94	Bis(2-chloro-isopropyl) ether	29.1	1.954	05SS00301D 05SS01501 05SS01601 05SS01801	720 770 680 750	U	720 770 680 750	UJ
5-003	H0001212.D 9/28/94	N-nitroso-pyrrolidine	39.1	0.437	05SS00301D 05SS01501 05SS01601 05SS01801	720 770 680 750	U	720 770 680 750	UJ
5-003	H0001212.D 9/28/94	Benzoic Acid	84.1	0.051	05SS00301D 05SS01501 05SS01601 05SS01801	3600 3800 3400 3700	U	3600 3800 3400 3700	UJ
5-003	H0001212.D 9/28/94	Phenyl-tert-butylamine	47.6	0.662	05SS00301D 05SS01501 05SS01601 05SS01801	3600 3800 3400 3700	U	3600 3800 3400 3700	UJ
5-003	H0001212.D 9/28/94	p-Phenylene-diamine	41.7	0.252	05SS00301D 05SS01501 05SS01601 05SS01801	36000 38000 34000 37000	U	36000 38000 34000 37000	UJ
5-003	H0001212.D 9/28/94	Aramite	32.4	0.095	05SS00301D 05SS01501 05SS01601 05SS01801	3600 3800 3400 3700	U	3600 3800 3400 3700	UJ
5-003	94M1BN3300 10/11/94	Hexachloro-phene	99.6	0.001	05SS00301RE	17000	U	17000	R
5-003	94M1BN3300 10/11/94	Methyl-methane sulfonate	26.2	0.279	05SS00301RE	360	U	360	UJ
5-003	94M1BN3300 10/11/94	Hexachloro-propene	38.0	0.236	05SS00301RE	1700	U	1700	UJ
5-003	94M1BN3300 10/11/94	1,4-Naphtho-quinone	31.6	0.119	05SS00301RE	36000	U	36000	UJ
5-003	94M1BN3300 10/11/94	4-Nitroquinoline -1-oxide	62.6	0.052	05SS00301RE	17000	U	17000	UJ
5-003	94M1BN3300 10/11/94	Pentachloro-nitrobenzene	32.9	0.097	05SS00301RE	1700	U	1700	UJ

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/L	Lab Qual	EDS Value ug/L	EDS Qual
3-001	H0000664.D 8/16/94	Benzoic Acid	21.0	0.049	03SS00824	2800	U	2800	R
					03SS00824D	2800		2800	
					03BS00832	1900		1900	
					03BS00832D	1900		1900	
					03SS00301	2000		2000	
					03SS00101	1800		1800	
					03SS00201	1900		1900	
					03BS00308	2100		2100	
					03BS00108	2200		2200	
					03BS00208	2100		2100	
					03SS00424	2000		2000	
					03SS00524	1900		1900	
					03SS00624	2800		2800	
					03SS00724	2000		2000	
					03BS00432	1900		1900	
					03BS00532	1900		1900	
3-001	H0000664.D 8/16/94	Hexachloro-phene	42.8	0.031	03SS00824	28000	U	28000	R
					03SS00824D	28000		28000	
					03BS00832	19000		19000	
					03BS00832D	19000		19000	
					03SS00301	20000		20000	
					03SS00101	18000		18000	
					03SS00201	19000		19000	
					03BS00308	21000		21000	
					03BS00108	22000		22000	
					03BS00208	21000		21000	
					03SS00424	20000		20000	
					03SS00524	19000		19000	
					03SS00624	28000		28000	
					03SS00724	20000		20000	
					03BS00432	19000		19000	
					03BS00532	19000		19000	

3-001	H0000664.D 8/16/94	4- Nitroquinoline- 1-oxide	27.8	0.060	03SS00824 03SS00824D 03BS00832 03BS00832D 03SS00301 03SS00101 03SS00201 03BS00308 03BS00108 03BS00208 03SS00424 03SS00524 03SS00624 03SS00724 03BS00432 03BS00532	28000 28000 19000 19000 20000 18000 19000 21000 22000 21000 20000 19000 28000 20000 19000 19000	U	28000 28000 19000 19000 20000 18000 19000 21000 22000 21000 20000 19000 28000 20000 19000 19000	UJ
3-001	H0000687.D 8/16/94	Benzoic Acid	33.2	0.041	03BS00632 03BS00732	2100 2000	U	2100 2000	R
3-001	H0000687.D 8/16/94	4- Nitroquinoline- 1-oxide	55.0	0.037	03BS00632 03BS00732	21000 20000	U	21000 20000	R
3-001	H0000687.D 8/16/94	Hexachloro- phene	80.5	0.011	03BS00632 03BS00732	21000 20000	U	21000 20000	R
3-001	H0000687.D 8/16/94	Benzidine	25.1	0.434	03BS00632 03BS00732	2100 2000	U	2100 2000	UJ
3-001	H0000687.D 8/16/94	Hexachloro- cyclo- pentadiene	30.8	0.236	03BS00632 03BS00732	430 410	U	430 410	UJ
3-001	H0000707.D 8/17/94	Benzoic Acid	46.2	0.033	03R007	50	U	50	R
3-001	H0000707.D 8/17/94	Hexachloro- phene	43.4	0.031	03R007	500	U	500	R
3-001	H0000707.D 8/17/94	Di-n- butylphthalate	33.2	1.646	03R007	10	U	10	UJ
3-001	H0000707.D 8/17/94	Phenyl-tert- butylamine	39.0	0.666	03R007	50	U	50	UJ
3-001	H0000707.D 8/17/94	p-Phenylene- diamine	33.5	0.162	03R007	500	U	500	UJ
3-001	H0000707.D 8/17/94	1,3,5- Trinitrobenzene	25.2	0.399	03R007	10	U	10	UJ

3-001	H0000707.D 8/17/94	Methapyriline	28.3	0.303	03R007	50	U	50	UJ

SDG No.	ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	%RSD	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
56-001	9/12/94 H0001054.D-H0001058.D	Hexachloro phene	35.3	0.027	56SS00101	35000	U	35000	R
					56SS00101D	34000	U	34000	R
					56BS00104	41000	U	41000	R
					56SS00201	34000	U	34000	R
					56BS00204	38000	U	38000	R
					56SS00301	35000	U	35000	R
					56BS00304	38000	U	38000	R
					56SS00401	34000	U	34000	R
					56BS00405	43000	U	43000	R
					56R022*	500	U	500	R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
56-001	9/26/94 H0001167.D	Pyridine	25.3	0.851	56R022*	50	U	50	UJ
56-001	9/26/94 H0001167.D	Phenyl-tert-butylamine	37.8	0.786	56R022*	50	U	50	UJ
56-001	9/26/94 H0001167.D	p-Phenylenediamine	39.6	0.261	56R022*	500	U	500	UJ
56-001	9/26/94 H0001167.D	Aramite	31.0	0.094	56R022*	50	U	50	UJ
56-001	9/26/94 H0001167.D	Hexachlorophene	40.7	0.016	56R022*	500	U	500	R
56-001	9/27/94 H0001188.D	Pyridine	26.7	0.835	56SS00101	3500	U	3500	UJ
					56SS00101D	3400	U	3400	UJ
					56BS00104	4100	U	4100	UJ
					56SS00201	3400	U	3400	UJ
					56BS00204	3800	U	3800	UJ
					56SS00301	3500	U	3500	UJ
					56BS00304	3800	U	3800	UJ
					56SS00401	3400	U	3400	UJ
					56BS00405	4300	U	4300	UJ

56-001	9/27/94 H0001188.D	N-nitrosopyrrolidine	27.0	0.523	56SS00101	710	U	710	UJ
					56SS00101D	690	U	690	UJ
					56BS00104	830	U	830	UJ
					56SS00201	710	U	710	UJ
					56BS00204	780	U	780	UJ
					56SS00301	700	U	700	UJ
					56BS00304	770	U	770	UJ
					56SS00401	700	U	700	UJ
					56BS00405	880	U	880	UJ
56-001	9/27/94 H0001188.D	Benzoic Acid	64.4	0.114	56SS00101	3500	U	3500	UJ
					56SS00101D	3400	U	3400	UJ
					56BS00104	4100	U	4100	UJ
					56SS00201	3400	U	3400	UJ
					56BS00204	3800	U	3800	UJ
					56SS00301	3500	U	3500	UJ
					56BS00304	3800	U	3800	UJ
					56SS00401	3400	U	3400	UJ
					56BS00405	4300	U	4300	UJ
56-001	9/27/94 H0001188.D	Phenyl-tert-butylamine	30.4	0.880	56SS00101	3500	U	3500	UJ
					56SS00101D	3400	U	3400	UJ
					56BS00104	4100	U	4100	UJ
					56SS00201	3400	U	3400	UJ
					56BS00204	3800	U	3800	UJ
					56SS00301	3500	U	3500	UJ
					56BS00304	3800	U	3800	UJ
					56SS00401	3400	U	3400	UJ
					56BS00405	4300	U	4300	UJ
56-001	9/27/94 H0001188.D	p-Phenylenediamine	34.8	0.282	56SS00101	35000	U	35000	UJ
					56SS00101D	34000	U	34000	UJ
					56BS00104	41000	U	41000	UJ
					56SS00201	34000	U	34000	UJ
					56BS00204	38000	U	38000	UJ
					56SS00301	35000	U	35000	UJ
					56BS00304	38000	U	38000	UJ
					56SS00401	34000	U	34000	UJ
					56BS00405	43000	U	43000	UJ
56-001	9/27/94 H0001188.D	Methapyriline	40.5	0.335	56SS00101	3500	U	3500	UJ
					56SS00101D	3400	U	3400	UJ
					56BS00104	4100	U	4100	UJ
					56SS00201	3400	U	3400	UJ
					56BS00204	3800	U	3800	UJ
					56SS00301	3500	U	3500	UJ
					56BS00304	3800	U	3800	UJ
					56SS00401	3400	U	3400	UJ
					56BS00405	4300	U	4300	UJ

56-001	9/27/94 H0001188.D	Aramite	40.4	0.101	56SS00101 56SS00101D 56BS00104 56SS00201 56BS00204 56SS00301 56BS00304 56SS00401 56BS00405	3500 3400 4100 3400 3800 3500 3800 3400 4300	U U U U U U U U U	3500 3400 4100 3400 3800 3500 3800 3400 4300	UJ UJ UJ UJ UJ UJ UJ UJ UJ
56-001	9/27/94 H0001188.D	Hexachlorophene	18.3	0.031	56SS00101 56SS00101D 56BS00104 56SS00201 56BS00204 56SS00301 56BS00304 56SS00401 56BS00405	35000 34000 41000 34000 38000 35000 38000 34000 43000	U U U U U U U U U	35000 34000 41000 34000 38000 35000 38000 34000 43000	R R R R R R R R R

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
BGROUN D-BS	94M1BN3571 12/08/94	4-Chloroaniline	33.8	0.262	0BR035 0BBS00104	10 350	U	10 350	UJ
BGROUN D-BS	94M1BN3571 12/08/94	Benzidine	28.1	0.164	0BR035 0BBS00104	50 1700	U	50 1700	UJ
BGROUN D-BS	94M1BN3572 12/08/94	Methyl Methane-sulfonate	36.9	0.219	0BR035 0BBS00104	10 350	U	10 350	UJ
BGROUN D-BS	94M1BN3572 12/08/94	1,4-Naphtho-quinone	27.5	0.190	0BR035 0BBS00104	1000 35000	U	1000 3500 0	UJ
BGROUN D-BS	94M1BN3619 12/27/94	4-Chloroaniline	59.6	0.160	0BBS00104D	350	U	350	UJ
BGROUN D-BS	94M1BN3619 12/27/94	4-Nitrophenol	42.2	0.059	0BBS00104D	1700	U	1700	UJ
BGROUN D-BS	94M1BN3619 12/27/94	4-Nitroaniline	37.4	0.176	0BBS00104D	1700	U	1700	UJ

BGROUN D-BS	94M1BN3619 12/27/94	Aniline	30.5	1.328	0BBS00104D	350	U	350	UJ
BGROUN D-BS	94M1BN3619 12/27/94	Benzoic Acid	26.4	0.184	0BBS00104D	1700	U	1700	UJ
BGROUN D-BS	94M1BN3619 12/27/94	Benzidine	26.6	0.094	0BBS00104D	1700	U	1700	UJ
BGROUN D-BS	94M1BN3620 12/27/94	N-Nitrosomethyl ethyl amine	27.3	0.392	0BBS00104D	350	U	350	UJ
BGROUN D-BS	94M1BN3620 12/27/94	1-Naphthyl-amine	48.2	0.348	0BBS00104D	1700	U	1700	UJ
BGROUN D-BS	94M1BN3620 12/27/94	2-Naphthyl-amine	68.2	0.166	0BBS00104D	1700	U	1700	UJ
BGROUN D-BS	94M1BN3620 12/27/94	5-Nitro-o-toluidine	31.7	0.261	0BBS00104D	350	U	350	UJ
BGROUN D-BS	94M1BN3620 12/27/94	4-Aminobi-phenyl	50.9	0.223	0BBS00104D	1700	U	1700	UJ
BGROUN D-BS	94M1BN3620 12/27/94	4-Nitroquinoline -1- oxide	36.0	0.089	0BBS00104D	17000	U	1700 0	UJ
BGROUN D-BS	94M1BN3620 12/27/94	Methapyrilene	27.2	0.332	0BBS00104D	1700	U	1700	UJ
BGROUN D-BS	94M1BN3620 12/27/94	Hexachloro-phene	77.6	0.033	0BBS00104D	17000	U	1700 0	R
BGROUN D-BS	94M1BN3621 12/27/94	p-Phenylene-diamine	62.0	0.089	0BBS00104D	1700	U	1700	UJ
BGROUN D-BS	94M1BN3635 12/28/94	Bis(2-chloroethyl) ether	61.8	2.846	0BBS00604 0BBS00504	380 370	U	380 370	UJ
BGROUN D-BS	94M1BN3635 12/28/94	4-Chloroaniline	61.6	0.152	0BBS00604 0BBS00504	380 370	U	380 370	UJ
BGROUN D-BS	94M1BN3635 12/28/94	3-Nitroaniline	34.2	0.196	0BBS00604 0BBS00504	1900 1800	U	1900 1800	UJ
BGROUN D-BS	94M1BN3635 12/28/94	2.4-Dinitrophenol	29.4	0.144	0BBS00604 0BBS00504	1900 1800	U	1900 1800	UJ
BGROUN D-BS	94M1BN3635 12/28/94	4-Nitrophenol	31.4	0.070	0BBS00604 0BBS00504	1900 1800	U	1900 1800	UJ

BGROUN D-BS	94M1BN3635 12/28/94	4-Nitroaniline	54.4	0.128	0BBS00604 0BBS00504	1900 1800	U	1900 1800	UJ
BGROUN D-BS	94M1BN3635 12/28/94	Pyrene	32.5	1.869	0BBS00604 0BBS00504	380 370	U	380 370	UJ
BGROUN D-BS	94M1BN3635 12/28/94	Aniline	39.3	1.161	0BBS00604 0BBS00504	380 370	U	380 370	UJ
BGROUN D-BS	94M1BN3635 12/28/94	Benzoic Acid	32.4	0.169	0BBS00604 0BBS00504	1900 110	U J	1900 110	UJ J
BGROUN D-BS	94M1BN3635 12/28/94	1,2-Diphenyl-hydrazine	42.3	1.544	0BBS00604 0BBS00504	380 370	U	380 370	UJ
BGROUN D-BS	94M1BN3635 12/28/94	Benzidine	56.2	0.056	0BBS00604 0BBS00504	1900 1800	U	1900 1800	UJ
BGROUN D-BS	94M1BN3636 12/28/94	o-Toluidine	26.6	1.021	0BBS00604 0BBS00504	380 370	U	380 370	UJ
BGROUN D-BS	94M1BN3636 12/28/94	1-Naphthyl-amine	43.9	0.377	0BBS00604 0BBS00504	1900 1800	U	1900 1800	UJ
BGROUN D-BS	94M1BN3636 12/28/94	2-Naphthyl-amine	61.7	0.200	0BBS00604 0BBS00504	1900 1800	U	1900 1800	UJ
BGROUN D-BS	94M1BN3636 12/28/94	5-Nitro-o-toluidine	35.3	0.247	0BBS00604 0BBS00504	380 370	U	380 370	UJ
BGROUN D-BS	94M1BN3636 12/28/94	4-Aminobi-phenyl	40.8	0.269	0BBS00604 0BBS00504	1900 1800	U	1900 1800	UJ
BGROUN D-BS	94M1BN3636 12/28/94	4-Nitroquinoline -1-oxide	32.4	0.094	0BBS00604 0BBS00504	19000 18000	U	19000 18000	UJ
BGROUN D-BS	94M1BN3636 12/28/94	Hexachloro-phene	67.4	0.048	0BBS00604 0BBS00504	19000 18000	U	19000 18000	R
BGROUN D-BS	94M1BN3637 12/28/94	p-Phenylene-diamine	44.4	0.130	0BBS00604 0BBS00504	19000 18000	U	19000 18000	UJ
BGROUN D-BS	94M1BN3644 12/29/94	4-Chloroaniline	75.5	0.097	0BBS00404	360	U	360	UJ
BGROUN D-BS	94M1BN3644 12/29/94	3-Nitroaniline	35.2	0.193	0BBS00404	1700	U	1700	UJ

BGROUN D-BS	94M1BN3644 12/29/94	2,4-Dinitrophenol	35.8	0.131	0BBS00404	1700	U	1700	UJ
BGROUN D-BS	94M1BN3644 12/29/94	4-Nitrophenol	28.4	0.073	0BBS00404	1700	U	1700	UJ
BGROUN D-BS	94M1BN3644 12/29/94	4-Nitroaniline	52.0	0.135	0BBS00404	1700	U	1700	UJ
BGROUN D-BS	94M1BN3644 12/29/94	Pyridine	29.6	1.095	0BBS00404	1700	U	1700	UJ
BGROUN D-BS	94M1BN3644 12/29/94	Aniline	46.3	1.027	0BBS00404	360	U	360	UJ
BGROUN D-BS	94M1BN3644 12/29/94	Benzoic Acid	42.4	0.144	0BBS00404	1700	U	1700	UJ
BGROUN D-BS	94M1BN3645 12/29/94	Pyridine	32.8	0.693	0BBS00404	1700	U	1700	UJ
BGROUN D-BS	94M1BN3645 12/29/94	N-Nitrosomethyl ethylamine	30.4	0.375	0BBS00404	360	U	360	UJ
BGROUN D-BS	94M1BN3645 12/29/94	Methyl methane-sulfonate	30.6	0.111	0BBS00404	360	U	360	UJ
BGROUN D-BS	94M1BN3645 12/29/94	N-Nitroso-morpholine	27.9	0.448	0BBS00404	360	U	360	UJ
BGROUN D-BS	94M1BN3645 12/29/94	o-Toluidine	34.0	0.917	0BBS00404	360	U	360	UJ
BGROUN D-BS	94M1BN3645 12/29/94	N-Nitroso-piperidine	30.7	0.228	0BBS00404	360	U	360	UJ
BGROUN D-BS	94M1BN3645 12/29/94	Phenyl-tert-butylamine	27.4	0.821	0BBS00404	1700	U	1700	UJ
BGROUN D-BS	94M1BN3645 12/29/94	1-Naphthyl-amine	53.6	0.312	0BBS00404	1700	U	1700	UJ
BGROUN D-BS	94M1BN3645 12/29/94	2-Naphthyl-amine	69.5	0.159	0BBS00404	1700	U	1700	UJ
BGROUN D-BS	94M1BN3645 12/29/94	5-Nitro-o-toluidine	41.4	0.224	0BBS00404	360	U	360	UJ
BGROUN D-BS	94M1BN3645 12/29/94	1,3,5-Trinitro-benzene	26.5	0.197	0BBS00404	360	U	360	UJ
BGROUN D-BS	94M1BN3645 12/29/94	4-Aminobi-phenyl	62.3	0.171	0BBS00404	1700	U	1700	UJ

BGROUN D-BS	94M1BN3645 12/29/94	4-Nitroquinoline -1- oxide	33.8	0.092	0BBS00404	17000	U	1700 0	UJ
BGROUN D-BS	94M1BN3645 12/29/94	Hexachloro-phene	60.5	0.058	0BBS00404	17000	U	1700 0	UJ
BGROUN D-BS	94M1BN3646 12/29/94	p-Phenylene-diamine	48.3	0.121	0BBS00404	17000	U	1700 0	UJ

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
Worms	94M1BN3644 12/29/94	4-Chloroaniline	75.5	0.097	Neg_Control 15E01201 15E01701 15E01601 15E02001 15E02301	1500 1600 1500 1500 1600 2100	U	1500 1600 1500 1500 1600 2100	UJ
Worms	94M1BN3644 12/29/94	3-Nitroaniline	35.2	0.193	Neg_Control 15E01201 15E01701 15E01601 15E02001 15E02301	7100 8000 7200 7200 7700 10000	U	7100 8000 7200 7200 7700 10000	UJ
Worms	94M1BN3644 12/29/94	2,4-Dinitrophenol	35.8	0.131	Neg_Control 15E01201 15E01701 15E01601 15E02001 15E02301	7100 8000 7200 7200 7700 10000	U	7100 8000 7200 7200 7700 10000	UJ
Worms	94M1BN3644 12/29/94	4-Nitrophenol	28.4	0.073	Neg_Control 15E01201 15E01701 15E01601 15E02001 15E02301	7100 8000 7200 7200 7700 10000	U	7100 8000 7200 7200 7700 10000	UJ
Worms	94M1BN3644 12/29/94	4-Nitroaniline	52.0	0.135	Neg_Control 15E01201 15E01701 15E01601 15E02001 15E02301	7100 8000 7200 7200 7700 10000	U	7100 8000 7200 7200 7700 10000	UJ

Worms	94M1BN3644 12/29/94	Pyridine	29.6	1.095	Neg_Control 15E01201 15E01701 15E01601 15E02001 15E02301	7100 8000 7200 7200 7700 10000	U	7100 8000 7200 7200 7700 10000	UJ
Worms	94M1BN3644 12/29/94	Aniline	46.3	1.027	Neg_Control 15E01201 15E01701 15E01601 15E02001 15E02301	1500 1600 1500 1500 1600 2100	U	1500 1600 1500 1500 1600 2100	UJ
Worms	94M1BN3644 12/29/94	Benzoic Acid	42.4	0.144	Neg_Control 15E01201 15E01701 15E01601 15E02001 15E02301	1200 1900 1900 1500 1100 980	J	1200 1900 1900 1500 1100 980	J
Worms	94M1BN3645 12/29/94	N-nitrosomethyl ethylamine	30.4	0.375	Neg_Control 15E01201 15E01701 15E01601 15E02001 15E02301	1500 1600 1500 1500 1600 2100	U	1500 1600 1500 1500 1600 2100	UJ
Worms	94M1BN3645 12/29/94	Methyl Methane-sulfonate	30.6	0.111	Neg_Control 15E01201 15E01701 15E01601 15E02001 15E02301	1500 1600 1500 1500 1600 2100	U	1500 1600 1500 1500 1600 2100	UJ
Worms	94M1BN3645 12/29/94	N-Nitroso-morpholine	27.9	0.448	Neg_Control 15E01201 15E01701 15E01601 15E02001 15E02301	1500 1600 1500 1500 1600 2100	U	1500 1600 1500 1500 1600 2100	UJ
Worms	94M1BN3645 12/29/94	o-Toluidine	34.0	0.917	Neg_Control 15E01201 15E01701 15E01601 15E02001 15E02301	1500 1600 1500 1500 1600 2100	U	1500 1600 1500 1500 1600 2100	UJ

Worms	94M1BN3645 12/29/94	N-Nitroso- piperidine	30.7	0.228	Neg_Control 15E01201 15E01701 15E01601 15E02001 15E02301	1500 1600 1500 1500 1600 2100	U	1500 1600 1500 1500 1600 2100	UJ
Worms	94M1BN3645 12/29/94	Phenyl-tert- butylamine	27.4	0.821	Neg_Control 15E01201 15E01701 15E01601 15E02001 15E02301	7100 8000 7200 7200 7700 10000	U	7100 8000 7200 7200 7700 10000	UJ
Worms	94M1BN3645 12/29/94	1-Naphthyl- amine	53.6	0.312	Neg_Control 15E01201 15E01701 15E01601 15E02001 15E02301	7100 8000 7200 7200 7700 10000	U	7100 8000 7200 7200 7700 10000	UJ
Worms	94M1BN3645 12/29/94	2-Naphthyl- amine	69.5	0.159	Neg_Control 15E01201 15E01701 15E01601 15E02001 15E02301	7100 8000 7200 7200 7700 10000	U	7100 8000 7200 7200 7700 10000	UJ
Worms	94M1BN3645 12/29/94	5-Nitro-o- toluidine	41.4	0.224	Neg_Control 15E01201 15E01701 15E01601 15E02001 15E02301	1500 1600 1500 1500 1600 2100	U	1500 1600 1500 1500 1600 2100	UJ
Worms	94M1BN3645 12/29/94	1,3,5-Trinitro- benzene	26.5	0.197	Neg_Control 15E01201 15E01701 15E01601 15E02001 15E02301	1500 1600 1500 1500 1600 2100	U	1500 1600 1500 1500 1600 2100	UJ
Worms	94M1BN3645 12/29/94	4-Aminobi- phenyl	62.3	0.171	Neg_Control 15E01201 15E01701 15E01601 15E02001 15E02301	7100 8000 7200 7200 7700 10000	U	7100 8000 7200 7200 7700 10000	UJ

Worms	94M1BN3645 12/29/94	4- Nitroquinoline -1-oxide	33.8	0.092	Neg_Control 15E01201 15E01701 15E01601 15E02001 15E02301	71000 80000 72000 72000 77000 10000 0	U	71000 80000 72000 72000 77000 100000	UJ
Worms	94M1BN3645 12/29/94	Hexachloro- phene	60.5	0.058	Neg_Control 15E01201 15E01701 15E01601 15E02001 15E02301	71000 80000 72000 72000 77000 10000 0	U	71000 80000 72000 72000 77000 100000	UJ
Worms	94M1BN3646 12/29/94	p-Phenylene diamine	48.3	0.121	Neg_Control 15E01201 15E01701 15E01601 15E02001 15E02301	71000 80000 72000 72000 77000 10000 0	U	71000 80000 72000 72000 77000 100000	UJ
Worms	95M1BN1001 1/3/95	4- Chloroaniline	69.2	0.122	15E03001	1500	U	1500	UJ
Worms	95M1BN1001 1/3/95	4-Nitroaniline	39.9	0.169	15E03001	7000	U	7000	UJ
Worms	95M1BN1001 1/3/95	Di-n- butylphthalate	31.2	1.698	15E03001	1500	U	1500	UJ
Worms	95M1BN1001 1/3/95	Bis(2- ethylhexyl) phthalate	28.9	1.194	15E03001	1700	--	1700	J
Worms	95M1BN1001 1/3/95	Aniline	52.8	0.902	15E03001	1500	U	1500	UJ
Worms	95M1BN1001 1/3/95	Benzidine	28.1	0.092	15E03001	7000	U	7000	UJ
Worms	95M1BN1002 1/3/95	Hexachloro- phene	80.3	0.029	15E03001	70000	U	70000	R
Worms	95M1BN1002 1/3/95	o-Toluidine	35.0	0.903	15E03001	1500	U	1500	UJ
Worms	95M1BN1002 1/3/95	1-Naphthyl- amine	38.8	0.411	15E03001	7000	U	7000	UJ
Worms	95M1BN1002 1/3/95	2-Naphthyl- amine	58.4	0.217	15E03001	7000	U	7000	UJ

Worms	95M1BN1002 1/3/95	5-Nitro-o-toluidine	25.4	0.285	15E03001	1500	U	1500	UJ
Worms	95M1BN1002 1/3/95	4-Aminobi-phenyl	52.4	0.216	15E03001	7000	U	7000	UJ
Worms	95M1BN1002 1/3/95	4-Nitroquinoline -1-oxide	42.4	0.080	15E03001	70000	U	70000	UJ
Worms	95M1BN1003 1/3/95	p-Phenylene diamine	35.9	0.150	15E03001	70000	U	70000	UJ

SDG No.	CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/kg	Lab Qual	EDS Value ug/kg	EDS Qual
49-SED	94M1BN3246 10/05/94	Hexachlorocyclo-pentadiene	28.2	0.214	49SD017	1700	U	1700	UJ
49-SED	94M1BN3246 10/05/94	Benzidine	43.5	0.934	49SD017	8200	U	8200	UJ
49-SED	94M1BN3247 10/05/94	Benzo(k) fluoranthene	25.1	1.228	49SD017	1700	U	1700	UJ
49-SED	94M1BN3247 10/05/94	Methylmethane-sulfonate	37.6	0.304	49SD017	1700	U	1700	UJ
49-SED	94M1BN3247 10/05/94	4-Nitroquinoline-1-oxide	48.9	0.071	49SD017	82000	U	82000	UJ
49-SED	94M1BN3247 10/05/94	Methapyrilene	42.7	0.789	49SD017	82000	U	82000	UJ
49-SED	94M1BN3247 10/05/94	Hexachlorophene	75.8	0.058	49SD017	82000	U	82000	UJ
49-SED	94M1BN3283 10/10/94	4-Nitroquinoline-1-oxide	38.8	0.085	49SD017D 49SD016 49SD015 49SD014 49SD013 49R027*	80000 43000 41000 44000 41000 500	U	80000 43000 41000 44000 41000 500	UJ

49-SED	94M1BN3283 10/10/94	Hexachlorophene	70.0	0.072	49SD017D 49SD016 49SD015 49SD014 49SD013 49R027*	80000 43000 41000 44000 41000 500	U	80000 43000 41000 44000 41000 500	UJ

APPENDIX E
PARCC Criteria Evaluation Summary Table

Sample Event PARCC Criteria Summary Table
NAS Mayport, Mayport, Florida

SDG Number	Precision	Accuracy	Representativeness	Completeness	Comparability
001W	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
002W	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
003W	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
004W	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
005W	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
006W	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
007W	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
002SW	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
002SED	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
001S	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
002S	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
003S	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable

004S	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
005S	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
SWMU 08/SL-01	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
003SW	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
003SED	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
BGROUND-SW	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
BGROUND-SED	Acceptable	Acceptable	Acceptable w/qualifications	Acceptable	Acceptable
SWMU3-001	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
001SW	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
001SED	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
BGROUND-BS	Acceptable	Acceptable	Acceptable w/qualifications	Acceptable	Acceptable
SWMU49-SED	Acceptable	Acceptable	Acceptable w/qualifications	Acceptable	Acceptable
SWMU28-001	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable

SWMU28-002	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
SWMU56-001	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
SWMU 5-001	Acceptable w/qualifications	Acceptable	Acceptable w/qualifications	Acceptable	Acceptable
SWMU 5-002	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
SWMU 5-003	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
SWMU 2&4-002	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
008W	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
009W	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable
010W	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable
011W	Acceptable	Acceptable	Acceptable w/qualifications	Acceptable	Acceptable
SWMU 2&4-001	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
SWMU 28-003	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
SWMU 15-001	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable
SWMU 15-002	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable
Amended 005W	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable

Amended 007W	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
08/SL-02	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
LWW SEW	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
LWW SED	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
Worms	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
Fish	Acceptable	Acceptable	Acceptable w/qualifications	Acceptable	Acceptable

APPENDIX E

HUMAN HEALTH RISK ASSESSMENT SUPPORT DOCUMENTATION INCLUDING:

Appendix E-1:	Human Health Dose-Response Tables
Appendix E-2:	Human Health Risk Assessment Spreadsheets SWMUs 6, 7, 8, 9, 10, and 11
Appendix E-3:	Human Health Risk Assessment Spreadsheets SWMU 12
Appendix E-4:	Human Health Risk Assessment Spreadsheets SWMU 15
Appendix E-5:	Human Health Risk Assessment Spreadsheets SWMU 16

APPENDIX E-1

HUMAN HEALTH DOSE-RESPONSE TABLES

Table 1
Oral Dose-Response Data
for Carcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Weight of Evidence	Oral Slope Factor (mg/kg/day)(-1)	Source	Test Species	Exposure Route	Tumor Type	Study Source
VOLATILES							
1,1,1-Trichloroethane	D	NE					
1,1,2,2-Tetrachloroethane	C	2.00e-01	IRIS	Mouse	Oral-gavage	Liver	IRIS
1,1,2-Trichloroethane	C	5.70e-02	IRIS	Mouse	Oral-gavage	Liver	IRIS
1,1-Dichloroethane	C	NE					
1,1-Dichloroethylene	C	6.00e-01	IRIS	Rat	Oral-drinking water	Adrenal	IRIS
1,2-Dichloroethane	B2	9.10e-02	IRIS	Rat	Oral-gavage	Hemangiosarcoma	IRIS
1,2-Dichloroethylene (total)	D	NE					
1,2-Dichloropropane	B2	6.80e-02	HEAST	Mouse	Oral-gavage	Liver	HEAST
2-Butanone	D	NE					
2-Hexanone	D	NE					
4-Methyl-2-Pentanone	D	NE					
Acetone	D	NE					
Benzene	A	2.90e-02	IRIS	Human	Inhalation	Leukemia	IRIS
Bromodichloromethane	B2	6.20e-02	IRIS	Mouse	Oral-gavage	Kidney	IRIS
Bromoform	B2	7.90e-03	IRIS	Rat	Oral-gavage	Intestine	IRIS
Bromomethane	D	NE					
Carbon Disulfide	D	NE					
Carbon Tetrachloride	B2	1.30e-01	IRIS	Rat/Mouse/ Hamster	Oral-gavage	Liver	IRIS
Chlorobenzene	D	NE					
Chloroethane	D	NE					

See notes at end of table.

Table 1 (Continued)
Oral Dose-Response Data
for Carcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Weight of Evidence	Oral Slope Factor (mg/kg/day)(-1)	Source	Test Species	Exposure Route	Tumor Type	Study Source
Chloroform	B2	6.10e-03	IRIS	Rat	Oral-drinking water	Kidney	IRIS
Chloromethane	C	1.30e-02	HEAST	Mouse	Inhalation	Kidney	HEAST
cis-1,3-Dichloropropene	C	1.80e-01	HEAST (15)	Rat	Oral-gavage	Forestomach	HEAST
Dibromochloromethane	C	8.40e-02	IRIS	Mouse	Oral-gavage	Liver	IRIS
Ethylbenzene	D	NE					
Ethylene dibromide	B2	8.50e+01	IRIS	Rat	Oral-gavage	Forestomach	IRIS
Methylene Chloride	B2	7.50e-03	IRIS	Mouse	Inhalation/Oral-drinking water	Liver	IRIS
Styrene	D	NE					
Tetrachloroethylene	B2	5.20e-02	(1)				
Toluene	D	NE					
trans-1,3-Dichloropropene	C	1.80e-01	HEAST (15)	Rat	Oral-gavage	Forestomach	HEAST
Trichloroethylene	B2	1.10e-02	(1)				
Vinyl Acetate	D	NE					
Vinyl Chloride	A	1.90e+00	HEAST		Oral-diet	Liver,lung	HEAST
Xylenes (total)	D	NE					
SEMIVOLATILES							
1-Methylnaphthalene	D	NE					
1,2,4-Trichlorobenzene	D	NE					
1,2-Dichlorobenzene	D	NE					
1,3-Dichlorobenzene	D	NE					
1,4-Dichlorobenzene	C	2.40e-02	HEAST	Mouse	Oral-gavage	Liver	HEAST

See notes at end of table.

Table 1 (Continued)
Oral Dose-Response Data
for Carcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Weight of Evidence	Oral Slope Factor (mg/kg/day)(-1)	Source	Test Species	Exposure Route	Tumor Type	Study Source
2,4,5-Trichlorophenol	D	NE					
2,4,6-Trichlorophenol	B2	1.10e-02	IRIS	Rat	Oral-diet	Leukemia	IRIS
2,4-Dichlorophenol	D	NE					
2,4-Dimethylphenol	D	NE					
2,4-Dinitrophenol	D	NE					
2,4-Dinitrotoluene	B2	6.80e-01	IRIS (20)	Rat	Oral-diet	Liver	IRIS
2,6-Dinitrotoluene	B2	6.80e-01	IRIS (20)	Rat	Oral-diet	Liver	IRIS
2-Chloronaphthalene	D	NE					
2-Chlorophenol	D	NE					
2-Methylnaphthalene	D	NE					
2-Methylphenol	D	NE					
2-Nitroaniline	D	NE					
2-Nitrophenol	D	NE					
3,3'-Dichlorobenzidine	B2	4.50e-01	IRIS	Rat	Oral-diet	Mammary	IRIS
3-Nitroaniline	D	NE					
4,6-Dinitro-2-Methylphenol	D	NE					
4-Bromophenyl-phenylether	D	NE					
4-Chloroaniline	D	NE					
4-Chlorophenyl-phenylether	D	NE					
4-Chloro-3-Methylphenol	D	NE					
4-Methylphenol	C	NE					
4-Nitroaniline	D	NE					
4-Nitrophenol	D	NE					

See notes at end of table.

Table 1 (Continued)
Oral Dose-Response Data
for Carcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Weight of Evidence	Oral Slope Factor (mg/kg/day)(-1)	Source	Test Species	Exposure Route	Tumor Type	Study Source
Acenaphthylene	D	NE					
Acenaphthene	D	NE					
Anthracene	D	NE					
Benzoicacid	D	NE					
Benzo(a)Anthracene	B2	7.30e+00	(4)				
Benzo(a)Pyrene	B2	7.30e+00	IRIS	Mouse	Oral-diet	Forestomach	IRIS
Benzo(b)Fluoranthene	B2	7.30e+00	(4)				
Benzo(g,h,i)perylene	D	NE					
Benzo(k)Fluoranthene	B2	7.30e+00	(4)				
Benzyl Alcohol	D	NE					
bis(2-Chloroethoxy)Methane	D	NE					
bis(2-Chloroethyl)Ether	D	ND					
bis(2-Chloroisopropyl)Ether	D	ND					
bis(2-Ethylhexyl)phthalate	B2	1.40e-02	IRIS	Rat	Oral-diet	Liver	IRIS
Butylbenzylphthalate	C	NE	IRIS				
Carbazole	B2	2.00e-02	HEAST	Mouse	Oral-diet	Liver	HEAST
Chrysene	B2	7.30e+00	(4)				
Dibenzofuran	D	NE					
Dibenz(a,h)Anthracene	B2	7.30e+00	(4)				
Diethylphthalate	D	NE					
Dimethylphthalate	D	NE					
Di-n-butylphthalate	D	NE					
Di-n-octylphthalate	D	NE					

See notes at end of table.

Table 1 (Continued)
Oral Dose-Response Data
for Carcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Weight of Evidence	Oral Slope Factor (mg/kg/day)(-1)	Source	Test Species	Exposure Route	Tumor Type	Study Source
Fluoranthene	D	NE					
Fluorene	D	NE					
Hexachlorobenzene	B2	1.60e+00	IRIS	Rat	Oral-diet	Liver	IRIS
Hexachlorobutadiene	C	7.80e-02	IRIS	Rat	Oral-diet	Kidney	IRIS
Hexachlorocyclopentadiene	D	NE					
Hexachloroethane	C	1.40e-02	IRIS	Mouse	Oral-gavage	Liver	IRIS
Indeno(1,2,3-c,d)Pyrene	B2	7.30e+00	(4)				
Isophorone	C	9.50e-04	IRIS	Rat	Oral-gavage	Kidney	IRIS
Naphthalene	D	NE					
Nitrobenzene	D	NE					
N-Nitrosodiphenylamine	B2	4.90e-03	IRIS	Rat	Oral-drinking water	Bladder	IRIS
N-Nitroso-di-n-propylamine	B2	7.00e+00	IRIS	Rat	Oral-drinking water	Liver	IRIS
Pentachlorophenol	B2	1.20e-01	IRIS	Mouse	Oral-diet	Liver/adrenal	IRIS
Phenanthrene	D	NE					
Phenol	D	NE					
Pyrene	D	NE					
PESTICIDES/PCBs							
4,4'-DDD	B2	2.40e-01	IRIS	Mouse	Oral-diet	Liver	IRIS
4,4'-DDE	B2	3.40e-01	IRIS	Mouse/hamster	Oral-diet	Liver	IRIS
4,4'-DDT	B2	3.40e-01	IRIS	Mouse/rat	Oral-diet	Liver	IRIS
Aldrin	B2	1.70e+01	IRIS	Mouse	Oral-diet	Liver	IRIS

See notes at end of table.

Table 1 (Continued)
Oral Dose-Response Data
for Carcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Weight of Evidence	Oral Slope Factor (mg/kg/day)(-1)	Source	Test Species	Exposure Route	Tumor Type	Study Source
alpha-BHC	B2	6.30e+00	IRIS	Mouse	Oral-diet	Liver	IRIS
alpha-Chlordane	B2	1.30e+00	IRIS (9)	Mouse	Oral-diet	Liver	IRIS
Aroclor-1016	B2	7.70e+00	(11)				
Aroclor-1221	B2	7.70e+00	(11)				
Aroclor-1232	B2	7.70e+00	(11)				
Aroclor-1242	B2	7.70e+00	(11)				
Aroclor-1248	B2	7.70e+00	(11)				
Aroclor-1254	B2	7.70e+00	(11)				
Aroclor-1260	B2	7.70e+00	IRIS	Rat	Oral-diet	Liver	IRIS
beta-BHC	C	1.80e+00	IRIS	Mouse	Oral-diet	Liver	IRIS
delta-BHC	D	NE					
Dieldrin	B2	1.60e+01	IRIS	Mouse	Oral-diet	Liver	IRIS
Endosulfan I	D	NE					
Endosulfan II	D	NE					
Endosulfan sulfate	D	NE					
Endrin	D	NE					
Endrin aldehyde	D	NE					
Endrin ketone	D	NE					
gamma-BHC (Lindane)	C/B2	1.30e+00	HEAST	Mouse	Oral-diet	Liver	IRIS
gamma-Chlordane	B2	1.30e+00	IRIS (9)	Mouse	Oral-diet	Liver	IRIS
Heptachlor	B2	4.50e+00	IRIS	Mouse	Oral-diet	Liver	IRIS
Heptachlor Epoxide	B2	9.10e+00	IRIS	Mouse	Oral-diet	Liver	IRIS
Methoxychlor	D	NE					

See notes at end of table.

Table 1 (Continued)
Oral Dose-Response Data
for Carcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Weight of Evidence	Oral Slope Factor (mg/kg/day)(-1)	Source	Test Species	Exposure Route	Tumor Type	Study Source
Toxaphene	B2	1.10e+00	IRIS	Mouse	Oral-diet	Liver	IRIS
INORGANICS							
Aluminum	D	NE					
Antimony	D	NE					
Arsenic	A	1.75e+00	IRIS (16)	Human	Oral-drinking water	Skin	IRIS
Barium	D	NE					
Beryllium	B2	4.30e+00	IRIS	Rat	Oral-drinking water	Total	IRIS
Cadmium	D	NE					
Calcium	D	NE					
Chromium	D	NE					
Cobalt	D	NE					
Copper	D	NE					
Cyanide	D	NE					
Iron	D	NE					
Lead	B2	NE					
Magnesium	D	NE					
Manganese	D	NE					
Mercury	D	NE					
Nickel	D	NE					
Nitrate/nitrite	D	NE					
Phosphorus	D	NE					
Potassium	D	NE					

See notes at end of table.

Table 1 (Continued)
Oral Dose-Response Data
for Carcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Weight of Evidence	Oral Slope Factor (mg/kg/day)(-1)	Source	Test Species	Exposure Route	Tumor Type	Study Source
Selenium	D	NE					
Silver	D	NE					
Sodium	D	NE					
Thallium	D	NE					
Tin	D	NE					
Vanadium	D	NE					
Zinc	D	NE					

(1) This value was provided by the Environmental Criteria and Assessment Office (ECAO) of the USEPA in response to a specific request.
(4) The ingestion slope factor for benzo(a)pyrene was used as a surrogate for all PAHs classified as A or B carcinogens and for which a chemical-specific slope factor was not available.
(9) The values for chlordane have been used as surrogates for alpha- and gamma-chlordane.
(11) The ingestion slope factor for PCBs, in which Aroclor-1260 was evaluated, has been used as a surrogate for all Aroclors.
(15) Values for 1,3-dichloropropene were used as surrogates for cis- and trans-1,3-dichloropropene.
(16) The ingestion slope factor for arsenic has been calculated from the drinking water unit risk of 5.00E-05 per(ug/L).
(20) "Dinitrotoluene mixture, 2,4-/2,6-" has been used as a surrogate for 2,4- and 2,6-dinitrotoluene.

Weight of Evidence (route-specific):
A = Human carcinogen
B = Probable human carcinogen (B1 = limited human evidence; B2 = sufficient human evidence)
C = Possible human carcinogen
D = Not classifiable as to human carcinogenicity

Notes: Integrated Risk Information System (IRIS) on-line database search, current as of March 1995.
Health Effects Assessment Summary Tables (HEAST), current as of November 1994.

ND = no data.
NE = not evaluated.

Table 2
Inhalation Dose-Response Data
for Carcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Weight of Evidence	Inhalation Slope Factor (mg/kg/day)(-1)	Source	Inhalation Unit Risk ($\mu g/m^3$)(-1)	Source	Test Species	Exposure Route	Tumor Type	Study Source
VOLATILES									
1,1,1-Trichloroethane	D	NE		NE					
1,1,2,2-Tetrachloroethane	C	2.00e-01	HEAST	5.80e-05	IRIS	Mouse	Oral-gavage	Liver	IRIS
1,1,2-Trichloroethane	C	5.70e-02	HEAST	1.60e-05	IRIS	Mouse	Oral-gavage	Liver	IRIS
1,1-Dichloroethane	C	NE		NE					
1,1-Dichloroethylene	C	1.20e+00	HEAST	5.00e-05	IRIS	Mouse	Inhalation	Kidney	IRIS
1,2-Dichloroethane	B2	9.10e-02	HEAST	2.60e-05	IRIS	Rat	Oral-gavage	Hemangiosarcoma	IRIS
1,2-Dichloroethylene (total)	D	NE		NE					
1,2-Dichloropropane	D	NE		NE					
2-Butanone	D	NE		NE					
2-Hexanone	D	NE		NE					
4-Methyl-2-Pentanone	D	NE		NE					
Acetone	D	NE		NE					
Benzene	A	2.90e-02	HEAST	8.30e-06	IRIS	Human	Inhalation	Leukemia	IRIS
Bromodichloromethane	D	NE		NE					
Bromoform	B2	3.90e-03	HEAST	1.10e-06	IRIS	Rat	Oral-gavage	Intestine	IRIS
Bromomethane	D	NE		NE					
Carbon Disulfide	D	NE		NE					
Carbon Tetrachloride	B2	5.30e-02	HEAST	1.50e-05	IRIS	Rat/Mouse/ Hamster	Oral-gavage	Liver	IRIS
Chlorobenzene	D	NE		NE					
Chloroethane	D	NE		NE					
Chloroform	B2	8.10e-02	HEAST	2.30e-05	IRIS	Mouse	Oral-gavage	Liver	IRIS

See notes at end of table.

Table 2 (Continued)
Inhalation Dose-Response Data
for Carcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Weight of Evidence	Inhalation Slope Factor (mg/kg/day)(-1)	Source	Inhalation Unit Risk ($\mu g/m^3$)(-1)	Source	Test Species	Exposure Route	Tumor Type	Study Source
Chloromethane	C	6.30e-03	HEAST	1.80e-06	HEAST	Mouse	Inhalation	Kidney	HEAST
cis-1,3-Dichloropropene	C	1.30e-01	HEAST (15)	3.70e-05	HEAST (15)	Mouse	Inhalation	Lung	HEAST
Dibromochloromethane	D	NE		NE					
Ethylbenzene	D	NE		NE					
Ethylene dibromide	B2	7.60e-01	HEAST	2.20e-04	IRIS	Rat	Inhalation	Nasal cavity	IRIS
Methylene Chloride	B2	NE		4.70e-07	IRIS	Mouse	Inhalation	Liver	IRIS
Styrene	D	NE		NE					
Tetrachloroethylene	B2	2.0e-03	(1)	5.8e-07	(1)				
Toluene	D	NE		NE					
trans-1,3-Dichloropropene	C	1.30e-01	HEAST (15)	3.70e-05	HEAST (15)	Mouse	Inhalation	Lung	HEAST
Trichloroethylene	B2	6.00e-03	(1)	1.70e-06	(1)				
Vinyl Acetate	D	NE		NE					
Vinyl Chloride	A	3.00e-01	HEAST	8.40e-05	HEAST	Rat	Inhalation	Liver	HEAST
Xylenes (total)	D	NE		NE					
SEMIVOLATILES									
1-Methylnaphthalene	D	NE		NE					
1,2,4-Trichlorobenzene	D	NE		NE					
1,2-Dichlorobenzene	D	NE		NE					
1,3-Dichlorobenzene	D	NE		NE					
1,4-Dichlorobenzene	D	NE		NE					
2,4,5-Trichlorophenol	D	NE		NE					
2,4,6-Trichlorophenol	B2	1.00e-02	HEAST	3.10e-06	IRIS	Rat	Oral-diet	Leukemia	IRIS

See notes at end of table.

Table 2 (Continued)
Inhalation Dose-Response Data
for Carcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Weight of Evidence	Inhalation Slope Factor (mg/kg/day)(-1)	Source	Inhalation Unit Risk ($\mu g/m^3$)(-1)	Source	Test Species	Exposure Route	Tumor Type	Study Source
2,4-Dichlorophenol	D	NE		NE					
2,4-Dimethylphenol	D	NE		NE					
2,4-Dinitrophenol	D	NE		NE					
2,4-Dinitrotoluene	D	NE		NE					
2,6-Dinitrotoluene	D	NE		NE					
2-Chloronaphthalene	D	NE		NE					
2-Chlorophenol	D	NE		NE					
2-Methylnaphthalene	D	NE		NE					
2-Methylphenol	D	NE		NE					
2-Nitroaniline	D	NE		NE					
2-Nitrophenol	D	NE		NE					
3,3'-Dichlorobenzidine	D	NE		NE					
3-Nitroaniline	D	NE		NE					
4,6-Dinitro-2-Methylphenol	D	NE		NE					
4-Bromophenyl-phenylether	D	NE		NE					
4-Chloroaniline	D	NE		NE					
4-Chlorophenyl-phenylether	D	NE		NE					
4-Chloro-3-Methylphenol	D	NE		NE					
4-Methylphenol	C	NE		NE					
4-Nitroaniline	D	NE		NE					
4-Nitrophenol	D	NE		NE					
Acenaphthylene	D	NE		NE					
Acenaphthene	D	NE		NE					

See notes at end of table.

Table 2 (Continued)
Inhalation Dose-Response Data
for Carcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Weight of Evidence	Inhalation Slope Factor (mg/kg/day)(-1)	Source	Inhalation Unit Risk ($\mu g/m^3$)(-1)	Source	Test Species	Exposure Route	Tumor Type	Study Source
Anthracene	D	NE		NE					
Benzoic acid	D	NE		NE					
Benzo(a)Anthracene	B2	NE		NE					
Benzo(a)Pyrene	B2	NE		NE					
Benzo(b)Fluoranthene	B2	NE		NE					
Benzo(g,h,i)perylene	D	NE		NE					
Benzo(k)Fluoranthene	B2	NE		NE					
Benzyl Alcohol	D	NE		NE					
bis(2-Chloroethoxy)Methane	D	NE		NE					
bis(2-Chloroethyl)Ether	B2	1.10e+00	HEAST	3.30e-04	IRIS	Mouse	Oral-gavage/ diet	Liver	IRIS
bis(2-Chloroisopropyl)Ether	C	3.50e-02	HEAST	1.00e-05	HEAST	Mouse	Oral-gavage	Liver/lung	HEAST
bis(2-Ethylhexyl)phthalate	D	NE		NE					
Butylbenzylphthalate	D	NE		NE					
Carbazole	D	NE		NE					
Chrysene	B2	NE		NE					
Dibenzofuran	D	NE		NE					
Dibenz(a,h)Anthracene	B2	NE		NE					
Diethylphthalate	D	NE		NE					
Dimethylphthalate	D	NE		NE					
Di-n-butylphthalate	D	NE		NE					
Di-n-octylphthalate	D	NE		NE					
Fluoranthene	D	NE		NE					
Fluorene	D	NE		NE					

See notes at end of table.

Table 2 (Continued)
Inhalation Dose-Response Data for Carcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Weight of Evidence	Inhalation Slope Factor (mg/kg/day)(-1)	Source	Inhalation Unit Risk ($\mu g/m^3$)(-1)	Source	Test Species	Exposure Route	Tumor Type	Study Source
Hexachlorobenzene	B2	1.60e+00	HEAST	4.60e-04	IRIS	Rat	Oral-diet	Liver	IRIS
Hexachlorobutadiene	C	7.80e-02	HEAST	2.20e-05	IRIS	Rat	Oral-diet	Kidney	IRIS
Hexachlorocyclopentadiene	D	NE		NE					
Hexachloroethane	C	1.40e-02	HEAST	4.00e-06	IRIS	Mouse	Oral-gavage	Liver	IRIS
Indeno(1,2,3-c,d)Pyrene	B2	NE		NE					
Isophorone	D	NE		NE					
Naphthalene	D	NE		NE					
Nitrobenzene	D	NE		NE					
N-Nitrosodiphenylamine	D	NE		NE					
N-Nitroso-di-n-propylamine	D	NE		NE					
Pentachlorophenol	D	NE		NE					
Phenanthrene	D	NE		NE					
Phenol	D	NE		NE					
Pyrene	D	NE		NE					
PESTICIDES/PCBs									
4,4'-DDD	D	NE		NE					
4,4'-DDE	D	NE		NE					
4,4'-DDT	B2	3.40e-01	HEAST	9.70e-05	IRIS	Mouse/rat	Oral-diet	Liver	IRIS
Aldrin	B2	1.70e+01	HEAST	4.90e-03	IRIS	Mouse	Oral-diet	Liver	IRIS
alpha-BHC	B2	6.30e+00	HEAST	1.80e-03	IRIS	Mouse	Oral-diet	Liver	IRIS
alpha-Chlordane	B2	1.30e+00	HEAST (9)	3.70e-04	IRIS (9)	Mouse	Oral-diet	Liver	IRIS
Aroclor-1016	B2	NE		NE					
Aroclor-1221	B2	NE		NE					

See notes at end of table.

Table 2 (Continued)
Inhalation Dose-Response Data
for Carcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Weight of Evidence	Inhalation Slope Factor (mg/kg/day)(-1)	Source	Inhalation Unit Risk ($\mu g/m^3$)(-1)	Source	Test Species	Exposure Route	Tumor Type	Study Source
Aroclor-1232	B2	NE		NE					
Aroclor-1242	B2	NE		NE					
Aroclor-1248	B2	NE		NE					
Aroclor-1254	B2	NE		NE					
Aroclor-1260	B2	NE		NE					
beta-BHC	C	1.80e+00	HEAST	5.30e-04	IRIS	Mouse	Oral-diet	Liver	IRIS
delta-BHC	D	NE		NE					
Dieldrin	B2	1.60e+01	HEAST	4.60e-03	IRIS	Mouse	Oral-diet	Liver	IRIS
Endosulfan I	D	NE		NE					
Endosulfan II	D	NE		NE					
Endosulfan sulfate	D	NE		NE					
Endrin	D	NE		NE					
Endrin aldehyde	D	NE		NE					
Endrin ketone	D	NE		NE					
gamma-BHC (Lindane)	D	NE		NE					
gamma-Chlordane	B2	1.30e+00	HEAST (9)	3.70e-04	IRIS (9)	Mouse	Oral-diet	Liver	IRIS
Heptachlor	B2	4.50e+00	HEAST	1.30e-03	IRIS	Mouse	Oral-diet	Liver	IRIS
Heptachlor Epoxide	B2	9.10e+00	HEAST	2.60e-03	IRIS	Mouse	Oral-gavage	Liver	IRIS
Methoxychlor	D	NE		NE					
Toxaphene	B2	1.10e+00	HEAST	3.20e-04	IRIS	Mouse	Oral-diet	Liver	IRIS
INORGANICS									
Aluminum	D	NE		NE					
Antimony	D	NE		NE					

See notes at end of table.

Table 2 (Continued)
Inhalation Dose-Response Data for Carcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Weight of Evidence	Inhalation Slope Factor (mg/kg/day)(-1)	Source	Inhalation Unit Risk ($\mu g/m^3$)(-1)	Source	Test Species	Exposure Route	Tumor Type	Study Source
Arsenic	A	5.00e+01	HEAST	4.30e-03	IRIS	Human	Inhalation	Lung	IRIS
Barium	D	NE		NE					
Beryllium	B2	8.40e+00	HEAST	2.40e-03	IRIS	Human	Inhalation	Lung	IRIS
Cadmium	B1	NE		1.80e-03	IRIS	Human	Inhalation	Lung	IRIS
Calcium	D	NE		NE					
Chromium	A	4.10e+01	HEAST (7)	1.20e-02	IRIS (7)	Human	Inhalation	Lung	IRIS
Cobalt	D	NE		NE					
Copper	D	NE		NE					
Cyanide	D	NE		NE					
Iron	D	NE		NE					
Lead	D	NE		NE					
Magnesium	D	NE		NE					
Manganese	D	NE		NE					
Mercury	D	NE		NE					
Nickel	A	8.40e-01	HEAST (13)	2.40e-04	IRIS (13)	Human	Inhalation	Lung	IRIS
Nitrate/nitrite	D	NE		NE					
Phosphorus	D	NE		NE					
Potassium	D	NE		NE					
Selenium	D	NE		NE					
Silver	D	NE		NE					
Sodium	D	NE		NE					
Thallium	D	NE		NE					

See notes at end of table.

Table 2 (Continued)
Inhalation Dose-Response Data for Carcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Weight of Evidence	Inhalation Slope Factor (mg/kg/day)(-1)	Source	Inhalation Unit Risk ($\mu g/m^3$)(-1)	Source	Test Species	Exposure Route	Tumor Type	Study Source
Tin	D	NE		NE					
Vanadium	D	NE		NE					
Zinc	D	NE		NE					

(1) This value was provided by the Environmental Criteria and Assessment Office (ECAO) of the USEPA in response to a specific request.
(3) The inhalation slope factor for benzo(a)pyrene was used as a surrogate for all PAHs classified as A or B carcinogens and for which a chemical-specific slope factor was not available.
(7) The toxicity values for chromium are based on chromium VI.
(9) The values for chlordane have been used as surrogates for alpha- and gamma-chlordane.
(13) The toxicity values for nickel are based on nickel refinery dust.
(15) Values for 1,3-dichloropropene were used as surrogates for cis- and trans-1,3-dichloropropene.

Weight of Evidence (route-specific):
A = Human carcinogen
B = Probable human carcinogen (B1 = limited human evidence; B2 = sufficient human evidence)
C = Possible human carcinogen
D = Not classifiable as to human carcinogenicity

Notes: NE = not evaluated.
Integrated Risk Information System (IRIS) on-line database search, current as of March 1995.
Health Effects Assessment Summary Tables (HEAST), current as of November 1994.

Table 3
Oral Dose-Response Data
for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor	Study Source
	Oral RfD (mg/kg-day)	Source	Oral RfD (mg/kg-day)	Source						
VOLATILES										
1,1,1-Trichloroethane	ND		ND							
1,1,2,2-Tetrachloroethane	1.00e-02	(1)	ND							
1,1,2-Trichloroethane	4.00e-03	IRIS	4.00e-02	HEAST	Oral-drinking water	Medium	Clinical serum chemistry	Mouse	1000 H,A,S	IRIS
1,1-Dichloroethane	1.00e-01	HEAST	1.00e+00	HEAST	Inhalation	Low	No effects observed	Rat	1000 H,A,S	HEAST
1,1-Dichloroethylene	9.00e-03	IRIS	9.00e-03	HEAST	Oral-drinking water	Medium	Hepatic lesions	Rat	1000 H,A,L	IRIS
1,2-Dichloroethane	3.00e-01	(1)	ND							
1,2-Dichloroethylene (total)	9.00e-03	HEAST (14)	9.00e-03	HEAST (14)						
1,2-Dichloropropane	ND		ND							
2-Butanone	6.00e-01	IRIS	2.00e+00	HEAST	Oral-drinking water	Low	Decreased fetal birth weight	Rat	3000 H,A,S,D	IRIS
2-Hexanone	ND		ND							
4-Methyl-2-Pentanone	8.00e-02	HEAST	8.00e-01	HEAST	Oral-gavage	Low	Liver/kidney toxicity	Rat	3000 H,A,S,D	HEAST
Acetone	1.00e-01	IRIS	1.00e+00	HEAST	Oral-gavage	Low	Increased liver, kidney weight	Rat	1000 H,A,S	IRIS
Benzene	3.00e-04	(1)	ND							
Bromodichloromethane	2.00e-02	IRIS	2.00e-02	HEAST	Oral-gavage	Medium	Renal cytomegaly	Mouse	1000 H,A,L	IRIS
Bromoform	2.00e-02	IRIS	2.00e-01	HEAST	Oral-gavage	Medium	Hepatic lesions	Rat	1000 H,A,S	IRIS
Bromomethane	1.40e-03	IRIS	ND		Oral-gavage	Medium	Forestomach epithelial hyperplasia	Rat	1000 H,A,S	IRIS

See notes at end of table.

Table 3 (Continued)
Oral Dose-Response Data
for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor	Study Source
	Oral RfD (mg/kg-day)	Source	Oral RfD (mg/kg-day)	Source						
Carbon Disulfide	1.00e-01	IRIS	1.00e-01	HEAST	Inhalation	Medium	Fetal toxicity/ teratogenicity	Rabbit	100 H,A	IRIS
Carbon Tetrachloride	7.00e-04	IRIS	ND		Oral-gavage	Medium	Liver lesions	Rat	1000 H,A,S	IRIS
Chlorobenzene	2.00e-02	IRIS	ND		Oral-capsule	Medium	Hepatic changes	Dog	1000 H,A,S	IRIS
Chloroethane	ND		ND							
Chloroform	1.00e-02	IRIS	1.00e-02	HEAST	Oral-capsule	Medium	Fatty cyst formation in liver	Dog	1000 H,A,L	IRIS
Chloromethane	4.00e-03	(1)	ND							
cis-1,3-Dichloropropene	3.00e-04	IRIS (15)	3.00e-03	HEAST (15)	Oral-diet	Low	Increased organ weights	Rat	10,000 H,A,S,D	IRIS
Dibromochloromethane	2.00e-02	IRIS	2.00e-01	HEAST	Oral-gavage	Medium	Hepatic lesions	Rat	1000 H,A,S	IRIS
Ethylbenzene	1.00e-01	IRIS	ND		Oral-gavage	Low	Liver, kidney toxicity	Rat	1000 H,A,S	IRIS
Ethylene dibromide	ND		ND							
Methylene Chloride	6.00e-02	IRIS	6.00e-02	HEAST	Oral-drinking water	Medium	Liver toxicity	Rat	100 H,A	IRIS
Styrene	2.00e-01	IRIS	ND		Oral-gavage	Medium	Red blood cell/liver effects	Dog	1000 H,A,S	IRIS
Tetrachloroethylene	1.00e-02	IRIS	1.00e-01	HEAST	Oral-gavage	Medium	Hepatotoxicity	Mouse	1000 H,A,S	IRIS
Toluene	2.00e-01	IRIS	2.00e+00	HEAST	Oral-gavage	Medium	Changes in liver, kidney weight	Rat	1000 H,A,S	IRIS
trans-1,3-Dichloropropene	3.00e-04	IRIS (15)	3.00e-03	HEAST (15)	Oral-diet	Low	Increased organ weights	Rat	10,000 H,A,S,D	IRIS
Trichloroethylene	6.00e-03	(1)	ND							

See notes at end of table.

Table 3 (Continued)
Oral Dose-Response Data
for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor	Study Source
	Oral RfD (mg/kg-day)	Source	Oral RfD (mg/kg-day)	Source						
Vinyl Acetate	1.00e+00	HEAST	1.00e+00	HEAST	Oral-drinking water	Low	Altered body weight	Rat	100 H,A	HEAST
Vinyl Chloride	ND		ND							
Xylenes (total)	2.00e+00	IRIS	ND		Oral-gavage	Medium	Hyperactivity, decreased weight	Rat	100 H,A	IRIS
SEMIVOLATILES										
1-Methylnaphthalene	ND		ND							
1,2,4-Trichlorobenzene	1.00e-02	IRIS	1.00e-02	HEAST	Oral-drinking water	Medium	Increased adrenal weight	Rat	1000 H,A,S	IRIS
1,2-Dichlorobenzene	9.00e-02	IRIS	ND		Oral-gavage	Low	No adverse effects observed	Rat	1000 H,A,D	IRIS
1,3-Dichlorobenzene	ND		ND							
1,4-Dichlorobenzene	ND		ND							
2,4,5-Trichlorophenol	1.00e-01	IRIS	1.00e+00	HEAST	Oral-diet	Low	Liver/kidney pathology	Rat	1000 H,A,S	IRIS
2,4,6-Trichlorophenol	ND		ND							
2,4-Dichlorophenol	3.00e-03	IRIS	3.00e-03	HEAST	Oral-drinking water	Low	Altered immune function	Rat	100 H,A	IRIS
2,4-Dimethylphenol	2.00e-02	IRIS	2.00e-01	HEAST	Oral-gavage	Low	Adverse clinical signs	Mouse	3000 H,A,S,D	IRIS
2,4-Dinitrophenol	2.00e-03	IRIS	2.00e-03	HEAST	Oral-therapeutic	Low	Cataract formation	Human	1000 H,S,L	IRIS
2,4-Dinitrotoluene	2.00e-03	IRIS	2.00e-03	HEAST	Oral-capsule	High	Neurotoxicity	Dog	100 H,A	IRIS
2,6-Dinitrotoluene	1.00e-03	HEAST	1.00e-02	HEAST	Oral-diet	Low	Mortality, neurotoxicity	Dog	3000 H,A,S,D	HEAST

See notes at end of table.

Table 3 (Continued)
Oral Dose-Response Data
for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor	Study Source
	Oral RfD (mg/kg-day)	Source	Oral RfD (mg/kg-day)	Source						
2-Chloronaphthalene	8.00e-02	IRIS	ND		Oral-gavage	Low	Adverse clinical and pathological signs	Mouse	3000 H,A,S,D	IRIS
2-Chlorophenol	5.00e-03	IRIS	5.00e-02	HEAST	Oral-drinking water	Low	Reproductive effects	Rat	1000 H,A,S	IRIS
2-Methylnaphthalene	ND		ND							
2-Methylphenol	5.00e-02	IRIS	5.00e-01	HEAST	Oral-gavage	Medium	Decreased weight, neurotoxicity	Rat	1000 H,A,S	IRIS
2-Nitroaniline	ND		ND							
2-Nitrophenol	ND		ND							
3,3'-Dichlorobenzidine	ND		ND							
3-Nitroaniline	ND		ND							
4,6-Dinitro-2-Methylphenol	ND		ND							
4-Bromophenyl-phenylether	ND		ND							
4-Chloroaniline	4.00e-03	IRIS	4.00e-03	HEAST	Oral-diet	Low	Lesions of the splenic capsule	Rat	3000 H,A,L,D	IRIS
4-Chlorophenyl-phenylether	ND		ND							
4-Chloro-3-Methylphenol	ND		2.00e+00	HEAST	Oral-gavage	Low	Decreased weight gain	Rat	100 H,A	HEAST
4-Methylphenol	5.00e-03	HEAST	5.00e-03	HEAST	Oral-gavage	Medium	Hypoactivity, respiratory distress	Rabbit	1000 H,A,S	HEAST
4-Nitroaniline	ND		ND							
4-Nitrophenol	ND		ND							
Acenaphthylene	ND		ND							

See notes at end of table.

Table 3 (Continued)
Oral Dose-Response Data
for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor	Study Source
	Oral RfD (mg/kg-day)	Source	Oral RfD (mg/kg-day)	Source						
Acenaphthene	6.00e-02	IRIS	6.00e-01	HEAST	Oral-gavage	Low	Hepatotoxicity	Mouse	3000 H,A,S,D	IRIS
Anthracene	3.00e-01	IRIS	3.00e+00	HEAST	Oral-gavage	Low	No effects observed	Mouse	3000 H,A,S,D	IRIS
Benzoic acid	4.00e+00	IRIS	4.00e+00	HEAST	Oral-diet	Medium	No effects observed	Human	1	IRIS
Benzo(a)Anthracene	ND		ND							
Benzo(a)Pyrene	ND		ND							
Benzo(b)Fluoranthene	ND		ND							
Benzo(g,h,i)perylene	ND		ND							
Benzo(k)Fluoranthene	ND		ND							
Benzyl Alcohol	3.00e-01	HEAST	1.00e+00	HEAST	Oral-gavage	Low	Epithellial hyperplasia	Rat	1000 H,A,L	HEAST
bis(2-Chloroethoxy)Methane	ND		ND							
bis(2-Chloroethyl)Ether	ND		ND							
bis(2-Chloroisopropyl)Ether	4.00e-02	IRIS	4.00e-02	HEAST	Oral-diet	Low	Decreased hemoglobin	Mouse	1000 H,A,D	HEAST
bis(2-Ethylhexyl)phthalate	2.00e-02	IRIS	ND		Oral-diet	Medium	Increased liver weight	Guinea pig	1000 H,A,S,L	IRIS
Butylbenzylphthalate	2.00e-01	IRIS	2.00e+00	HEAST	Oral-diet	Low	Increased liver/brain weights	Rat	1000 H,A,S	IRIS
Carbazole	ND		ND							
Chrysene	ND		ND							
Dibenzofuran	ND		ND							

See notes at end of table.

Table 3 (Continued)
Oral Dose-Response Data
for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor	Study Source
	Oral RfD (mg/kg-day)	Source	Oral RfD (mg/kg-day)	Source						
Dibenz(a,h)Anthracene	ND		ND							
Diethylphthalate	8.00e-01	IRIS	8.00e+00	HEAST	Oral-diet	Low	Decreased growth rate, altered organ weights	Rat	1000 H,A,S	IRIS
Dimethylphthalate	ND		ND							
Di-n-butylphthalate	1.00e-01	IRIS	1.00e+00	HEAST	Oral-diet	Low	Increased mortality	Rat	1000 H,A,S	IRIS
Di-n-octylphthalate	2.00e-02	HEAST	2.00e-02	HEAST	Oral-diet	Low	Increased kidney, liver weight	Rat	1000 H,A,S	HEAST
Fluoranthene	4.00e-02	IRIS	4.00e-01	HEAST	Oral-gavage	Low	Increased liver weight, clinical effects	Mouse	3000 H,A,S,D	IRIS
Fluorene	4.00e-02	IRIS	4.00e-01	HEAST	Oral-gavage	Low	Hematological changes	Mouse	3000 H,A,S,D	IRIS
Hexachlorobenzene	8.00e-04	IRIS	ND		Oral-diet	Medium	Liver effects	Rat	100 H,A	IRIS
Hexachlorobutadiene	2.00e-04	HEAST	ND		Oral-diet	Low	Kidney toxicity	Rat	100 H,A	HEAST
Hexachlorocyclopentadiene	7.00e-03	IRIS	7.00e-02	HEAST	Oral-gavage	Low	Stomach lesions	Rat	1000 H,A,L	IRIS
Hexachloroethane	1.00e-03	IRIS	1.00e-02	HEAST	Oral-diet	Medium	Renal tubule degeneration	Rat	1000 H,A,S	IRIS
Indeno(1,2,3-c,d)Pyrene	ND		ND							
Isophorone	2.00e-01	IRIS	2.00e+00	HEAST	Oral-capsule	Low	No observed effects	Dog	1000 H,A,S	IRIS
Naphthalene	4.00e-02	(1)	ND							

See notes at end of table.

Table 3 (Continued)
Oral Dose-Response Data
for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor	Study Source
	Oral RfD (mg/kg-day)	Source	Oral RfD (mg/kg-day)	Source						
Nitrobenzene	5.00e-04	IRIS	5.00e-03	HEAST	Inhalation	Low	Hematologic, adrenal, renal, and hepatic lesions	Rat/ mouse	10,000 H,A,S,L	IRIS
N-Nitrosodiphenylamine	ND		ND							
N-Nitroso-di-n-propylamine	ND		ND							
Pentachlorophenol	3.00e-02	IRIS	3.00e-02	HEAST	Oral-diet	Medium	Liver/kidney pathology	Rat	100 H,A	IRIS
Phenanthrene	ND		ND							
Phenol	6.00e-01	IRIS	6.00e-01	HEAST	Oral-gavage	Low	Decreased fetal weight	Rat	100 H,A	IRIS
Pyrene	3.00e-02	IRIS	3.00e-01	HEAST	Oral-gavag	Low	Renal tubular pathology	Mouse	3000 H,A,S,D	IRIS
PESTICIDES/PCBs										
4,4'-DDD	ND		ND							
4,4'-DDE	ND		ND							
4,4'-DDT	5.00e-04	IRIS	5.00e-04	HEAST	Oral-diet	Medium	Liver lesions	Rat	100 H,A	IRIS
Aldrin	3.00e-05	IRIS	3.00e-05	HEAST	Oral-diet	Medium	Liver toxicity	Rat	1000 H,A,L	IRIS
alpha-BHC	ND		ND							
alpha-Chlordane	6.00e-05	IRIS (9)	6.00e-05	HEAST (9)	Oral-diet	Low	Liver hypertrophy	Rat	1000 H,A,D	IRIS
Aroclor-1016	7.00e-05	IRIS	ND		Oral-diet	Medium	Reduced birth weights	Monkey	100 H,A,S,D	IRIS
Aroclor-1221	2.00e-05	(6)	5.00e-05	(6)						
Aroclor-1232	2.00e-05	(6)	5.00e-05	(6)						

See notes at end of table.

Table 3 (Continued)
Oral Dose-Response Data
for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor	Study Source
	Oral RfD (mg/kg-day)	Source	Oral RfD (mg/kg-day)	Source						
Aroclor-1242	2.00e-05	(6)	5.00e-05	(6)						
Aroclor-1248	2.00e-05	(6)	5.00e-05	(6)						
Aroclor-1254	2.00e-05	IRIS	5.00e-05	HEAST	Oral-capsule	Medium	Immunological and clinical effects	Monkey	300 H,A,S,L	IRIS
Aroclor-1260	2.00e-05	(6)	5.00e-05	(6)						
beta-BHC	ND		ND							
delta-BHC	ND		ND							
Dieldrin	5.00e-05	IRIS	5.00e-05	HEAST	Oral-diet	Medium	Liver lesions	Rat	100 H,A	IRIS
Endosulfan I	6.00e-03	IRIS	6.00e-03	HEAST	Oral-diet	Medium	Kidney lesions	Rat	100 H,A	IRIS
Endosulfan II	6.00e-03	(10)	6.00e-03	(10)						
Endosulfan sulfate	6.00e-03	(10)	6.00e-03	(10)						
Endrin	3.00e-04	IRIS	3.00e-04	HEAST	Oral-diet	Medium	Liver lesions, convulsions	Dog	100 H,A	IRIS
Endrin aldehyde	ND		ND							
Endrin ketone	ND		ND							
gamma-BHC (Lindane)	3.00e-04	IRIS	3.00e-03	HEAST	Oral-diet	Medium	Liver, kidney toxicity	Rat	1000 H,A,S	IRIS
gamma-Chlordane	6.00e-05	IRIS (9)	6.00e-05	HEAST (9)	Oral-diet	Low	Liver hypertrophy	Rat	1000 H,A,D	IRIS
Heptachlor	5.00e-04	IRIS	5.00e-04	HEAST	Oral-diet	Low	Increased liver weights	Rat	300 H,A,D	IRIS
Heptachlor Epoxide	1.30e-05	IRIS	1.30e-05	HEAST	Oral-diet	Low	Increased liver weight	Dog	1000 H,A,L	IRIS
Methoxychlor	5.00e-03	IRIS	5.00e-03	HEAST	Oral-gavage	Low	Loss of litters	Rabbit	1000 H,A,D	IRIS

See notes at end of table.

Table 3 (Continued)
Oral Dose-Response Data
for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical		Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor	Study Source
		Oral RfD (mg/kg-day)	Source	Oral RfD (mg/kg-day)	Source						
Toxaphene		ND		ND							
INORGANICS											
Aluminum		1.00e+00	(1)	ND							
Antimony		4.00e-04	IRIS	4.00e-04	HEAST	Oral-drinking water	Low	Reduced lifespan	Rat	1000 H,A,L	IRIS
Arsenic		3.00e-04	IRIS	3.00e-04	HEAST	Oral-drinking water	Medium	Hyperpigmentation, keratosis	Human	3 D	IRIS
Barium		7.00e-02	IRIS	7.00e-02	HEAST	Oral-drinking water	Medium	Elevated blood pressure	Human	3 H	IRIS
Beryllium		5.00e-03	IRIS	5.00e-03	HEAST	Oral-drinking water	Low	No effects observed	Rat	100 H,A	IRIS
Cadmium	Food	1.00e-03	IRIS	ND		Oral-diet	High	Proteinuria	Human	10 H	IRIS
	Drinking Water	5.00e-04	IRIS	ND		Oral-drinking water	High	Proteinuria	Human	10 H	IRIS
Calcium		ND		ND							
Chromium		5.00e-03	IRIS (7)	2.00e-02	HEAST (7)	Oral-drinking water	Low	No effects observed	Rat	500 H,A,S	IRIS
Cobalt		6.00e-02	(1, 25)	ND							
Copper		ND	(12)	ND	(12)						
Cyanide		2.00e-02	IRIS	2.00e-02	HEAST	Oral-diet	Medium	No effects observed	Rat	100 H,A	IRIS
Iron		3.00e-01	(1)	ND							
Lead		ND		ND							
Magnesium		ND		ND							

See notes at end of table.

Table 3 (Continued)
Oral Dose-Response Data
for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical		Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor	Study Source
		Oral RfD (mg/kg-day)	Source	Oral RfD (mg/kg-day)	Source						
Manganese	Food	1.40e-01	IRIS	1.40e-01	HEAST	Oral-diet	NA	CNS effects	Human	1	IRIS
	Drinking Water	5.00e-03	IRIS	5.00e-03	HEAST	Oral-drinking water	NA	CNS effects	Human	1	IRIS
Mercury		3.00e-04	HEAST (23)	3.00e-04	HEAST (23)	Oral-gavage	Low	Kidney effects	Rat	1000 H,A,D	HEAST
Nickel		2.00e-02	IRIS (17)	2.00e-02	HEAST (17)	Oral-diet	Medium	Decreased body, organ weights	Rat	300 H,A,D	IRIS
Nitrate/nitrite		1.00e-01	IRIS	1.00e-01	HEAST	Oral-drinking water	High	Methemoglobinemia	Human	10 M	IRIS
Phosphorus		2.00e-05	IRIS	ND		Oral-gavage	Low	Mortality	Rat	1000 H,A,D	IRIS
Potassium		ND		ND							
Selenium		5.00e-03	IRIS	5.00e-03	HEAST	Oral-diet	High	Selenosis	Human	3 H	IRIS
Silver		5.00e-03	IRIS	5.00e-03	HEAST	Injection-i.v.	Low	Argyria	Human	3 H	IRIS
Sodium		ND		ND							
Thallium		8.00e-05	IRIS (18)	8.00e-04	HEAST (18)	Oral-gavage	Low	No effects observed	Rat	3000 H,A,S,D	IRIS
Tin		6.00e-01	HEAST	6.00e-01	HEAST	Oral-diet	Low	Liver/kidney lesions	Rat	100 H,A	HEAST
Vanadium		7.00e-03	HEAST	7.00e-03	HEAST	Oral-drinking water	Low	No effects observed	Rat	100 H,A	HEAST
Zinc		3.00e-01	IRIS	3.00e-01	HEAST	Oral-diet supplement	Medium	Decrease in ESOD activity	Human	3 S	IRIS

See notes at end of table.

Table 3 (Continued)
Oral Dose-Response Data
for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor	Study Source
	Oral RfD (mg/kg-day)	Source	Oral RfD (mg/kg-day)	Source						

(1) This value was provided by the Environmental Criteria and Assessment Office (ECAO) of the USEPA in response to a specific request.
(6) The chronic and subchronic ingestion RfD for Aroclor-1254 has been used as a surrogate for all Aroclors lacking chemical specific RfDs.
(7) The toxicity values for chromium are based on chromium VI.
(9) The values for chlordane have been used as surrogates for alpha- and gamma-chlordane.
(10) The values for endosulfan have been used as surrogates for endosulfan II and endosulfan sulfate.
(12) A drinking water standard for copper of 1.3 mg/L exists. Inadequate toxicity information is available to calculate an RfD.
(14) The values for 1,1-dichloroethylene have been used as surrogates for 1,2-dichloroethylene (total) adopted based on analogy.
(15) Values for 1,3-dichloropropene were used as surrogates for cis- and trans-1,3-dichloropropene.
(17) The ingestion RfD values for nickel are based on nickel, soluble salts.
(18) The ingestion RfD values for thallium are based on thallium sulfate.
(23) This mercury value is specific for inorganic mercury.
(25) This value is provided for childhood exposures. An oral RfD of 1.8e-01 mg/kg-day is provided for adult exposures (ECAO).

Uncertainty factors:
H = Variation in human sensitivity
A = Animal to human extrapolation
S = Extrapolation from subchronic to chronic NOAEL
L = Extrapolation from LOAEL to NOAEL
D = Inadequate data
M = Modifying factor

Notes: ND = no data.
NA = not applicable.

Integrated Risk Information System (IRIS) on-line database search, current as of March 1995.
Health Effects Assessment Summary Tables (HEAST), current as of November 1994.
Environmental Criteria and Assessment Office (ECAO) of the USEPA in response to a specific request.

Table 4
Inhalation Dose-Response Data
for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Chemical	Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor	Study Source
	RfC ($\mu g/m^3$)	Source	RfC ($\mu g/m^3$)	Source						
VOLATILES										
1,1,1-Trichloroethane	ND		ND							
1,1,2,2-Tetrachloroethane	ND		ND							
1,1,2-Trichloroethane	ND		ND							
1,1-Dichloroethane	5.00e+02	HEAST (3)	5.00e+03	HEAST (4)	Inhalation	Low	Kidney damage	Cat	1000 H,A,S	HEAST
1,1-Dichloroethylene	ND		ND							
1,2-Dichloroethane	ND		ND							
1,2-Dichloroethylene (total)	ND		ND							
1,2-Dichloropropane	4.00e+00	IRIS	1.30e+01	HEAST	Inhalation	Medium	Hyperplasia of nasal mucosa	Rat	300 H,A,S,L	IRIS
2-Butanone	1.00e+03	IRIS	1.00e+03	HEAST	Inhalation	Low	Decreased fetal birth weight	Mouse	1000 H,A,S	IRIS
2-Hexanone	ND		ND							
4-Methyl-2-Pentanone	8.00e+01	HEAST (6)	8.00e+02	HEAST (7)	Inhalation	Low	Liver, kidney effects	Rat	1000 H,A,S	HEAST
Acetone	ND		ND							
Benzene	ND		ND							
Bromodichloromethane	ND		ND							
Bromoform	ND		ND							
Bromomethane	5.00e+00	IRIS	ND		Inhalation	High	Lesions of nasal cavity	Rat	100 H,A,L	IRIS
Carbon Disulfide	1.00e+01	HEAST	1.00e+01	HEAST	Inhalation	Low	Fetal toxicity	Rat	1000 H,A,S	HEAST
Carbon Tetrachloride	ND		ND							

See notes at end of table.

Table 4 (Continued)
Inhalation Dose-Response Data
for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Chemical	Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor	Study Source
	RfC ($\mu g/m^3$)	Source	RfC ($\mu g/m^3$)	Source						
Chlorobenzene	2.00e+01	HEAST (14)	ND		Inhalation	Low	Liver, kidney effects	Rat	10,000 H,A,S,L	HEAST
Chloroethane	1.00e+04	IRIS	1.00e+04	HEAST	Inhalation	Medium	Delayed fetal ossification	Mouse	300 H,A,S,D	IRIS
Chloroform	ND		ND							
Chloromethane	ND		ND							
cis-1,3-Dichloropropene	2.00e+01	IRIS (15)	2.00e+01	HEAST	Inhalation	High	Alterations of nasal epithelium	Mouse	30 H,A	IRIS
Dibromochloromethane	ND		ND							
Ethylbenzene	1.00e+03	IRIS	ND		Inhalation	Low	Developmental toxicity	Rat/ rabbit	300 H,A,S	IRIS
Ethylene dibromide	2.00e-01	HEAST	2.00e+00	HEAST	Inhalation	Low	Sperm effects	Human	1000 A,S,L	HEAST
Methylene Chloride	3.00e+03	HEAST	3.00e+03	HEAST	Inhalation	Low	Liver toxicity	Rat	100 H,A	HEAST
Styrene	1.00e+03	IRIS	3.00e+03	HEAST	Inhalation	Medium	CNS effects	Human	30 H,S,D	IRIS
Tetrachloroethylene	ND		ND							
Toluene	4.00e+02	IRIS	ND		Inhalation	Medium	Neurological effects	Human	300 H,L,D	IRIS
trans-1,3-Dichloropropene	2.00e+01	IRIS (15)	2.00e+01	HEAST	Inhalation	High	Alterations of nasal epithelium	Mouse	30 H,A	IRIS
Trichloroethylene	ND		ND							
Vinyl Acetate	2.00e+02	IRIS	2.00e+02	HEAST	Inhalation	High	Nasal epithelial lesions	Rat/mo use	30 H,A	IRIS
Vinyl Chloride	ND		ND							
Xylenes (total)	ND		ND							

See notes at end of table.

Table 4 (Continued)
Inhalation Dose-Response Data
for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Chemical	Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor	Study Source
	RfC ($\mu g/m^3$)	Source	RfC ($\mu g/m^3$)	Source						
SEMIVOLATILES										
1-Methylnaphthalene	ND		ND							
1,2,4-Trichlorobenzene	2.00e+02	HEAST (8)	2.00e+03	HEAST (9)	Inhalation	Low	Weight changes	Rat/Rabbit	1000 H,A,S	HEAST
1,2-Dichlorobenzene	2.00e+02	HEAST (16)	2.00e+03	HEAST	Inhalation	Low	Decreased weight gain	Rat	1000 H,A,S	HEAST
1,3-Dichlorobenzene	ND		ND							
1,4-Dichlorobenzene	8.00e+02	IRIS	2.50e+03	HEAST	Inhalation	Medium	Increased liver weight	Rat	100 H,A,S	IRIS
2,4,5-Trichlorophenol	ND		ND							
2,4,6-Trichlorophenol	ND		ND							
2,4-Dichlorophenol	ND		ND							
2,4-Dimethylphenol	ND		ND							
2,4-Dinitrophenol	ND		ND							
2,4-Dinitrotoluene	ND		ND							
2,6-Dinitrotoluene	ND		ND							
2-Chloronaphthalene	ND		ND							
2-Chlorophenol	ND		ND							
2-Methylnaphthalene	ND		ND							
2-Methylphenol	ND		ND							
2-Nitroaniline	2.00e-01	HEAST	2.00e+00	HEAST	Inhalation	Low	Hematological effects	Rat	10,000 H,A,S,L	HEAST
2-Nitrophenol	ND		ND							
3,3'-Dichlorobenzidine	ND		ND							

See notes at end of table.

Table 4 (Continued)
Inhalation Dose-Response Data
for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Chemical	Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor	Study Source
	RfC ($\mu g/m^3$)	Source	RfC ($\mu g/m^3$)	Source						
3-Nitroaniline	ND		ND							
4,6-Dinitro-2-Methylphenol	ND		ND							
4-Bromophenyl-phenylether	ND		ND							
4-Chloroaniline	ND		ND							
4-Chlorophenyl-phenylether	ND		ND							
4-Chloro-3-Methylphenol	ND		ND							
4-Methylphenol	ND		ND							
4-Nitroaniline	ND		ND							
4-Nitrophenol	ND		ND							
Acenaphthylene	ND		ND							
Acenaphthene	ND		ND							
Anthracene	ND		ND							
Benzoic acid	ND		ND							
Benzo(a)Anthracene	ND		ND							
Benzo(a)Pyrene	ND		ND							
Benzo(b)Fluoranthene	ND		ND							
Benzo(g,h,i)perylene	ND		ND							
Benzo(k)Fluoranthene	ND		ND							
Benzyl Alcohol	ND		ND							
bis(2-Chloroethoxy)Methane	ND		ND							
bis(2-Chloroethyl)Ether	ND		ND							
bis(2-Chloroisopropyl)Ether	ND		ND							
bis(2-Ethylhexyl)phthalate	ND		ND							

See notes at end of table.

Table 4 (Continued)
Inhalation Dose-Response Data
for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Chemical	Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor	Study Source
	RfC ($\mu g/m^3$)	Source	RfC ($\mu g/m^3$)	Source						
Butylbenzylphthalate	ND		ND							
Carbazole	ND		ND							
Chrysene	ND		ND							
Dibenzofuran	ND		ND							
Dibenz(a,h)Anthracene	ND		ND							
Diethylphthalate	ND		ND							
Dimethylphthalate	ND		ND							
Di-n-butylphthalate	ND		ND							
Di-n-octylphthalate	ND		ND							
Fluoranthene	ND		ND							
Fluorene	ND		ND							
Hexachlorobenzene	ND		ND							
Hexachlorobutadiene	ND		ND							
Hexachlorocyclopentadiene	7.00e-02	HEAST	7.00e-01	HEAST	Inhalation	Low	Respiratory tract lesions	Rat	1000 H,A,S	HEAST
Hexachloroethane	ND		ND							
Indeno(1,2,3-c,d)Pyrene	ND		ND							
Isophorone	ND		ND							
Naphthalene	ND		ND							
Nitrobenzene	2.00e+00	HEAST (10)	2.00e+01	HEAST (11)	Inhalation	Low	Hematological, adrenal, liver, kidney lesions	Mouse	10,000 H,A,S,L	HEAST
N-Nitrosodiphenylamine	ND		ND							
N-Nitroso-di-n-propylamine	ND		ND							

See notes at end of table.

Table 4 (Continued)
Inhalation Dose-Response Data
for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Chemical	Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor	Study Source
	RfC ($\mu g/m^3$)	Source	RfC ($\mu g/m^3$)	Source						
Pentachlorophenol	ND		ND							
Phenanthrene	ND		ND							
Phenol	ND		ND							
Pyrene	ND		ND							
PESTICIDES/PCBs										
4,4'-DDD	ND		ND							
4,4'-DDE	ND		ND							
4,4'-DDT	ND		ND							
Aldrin	ND		ND							
alpha-BHC	ND		ND							
alpha-Chlordane	ND		ND							
Aroclor-1016	ND		ND							
Aroclor-1221	ND		ND							
Aroclor-1232	ND		ND							
Aroclor-1242	ND		ND							
Aroclor-1248	ND		ND							
Aroclor-1254	ND		ND							
Aroclor-1260	ND		ND							
beta-BHC	ND		ND							
delta-BHC	ND		ND							
Dieldrin	ND		ND							
Endosulfan I	ND		ND							
Endosulfan II	ND		ND							

See notes at end of table.

Table 4 (Continued)
Inhalation Dose-Response Data
for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Chemical	Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor	Study Source
	RfC ($\mu g/m^3$)	Source	RfC ($\mu g/m^3$)	Source						
Endosulfan sulfate	ND		ND							
Endrin	ND		ND							
Endrin aldehyde	ND		ND							
Endrin ketone	ND		ND							
gamma-BHC (Lindane)	ND		ND							
gamma-Chlordane	ND		ND							
Heptachlor	ND		ND							
Heptachlor Epoxide	ND		ND							
Methoxychlor	ND		ND							
Toxaphene	ND		ND							
INORGANICS										
Aluminum	ND		ND							
Antimony	ND		ND							
Arsenic	ND		ND							
Barium	5.00e-01	HEAST (12)	5.00e+00	HEAST (13)	Inhalation	Low	Fetotoxicity	Rat	1000 H,A,S	HEAST
Beryllium	ND		ND							
Cadmium	ND		ND							
Calcium	ND		ND							
Chromium	ND		ND							
Cobalt	ND		ND							
Copper	ND		ND							
Cyanide	ND		ND							
Iron	ND		ND							

See notes at end of table.

Table 4 (Continued)
Inhalation Dose-Response Data
for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Chemical	Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor	Study Source
	RfC ($\mu g/m^3$)	Source	RfC ($\mu g/m^3$)	Source						
Lead	ND		ND							
Magnesium	ND		ND							
Manganese	5.00e-02	IRIS	ND		Inhalation	Medium	Impaired neurobehavioal function	Human	1000 H,L,D	IRIS
Mercury	3.00e-01	HEAST (21)	3.00e-01	HEAST (21)	Inhalation	Low	Neurotoxicity	Human	30 H,D	HEAST
Nickel	ND		ND							
Nitrate/nitrite	ND		ND							
Phosphorus	ND		ND							
Potassium	ND		ND							
Selenium	ND		ND							
Silver	ND		ND							
Sodium	ND		ND							
Thallium	ND		ND							
Tin	ND		ND							
Vanadium	ND		ND							
Zinc	ND		ND							

See notes at end of table.

Table 4 (Continued)
Inhalation Dose-Response Data for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Chemical	Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor	Study Source
	RfC ($\mu g/m^3$)	Source	RfC ($\mu g/m^3$)	Source						

(3) 1,1-Dichloroethane has a chronic inhalation RfD of 1.00e-01 mg/kg-day (HEAST).
(4) 1,1-Dichloroethane has a subchronic inhalation RfD of 1.00e+00 mg/kg-day (HEAST).
(6) 4-Methyl-2-pentanone has a chronic inhalation RfD of 2.00e-02 mg/kg-day (HEAST).
(7) 4-Methyl-2-pentanone has a subchronic inhalation RfD of 2.00e-01 mg/kg-day (HEAST).
(8) 1,2,4-Trichlorobenzene has a chronic inhalation RfD of 3.00e-03 mg/kg-day (HEAST).
(9) 1,2,4-Trichlorobenzene has a subchronic inhalation RfD of 3.00e-02 mg/kg-day (HEAST).
(10) Nitrobenzene has a chronic inhalation RfD of 6.00e-04 mg/kg-day (HEAST).
(11) Nitrobenzene has a subchronic inhalation RfD of 6.00e-04 mg/kg-day (HEAST).
(12) Barium has a chronic inhalation RfD of 1.00e-04 mg/kg-day (HEAST).
(13) Barium has a subchronic inhalation RfD of 1.00e-03 mg/kg-day (HEAST).
(14) Chlorobenzene has a chronic inhalation RfD of 5.00e-03 mg/kg-day (HEAST).
(15) Values for 1,3-dichloropropene were used as surrogates for cis- and trans-1,3-dichloropropene.
(16) 1,2-Dichlorobenzene has a chronic inhalation RfD of 4.00e-02 mg/kg-day (HEAST).
(21) The mercury RfC values were developed specifically for elemental mercury.

Uncertainty factors:
- A = Animal to human extrapolation
- H = Variation in human sensitivity
- S = Extrapolation from subchronic to chronic NOAEL
- L = Extrapolation from LOAEL to NOAEL
- D = Inadequate data
- M = Modifying factor

Notes: ND = no data.
NA = not applicable.

Integrated Risk Information System (IRIS) on-line database search, current as of March 1995.
Health Effects Assessment Summary Tables (HEAST), current as of November 1994.

Table 5
Dermal Dose-Response Data for Carcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Compound	Weight of Evidence	Oral Slope Factor (mg/kg-day)-1	Oral Absorption Efficiency	Reference	Dermal Slope Factor (mg/kg-day)-1
VOLATILES					
1,1,1-Trichloroethane	D	NE			NE
1,1,2,2-Tetrachloroethane	C	2.00e-01	100%	ATSDR, 1989e	2.00e-01
1,1,2-Trichloroethane	C	5.70e-02	100%	ATSDR, 1989d	5.70e-02
1,1-Dichloroethane	C	NE		(26)	NE
1,1-Dichloroethylene	C	6.00e-01	100%	Putcha et al., 1986	6.00e-01
1,2-Dichloroethane	B2	9.10e-02	100%	Reitz et al., 1980	9.10e-02
1,2-Dichloroethylene (total)	D	NE			NE
1,2-Dichloropropane	B2	6.80e-02	100%	ATSDR. 1989f	6.80e-02
2-Butanone	D	NE			NE
2-Hexanone	D	NE			NE
4-Methyl-2-Pentanone	D	NE			NE
Acetone	D	NE			NE
Benzene	A	2.90e-02		(26)	2.90e-02
Bromodichloromethane	B2	6.20e-02			
Bromoform	B2	7.90e-03			
Bromomethane	D	NE			NE
Carbon Disulfide	D	NE			NE
Carbon Tetrachloride	B2	1.30e-01	100%	Paul & Rubenstein, 1963	1.30e-01
Chlorobenzene	D	NE			NE
Chloroethane	D	NE			NE
Chloroform	B2	6.10e-03	100%	Brown et al., 1974	6.10e-03
Chloromethane	C	1.30e-02			
cis-1,3-Dichloropropene	C	1.80e-01			
Dibromochloromethane	C	8.40e-02			

See notes at end of table.

Table 5 (Continued)
Dermal Dose-Response Data for Carcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Compound	Weight of Evidence	Oral Slope Factor (mg/kg-day)-1	Oral Absorption Efficiency	Reference	Dermal Slope Factor (mg/kg-day)-1
Ethylbenzene	D	NE			NE
Ethylene dibromide	B2	8.50e+01			
Methylene Chloride	B2	7.50e-03	100%	McKenna & Zempel. 1981	7.50e-03
Styrene	D	NE			NE
Tetrachloroethylene	B2	5.2e-02	100%	Pegg et al., 1979	5.2e-02
Toluene	D	NE			NE
trans-1,3-Dichloropropene	C	1.80e-01			
Trichloroethylene	B2	1.10e-02	100%	Prout et al., 1985	1.10e-02
Vinyl Acetate	D	NE			NE
Vinyl Chloride	A	1.90e+00	100%	Watanabe et al., 1976	1.90e+00
Xylenes (total)	D	NE			NE
SEMIVOLATILES					
1-Methylnaphthalene	D	NE			NE
1,2,4-Trichlorobenzene	D	NE			NE
1,2-Dichlorobenzene	D	NE			NE
1,3-Dichlorobenzene	D	NE			NE
1,4-Dichlorobenzene	C	2.40e-02	100%	ATSDR, 1989b	2.40e-02
2,4,5-Trichlorophenol	D	NE			NE
2,4,6-Trichlorophenol	B2	1.10e-02			
2,4-Dichlorophenol	D	NE			NE
2,4-Dimethylphenol	D	NE			NE
2,4-Dinitrophenol	D	NE			NE
2,4-Dinitrotoluene	B2	6.80e-01			
2,6-Dinitrotoluene	B2	6.80e-01	50%	(28)	1.36e+00
2-Chloronaphthalene	D	NE			NE

See notes at end of table.

Table 5 (Continued)
Dermal Dose-Response Data for Carcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Compound	Weight of Evidence	Oral Slope Factor (mg/kg-day)-1	Oral Absorption Efficiency	Reference	Dermal Slope Factor (mg/kg-day)-1
2-Chlorophenol	D	NE			NE
2-Methylnaphthalene	D	NE			NE
2-Methylphenol	D	NE			NE
2-Nitroaniline	D	NE			NE
2-Nitrophenol	D	NE			NE
3,3'-Dichlorobenzidine	B2	4.50e-01			
3-Nitroaniline	D	NE			NE
4,6-Dinitro-2-Methylphenol	D	NE			NE
4-Bromophenyl-phenylether	D	NE			NE
4-Chloroaniline	D	NE			NE
4-Chlorophenyl-phenylether	D	NE			NE
4-Chloro-3-Methylphenol	D	NE			NE
4-Methylphenol	C	NE			NE
4-Nitroaniline	D	NE			NE
4-Nitrophenol	D	NE			NE
Acenaphthylene	D	NE			NE
Acenaphthene	D	NE			NE
Anthracene	D	NE			NE
Benzoic acid	D	NE			NE
Benzo(a)Anthracene	B2	7.30e+00	91%	(30)	8.02e+00
Benzo(a)Pyrene	B2	7.30e+00	91%	Hecht et al., 1979	8.02e+00
Benzo(b)Fluoranthene	B2	7.30e+00	91%	(30)	8.02e+00
Benzo(g,h,i)perylene	D	NE			NE
Benzo(k)Fluoranthene	B2	7.30e+00	91%	(30)	8.02e+00
Benzyl Alcohol	D	NE			NE

See notes at end of table.

Table 5 (Continued)
Dermal Dose-Response Data for Carcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Compound	Weight of Evidence	Oral Slope Factor (mg/kg-day)-1	Oral Absorption Efficiency	Reference	Dermal Slope Factor (mg/kg-day)-1
bis(2-Chloroethoxy)Methane	D	NE			NE
bis(2-Chloroethyl)Ether	B2	1.10e+00			
bis(2-Chloroisopropyl)Ether	D	ND			
bis(2-Ethylhexyl)phthalate	B2	1.40e-02	100%	Chadwick et al., 1982	1.40e-02
Butylbenzylphthalate	C	NE			NE
Carbazole	B2	2.00e-02	50%	(28)	4.00e-02
Chrysene	B2	7.30e+00	91%	(30)	8.02e+00
Dibenzofuran	D	NE			NE
Dibenz(a,h)Anthracene	B2	7.30e+00	91%	(30)	8.02e+00
Diethylphthalate	D	NE			NE
Dimethylphthalate	D	NE			NE
Di-n-butylphthalate	D	NE			NE
Di-n-octylphthalate	D	NE			NE
Fluoranthene	D	NE			NE
Fluorene	D	NE			NE
Hexachlorobenzene	B2	1.60e+00			
Hexachlorobutadiene	C	7.80e-02			
Hexachlorocyclopentadiene	D	NE			NE
Hexachloroethane	C	1.40e-02			
Indeno(1,2,3-c,d)Pyrene	B2	7.30e+00	91%	(30)	8.02e+00
Isophorone	C	9.50e-04			
Naphthalene	D	NE			NE
Nitrobenzene	D	NE			NE
N-Nitrosodiphenylamine	B2	4.90e-03			
N-Nitroso-di-n-propylamine	B2	7.00e+00			

See notes at end of table.

Table 5 (Continued)
Dermal Dose-Response Data for Carcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Compound	Weight of Evidence	Oral Slope Factor (mg/kg-day)-1	Oral Absorption Efficiency	Reference	Dermal Slope Factor (mg/kg-day)-1
Pentachlorophenol	B2	1.20e-01	90%	ATSDR, 1989c	1.33e-01
Phenanthrene	D	NE			NE
Phenol	D	NE			NE
Pyrene	D	NE			NE
PESTICIDES/PCBs					
4,4'-DDD	B2	2.40e-01	20%	(32)	1.20e+00
4,4'-DDE	B2	3.40e-01	20%	(32)	1.70e+00
4,4'-DDT	B2	3.40e-01	20%	Siebert, 1976	1.70e+00
Aldrin	B2	1.70e+01			
alpha-BHC	B2	6.30e+00			
alpha-Chlordane	B2	1.30e+00	80%	(33)	1.63e+00
Aroclor-1016	B2	7.70e+00	90%	Albro & Fishbein, 1972	8.56e+00
Aroclor-1221	B2	7.70e+00	90%	Albro & Fishbein, 1972	8.56e+00
Aroclor-1232	B2	7.70e+00	90%	Albro & Fishbein, 1972	8.56e+00
Aroclor-1242	B2	7.70e+00	90%	Albro & Fishbein, 1972	8.56e+00
Aroclor-1248	B2	7.70e+00	90%	Albro & Fishbein, 1972	8.56e+00
Aroclor-1254	B2	7.70e+00	90%	Albro & Fishbein, 1972	8.56e+00
Aroclor-1260	B2	7.70e+00	90%	Albro & Fishbein, 1972	8.56e+00
beta-BHC	C	1.80e+00			
delta-BHC	D	NE			NE
Dieldrin	B2	1.60e+01	80%	(33)	2.00e+01
Endosulfan I	D	NE			NE
Endosulfan II	D	NE			NE
Endosulfan sulfate	D	NE			NE
Endrin	D	NE			NE

See notes at end of table.

Table 5 (Continued)
Dermal Dose-Response Data for Carcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Compound	Weight of Evidence	Oral Slope Factor (mg/kg-day)-1	Oral Absorption Efficiency	Reference	Dermal Slope Factor (mg/kg-day)-1
Endrin aldehyde	D	NE			NE
Endrin ketone	D	NE			NE
gamma-BHC (Lindane)	C/B2	1.30e+00			
gamma-Chlordane	B2	1.30e+00	80%	Ohno et al., 1986	1.63e+00
Heptachlor	B2	4.50e+00	49%	ATSDR, 1991f	9.18e+00
Heptachlor Epoxide	B2	9.10e+00	49%	(34)	1.86e+01
Methoxychlor	D	NE			NE
Toxaphene	B2	1.10e+00			
INORGANICS					
Aluminum	D	NE			NE
Antimony	D	NE			NE
Arsenic	A	1.75e+00	98%	Vahter, 1983	1.79e+00
Barium	D	NE			NE
Beryllium	B2	4.30e+00	1%	Owen, 1990	4.30e+02
Cadmium	D	NE			NE
Calcium	D	NE			NE
Chromium	D	NE			NE
Cobalt	D	NE			NE
Copper	D	NE			NE
Cyanide	D	NE			NE
Iron	D	NE			NE
Lead	B2	NE			NE
Magnesium	D	NE			NE
Manganese	D	NE			NE
Mercury	D	NE			NE

See notes at end of table.

Table 5 (Continued)
Dermal Dose-Response Data for Carcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

Compound	Weight of Evidence	Oral Slope Factor (mg/kg-day)-1	Oral Absorption Efficiency	Reference	Dermal Slope Factor (mg/kg-day)-1
Nickel	D	NE			NE
Nitrate/nitrite	D	NE			NE
Phosphorus	D	NE			NE
Potassium	D	NE			NE
Selenium	D	NE			NE
Silver	D	NE			NE
Sodium	D	NE			NE
Thallium	D	NE			NE
Tin	D	NE			NE
Vanadium	D	NE			NE
Zinc	D	NE			NE

(26) This toxicity values is based on absorbed dose. Therefore, no adjustment of this value is necessary.
(28) SVOCs lacking specific information on absorption efficiency are assigned a default value of 50% (USEPA Region IV, 1993).
(30) The oral absorption efficiency of all PAHs is assumed to be identical to that of benzo(a)pyrene, based on structural analogy.
(32) The oral absorption efficiency of DDE and DDD is assumed to be identical to that of DDT, based on structural analogy.
(33) The oral absorption efficiency of alpha-chlordane is assumed to be identical to that of gamma-chlordane, based on structural analogy.
(34) The oral absorption efficiency of heptachlor epoxide is assumed to be identical to that of heptachlor, based on structural analogy.

Weight of Evidence (route-specific):
- A = Human carcinogen
- B = Probable human carcinogen (B1 = limited human evidence; B2 = sufficient human evidence)
- C = Possible human carcinogen
- D = Not classifiable as to human carcinogenicity

Notes: NE = not evaluated.

For documentation concerning oral slope factors, refer to Table 1.

Table 6
Dermal Dose-Response Data for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

	Chronic Oral RfD (mg/kg-day)	Subchronic Oral RfD (mg/kg-day)	Oral Absorption Efficiency	Reference	Dermal Chronic RfD (mg/kg-day)	Dermal Subchronic RfD (mg/kg-day)
VOLATILES						
1,1,1-Trichloroethane	ND	ND			ND	ND
1,1,2,2-Tetrachloroethane	1.00e-02	ND	100%	ATSDR, 1989e	1.00e-02	ND
1,1,2-Trichloroethane	4.00e-03	4.00e-02	100%	ATSDR, 1989d	4.00e-03	4.00e-02
1,1-Dichloroethane	1.00e-01	1.00e+00		(26)	1.00e-01	1.00e+00
1,1-Dichloroethylene	9.00e-03	9.00e-03	100%	Putcha et al., 1986	9.00e-03	9.00e-03
1,2-Dichloroethane	3.00e-01	ND	100%	Reitz et al., 1980	3.00e-01	ND
1,2-Dichloroethylene (total)	9.00e-03	9.00e-03	100%	(24)	9.00e-03	9.00e-03
1,2-Dichloropropane	ND	ND	100%	ATSDR, 1989f	ND	ND
2-Butanone	6.00e-01	2.00e+00	80%	(25)	4.80e-01	1.60e+00
2-Hexanone	ND	ND			ND	ND
4-Methyl-2-Pentanone	8.00e-02	8.00e-01				
Acetone	1.00e-01	1.00e+00	100%	ATSDR, 1992	1.00e-01	1.00e+00
Benzene	3.00e-04	ND	100%	ATSDR, 1993	3.00e-04	ND
Bromodichloromethane	2.00e-02	2.00e-02				
Bromoform	2.00e-02	2.00e-01				
Bromomethane	1.40e-03	ND				
Carbon Disulfide	1.00e-01	1.00e-01	100%	ATSDR, 1991e	1.00e-01	1.00e-01
Carbon Tetrachloride	7.00e-04	ND	100%	Paul & Rubenstein, 1963	7.00e-04	ND
Chlorobenzene	2.00e-02	ND	100%	Ogata & Shimada, 1983	2.00e-02	ND
Chloroethane	ND	ND			ND	ND
Chloroform	1.00e-02	1.00e-02	100%	Brown et al., 1974	1.00e-02	1.00e-02
Chloromethane	4.00e-03	ND				ND
cis-1,3-Dichloropropene	3.00e-04	3.00e-03				

See notes at end of table.

Table 6 (Continued)
Dermal Dose-Response Data for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

	Chronic Oral RfD (mg/kg-day)	Subchronic Oral RfD (mg/kg-day)	Oral Absorption Efficiency	Reference	Dermal Chronic RfD (mg/kg-day)	Dermal Subchronic RfD (mg/kg-day)
Dibromochloromethane	2.00e-02	2.00e-01				
Ethylbenzene	1.00e-01	ND	82%	ATSDR, 1989g	8.20e-02	ND
Ethylene dibromide	ND	ND			ND	ND
Methylene Chloride	6.00e-02	6.00e-02	100%	McKenna & Zempel. 1981	6.00e-02	6.00e-02
Styrene	2.00e-01	ND				
Tetrachloroethylene	1.00e-02	1.00e-01	100%	Pegg et al., 1979	1.00e-02	1.00e-01
Toluene	2.00e-01	2.00e+00	100%	Smith et al., 1954	2.00e-01	2.00e+00
trans-1,3-Dichloropropene	3.00e-04	3.00e-03				
Trichloroethylene	6.00e-03	ND	100%	Prout et al., 1985	6.00e-03	ND
Vinyl Acetate	1.00e+00	1.00e+00				
Vinyl Chloride	ND	ND	100%	Watanabe et al., 1976	ND	ND
Xylenes (total)	2.00e+00	ND	100%	Bray et al., 1949	2.00e+00	ND
SEMIVOLATILES						
1-Methylnaphthalene	ND	ND			ND	ND
1,2,4-Trichlorobenzene	1.00e-02	1.00e-02				
1,2-Dichlorobenzene	9.00e-02	ND	100%	(27)	9.00e-02	ND
1,3-Dichlorobenzene	ND	ND			ND	ND
1,4-Dichlorobenzene	ND	ND	100%	ATSDR, 1989b	ND	ND
2,4,5-Trichlorophenol	1.00e-01	1.00e+00				
2,4,6-Trichlorophenol	ND	ND			ND	ND
2,4-Dichlorophenol	3.00e-03	3.00e-03				
2,4-Dimethylphenol	2.00e-02	2.00e-01				
2,4-Dinitrophenol	2.00e-03	2.00e-03				
2,4-Dinitrotoluene	2.00e-03	2.00e-03				

See notes at end of table.

Table 6 (Continued)
Dermal Dose-Response Data for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

	Chronic Oral RfD (mg/kg-day)	Subchronic Oral RfD (mg/kg-day)	Oral Absorption Efficiency	Reference	Dermal Chronic RfD (mg/kg-day)	Dermal Subchronic RfD (mg/kg-day)
2,6-Dinitrotoluene	1.00e-03	1.00e-02	50%	(28)	5.00e-04	5.00e-03
2-Chloronaphthalene	8.00e-02	ND				ND
2-Chlorophenol	5.00e-03	5.00e-02				
2-Methylnaphthalene	ND	ND			ND	ND
2-Methylphenol	5.00e-02	5.00e-01				
2-Nitroaniline	ND	ND				
2-Nitrophenol	ND	ND			ND	ND
3,3'-Dichlorobenzidine	ND	ND			ND	ND
3-Nitroaniline	ND	ND			ND	ND
4,6-Dinitro-2-Methylphenol	ND	ND			ND	ND
4-Bromophenyl-phenylether	ND	ND			ND	ND
4-Chloroaniline	4.00e-03	4.00e-03	50%	(28)	2.00e-03	2.00e-03
4-Chlorophenyl-phenylether	ND	ND			ND	ND
4-Chloro-3-Methylphenol	ND	2.00e+00			ND	
4-Methylphenol	5.00e-03	5.00e-03	95%	(29)	4.75e-03	4.75e-03
4-Nitroaniline	ND	ND			ND	ND
4-Nitrophenol	ND	ND			ND	ND
Acenaphthylene	ND	ND			ND	ND
Acenaphthene	6.00e-02	6.00e-01	91%	(30)	5.46e-02	5.46e-01
Anthracene	3.00e-01	3.00e+00	91%	(30)	2.73e-01	2.73e+00
Benzoic acid	4.00e+00	4.00e+00	50%	(28)	2.00e+00	2.00e+00
Benzo(a)Anthracene	ND	ND	91%	(30)	ND	ND
Benzo(a)Pyrene	ND	ND	91%	Hecht et al., 1979	ND	ND
Benzo(b)Fluoranthene	ND	ND	91%	(30)	ND	ND

See notes at end of table.

Table 6 (Continued)
Dermal Dose-Response Data for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

	Chronic Oral RfD (mg/kg-day)	Subchronic Oral RfD (mg/kg-day)	Oral Absorption Efficiency	Reference	Dermal Chronic RfD (mg/kg-day)	Dermal Subchronic RfD (mg/kg-day)
Benzo(g,h,i)perylene	ND	ND			ND	ND
Benzo(k)Fluoranthene	ND	ND	91%	(30)	ND	ND
Benzyl Alcohol	3.00e-01	1.00e+00				
bis(2-Chloroethoxy)Methane	ND	ND			ND	ND
bis(2-Chloroethyl)Ether	ND	ND			ND	ND
bis(2-Chloroisopropyl)Ether	4.00e-02	4.00e-02				
bis(2-Ethylhexyl)phthalate	2.00e-02	ND	100%	Chadwick et al., 1982	2.00e-02	ND
Butylbenzylphthalate	2.00e-01	2.00e+00				
Carbazole	ND	ND	50%	(28)	ND	ND
Chrysene	ND	ND	91%	(30)	ND	ND
Dibenzofuran	ND	ND			ND	ND
Dibenz(a,h)Anthracene	ND	ND	91%	(30)	ND	ND
Diethylphthalate	8.00e-01	8.00e+00				
Dimethylphthalate	ND	ND				
Di-n-butylphthalate	1.00e-01	1.00e+00	100%	(31)	1.00e-01	1.00e+00
Di-n-octylphthalate	2.00e-02	2.00e-02	100%	(31)	2.00e-02	2.00e-02
Fluoranthene	4.00e-02	4.00e-01	91%	(30)	3.64e-02	3.64e-01
Fluorene	4.00e-02	4.00e-01	91%	(30)	3.64e-02	3.64e-01
Hexachlorobenzene	8.00e-04	ND				
Hexachlorobutadiene	2.00e-04	ND				
Hexachlorocyclopentadiene	7.00e-03	7.00e-02				
Hexachloroethane	1.00e-03	1.00e-02				
Indeno(1,2,3-c,d)Pyrene	ND	ND	91%	(30)	ND	ND
Isophorone	2.00e-01	2.00e+00				

See notes at end of table.

Table 6 (Continued)
Dermal Dose-Response Data for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

	Chronic Oral RfD (mg/kg-day)	Subchronic Oral RfD (mg/kg-day)	Oral Absorption Efficiency	Reference	Dermal Chronic RfD (mg/kg-day)	Dermal Subchronic RfD (mg/kg-day)
Naphthalene	4.00e-02	ND	100%	Chang, 1943	4.00e-02	ND
Nitrobenzene	5.00e-04	5.00e-03				
N-Nitrosodiphenylamine	ND	ND			ND	ND
N-Nitroso-di-n-propylamine	ND	ND			ND	ND
Pentachlorophenol	3.00e-02	3.00e-02	90%	ATSDR, 1989c	2.70e-02	2.70e-02
Phenanthrene	ND	ND	91%	(30)	ND	ND
Phenol	6.00e-01	6.00e-01				
Pyrene	3.00e-02	3.00e-01	91%	(30)	2.73e-02	2.73e-01
PESTICIDES/PCBs						
4,4'-DDD	ND	ND	20%	(32)	ND	ND
4,4'-DDE	ND	ND	20%	(32)	ND	ND
4,4'-DDT	5.00e-04	5.00e-04	20%	Siebert, 1976	1.00e-04	1.00e-04
Aldrin	3.00e-05	3.00e-05				
alpha-BHC	ND	ND			ND	ND
alpha-Chlordane	6.00e-05	6.00e-05	80%	(33)	4.80e-05	4.80e-05
Aroclor-1016	7.00e-05	ND	90%	Albro & Fishbein, 1972	6.30e-05	ND
Aroclor-1221	2.00e-05	5.00e-05	90%	Albro & Fishbein, 1972	1.80e-05	4.50e-05
Aroclor-1232	2.00e-05	5.00e-05	90%	Albro & Fishbein, 1972	1.80e-05	4.50e-05
Aroclor-1242	2.00e-05	5.00e-05	90%	Albro & Fishbein, 1972	1.80e-05	4.50e-05
Aroclor-1248	2.00e-05	5.00e-05	90%	Albro & Fishbein, 1972	1.80e-05	4.50e-05
Aroclor-1254	2.00e-05	5.00e-05	90%	Albro & Fishbein, 1972	1.80e-05	4.50e-05
Aroclor-1260	2.00e-05	5.00e-05	90%	Albro & Fishbein, 1972	1.80e-05	4.50e-05
beta-BHC	ND	ND			ND	ND
delta-BHC	ND	ND			ND	ND

See notes at end of table.

Table 6 (Continued)
Dermal Dose-Response Data for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

	Chronic Oral RfD (mg/kg-day)	Subchronic Oral RfD (mg/kg-day)	Oral Absorption Efficiency	Reference	Dermal Chronic RfD (mg/kg-day)	Dermal Subchronic RfD (mg/kg-day)
Dieldrin	5.00e-05	5.00e-05	80%	(33)	4.00e-05	4.00e-05
Endosulfan I	6.00e-03	6.00e-03	39%	ATSDR, 1990a	2.34e-03	2.34e-03
Endosulfan II	6.00e-03	6.00e-03	39%	ATSDR, 1990a	2.34e-03	2.34e-03
Endosulfan sulfate	6.00e-03	6.00e-03	39%	(37)	2.34e-03	2.34e-03
Endrin	3.00e-04	3.00e-04				
Endrin aldehyde	ND	ND			ND	ND
Endrin ketone	ND	ND			ND	ND
gamma-BHC (Lindane)	3.00e-04	3.00e-03				
gamma-Chlordane	6.00e-05	6.00e-05	80%	Ohno et al., 1986	4.80e-05	4.80e-05
Heptachlor	5.00e-04	5.00e-04	49%	ATSDR, 1991f	2.54e-04	2.54e-04
Heptachlor Epoxide	1.30e-05	1.30e-05	49%	(36)	6.40e-06	6.40e-06
Methoxychlor	5.00e-03	5.00e-03				
Toxaphene	ND	ND			ND	ND
INORGANICS						
Aluminum	1.00e+00	ND			ND	ND
Antimony	4.00e-04	4.00e-04	1%	ATSDR, 1991a	4.00e-06	4.00e-06
Arsenic	3.00e-04	3.00e-04	98%	Vahter, 1983	2.94e-04	2.94e-04
Barium	7.00e-02	7.00e-02	7%	ATSDR, 1991c	4.90e-03	4.90e-03
Beryllium	5.00e-03	5.00e-03	1%	Owen, 1990	5.00e-05	5.00e-05
Cadmium	1.00e-03	ND	1%	McLellan et al, 1978	1.00e-05	ND
Calcium	ND	ND			ND	ND
Chromium	5.00e-03	2.00e-02	11%	Ogawa, 1976	5.50e-04	2.20e-03
Cobalt	6.00e-02	ND	30%	ATSDR, 1990b	1.80e-02	ND
Copper	ND	ND			ND	ND

See notes at end of table.

Table 6 (Continued)
Dermal Dose-Response Data for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

	Chronic Oral RfD (mg/kg-day)	Subchronic Oral RfD (mg/kg-day)	Oral Absorption Efficiency	Reference	Dermal Chronic RfD (mg/kg-day)	Dermal Subchronic RfD (mg/kg-day)
Cyanide	2.00e-02	2.00e-02	17%	Gettler & Baine, 1938	3.40e-03	3.40e-03
Iron	3.00e-01	ND	2%	Goyer, 1991	6.00e-03	ND
Lead	ND	ND			ND	ND
Magnesium	ND	ND			ND	ND
Manganese	1.40e-01	1.40e-01	4%	ATSDR, 1991b	5.60e-03	5.60e-03
Mercury	3.00e-04	3.00e-04	20%	Nielsen, 1992	6.00e-05	6.00e-05
Nickel	2.00e-02	2.00e-02	5%	Christenson & Lagesson, 1981	1.00e-03	1.00e-03
Nitrate/nitrite	1.00e-01	1.00e-01				
Phosphorus	2.00e-05	ND				ND
Potassium	ND	ND			ND	ND
Selenium	5.00e-03	5.00e-03	60%	Owen, 1990	3.00e-03	3.00e-03
Silver	5.00e-03	5.00e-03	21%	MacIntyre et al., 1978	1.05e-03	1.05e-03
Sodium	ND	ND			ND	ND
Thallium	8.00e-05	8.00e-04	100%	Lie et al., 1960	8.00e-05	8.00e-04
Tin	6.00e-01	6.00e-01	1%	ATSDR, 1990c	6.00e-03	6.00e-03
Vanadium	7.00e-03	7.00e-03	3%	ATSDR, 1991d	2.10e-04	2.10e-04
Zinc	3.00e-01	3.00e-01	34%	Sandstrom et al., 1987	1.02e-01	1.02e-01

See notes at end of table.

Table 6 (Continued)
Dermal Dose-Response Data for Noncarcinogenic Effects

RCRA Facility Investigation, Group II SWMUs
Naval Station Mayport
Mayport, Florida

	Chronic Oral RfD (mg/kg-day)	Subchronic Oral RfD (mg/kg-day)	Oral Absorption Efficiency	Reference	Dermal Chronic RfD (mg/kg-day)	Dermal Subchronic RfD (mg/kg-day)

(24) The oral absorption efficiency of 1,2-dichloroethylene is assumed to be identical to that of 1,1-dichloroethylene, based on structural analogy.
(25) VOCs lacking specific information on absorption efficiency are assigned a default value of 80% (USEPA Region IV, 1993).
(26) This toxicity values is based on absorbed dose. Therefore, no adjustment of this value is necessary.
(27) The oral absorption efficiency of 1,2-dichlorobenzene is assumed to be identical to that of 1,4-dichlorobenzene, based on structural analogy.
(28) SVOCs lacking specific information on absorption efficiency are assigned a default value of 50% (USEPA Region IV, 1993).
(29) The oral absorption efficiency of 4-methylphenol is assumed to be identical to that of phenol (ATSDR, 1989e), based on structural analogy.
(30) The oral absorption efficiency of all PAHs is assumed to be identical to that of benzo(a)pyrene, based on structural analogy.
(31) The oral absorption efficiency of all phthalates is assumed to be identical to that of bis(2-ethylhexyl)phthalate, based on structural analogy.
(32) The oral absorption efficiency of DDE and DDD is assumed to be identical to that of DDT, based on structural analogy.
(33) The oral absorption efficiency of alpha-chlordane is assumed to be identical to that of gamma-chlordane, based on structural analogy.
(35) The oral absorption efficiency of 1,1,1-trichloroethane is assumed to be identical to that of 1,1,2-trichloroethane, based on structural analogy.
(36) The oral absorption efficiency of heptachlor epoxide is assumed to be identical to that of heptachlor, based on structural analogy.
(37) The oral absorption efficiency of endosulfan sulfate is assumed to be identical to that of endosulfan, based on structural analogy.

Notes: ND = no data.

For documentation concerning chronic and subchronic oral RfDs, refer to Table 3.

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APPENDIX E-2

HUMAN HEALTH RISK ASSESSMENT SPREADSHEETS
SWMUs 6, 7, 8, 9, 10, AND 11

TABLE E-2-1

INGESTION OF GROUNDWATER AS DRINKING WATER FROM SURFICIAL AQUIFER(UNFILTERED SAMPLES) - SWMUs 6, 7, 8, 9, 10, and 11
ADULT RESIDENT
RCRA Facility Investigation, Group II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
CONCENTRATION WATER	CW	chemical specific	ug/liter	
INGESTION RATE	IR	2	liters/day	USEPA, 1991
BODY WEIGHT	BW	70	kg	USEPA, 1991
CONVERSION FACTOR	CF	0.001	mg/ug	
EXPOSURE FREQUENCY	EF	350	days/year	USEPA, 1991
EXPOSURE DURATION	ED	30	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	30	years	USEPA, 1991

USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.

CANCER RISK = INTAKE (mg/kg-day) x CANCER SLOPE FACTOR $(mg/kg\text{-}day)^{-1}$

HAZARD QUOTIENT = INTAKE (mg/kg-day) / REFERENCE DOSE (mg/kg-day)

$$INTAKE = \frac{CW \times IR \times EF \times ED \times CF}{BW \times AT \times 365\ days/year}$$

TABLE E-2-i

INGESTION OF GROUNDWATER AS DRINKING WATER FROM SURFICIAL AQUIFER(UNFILTERED SAMPLES) - SWMUs 6, 7, 8, 9, 10, and 11
ADULT RESIDENT
RCRA Facility Investigation, Group II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA

CARCINOGENIC EFFECTS

COMPOUND	WATER CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	CANCER SLOPE FACTOR [1] $(mg/kg\text{-}day)^{-1}$	CANCER RISK INGESTION
Arsenic	9	ug/liter	1.1E-04	1.5	1.6E-04
Lead	5.3	ug/liter	6.2E-05	ND	
TOTAL CANCER RISK					2E-04

TABLE E-2-1

INGESTION OF GROUNDWATER AS DRINKING WATER FROM SURFICIAL AQUIFER(UNFILTERED SAMPLES) - SWMUs 6, 7, 8, 9, 10, and 11
ADULT RESIDENT
RCRA Facility Investigation, Group II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA

NONCARCINOGENIC EFFECTS

COMPOUND	WATER CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	REFERENCE DOSE (mg/kg-day)	HAZARD QUOTIENT INGESTION
2-Butanone	17	ug/liter	4.7E-04	0.6	7.8E-04
Carbon disulfide	2.8	ug/liter	7.7E-05	0.1	7.7E-04
2-Methylnaphthalene	46.5	ug/liter	1.3E-03	ND	
Acenaphthene	7.9	ug/liter	2.2E-04	0.06	3.6E-03
Fluorene	8.2	ug/liter	2.2E-04	0.04	5.6E-03
Naphthene	67.4	ug/liter	1.8E-03	0.04	4.6E-02
Phenanthrene	8	ug/liter	2.2E-04	ND	
Arsenic	9	ug/liter	2.5E-04	0.0003	8.2E-01
Calcium	240386	ug/liter	6.6E+00	ND	
Iron	34500	ug/liter	9.5E-01	0.3	3.2E+00
Lead	5.3	ug/liter	1.5E-04	ND	
Magnesium	189094	ug/liter	5.2E+00	ND	
Manganese	1249	ug/liter	3.4E-02	0.005	6.8E+00
Sodium	3475000	ug/liter	9.5E+01	ND	
Thallium	1.7	ug/liter	4.7E-05	0.00008	5.8E-01
Vanadium	17.6	ug/liter	4.8E-04	0.007	6.9E-02
			TOTAL HAZARD INDEX		1E+01

ND = No data available

TABLE E-2-2

INHALATION EXPOSURE TO VOCs DURING SHOWERING - SWMUs 6, 7, 8, 9, 10, and 11
ADULT RESIDENT
RCRA Facility Investigation, Group II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
CONCENTRATION SHOWER AIR	CA [1]	chemical-specific	ug/m^3	Modeled
CONVERSION FACTOR 1	CF_1	24	hours/day	
EXPOSURE TIME SHOWER	ET	0.2	hours/day	USEPA, 1989
EXPOSURE FREQUENCY	EF	350	days/year	USEPA, 1991
EXPOSURE DURATION	ED	24	years	USEPA, 1991
CONVERSION FACTOR 2	CF_2	365	days/year	
AVERAGING TIME CANCER	AT	70	years	USEPA, 1989
AVERAGING TIME NONCANCER	AT	24	years	USEPA, 1989

[1] Calculated via model by Foster and Chrostowski, Air Pollution Control Association Annual Meeting, 1987.
USEPA, 1989. Risk Assessment Guidance for Superfund Volume I: Human Health Evaluation Manual, (Part A) EPA/540/1-89/002; December 1989.
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Assumptions".

EQUATIONS

CANCER RISK = AVG. CONC. (ug/m^3) * CANCER UNIT RISK $(ug/m^3)^{-1}$

HAZARD QUOTIENT = AVG.CONC.(ug/m^3)/REF. CONC. (ug/m^3)

$$\text{AVG. CONC.} = \frac{CA_{air} * EF * ET * ED}{AT * CF1 * CF2}$$

TABLE E-2-2

INHALATION EXPOSURE TO VOCs DURING SHOWERING - SWMUs 6, 7, 8, 9, 10, and 11
ADULT RESIDENT
RCRA Facility Investigation, Group II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA

CARCINOGENIC EFFECTS

COMPOUND	VOLATILE OR NON-VOLATILE? V/NV	SHOWER AIR CONCENTRATION ($\mu g/m^3$)	AVERAGE AIR CONCENTRATION LIFETIME ($\mu g/m^3$)	INHALATION CANCER UNIT RISK ($(\mu g/m^3)^{-1}$)	CANCER RISK
No carcinogens were detected			NA NA	ND ND	NA NA
			SUMMARY CANCER RISK		0E+00

NA - Not Applicable - The analyte is not volatile and has therefore not been evaluated via this volatilization model.

TABLE E-2-2

INHALATION EXPOSURE TO VOCs DURING SHOWERING - SWMUs 6, 7, 8, 9, 10, and 11
ADULT RESIDENT
RCRA Facility Investigation, Group II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA

NONCARCINOGENIC EFFECTS

COMPOUND	VOLATILE OR NON-VOLATILE? V/NV	SHOWER AIR CONCENTRATION (ug/m^3)	AVERAGE AIR CONCENTRATION FOR TIME PERIOD (ug/m^3)	CHRONIC INHALATION RfC [1] (ug/m^3)	HAZARD QUOTIENT
Carbon disulfide	V	15	1.2E-01	1.00E+01	1.2E-02
2-Butanone	V	12	9.6E-02	1.00E+03	9.6E-05
					NA
SUMMARY HAZARD INDEX					1.2E-02

[1] RfC is the Reference Concentration published by USEPA
NA - Not Applicable - The analyte is not volatile and has therefore not been evaluated via this volatilization model.

TABLE E-2-2

CONCENTRATION OF VOLATILE COMPOUNDS RESULTING FROM SHOWERING - SWMUs 6, 7, 8, 9, 10, A
ADULT RESIDENT
RCRA Facility Investigation, Group II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA

EMPIRICAL CONSTANTS

CONSTANT	SYMBOL	VALUE	UNIT	SOURCE
Liquid-film mass transfer for CO2	K_l (CO2)	20	cm/hr	Calculated
Gas-film mass transfer for water	K_l (water)	3000	cm/hr	Calculated
Molar gas constant x Temperature	RT	0.024	atm-m³/mole	
Reference temperature	T_1	293	K	
Temperature of shower water	T_s	318	K	Assumption
Viscosity of water at shower temperature	u_s	0.6178	cp	Calculated
Viscosity of water at reference temperature	u_1	0.65	cp	Calculated
Shower droplet free-fall time	t_s	1.5	sec	Assumption
Droplet diameter	d	1	mm	Foster and Chrostowski
Flow rate in shower	FR	20	l/min	Assumption
Volume of shower area	SV	12	m³	Assumption
Air exchange rate	R	0.03	min^{-1}	Calculated
Time in shower	D_s	12	min	USEPA, 1989b
Time at which concentration is being calculated	t	12	min	Assumption

Foster, S.A. and Chrostowski, P.C., 1987. Inhalation Exposures to Volatile Organic Contaminants in the Shower
All equations and definition of terms are presented in "Calculation of Shower-Generated Air Contaminants from Groundwater" which is appended to this report.

SHOWER CONCENTRATIONS

COMPOUND	C_w (ug/l)	MW (g/mol)	H atm-m³/mol	k_l (cm/hr)	k_g (cm/hr)	K_L (cm/hr)	K_{al} (cm/hr)	C_{wd} (µg/l)	S (µg/m³-min)	$C_{(voc)}$ (µg/m³)
Carbon Disulfide	2.8	76.0	0.0123	1.5E+01	1.5E+03	1.5E+01	1.6E+01	9.2E-01	1.5E+00	**1.5E+01**
2-Butanone	17	72.0	0.0000274	1.6E+01	1.5E+03	1.5E+00	1.6E+00	6.9E-01	1.1E+00	**1.2E+01**

C_w = Concentration in groundwater

MW = Molecular weight

H = Henry's Law constant

k_l = Chemical-specific mass-transfer coefficient

k_g = Chemical-specific gas mass-transfer coeffici

K_L = Mass transfer coefficient

K_{al} = Temperature correction of mass transfer coefficient

C_{wd} = Analyte concentration in water droplet

S = Release rate of analyte to air

$C_{(voc)}$ = Analyte concentration in bathroom air at time t.

$$C_{(voc)} = (S/R) \times (e^{(RDs)}-1) \times e^{(-Rt)}$$

APPENDIX E-3

HUMAN HEALTH RISK ASSESSMENT SPREADSHEETS SWMU 12

INGESTION OF GROUNDWATER AS DRINKING WATER (UNFILTERED SAMPLES) - SWMU 12
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-3-1

GWING12	28-Aug-95

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
CONCENTRATION WATER	CW	chemical specific	ug/liter	
INGESTION RATE	IR	2	liters/day	USEPA, 1991
BODY WEIGHT	BW	70	kg	USEPA, 1991
CONVERSION FACTOR	CF	0.001	mg/ug	
EXPOSURE FREQUENCY	EF	350	days/year	USEPA, 1991
EXPOSURE DURATION	ED	30	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	30	years	USEPA, 1991

USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.

CANCER RISK = INTAKE (mg/kg-day) x CANCER SLOPE FACTOR (mg/kg-day)^-1

HAZARD QUOTIENT = INTAKE (mg/kg-day) / REFERENCE DOSE (mg/kg-day)

$$\text{INTAKEing} = \frac{CW \times IR \times EF \times ED \times CF}{BW \times AT \times 365 \text{ days/year}}$$

NOTE:

For noncarcinogenic effects AT = ED

INGESTION OF GROUNDWATER AS DRINKING WATER (UNFILTERED SAMPLES) - SWMU 12
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-3-1

CARCINOGENIC EFFECTS

COMPOUND	WATER CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	CANCER SLOPE FACTOR (mg/kg-day)^-1	CANCER RISK INGESTION
Arsenic	42.5	ug/liter	5.0E-04	1.5E+00	7.5E-04
TOTAL CANCER RISK					7E-04

INGESTION OF GROUNDWATER AS DRINKING WATER (UNFILTERED SAMPLES) - SWMU 12
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-3-1

NONCARCINOGENIC EFFECTS

COMPOUND	WATER CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	REFERENCE DOSE (mg/kg-day)	HAZARD QUOTIENT INGESTION
Phenol	43	ug/liter	1.2E-03	6.0E-01	2.0E-03
Arsenic	42.5	ug/liter	1.2E-03	3.0E-04	3.9E+00
Vanadium	110	ug/liter	3.0E-03	7.0E-03	4.3E-01
				TOTAL HAZARD INDEX	4E+00

APPENDIX E-4

HUMAN HEALTH RISK ASSESSMENT SPREADSHEETS SWMU 15

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL - SWMU15
ADOLESCENT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-1

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
CONCENTRATION SOIL	CS	chemical-specific	chemical-specific	
INGESTION RATE	IR	100	mg/day	USEPA, 1991
FRACTION INGESTED	FI	100%	unitless	Assumption
ADHERENCE FACTOR	AF	1	mg/cm²-event	USEPA, 1992a
AGE-SPECIFIC SURFACE AREA	SAi	age-specific	cm²	USEPA, 1989
ABSORPTION FRACTION	ABSd	chemical-specific	unitless	USEPA, 1992b
CONVERSION FACTOR	CF	1.00E-06	kg/mg	SEE BELOW
BODY WEIGHT	BW	40	kg	USEPA, 1989
AGE-SPECIFIC BODY WEIGHT	BWi	age-specific	kg	USEPA, 1989
EXPOSURE FREQUENCY	EF	45	days/year *	Assumption
EXPOSURE DURATION	ED	11	years	Assumption
AGE-SPECIFIC EXPOSURE DURATION	EDi	age-specific	years	Assumption
AGE-WEIGHTED SURFACE AREA [1]	SAsoil/adj	1136	cm²-year/kg	Per USEPA, 1992a
DOSE ABSORBED PER EVENT	DAevent	chemical-specific	mg/cm²-event	Per USEPA, 1992a
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	11	years	Assumption

* Units for exposure frequency are in events/year in the calculation of the dermally absorbed dose.
[1] In estimating the dermally absorbed dose for children age 6 through 16, the time-weighted, bodyweight normalized surface area exposed is calculated from surface area, exposure duration, and body weight for each of 11 age periods, age 6 through 16, per USEPA, 1992.
USEPA, 1989. Exposure Factors Handbook;EPA 600/8-89/043; May 1989.
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.
USEPA, 1992a. Dermal Exposure Assessment: Principles and Applications; EPA/600/8-91/011B; January 1992 and Appendix D-7 to the RFI General Information Report.
USEPA, 1992b. USEPA Region IV Guidance Memorandum, February 10, 1992.
CF = 10E-09 kg/ug for organics

EQUATIONS

CANCER RISK = INTAKE (mg/kg-day) x CANCER SLOPE FACTOR (mg/kg-day)-1

HAZARD QUOTIENT = INTAKE (mg/kg-day) / REFERENCE DOSE (mg/kg-day)

$$\text{INTAKEING} = \frac{CS \times IR \times FI \times CF \times EF \times ED}{BW \times AT \times 365\ \text{days/yr}}$$

$$\text{INTAKEDERMAL} = (DAevent \times EF / AT \times 365\ \text{days/year}) \times SAsoil/adj$$

Where:

SAsoil/adj = SUM (SAi x EDi / BWi)

DAevent = CS x AF x ABSd x CF

Note: For noncarcinogenic effects: AT = ED

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL - SWMU15
ADOLESCENT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-1

CTSS15	28-Aug-95

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	ORAL CSF (mg/kg-day)^-1	CANCER RISK INGESTION	DERMAL ABS [1]	INTAKE DERMAL (mg/kg-day)	DERMAL CSF [2] (mg/kg-day)^-1	CANCER RISK DERMAL	TOTAL CANCER RISK
DDE, 4,4'-	O	2800	ug/kg	1.4E-07	0.34	4.6E-08	0.01	5.6E-08	1.7	9.5E-08	1.4E-07
DDT, 4,4'	O	14186	ug/kg	6.9E-07	0.34	2.3E-07	0.01	2.8E-07	1.7	4.8E-07	7.2E-07
Chlordane	O	8022	ug/kg	3.9E-07	1.3	5.1E-07	0.01	1.6E-07	1.63	2.6E-07	7.7E-07
Arsenic	I	4	mg/kg	1.9E-07	1.5	2.9E-07	0.001	8.0E-09	1.53	1.2E-08	3.0E-07
Beryllium	I	0.15	mg/kg	7.3E-09	4.3	3.1E-08	0.001	3.0E-10	430	1.3E-07	1.6E-07
					SUMMARY CANCER RISK	1.1E-06				1E-06	2E-06

[1] USEPA Region IV guidance specifies absorption factors of 1% for organics and 0.1% for inorganics (February 10, 1992).
[2] Calculated from Oral CSFs.

CTSS15	28-Aug-95

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL - SWMU15
ADOLESCENT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-1

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	ORAL RfD (mg/kg-day)	HAZARD QUOTIENT INGESTION	DERMAL ABS [1]	INTAKE DERMAL (mg/kg-day)	DERMAL RfD [2] (mg/kg-day)	HAZARD QUOTIENT DERMAL	TOTAL HAZARD QUOTIENT
DDE, 4,4'-	O	2800	ug/kg	8.6E-07	ND		0.01	3.6E-07	ND		
DDT, 4,4'	O	14186	ug/kg	4.4E-06	0.0005	8.7E-03	0.01	1.8E-06	0.0001	1.8E-02	2.7E-02
Chlordane	O	8022	ug/kg	2.5E-06	0.00006	4.1E-02	0.01	1.0E-06	0.000048	2.1E-02	6.2E-02
Arsenic	I	4	mg/kg	1.2E-06	0.0003	4.1E-03	0.001	5.1E-08	0.000294	1.7E-04	4.3E-03
Beryllium	I	0.15	mg/kg	4.6E-08	0.005	9.2E-06	0.001	1.9E-09	0.00005	3.8E-05	4.7E-05
					SUMMARY HAZARD INDEX	5.4E-02				4E-02	9E-02

[1] USEPA Region IV guidance specifies absorption factors of 1% for organics and 0.1% for inorganics (February 10, 1992).
[2] Calculated from Oral RfDs.
ND = No data available

INHALATION OF PARTICULATES - SURFACE SOIL - SWMU 15
ADOLESCENT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-2

CTSSIN15	12-May-95

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical specific	chemical specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	*
CONCENTRATION AIR	CA	chemical specific	mg/m^3	
INHALATION RATE	IR	0.833	$m^3/hour$	USEPA, 1991
BODY WEIGHT	BW	40	kg	USEPA, 1991
EXPOSURE TIME	ET	4	hours/day	Assumption
EXPOSURE FREQUENCY	EF	45	days/year	Assumption
EXPOSURE DURATION	ED	11	years	Assumption
CONVERSION FACTOR	CF	0.001	mg/ug	Organics only
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	11	years	Assumption

USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.
*PEF has been derived in Appendix D-5 to the RFI General Information Report.

EQUATIONS

CANCER RISK = INTAKE (mg/kg-day) x INHALATION CANCER SLOPE FACTOR $(mg/kg\text{-}day)^{-1}$

HAZARD QUOTIENT = INTAKE (mg/kg-day) / INHALATION REFERENCE DOSE (mg/kg-day)

$$\text{INTAKE} = \frac{CA \times IR \times ET \times EF \times ED}{BW \times AT \times 365\ days/yr}$$

Where:

$$CA = C \times CF \times (1/PEF)$$

Note: For noncarcinogenic effects: AT = ED

INHALATION OF PARTICULATES - SURFACE SOIL - SWMU 15
ADOLESCENT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-2

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	AIR CONCENTRATIO (mg/m³)	INTAKE (mg/kg-day)	INHALATION CSF (mg/kg-day)^-1	CANCER RISK
DDT, 4,4'-	O	14186	ug/kg	2.85E-07	4.6E-10	0.34	**1.6E-10**
Chlordane	O	8022	ug/kg	1.61E-07	2.6E-10	1.3	**3.4E-10**
Arsenic	I	4	mg/kg	8.05E-08	1.3E-10	50	**6.5E-09**
Beryllium	I	0.15	mg/kg	3.02E-09	4.9E-12	8.4	**4.1E-11**
						SUMMARY CANCER RISK	7E-09

INHALATION OF PARTICULATES - SURFACE SOIL - SWMU 15
ADOLESCENT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-2

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	AIR CONCENTRATIO (mg/m³)	INTAKE (mg/kg-day)	INHALATION RfD (mg/kg-day)	HAZARD QUOTIENT
DDE, 4,4'-	O	2800	ug/kg	5.63E-08	5.8E-10	ND	
DDT, 4,4'-	O	14186	ug/kg	2.85E-07	2.9E-09	ND	
Chlordane	O	8022	ug/kg	1.61E-07	1.7E-09	ND	
Arsenic	I	4	mg/kg	8.05E-08	8.3E-10	ND	
Beryllium	I	0.15	mg/kg	3.02E-09	3.1E-11	ND	
SUMMARY HAZARD INDEX							0E+00

ND = No data available

ATSS15	28-Aug-95

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL - SWMU 15
ADULT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-3

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
CONCENTRATION SOIL	CS	chemical specific	chemical specific	
INGESTION RATE	IR	100	mg/day	USEPA, 1991
FRACTION INGESTED	FI	100%	unitless	Assumption
ADHERENCE FACTOR	AF	1	mg/cm²-event	USEPA, 1992a
ABSORPTION FRACTION	ABSd	chemical specific	unitless	USEPA, 1992b
SURFACE AREA EXPOSED	SA	5,750	cm²	USEPA, 1992a
DOSE ABSORBED PER EVENT	DAevent	chemical specific	mg/cm2-event	USEPA, 1992a
CONVERSION FACTOR	CF	1.00E-06	kg/mg	SEE BELOW
BODY WEIGHT	BW	70	kg	USEPA, 1991
EXPOSURE FREQUENCY	EF	45	days/year *	Assumption
EXPOSURE DURATION	ED	19	years	Assumption
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	19	years	Assumption

* Units for exposure frequency are events/year in the calculation of the dermally absorbed dose.
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.
USEPA, 1992a. Dermal Exposure Assessment: Principles and Applications; EPA/600/8-91/011B; 1/92.
USEPA, 1992b. USEPA Region IV Guidance Memorandum; February 10, 1992.
CF = 10E-9 kg/ug for organics

EQUATIONS

CANCER RISK = INTAKE (mg/kg-day) x CANCER SLOPE FACTOR (mg/kg-day)-1

HAZARD QUOTIENT = INTAKE (mg/kg-day) / REFERENCE DOSE (mg/kg-day)

INTAKE-INGESTION = $\frac{CS \times IR \times FI \times CF \times EF \times ED}{BW \times AT \times 365 \text{ days/yr}}$

INTAKE-DERMAL = $\frac{DAevent \times SA \times EF \times ED}{BW \times AT \times 365 \text{ days/yr}}$

Where:
DAevent= CS x AF x ABSd x CF

Note: For noncarcinogenic effects: AT = ED

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL - SWMU 15
ADULT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-3

ATSS15	28-Aug-95

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	ORAL CSF (mg/kg-day)^-1	CANCER RISK INGESTION	DERMAL ABS [1]	INTAKE DERMAL (mg/kg-day)	DERMAL CSF [2] (mg/kg-day)^-1	CANCER RISK DERMAL	TOTAL CANCER RISK
DDE, 4,4'-	O	2800	ug/kg	1.3E-07	0.34	4.6E-08	0.01	7.7E-08	1.7	1.3E-07	1.8E-07
DDT, 4,4'-	O	14186	ug/kg	6.8E-07	0.34	2.3E-07	0.01	3.9E-07	1.7	6.6E-07	8.9E-07
Chlordane	O	8022	ug/kg	3.8E-07	1.3	5.0E-07	0.01	2.2E-07	1.63	3.6E-07	8.6E-07
Arsenic	I	4	mg/kg	1.9E-07	1.5	2.9E-07	0.001	1.1E-08	1.53	1.7E-08	3.0E-07
Beryllium	I	0.15	mg/kg	7.2E-09	4.3	3.1E-08	0.001	4.1E-10	430	1.8E-07	2.1E-07
SUMMARY CANCER RISK						1E-06				1E-06	2E-06

[1] USEPA Region IV guidance specifies absorption factors of 1% for organics and 0.1% for inorganics (February 10, 1992).
[2] Calculated from Oral CSFs.

ATSS15	28-Aug-95

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL - SWMU 15
ADULT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-3

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	ORAL RfD (mg/kg-day)	HAZARD QUOTIENT INGESTION	DERMAL ABS [1]	INTAKE DERMAL (mg/kg-day)	DERMAL RfD [2] (mg/kg-day)	HAZARD QUOTIENT DERMAL	TOTAL HAZARD QUOTIENT
DDE, 4,4'-	O	2800	ug/kg	4.9E-07	ND		0.01	2.8E-07	ND		
DDT, 4,4'-	O	14186	ug/kg	2.5E-06	0.0005	5.0E-03	0.01	1.4E-06	0.0001	1.4E-02	1.9E-02
Chlordane	O	8022	ug/kg	1.4E-06	0.00006	2.4E-02	0.01	8.1E-07	0.000048	1.7E-02	4.0E-02
Arsenic	I	4	mg/kg	7.0E-07	0.0003	2.3E-03	0.001	4.1E-08	0.000294	1.4E-04	2.5E-03
Beryllium	I	0.15	mg/kg	2.6E-08	0.005	5.3E-06	0.001	1.5E-09	0.00005	3.0E-05	3.6E-05
SUMMARY HAZARD INDEX						3E-02				3E-02	6E-02

[1] USEPA Region IV guidance specifies absorption factors of 1% for organics and 0.1% for inorganics (February 10, 1992).
[2] Calculated from Oral RfDs.
ND = No data available

INHALATION OF PARTICULATE DUST - SURFACE SOIL - SWMU 15
ADULT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-4

ATSSIN15	12-May-95

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical specific	chemical specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	*
CONCENTRATION AIR	CA	chemical specific	mg/m^3	
INHALATION RATE	IR	0.833	$m^3/hour$	USEPA, 1991
BODY WEIGHT	BW	70	kg	USEPA, 1991
EXPOSURE TIME	ET	4	hours/day	Assumption
EXPOSURE FREQUENCY	EF	45	days/year	Assumption
EXPOSURE DURATION	ED	19	years	Assumption
CONVERSION FACTOR	CF	0.001	mg/ug	Organics only
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	19	years	USEPA, 1991

USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.
*PEF has been derived in Appendix D-5 to the RFI General Information Report.

EQUATIONS

CANCER RISK = INTAKE (mg/kg-day) x INHALATION CANCER SLOPE FACTOR (mg/kg-day)-1

HAZARD QUOTIENT = INTAKE (mg/kg-day) / INHALATION REFERENCE DOSE (mg/kg-day)

$$\text{INTAKE} = \frac{CA \times IR \times ET \times EF \times ED}{BW \times AT \times 365\ \text{days/yr}}$$

Where:

$$CA = C \times CF \times (1/PEF)$$

Note: For noncarcinogenic effects, AT = ED

INHALATION OF PARTICULATE DUST - SURFACE SOIL - SWMU 15
ADULT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-4

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	AIR CONCENTRATION (mg/m³)	INTAKE (mg/kg-day)	INHALATION CSF (mg/kg-day)⁻¹	CANCER RISK
DDT, 4,4'-	O	14186	ug/kg	2.85E-07	4.5E-10	0.34	**1.5E-10**
Chlordane	O	8022	ug/kg	1.61E-07	2.6E-10	1.3	**3.3E-10**
Arsenic	I	4	mg/kg	8.05E-08	1.3E-10	50	**6.4E-09**
Beryllium	I	0.15	mg/kg	3.02E-09	4.8E-12	8.4	**4.0E-11**
						SUMMARY CANCER RISK	**7E-09**

INHALATION OF PARTICULATE DUST - SURFACE SOIL - SWMU 15
ADULT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-4

ATSSIN15	12-May-95

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	AIR CONCENTRATION (mg/m³)	INTAKE (mg/kg-day)	INHALATION RfD (mg/kg-day)	HAZARD QUOTIENT
DDE, 4,4'-	O	2800	ug/kg	5.63E-08	3.3E-10	ND	
DDT, 4,4'-	O	14186	ug/kg	2.85E-07	1.7E-09	ND	
Chlordane	O	8022	ug/kg	1.61E-07	9.5E-10	ND	
Arsenic	I	4	mg/kg	8.05E-08	4.7E-10	ND	
Beryllium	I	0.15	mg/kg	3.02E-09	1.8E-11	ND	
SUMMARY HAZARD INDEX							0E+00

ND = no data available.

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL - SWMU 15
OCCUPATIONAL WORKER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-5

OWSS15	28-Aug-95

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
CONCENTRATION SOIL	CS	chemical specific	chemical specific	
INGESTION RATE	IR	50	mg/day	USEPA, 1991
FRACTION INGESTED	FI	100%	unitless	Assumption
ADHERENCE FACTOR	AF	1	mg/cm²-event	USEPA, 1992a
ABSORPTION FRACTION	ABS	chemical specific	unitless	USEPA, 1992b
SURFACE AREA EXPOSED	SA	2,300	cm²	USEPA, 1992a
DOSE ABSORBED PER EVENT	DAevent	chemical specific	mg/cm2-event	USEPA, 1992a
CONVERSION FACTOR	CF	1.00E-09	kg/ug	Organic conversion
CONVERSION FACTOR	CF	1.00E-06	kg/mg	Inorganic conversion
BODY WEIGHT	BW	70	kg	USEPA, 1991
EXPOSURE FREQUENCY	EF	250	days/year *	USEPA, 1991
EXPOSURE DURATION	ED	25	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	25	years	USEPA, 1991

* Units for exposure frequency are events/year in the calculation of the dermally absorbed dose.
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.
USEPA, 1992a. Dermal Exposure Assessment: Principles and Applications; EPA/600/8-91/011B; January 1992.
USEPA, 1992b. USEPA Region IV Guidance Memorandum; February 10, 1992.

EQUATIONS

CANCER RISK = INTAKE (mg/kg-day) x CANCER SLOPE FACTOR (mg/kg-day)-1

HAZARD QUOTIENT = INTAKE (mg/kg-day) / REFERENCE DOSE (mg/kg-day)

$$\text{INTAKE-INGESTION} = \frac{CS \times IR \times FI \times CF \times EF \times ED}{BW \times AT \times 365\ \text{days/yr}}$$

$$\text{INTAKE-DERMAL} = \frac{DAevent \times SA \times EF \times ED}{BW \times AT \times 365\ \text{days/yr}}$$

Where:

DAevent = CS x AF x ABS x CF

Note: For noncarcinogenic effects, AT = ED

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL - SWMU 15
OCCUPATIONAL WORKER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-5

OWSS15	28-Aug-95

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	ORAL CSF (mg/kg-day)^-1	CANCER RISK INGESTION	DERMAL ABS [1]	INTAKE DERMAL (mg/kg-day)	DERMAL CSF [2] (mg/kg-day)^-1	CANCER RISK DERMAL	TOTAL CANCER RISK
DDE, 4,4'-	O	2800	ug/kg	4.9E-07	0.34	1.7E-07	0.01	2.3E-07	1.7	3.8E-07	5.5E-07
DDT, 4,4'-	O	14186	ug/kg	2.5E-06	0.34	8.4E-07	0.01	1.1E-06	1.7	1.9E-06	2.8E-06
Chlordane	O	8022	ug/kg	1.4E-06	1.3	1.8E-06	0.01	6.4E-07	1.63	1.1E-06	2.9E-06
Arsenic	I	4	mg/kg	7.0E-07	1.5	1.0E-06	0.001	3.2E-08	1.53	4.9E-08	1.1E-06
Beryllium	I	0.15	mg/kg	2.6E-08	4.3	1.1E-07	0.001	1.2E-09	430	5.2E-07	6.3E-07
SUMMARY CANCER RISK						4E-06				4E-06	8E-06

[1] USEPA Region IV guidance specifies absorption factors of 1% for organics and 0.1% for inorganics (February 10, 1992).
[2] Calculated from Oral CSFs.

OWSS15	28-Aug-95

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL - SWMU 15
OCCUPATIONAL WORKER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-5

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	ORAL RfD (mg/kg-day)	HAZARD QUOTIENT INGESTION	DERMAL ABS [1]	INTAKE DERMAL (mg/kg-day)	DERMAL RfD [2] (mg/kg-day)	HAZARD QUOTIENT DERMAL	TOTAL HAZARD QUOTIENT
DDE, 4,4'-	O	2800	ug/kg	1.4E-06	ND		0.01	6.3E-07	ND		
DDT, 4,4'-	O	14186	ug/kg	6.9E-06	0.0005	1.4E-02	0.01	3.2E-06	0.0001	3.2E-02	4.6E-02
Chlordane	O	8022	ug/kg	3.9E-06	0.00006	6.5E-02	0.01	1.8E-06	0.000048	3.8E-02	1.0E-01
Arsenic	I	4	mg/kg	2.0E-06	0.0003	6.5E-03	0.001	9.0E-08	0.000294	3.1E-04	6.8E-03
Beryllium	I	0.15	mg/kg	7.3E-08	0.005	1.5E-05	0.001	3.4E-09	0.00005	6.8E-05	8.2E-05
SUMMARY HAZARD INDEX						9E-02				7E-02	2E-01

[1] USEPA Region IV guidance specifies absorption factors of 1% for organics and 0.1% for inorganics (February 10, 1992).
[2] Calculated from Oral RfDs.
ND = no data.

OWSSIN15	12-May-95

INHALATION OF PARTICULATE DUST - SURFACE SOIL - SWMU 15
OCCUPATIONAL WORKER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-6

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical specific	chemical specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	*
CONCENTRATION AIR	CA	chemical specific	mg/m^3	
INHALATION RATE	IR	2.5	$m^3/hour$	USEPA, 1991
BODY WEIGHT	BW	70	kg	USEPA, 1991
EXPOSURE TIME	ET	8	hours/day	Assumption
EXPOSURE FREQUENCY	EF	250	days/year	Assumption
EXPOSURE DURATION	ED	25	years	Assumption
CONVERSION FACTOR	CF	0.001	mg/ug	Organics only
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	25	years	USEPA, 1991

USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6 03.
*PEF has been derived in Appendix D-5 to the RFI General Information Report.

EQUATIONS

CANCER RISK = INTAKE (mg/kg-day) x INHALATION CANCER SLOPE FACTOR (mg/kg-day) -1

'HAZARD QUOTIENT = INTAKE (mg/kg-day) / INHALATION REFERENCE DOSE (mg/kg-day)

$$\text{INTAKE} = \frac{\text{CA x IR x ET x EF x ED}}{\text{BW x AT x 365 days/yr}}$$

Where:

CA = C x CF x (1/PEF)

Note: For noncarcinogenic effects, AT = ED.

INHALATION OF PARTICULATE DUST - SURFACE SOIL - SWMU 15
OCCUPATIONAL WORKER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-6

OWSSIN15	12-May-95

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION [1]	UNITS	AIR CONCENTRATION (mg/m³)	INTAKE (mg/kg-day)	INHALATION CSF (mg/kg-day)^-1	CANCER RISK
DDT, 4,4'-	O	14186	ug/kg	2.85E-07	2.0E-08	0.34	**6.8E-09**
Chlordane	O	8022	ug/kg	1.61E-07	1.1E-08	1.3	**1.5E-08**
Arsenic	I	4	mg/kg	8.05E-08	5.6E-09	50	**2.8E-07**
Beryllium	I	0.15	mg/kg	3.02E-09	2.1E-10	8.4	**1.8E-09**
SUMMARY CANCER RISK							3E-07

INHALATION OF PARTICULATE DUST - SURFACE SOIL - SWMU 15
OCCUPATIONAL WORKER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-6

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	AIR CONCENTRATION (mg/m³)	INTAKE (mg/kg-day)	INHALATION RfD (mg/kg-day)	HAZARD QUOTIENT
DDE, 4,4'-	O	2800	ug/kg	5.63E-08	1.1E-08	ND	
DDT, 4,4'-	O	14186	ug/kg	2.85E-07	5.6E-08	ND	
Chlordane	O	8022	ug/kg	1.61E-07	3.2E-08	ND	
Arsenic	I	4	mg/kg	8.05E-08	1.6E-08	ND	
Beryllium	I	0.15	mg/kg	3.02E-09	5.9E-10	ND	
SUMMARY HAZARD INDEX							0E+00

ND = no data available.

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL - SWMU 15
SITE MAINTENANCE WORKER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-7

SWSS15	28-Aug-95

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
CONCENTRATION SOIL	CS	chemical specific	chemical specific	
INGESTION RATE	IR	118	mg/day	USEPA, 1992a
FRACTION INGESTED	FI	100%	unitless	Assumption
ADHERENCE FACTOR	AF	1	mg/cm²-event	USEPA, 1992a
ABSORPTION FRACTION	ABS	chemical specific	unitless	USEPA, 1992b
SURFACE AREA EXPOSED	SA	5,750	cm²	USEPA, 1992a
DOSE ABSORBED PER EVENT	DAevent	chemical specific	mg/cm2-event	USEPA, 1992a
CONVERSION FACTOR	CF	1.00E-09	kg/ug	Organic conversion
CONVERSION FACTOR	CF	1.00E-06	kg/mg	Inorganic conversion
BODY WEIGHT	BW	70	kg	USEPA, 1991
EXPOSURE FREQUENCY	EF	30	days/year *	Assumption
EXPOSURE DURATION	ED	25	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	25	years	USEPA, 1991

* Units for exposure frequency are events/year in the calculation of the dermally absorbed dose.
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.
USEPA, 1992a. Dermal Exposure Assessment: Principles and Applications; EPA/600/8-91/011B; January 1992.
USEPA, 1992b. USEPA Region IV Guidance Memorandum; February 10, 1992.

EQUATIONS

CANCER RISK = INTAKE (mg/kg-day) x CANCER SLOPE FACTOR (mg/kg-day)-1

HAZARD QUOTIENT = INTAKE (mg/kg-day) / REFERENCE DOSE (mg/kg-day)

$$\text{INTAKE-INGESTION} = \frac{CS \times IR \times FI \times CF \times EF \times ED}{BW \times AT \times 365\ \text{days/yr}}$$

$$\text{INTAKE-DERMAL} = \frac{DAevent \times SA \times EF \times ED}{BW \times AT \times 365\ \text{days/yr}}$$

Where:

DAevent = CS x AF x ABS x CF

Note: For noncarcinogenic effects, AT = ED

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL - SWMU 15
SITE MAINTENANCE WORKER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-7

SWSS15	28-Aug-95

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	ORAL CSF (mg/kg-day)^-1	CANCER RISK INGESTION	DERMAL ABS [1]	INTAKE DERMAL (mg/kg-day)	DERMAL CSF [2] (mg/kg-day)^-1	CANCER RISK DERMAL	TOTAL CANCER RISK
DDE, 4,4'-	O	2800	ug/kg	1.4E-07	0.34	4.7E-08	0.01	6.8E-08	1.7	1.1E-07	1.6E-07
DDT, 4,4'-	O	14186	ug/kg	7.0E-07	0.34	2.4E-07	0.01	3.4E-07	1.7	5.8E-07	8.2E-07
Chlordane	O	8022	ug/kg	4.0E-07	1.3	5.2E-07	0.01	1.9E-07	1.63	3.2E-07	8.3E-07
Arsenic	I	4	mg/kg	2.0E-07	1.5	3.0E-07	0.001	9.6E-09	1.53	1.5E-08	3.1E-07
Beryllium	I	0.15	mg/kg	7.4E-09	4.3	3.2E-08	0.001	3.6E-10	430	1.6E-07	1.9E-07
			SUMMARY CANCER RISK			1E-06				1E-06	2E-06

[1] USEPA Region IV guidance specifies absorption factors of 1% for organics and 0.1% for inorganics (February 10, 1992).
[2] Calculated from Oral CSFs.

SWSS15	28-Aug-95

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL - SWMU 15
SITE MAINTENANCE WORKER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-7

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	ORAL RfD (mg/kg-day)	HAZARD QUOTIENT INGESTION	DERMAL ABS [1]	INTAKE DERMAL (mg/kg-day)	DERMAL RfD [2] (mg/kg-day)	HAZARD QUOTIENT DERMAL	TOTAL HAZARD QUOTIENT
DDE, 4,4'-	O	2800	ug/kg	3.9E-07	ND		0.01	1.9E-07	ND		
DDT, 4,4'-	O	14186	ug/kg	2.0E-06	0.0005	3.9E-03	0.01	9.6E-07	0.0001	9.6E-03	1.4E-02
Chlordane	O	8022	ug/kg	1.1E-06	0.00006	1.9E-02	0.01	5.4E-07	0.000048	1.1E-02	3.0E-02
Arsenic	I	4	mg/kg	5.5E-07	0.0003	1.8E-03	0.001	2.7E-08	0.000294	9.2E-05	1.9E-03
Beryllium	I	0.15	mg/kg	2.1E-08	0.005	4.2E-06	0.001	1.0E-09	0.00005	2.0E-05	2.4E-05
SUMMARY HAZARD INDEX						2E-02				2E-02	5E-02

[1] USEPA Region IV guidance specifies absorption factors of 1% for organics and 0.1% for inorganics (February 10, 1992).
[2] Calculated from Oral RfDs.
ND = No data available

INHALATION OF PARTICULATE DUST - SURFACE SOIL -SWMU 15
SITE MAINTENANCE WORKER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-8

SWSSIN15	12-May-95

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical specific	chemical specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	*
CONCENTRATION AIR	CA	chemical specific	mg/m^3	
INHALATION RATE	IR	2.5	$m^3/hour$	USEPA, 1991
BODY WEIGHT	BW	70	kg	USEPA, 1991
EXPOSURE TIME	ET	8	hours/day	Assumption
EXPOSURE FREQUENCY	EF	30	days/year	Assumption
EXPOSURE DURATION	ED	25	years	Assumption
CONVERSION FACTOR	CF	0.001	mg/ug	Organics only
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	25	years	USEPA, 1991

USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.
*PEF has been derived in Appendix D-5 to the RFI General Information Report.

EQUATIONS

CANCER RISK = INTAKE (mg/kg-day) x INHALATION CANCER SLOPE FACTOR (mg/kg-day) -1

'HAZARD QUOTIENT = INTAKE (mg/kg-day) / INHALATION REFERENCE DOSE (mg/kg-day)

$$\text{INTAKE} = \frac{\text{CA x IR x ET x EF x ED}}{\text{BW x AT x 365 days/yr}}$$

Where:

CA = C x CF x (1/PEF)

Note: For noncarcinogenic effects, AT = ED

INHALATION OF PARTICULATE DUST - SURFACE SOIL -SWMU 15
SITE MAINTENANCE WORKER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-8

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	AIR CONCENTRATION (mg/m³)	INTAKE (mg/kg-day)	INHALATION CSF (mg/kg-day)^-1	CANCER RISK
DDT, 4,4'-	O	14186	ug/kg	2.85E-07	2.4E-09	0.34	8.1E-10
Chlordane	O	8022	ug/kg	1.61E-07	1.4E-09	1.3	1.8E-09
Arsenic	I	4	mg/kg	8.05E-08	6.8E-10	50	3.4E-08
Beryllium	I	0.15	mg/kg	3.02E-09	2.5E-11	8.4	2.1E-10
SUMMARY CANCER RISK							4E-08

INHALATION OF PARTICULATE DUST - SURFACE SOIL -SWMU 15
SITE MAINTENANCE WORKER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-8

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	AIR CONCENTRATION (mg/m³)	INTAKE (mg/kg-day)	INHALATION RfD (mg/kg-day)	HAZARD QUOTIENT
DDE, 4,4'-	O	2800	ug/kg	5.63E-08	1.3E-09	ND	
DDT, 4,4'-	O	14186	ug/kg	2.85E-07	6.7E-09	ND	
Chlordane	O	8022	ug/kg	1.61E-07	3.8E-09	ND	
Arsenic	I	4	mg/kg	8.05E-08	1.9E-09	ND	
Beryllium	I	0.15	mg/kg	3.02E-09	7.1E-11	ND	
SUMMARY HAZARD INDEX							0E+00

ND = no data available.

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL - SWMU 15
CHILD RESIDENT
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-9

CRSS15	28-Aug-95

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
CONCENTRATION SOIL	CS	chemical specific	chemical-specific	
INGESTION RATE	IR	200	mg/day	USEPA, 1991
FRACTION INGESTED	FI	100%	unitless	Assumption
ADHERENCE FACTOR	AF	1	mg/cm²-event	USEPA, 1992a
AGE-SPECIFIC SURFACE AREA	SA	age-specific	cm²	USEPA, 1989
ABSORPTION FRACTION	ABS	chemical specific	unitless	USEPA, 1992b
CONVERSION FACTOR	CF	1.00E-06	kg/mg	Inorganic conversion
CONVERSION FACTOR	CF	1.00E-09	kg/ug	Organic conversion
BODY WEIGHT	BW	15	kg	USEPA, 1989
AGE-SPECIFIC BODY WEIGHT	BW	age-specific	kg	USEPA, 1989
EXPOSURE FREQUENCY	EF	350	days/year *	Assumption
EXPOSURE DURATION	ED	6	years	Assumption
AGE-SPECIFIC EXPOSURE DURATION	ED	age-specific	years	Assumption
AGE-WEIGHTED SURFACE AREA [1]	SAsoil/adj	766	cm2-year/kg	USEPA, 1992a
DOSE ABSORBED PER EVENT	DAevent	chemical specific	mg/cm2-event	USEPA, 1992a
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	6	years	USEPA, 1991

* Units for exposure frequency are in events/year in the calculation of the dermally absorbed dose.

[1] In estimating the dermally absorbed dose for children age 1 through 6, the time-weighted, bodyweight normalized surface area exposed is calculated from surface area, exposure duration, and body weight for each of 6 age periods, age 1 through 6, per USEPA, 1992.

USEPA, 1989. Exposure Factors Handbook;EPA/600/8-89/043; May 1989.

USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance. "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.

USEPA, 1992a. Dermal Exposure Assessment: Principles and Applications, EPA/600/8-91/011B; January 1992 and Appendix D-5 to the RFI General Information Report.

USEPA, 1992b. USEPA Region IV Guidance Memorandum; February 10, 1992.

EQUATIONS

CANCER RISK = INTAKE (mg/kg-day) x CANCER SLOPE FACTOR (mg/kg-day)-1

HAZARD QUOTIENT = INTAKE (mg/kg-day) / REFERENCE DOSE (mg/kg-day)

$$\text{INTAKE-INGESTION} = \frac{CS \times IR \times FI \times CF \times EF \times ED}{BW \times AT \times 365\ \text{days/yr}}$$

INTAKE-DERMAL = (DAevent x EF / AT x 365 days/year) x SAsoil/adj

Where:

SAsoil/adj = SUM (SA x ED / BW)

DAevent = CS x AF x ABS x CF

CRSS15	28-Aug-95

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL - SWMU 15
CHILD RESIDENT
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-9

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	ORAL CSF [1] (mg/kg-day)-1	CANCER RISK INGESTION	DERMAL ABS [2]	INTAKE DERMAL (mg/kg-day)	DERMAL CSF [1] (mg/kg-day)-1	CANCER RISK DERMAL	TOTAL CANCER RISK
DDE, 4,4'-	O	2800	ug/kg	3.1E-06	0.34	1.0E-06	0.01	2.9E-07	1.7	5.0E-07	1.5E-06
DDT, 4,4'-	O	14186	ug/kg	1.6E-05	0.34	5.3E-06	0.01	1.5E-06	1.7	2.5E-06	7.8E-06
Chlordane	O	8022	ug/kg	8.8E-06	1.3	1.1E-05	0.01	8.4E-07	1.63	1.4E-06	1.3E-05
Arsenic	I	4	mg/kg	4.4E-06	1.5	6.6E-06	0.001	4.2E-08	1.53	6.4E-08	6.6E-06
Beryllium	I	0.15	mg/kg	1.6E-07	4.3	7.1E-07	0.001	1.6E-09	430	6.8E-07	1.4E-06
				SUMMARY CANCER RISK		2.5E-05				5E-06	3E-05

[1] USEPA Region IV guidance specifies absorption factors of 1% for organics and 0.1% for inorganics (February 10, 1992).
[2] Calculated from Oral CSFs.

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL - SWMU 15
CHILD RESIDENT
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-9

CRSS15	28-Aug-95

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC (O)	SOIL CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	ORAL RfD (mg/kg-day)	HAZARD QUOTIENT INGESTION	DERMAL ABS [1]	INTAKE DERMAL (mg/kg-day)	DERMAL RfD [2] (mg/kg-day)	HAZARD QUOTIENT DERMAL	TOTAL HAZARD QUOTIENT
DDE, 4,4'-	O	2800	ug/kg	3.6E-05	ND		0.01	3.4E-06	ND		
DDT, 4,4'-	O	14186	ug/kg	1.8E-04	0.0005	3.6E-01	0.01	1.7E-05	0.0001	1.7E-01	5.4E-01
Chlordane	O	8022	ug/kg	1.0E-04	0.00006	1.7E+00	0.01	9.8E-06	0.000048	2.0E-01	1.9E+00
Arsenic	I	4	mg/kg	5.1E-05	0.0003	1.7E-01	0.001	4.9E-07	0.000294	1.7E-03	1.7E-01
Beryllium	I	0.15	mg/kg	1.9E-06	0.005	3.8E-04	0.001	1.8E-08	0.00005	3.7E-04	7.5E-04
SUMMARY HAZARD INDEX						2.2E+00				4E-01	3E+00

[1] USEPA Region IV guidance specifies absorption factors of 1% for organics and 0.1% for inorganics (February 10, 1992).
[2] Calculated from Oral RfDs.
ND - No data available

INHALATION OF PARTICULATE DUST - SURFACE SOIL - SWMU 15
CHILD RESIDENT
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-10

CRSSIN15	12-May-95

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical specific	chemical specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	*
CONCENTRATION AIR	CA	chemical specific	mg/m^3	
INHALATION RATE	IR	0.833	m^3/hour	USEPA, 1991
BODY WEIGHT	BW	15	kg	USEPA, 1991
EXPOSURE TIME	ET	24	hours/day	Assumption
EXPOSURE FREQUENCY	EF	350	days/year	USEPA, 1991
EXPOSURE DURATION	ED	6	years	USEPA, 1991
CONVERSION FACTOR	CF	0.001	mg/ug	Organics only
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	6	years	USEPA, 1991

USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.
*PEF has been derived in Appendix D-5 to the RFI General Information Report.

EQUATIONS

CANCER RISK = INTAKE (mg/kg-day) x INHALATION CANCER SLOPE FACTOR (mg/kg-day)^-1

HAZARD QUOTIENT = INTAKE (mg/kg-day) / INHALATION REFERENCE DOSE (mg/kg-day)

$$\text{INTAKE} = \frac{CA \times IR \times ET \times EF \times ED}{BW \times AT \times 365\ \text{days/yr}}$$

Where:

$$CA = C \times CF \times (1/PEF)$$

Note: For noncarcinogenic effects: AT = ED

INHALATION OF PARTICULATE DUST - SURFACE SOIL - SWMU 15
CHILD RESIDENT
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-10

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	AIR CONCENTRATION (mg/m³)	INTAKE (mg/kg-day)	INHALATION CSF (mg/kg-day)^-1	CANCER RISK
DDT, 4,4'-	O	14186	ug/kg	2.85E-07	3.1E-08	0.34	1.1E-08
Chlordane	O	8022	ug/kg	1.61E-07	1.8E-08	1.3	2.3E-08
Arsenic	I	4	mg/kg	8.05E-08	8.8E-09	50	4.4E-07
Beryllium	I	0.15	mg/kg	3.02E-09	3.3E-10	8.4	2.8E-09
SUMMARY CANCER RISK							5E-07

INHALATION OF PARTICULATE DUST - SURFACE SOIL - SWMU 15
CHILD RESIDENT
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-10

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	AIR CONCENTRATION (mg/m³)	INTAKE (mg/kg-day)	INHALATION RfD (mg/kg-day)	HAZARD QUOTIENT
DDE, 4,4'-	O	2800	ug/kg	5.63E-08	7.2E-08	ND	
DDT, 4,4'-	O	14186	ug/kg	2.85E-07	3.6E-07	ND	
Chlordane	O	8022	ug/kg	1.61E-07	2.1E-07	ND	
Arsenic	I	4	mg/kg	8.05E-08	1.0E-07	ND	
Beryllium	I	0.15	mg/kg	3.02E-09	3.9E-09	ND	
SUMMARY HAZARD INDEX							0E+00

ND = no data available.

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL - SWMU 15
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-11

ARSSI5	28-Aug-95

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
CONCENTRATION SOIL	CS	chemical specific	chemical specific	
INGESTION RATE	IR	100	mg/day	USEPA, 1991
FRACTION INGESTED	FI	100%	unitless	Assumption
ADHERENCE FACTOR	AF	1	mg/cm²-event	USEPA, 1992a
ABSORPTION FRACTION	ABS	chemical specific	unitless	USEPA, 1992b
SURFACE AREA EXPOSED	SA	5,750	cm²	USEPA, 1992a
DOSE ABSORBED PER EVENT	DAevent	chemical specific	mg/cm2-event	USEPA, 1992a
CONVERSION FACTOR	CF	1.00E-09	kg/ug	Organic conversion
CONVERSION FACTOR	CF	1.00E-06	kg/mg	Inorganic conversion
BODY WEIGHT	BW	70	kg	USEPA, 1991
EXPOSURE FREQUENCY	EF	350	days/year *	Assumption
EXPOSURE DURATION	ED	24	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	24	years	USEPA, 1991

* Units for exposure frequency are events/year in the calculation of the dermally absorbed dose.
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.
USEPA, 1992a. Dermal Exposure Assessment: Principles and Applications; EPA/600/8-91/011B; January 1992.
USEPA, 1992b. USEPA Region IV Guidance Memorandum; February 10, 1992.

EQUATIONS

CANCER RISK = INTAKE (mg/kg-day) x CANCER SLOPE FACTOR (mg/kg-day)-1

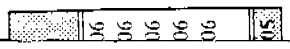
HAZARD QUOTIENT = INTAKE (mg/kg-day) / REFERENCE DOSE (mg/kg-day)

$$\text{INTAKE-INGESTION} = \frac{CS \times IR \times FI \times CF \times EF \times ED}{BW \times AT \times 365\ \text{days/yr}}$$

$$\text{INTAKE-DERMAL} = \frac{DAevent \times SA \times EF \times ED}{BW \times AT \times 365\ \text{days/yr}}$$

Where:
DAevent= CS x AF x ABS x CF

Note: For noncarcinogenic effects, AT= ED.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DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL - SWMU 15
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-11

ARSS15	28-Aug-95

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
CONCENTRATION SOIL	CS	chemical specific	chemical specific	
INGESTION RATE	IR	100	mg/day	USEPA, 1991
FRACTION INGESTED	FI	100%	unitless	Assumption
ADHERENCE FACTOR	AF	1	mg/cm²-event	USEPA, 1992a
ABSORPTION FRACTION	ABS	chemical specific	unitless	USEPA, 1992b
SURFACE AREA EXPOSED	SA	5,750	cm²	USEPA, 1992a
DOSE ABSORBED PER EVENT	DAevent	chemical specific	mg/cm2-event	USEPA, 1992a
CONVERSION FACTOR	CF	1.00E-09	kg/ug	Organic conversion
CONVERSION FACTOR	CF	1.00E-06	kg/mg	Inorganic conversion
BODY WEIGHT	BW	70	kg	USEPA, 1991
EXPOSURE FREQUENCY	EF	350	days/year *	Assumption
EXPOSURE DURATION	ED	24	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	24	years	USEPA, 1991

* Units for exposure frequency are events/year in the calculation of the dermally absorbed dose.
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.
USEPA, 1992a. Dermal Exposure Assessment: Principles and Applications; EPA-600/8-91/011B; January 1992.
USEPA, 1992b. USEPA Region IV Guidance Memorandum; February 10, 1992.

EQUATIONS

CANCER RISK = INTAKE (mg/kg-day) x CANCER SLOPE FACTOR (mg/kg-day)-1

HAZARD QUOTIENT = INTAKE (mg/kg-day) / REFERENCE DOSE (mg/kg-day)

$$\text{INTAKE-INGESTION} = \frac{CS \times IR \times FI \times CF \times EF \times ED}{BW \times AT \times 365\ \text{days/yr}}$$

$$\text{INTAKE-DERMAL} = \frac{DAevent \times SA \times EF \times ED}{BW \times AT \times 365\ \text{days/yr}}$$

Where:

DAevent= CS x AF x ABS x CF

Note: For noncarcinogenic effects, AT= ED.

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL - SWMU 15
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-1E

ARSS15	28-Aug-95

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	ORAL CSF (mg/kg-day)^-1	CANCER RISK INGESTION	DERMAL ABS [1]	INTAKE DERMAL (mg/kg-day)	DERMAL CSF [2] (mg/kg-day)^-1	CANCER RISK DERMAL	TOTAL CANCER RISK
DDE, 4,4'-	O	2800	ug/kg	1.3E-06	0.34	4.5E-07	0.01	7.6E-07	1.7	1.3E-06	1.7E-06
DDT, 4,4'-	O	14186	ug/kg	6.7E-06	0.34	2.3E-06	0.01	3.8E-06	1.7	6.5E-06	8.8E-06
Chlordane	O	8022	ug/kg	3.8E-06	1.3	4.9E-06	0.01	2.2E-06	1.63	3.5E-06	8.4E-06
Arsenic	I	4	mg/kg	1.9E-06	1.5	2.8E-06	0.001	1.1E-07	1.53	1.7E-07	3.0E-06
Beryllium	I	0.15	mg/kg	7.0E-08	4.3	3.0E-07	0.001	4.1E-09	430	1.7E-06	2.0E-06
					SUMMARY CANCER RISK	1E-05				1E-05	2E-05

[1] USEPA Region IV guidance specifies absorption factors of 1% for organics and 0.1% for inorganics (February 10, 1992).
[2] Calculated from Oral CSFs

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL - SWMU 15
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-11

ARSS15	28-Aug-95

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	ORAL RfD (mg/kg-day)	HAZARD QUOTIENT INGESTION	DERMAL ABS [1]	INTAKE DERMAL (mg/kg-day)	DERMAL RfD [2] (mg/kg-day)	HAZARD QUOTIENT DERMAL	TOTAL HAZARD QUOTIENT
DDE, 4,4'-	O	2800	ug/kg	3.8E-06	ND		0.01	2.2E-06	ND		
DDT, 4,4'-	O	14186	ug/kg	1.9E-05	0.0005	3.9E-02	0.01	1.1E-05	0.0001	1.1E-01	1.5E-01
Chlordane	O	8022	ug/kg	1.1E-05	0.00006	1.8E-01	0.01	6.3E-06	0.000048	1.3E-01	3.1E-01
Arsenic	I	4	mg/kg	5.5E-06	0.0003	1.8E-02	0.001	3.2E-07	0.000294	1.1E-03	1.9E-02
Beryllium	I	0.15	mg/kg	2.1E-07	0.005	4.1E-05	0.001	1.2E-08	0.00005	2.4E-04	2.8E-04
SUMMARY HAZARD INDEX						2E-01				2E-01	5E-01

[1] USEPA Region IV guidance specifies absorption factors of 1% for organics and 0.1% for inorganics (February 10, 1992).
[2] Calculated from Oral RfDs.
ND = No data available

INHALATION OF PARTICULATE DUST - SURFACE SOIL - SWMU 15
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-12

ARSSIN15	12-May-95

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical specific	chemical specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	*
CONCENTRATION AIR	CA	chemical specific	mg/m^3	
INHALATION RATE	IR	0.833	$m^3/hour$	USEPA, 1991
BODY WEIGHT	BW	70	kg	USEPA, 1991
EXPOSURE TIME	ET	24	hours/day	Assumption
EXPOSURE FREQUENCY	EF	350	days/year	USEPA, 1991
EXPOSURE DURATION	ED	24	years	USEPA, 1991
CONVERSION FACTOR	CF	0.001	mg/ug	Organics only
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	24	years	USEPA, 1991

USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.
*PEF has been derived in Appendix D-5 to the RFI General Information Report.

EQUATIONS

CANCER RISK = INTAKE (mg/kg-day) x INHALATION CANCER SLOPE FACTOR (mg/kg-day)$^{-1}$

HAZARD QUOTIENT = INTAKE (mg/kg-day) / INHALATION REFERENCE DOSE (mg/kg-day)

$$\text{INTAKE} = \frac{\text{CA x IR x ET x EF x ED}}{\text{BW x AT x 365 days/yr}}$$

Where:

CA = C x CF x (1/PEF)

Note: For noncarcinogenic effects: AT = ED

INHALATION OF PARTICULATE DUST - SURFACE SOIL - SWMU 15
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-12

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	AIR CONCENTRATION (mg/m³)	INTAKE (mg/kg-day)	INHALATION CSF (mg/kg-day)⁻¹	CANCER RISK
DDT, 4,4'-	O	14186	ug/kg	2.85E-07	2.7E-08	0.34	9.1E-09
Chlordane	O	8022	ug/kg	1.61E-07	1.5E-08	1.3	2.0E-08
Arsenic	I	4	mg/kg	8.05E-08	7.6E-09	50	3.8E-07
Beryllium	I	0.15	mg/kg	3.02E-09	2.8E-10	8.4	2.4E-09
SUMMARY CANCER RISK							4E-07

INHALATION OF PARTICULATE DUST - SURFACE SOIL - SWMU 15
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-12

ARSSIN15	12-May-95

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	AIR CONCENTRATION (mg/m³)	INTAKE (mg/kg-day)	INHALATION RfD (mg/kg-day)	HAZARD QUOTIENT
DDE, 4,4'-	O	2800	ug/kg	5.63E-08	1.5E-08	ND	
DDT, 4,4'-	O	14186	ug/kg	2.85E-07	7.8E-08	ND	
Chlordane	O	8022	ug/kg	1.61E-07	4.4E-08	ND	
Arsenic	I	4	mg/kg	8.05E-08	2.2E-08	ND	
Beryllium	I	0.15	mg/kg	3.02E-09	8.3E-10	ND	
SUMMARY HAZARD INDEX							0E+00

ND = No data available

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL - SWMU 15
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-13

EXSS15	28-Aug-95

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
CONCENTRATION SOIL	CS	chemical specific	chemical specific	
INGESTION RATE	IR	480	mg/day	USEPA, 1989
FRACTION INGESTED	FI	100%	unitless	Assumption
ADHERENCE FACTOR	AF	1	mg/cm²-event	USEPA, 1992a
ABSORPTION FRACTION	ABS	chemical specific	unitless	USEPA, 1992b
SURFACE AREA EXPOSED	SA	5,750	cm²	USEPA, 1992a
DOSE ABSORBED PER EVENT	DAevent	chemical specific	mg/cm2-event	USEPA, 1992a
CONVERSION FACTOR	CF	1.00E-09	kg/ug	Organic conversion
CONVERSION FACTOR	CF	1.00E-06	kg/mg	Inorganic conversion
BODY WEIGHT	BW	70	kg	USEPA, 1991
EXPOSURE FREQUENCY	EF	30	days/year *	Assumption
EXPOSURE DURATION	ED	1	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	1	years	USEPA, 1991

* Units for exposure frequency are events year in the calculation of the dermally absorbed dose.
USEPA, 1989. Exposure Factors Handbook; EPA/600/8-89/0-43; May 1989.
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.
USEPA, 1992a. Dermal Exposure Assessment: Principles and Applications; EPA/600/8-91/011B; January 1992.
USEPA, 1992b. USEPA Region IV Guidance Memorandum; February 10, 1992.

EQUATIONS

CANCER RISK = INTAKE (mg/kg-day) x CANCER SLOPE FACTOR (mg/kg-day)-1

HAZARD QUOTIENT = INTAKE (mg/kg-day) / REFERENCE DOSE (mg/kg-day)

$$\text{INTAKE-INGESTION} = \frac{CS \times IR \times FI \times CF \times EF \times ED}{BW \times AT \times 365\ \text{days/yr}}$$

$$\text{INTAKE-DERMAL} = \frac{DAevent \times SA \times EF \times ED}{BW \times AT \times 365\ \text{days/yr}}$$

Where:

DAevent= CS x AF x ABS x CF

Note: For noncarcinogenic effects, AT = ED

EXSS15	28-Aug-95

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL - SWMU 15
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-13

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	ORAL CSF (mg/kg-day)^-1	CANCER RISK INGESTION	DERMAL ABS [1]	INTAKE DERMAL (mg/kg-day)	DERMAL CSF [2] (mg/kg-day)^-1	CANCER RISK DERMAL	TOTAL CANCER RISK
DDE, 4,4'-	O	2800	ug/kg	2.3E-08	0.34	7.7E-09	0.01	2.7E-09	1.7	4.6E-09	1.2E-08
DDT, 4,4'-	O	14186	ug/kg	1.1E-07	0.34	3.9E-08	0.01	1.4E-08	1.7	2.3E-08	6.2E-08
Chlordane	O	8022	ug/kg	6.5E-08	1.3	8.4E-08	0.01	7.7E-09	1.63	1.3E-08	9.7E-08
Arsenic	I	4	mg/kg	3.2E-08	1.5	4.8E-08	0.001	3.9E-10	1.53	5.9E-10	4.9E-08
Beryllium	I	0.15	mg/kg	1.2E-09	4.3	5.2E-09	0.001	1.4E-11	430	6.2E-09	1.1E-08
SUMMARY CANCER RISK						2E-07				5E-08	2E-07

[1] USEPA Region IV guidance specifies absorption factors of 1% for organics and 0.1% for inorganics (February 10, 1992).
[2] Calculated from Oral CSFs.

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL - SWMU 15
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-13

EXSS15	28-Aug-95

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	ORAL RfD (mg/kg-day)	HAZARD QUOTIENT INGESTION	DERMAL ABS [1]	INTAKE DERMAL (mg/kg-day)	DERMAL RfD [2] (mg/kg-day)	HAZARD QUOTIENT DERMAL	TOTAL HAZARD QUOTIENT
DDE, 4,4'-	O	2800	ug/kg	1.6E-06	ND		0.01	1.9E-07	ND		
DDT, 4,4'-	O	14186	ug/kg	8.0E-06	0.0005	1.6E-02	0.01	9.6E-07	0.0001	9.6E-03	2.6E-02
Chlordane	O	8022	ug/kg	4.5E-06	0.00006	7.5E-02	0.01	5.4E-07	0.000048	1.1E-02	8.7E-02
Arsenic	I	4	mg/kg	2.3E-06	0.0003	7.5E-03	0.001	2.7E-08	0.000294	9.2E-05	7.6E-03
Beryllium	I	0.15	mg/kg	8.5E-08	0.005	1.7E-05	0.001	1.0E-09	0.00005	2.0E-05	3.7E-05
				SUMMARY HAZARD INDEX		1E-01				2E-02	1E-01

[1] USEPA Region IV guidance specifies absorption factors of 1% for organics and 0.1% for inorganics (February 10, 1992).
[2] Calculated from Oral RfDs.
ND = No data available

EXSSIN15	12-May-95

INHALATION OF PARTICULATE DUST - SURFACE SOIL - SWMU 15
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-14

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical specific	chemical specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	*
CONCENTRATION AIR	CA	chemical specific	mg/m^3	
INHALATION RATE	IR	2.5	$m^3/hour$	USEPA, 1991
BODY WEIGHT	BW	70	kg	USEPA, 1991
EXPOSURE TIME	ET	8	hours/day	Assumption
EXPOSURE FREQUENCY	EF	30	days/year	Assumption
EXPOSURE DURATION	ED	1	years	Assumption
CONVERSION FACTOR	CF	0.001	mg/ug	Organics only
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	1	years	USEPA, 1991

USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance:
"Standard Default Exposure Factors"; OSWER Directive 9285.6-03.
*PEF has been derived in Appendix D-5 to the RFI General Information Report.

EQUATIONS

CANCER RISK = INTAKE (mg/kg-day) x INHALATION CANCER SLOPE FACTOR (mg/kg-day) -1

'HAZARD QUOTIENT = INTAKE (mg/kg-day) / INHALATION REFERENCE DOSE (mg/kg-day)

$$\text{INTAKE} = \frac{\text{CA x IR x ET x EF x ED}}{\text{BW x AT x 365 days/yr}}$$

Where:

CA = C x CF x (1/PEF)

INHALATION OF PARTICULATE DUST - SURFACE SOIL - SWMU 15
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-14

EXSSIN15	12-May-95

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	AIR CONCENTRATION (mg/m³)	INTAKE (mg/kg-day)	INHALATION CSF (mg/kg-day)⁻¹	CANCER RISK
DDT, 4,4'-	O	14186	ug/kg	2.85E-07	9.6E-11	0.34	**3.3E-11**
Chlordane	O	8022	ug/kg	1.61E-07	5.4E-11	1.3	**7.0E-11**
Arsenic	I	4	mg/kg	8.05E-08	2.7E-11	50	**1.4E-09**
Beryllium	I	0.15	mg/kg	3.02E-09	1.0E-12	8.4	**8.5E-12**
SUMMARY CANCER RISK							1E-09

INHALATION OF PARTICULATE DUST - SURFACE SOIL - SWMU 15
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-14

EXSSIN15	12-May-95

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	AIR CONCENTRATION (mg/m³)	INTAKE (mg/kg-day)	INHALATION RfD (mg/kg-day)	HAZARD QUOTIENT
DDE, 4,4'-	O	2800	ug/kg	5.63E-08	1.3E-09	ND	
DDT, 4,4'-	O	14186	ug/kg	2.85E-07	6.7E-09	ND	
Chlordane	O	8022	ug/kg	1.61E-07	3.8E-09	ND	
Arsenic	I	4	mg/kg	8.05E-08	1.9E-09	ND	
Beryllium	I	0.15	mg/kg	3.02E-09	7.1E-11	ND	
SUMMARY HAZARD INDEX							0E+00

ND = no data available.

EXSB15	28-Aug-95

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SUBSURFACE SOIL - SWMU 15
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-15

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
CONCENTRATION SOIL	CS	chemical specific	chemical specific	
INGESTION RATE	IR	480	mg/day	USEPA, 1991
FRACTION INGESTED	FI	100%	unitless	Assumption
ADHERENCE FACTOR	AF	1	mg/cm²-event	USEPA, 1992a
ABSORPTION FRACTION	ABS	chemical specific	unitless	USEPA, 1992b
SURFACE AREA EXPOSED	SA	5,750	cm²	USEPA, 1992a
DOSE ABSORBED PER EVENT	DAevent	chemical specific	mg/cm2-event	USEPA, 1992a
CONVERSION FACTOR	CF	1.00E-09	kg/ug	Organic conversion
CONVERSION FACTOR	CF	1.00E-06	kg/mg	Inorganic conversion
BODY WEIGHT	BW	70	kg	USEPA, 1991
EXPOSURE FREQUENCY	EF	30	days/year *	Assumption
EXPOSURE DURATION	ED	1	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	1	years	USEPA, 1991

* Units for exposure frequency are events/year in the calculation of the dermally absorbed dose.
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.
USEPA, 1992a. Dermal Exposure Assessment: Principles and Applications; EPA/600/8-91/011B; January 1992.
USEPA, 1992b. USEPA Region IV Guidance Memorandum; February 10, 1992.

EQUATIONS

CANCER RISK = INTAKE (mg/kg-day) x CANCER SLOPE FACTOR (mg/kg-day)-1

HAZARD QUOTIENT = INTAKE (mg/kg-day) / REFERENCE DOSE (mg/kg-day)

$$\text{INTAKE-INGESTION} = \frac{CS \times IR \times FI \times CF \times EF \times ED}{BW \times AT \times 365\ \text{days/yr}}$$

$$\text{INTAKE-DERMAL} = \frac{DAevent \times SA \times EF \times ED}{BW \times AT \times 365\ \text{days/year}}$$

Where:
DAevent = CS x AF x ABS x CF

Note: For noncarcinogenic effects, AT = ED

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SUBSURFACE SOIL - SWMU 15
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-15

EXSB15	28-Aug-95

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	ORAL CSF (mg/kg-day)^-1	CANCER RISK INGESTION	DERMAL ABS [1]	INTAKE DERMAL (mg/kg-day)	DERMAL CSF [2] (mg/kg-day)^-1	CANCER RISK DERMAL	TOTAL CANCER RISK
Arsenic	I	2.9	mg/kg	2.3E-08	1.5	3.5E-08	0.001	2.8E-10	1.53	4.3E-10	3.5E-08
SUMMARY CANCER RISK						4E-08				4E-10	4E-08

[1] USEPA Region IV guidance specifies absorption factors of 1% for organics and 0.1% for inorganics (February 10, 1992).
[2] Calculated from Oral CSFs.

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SUBSURFACE SOIL - SWMU 15
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-15

EXSB15	28-Aug-95

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	ORAL RfD (mg/kg-day)	HAZARD QUOTIENT INGESTION	DERMAL ABS [1]	INTAKE DERMAL (mg/kg-day)	DERMAL RfD [2] (mg/kg-day)	HAZARD QUOTIENT DERMAL	TOTAL HAZARD QUOTIENT
Arsenic	I	2.9	mg/kg	1.6E-06	0.0003	5.4E-03	0.001	2.0E-08	0.000294	6.7E-05	5.5E-03
SUMMARY HAZARD INDEX						5E-03				7E-05	6E-03

[1] USEPA Region IV guidance specifies absorption factors of 1% for organics and 0.1% for inorganics (February 10, 1992).
[2] Calculated from Oral RfDs.

EXSBIN15	12-May-95

INHALATION OF PARTICULATE DUST - SUBSURFACE SOIL - SWMU 15
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-16

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical specific	chemical specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	*
CONCENTRATION AIR	CA	chemical specific	mg/m^3	
INHALATION RATE	IR	2.5	$m^3/hour$	USEPA, 1991
BODY WEIGHT	BW	70	kg	USEPA, 1991
EXPOSURE TIME	ET	8	hours/day	Assumption
EXPOSURE FREQUENCY	EF	30	days/year	Assumption
EXPOSURE DURATION	ED	1	years	Assumption
CONVERSION FACTOR	CF	0.001	mg/ug	Organics only
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	1	years	USEPA, 1991

USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.
*PEF has been derived in Appendix D-5 to the RFI General Information Report.

EQUATIONS

CANCER RISK = INTAKE (mg/kg-day) x INHALATION CANCER SLOPE FACTOR (mg/kg-day)$^{-1}$

'HAZARD QUOTIENT = INTAKE (mg/kg-day) / INHALATION REFERENCE DOSE (mg/kg-day)

$$\text{INTAKE} = \frac{\text{CA x IR x ET x EF x ED}}{\text{BW x AT x 365 days/yr}}$$

Where:

CA = C x CF x (1/PEF)

Note: For noncarcinogenic effects, AT = ED

INHALATION OF PARTICULATE DUST - SUBSURFACE SOIL - SWMU 15
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-16

EXSBIN15	12-May-95

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION (1)	UNITS	AIR CONCENTRATION (mg/m³)	INTAKE (mg/kg-day)	INHALATION CSF (mg/kg-day)⁻¹	CANCER RISK
Arsenic	I	2.9	mg/kg	5.84E-08	2.0E-11	50	9.8E-10
SUMMARY CANCER RISK							1E-09

EXSBIN15	12-May-95

INHALATION OF PARTICULATE DUST - SUBSURFACE SOIL - SWMU 15
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-16

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	AIR CONCENTRATION (mg/m³)	INTAKE (mg/kg-day)	INHALATION RfD (mg/kg-day)	HAZARD QUOTIENT
Arsenic	I	2.9	mg/kg	5.84E-08	1.4E-09	ND	
SUMMARY HAZARD INDEX							0E+00

ND = no data available.

GWING15	28-Aug-95

INGESTION OF GROUNDWATER AS DRINKING WATER (UNFILTERED SAMPLES) - SWMU 15
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-17

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
CONCENTRATION WATER	CW	chemical specific	ug/liter	
INGESTION RATE	IR	2	liters/day	USEPA, 1991
BODY WEIGHT	BW	70	kg	USEPA, 1991
CONVERSION FACTOR	CF	0.001	mg/ug	
EXPOSURE FREQUENCY	EF	350	days/year	USEPA, 1991
EXPOSURE DURATION	ED	30	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	30	years	USEPA, 1991

USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.

CANCER RISK = INTAKE (mg/kg-day) x CANCER SLOPE FACTOR (mg/kg-day)-1

HAZARD QUOTIENT = INTAKE (mg/kg-day) / REFERENCE DOSE (mg/kg-day)

$$\text{INTAKE} = \frac{\text{CW x IR x EF x ED x CF}}{\text{BW x AT x 365 days/year}}$$

Note: For noncarcinogenic effects, AT = ED

INGESTION OF GROUNDWATER AS DRINKING WATER (UNFILTERED SAMPLES) - SWMU 15
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-17

CARCINOGENIC EFFECTS

COMPOUND	WATER CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	CANCER SLOPE FACTOR (mg/kg-day)^-1	CANCER RISK INGESTION
bis(2-ethylhexyl)phthalate	9	ug/liter	1.1E-04	0.014	1.5E-06
alpha-BHC	0.23	ug/liter	2.7E-06	6.3	1.7E-05
beta-BHC	3.6	ug/liter	4.2E-05	1.8	7.6E-05
Arsenic	62	ug/liter	7.3E-04	1.5	1.1E-03
			TOTAL CANCER RISK		1E-03

INGESTION OF GROUNDWATER AS DRINKING WATER (UNFILTERED SAMPLES) - SWMU 15
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
TABLE E-4-17

NONCARCINOGENIC EFFECTS

COMPOUND	WATER CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	REFERENCE DOSE (mg/kg-day)	HAZARD QUOTIENT INGESTION
bis(2-ethylhexyl)phthalate	9	ug/liter	2.5E-04	0.02	1.2E-02
alpha-BHC	0.23	ug/liter	6.3E-06	ND	
beta-BHC	3.6	ug/liter	9.9E-05	ND	
delta-BHC	0.03	ug/liter	8.2E-07	ND	
Arsenic	62	ug/liter	1.7E-03	0.0003	5.7E+00
Manganese	241	ug/liter	6.6E-03	0.005	1.3E+00
			TOTAL HAZARD INDEX		7E+00

ND = no data available.

APPENDIX E-5

HUMAN HEALTH RISK ASSESSMENT SPREADSHEETS SWMU 16

TABLE E-5-1

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SUBSURFACE SOIL - SWMU 16
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, Group II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
CONCENTRATION SOIL	CS	chemical specific	chemical specific	
INGESTION RATE	IR	480	mg/day	USEPA, 1991
FRACTION INGESTED	FI	100%	unitless	Assumption
ADHERENCE FACTOR	AF	1	mg/cm²-event	USEPA, 1992a
ABSORPTION FRACTION	ABS	chemical specific	unitless	USEPA, 1992b
SURFACE AREA EXPOSED	SA	5,750	cm²	USEPA, 1992a
DOSE ABSORBED PER EVENT	DA_{event}	chemical specific	mg/cm²-event	USEPA, 1992a
CONVERSION FACTOR	CF	1.00E-09	kg/ug	Organic conversion
CONVERSION FACTOR	CF	1.00E-06	kg/mg	Inorganic conversion
SURFACE AREA	BW	70	kg	USEPA, 1991
EXPOSURE FREQUENCY	EF	30	days/year *	Assumption
EXPOSURE DURATION	ED	1	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	1	years	USEPA, 1991

* Units for exposure frequency are events/year in the calculation of the dermally absorbed dose.

USEPA, 1989. Exposure Factors Handbook; EPA/600/8-89/0-43; May 1989
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.
USEPA, 1992a. Dermal Exposure Assessment: Principles and Applications; EPA/600/8-91/011B; January 1992.
USEPA, 1992b. USEPA Region IV Guidance Memo February 10, 1992.

EQUATIONS

CANCER RISK = INTAKE (mg/kg-day) x CANCER SLOPE FACTOR $(mg/kg\text{-}day)^{-1}$

HAZARD QUOTIENT = INTAKE (mg/kg-day) / REFERENCE DOSE (mg/kg-day)

$$\text{INTAKE-INGESTION} = \frac{CS \times IR \times FI \times CF \times EF \times ED}{BW \times AT \times 365\ days/yr}$$

$$\text{INTAKE-DERMAL} = \frac{DA_{event} \times EF \times ED \times SA}{BW \times AT \times 365\ days/yr}$$

Where:

$$DA_{event} = CS \times AF \times ABS \times CF$$

TABLE E-5-1

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SUBSURFACE SOIL - SWMU 16
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, Group II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	ORAL CSF [1] (mg/kg-day)$^{-1}$	CANCER RISK INGESTION	DERMAL ABS [2]	INTAKE DERMAL (mg/kg-day)	DERMAL CSF [3] (mg/kg-day)$^{-1}$	CANCER RISK DERMAL	TOTAL CANCER RISK
Arsenic	I	2.9	mg/kg	2.3E-08	1.5	3.5E-08	0.001	2.8E-10	1.53	4.3E-10	3.5E-08
Beryllium	I	0.28	mg/kg	2.3E-09	4.3	9.7E-09	0.001	2.7E-11	430	1.2E-08	2.1E-08
SUMMARY CANCER RISK						4E-08				1E-08	6E-08

[1] A relative potency factor (RPF) has been applied to oral cancer slope factor of carcinogenic PAH compounds in accordance with USEPA "Provisional Guidance for Quantitive Risk Assessment of Polycyclic Aromatic Hydrocarbons" (July, 1993).
[2] USEPA Region IV guidance specifies absorption factors of 1% for organics and 0.1% for inorganics (February 10, 1992).
[3] Calculated from Oral CSFs.
ND = No data available

TABLE E-5-1

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SUBSURFACE SOIL - SWMU 16
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, Group II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	ORAL RfD (mg/kg-day)	HAZARD QUOTIENT INGESTION	DERMAL ABS [1]	INTAKE DERMAL (mg/kg-day)	DERMAL RfD [2] (mg/kg-day)	HAZARD QUOTIENT DERMAL	TOTAL HAZARD QUOTIENT
Arsenic	I	2.9	mg/kg	1.6E-06	0.0003	5.4E-03	0.001	2.0E-08	0.000294	6.7E-05	5.5E-03
Beryllium	I	0.28	mg/kg	1.6E-07	0.00005	3.2E-03	0.001	1.9E-09	0.00005	3.8E-05	3.2E-03
SUMMARY HAZARD INDEX						9E-03				1E-04	9E-03

[1] USEPA Region IV guidance specifies absorption factors of 1% for organics and 0.1% for inorganics (February 10, 1992).
[2] Calculated from Oral RfDs.
ND = No data available

TABLE E-5-2

INHALATION OF PARTICULATE DUST - SUBSURFACE SOIL - SWMU 16
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, Group II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical specific	chemical specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	Appendix
CONCENTRATION AIR	CA	chemical specific	mg/m^3	
INHALATION RATE	IR	2.5	$m^3/hour$	USEPA, 1991
BODY WEIGHT	BW	70	kg	USEPA, 1991
EXPOSURE TIME	ET	8	hours/day	Assumption
EXPOSURE FREQUENCY	EF	30	days/year	Assumption
EXPOSURE DURATION	ED	1	years	Assumption
CONVERSION FACTOR	CF	0.001	mg/ug	Organics only
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	1	years	USEPA, 1991

USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.
PEF has been derived in the Appendix to this report, Derivation of Particulate Emission Factor

EQUATIONS

CANCER RISK = INTAKE (mg/kg-day) x INHALATION CANCER SLOPE FACTOR $(mg/kg\text{-}day)^{-1}$

HAZARD QUOTIENT = INTAKE (mg/kg-day) / INHALATION REFERENCE DOSE (mg/kg-day)

$$\text{INTAKE} = \frac{CA \times IR \times ET \times EF \times ED}{BW \times AT \times 365\ days/yr}$$

Where:

CA = C x CF x (1/PEF)

TABLE E-5-2

INHALATION OF PARTICULATE DUST - SUBSURFACE SOIL - SWMU 16
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, Group II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION [1]	UNITS	AIR CONCENTRATION (mg/m^3)	INTAKE (mg/kg-day)	INHALATION CSF $(mg/kg\text{-}day)^{-1}$	CANCER RISK
Arsenic	I	2.90	mg/kg	5.84E-08	2.0E-11	50	**9.8E-10**
Beryllium	I	0.28	mg/kg	5.63E-09	1.9E-12	8.4	**1.6E-11**
SUMMARY CANCER RISK							**1E-09**

ND = No data available

TABLE E-5-2

INHALATION OF PARTICULATE DUST - SUBSURFACE SOIL - SWMU 16
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, Group II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SOIL CONCENTRATION	UNITS	AIR CONCENTRATION (mg/m³)	INTAKE (mg/kg-day)	INHALATION RfD (mg/kg-day)	HAZARD QUOTIENT
Arsenic	I	2.90	mg/kg	5.84E-08	1.4E-09	ND	
Beryllium	I	0.28	mg/kg	5.63E-09	1.3E-10	ND	
SUMMARY HAZARD INDEX							0E+00

ND = No data available

TABLE E-5-3

INGESTION OF GROUNDWATER AS DRINKING WATER FROM SURFICIAL AQUIFER(UNFILTERED SAMPLES) - SWMU 16
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, Group II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
CONCENTRATION WATER	CW	chemical specific	ug/liter	
INGESTION RATE	IR	2	liters/day	USEPA, 1991
BODY WEIGHT	BW	70	kg	USEPA, 1991
CONVERSION FACTOR	CF	0.001	mg/ug	
EXPOSURE FREQUENCY	EF	350	days/year	USEPA, 1991
EXPOSURE DURATION	ED	30	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	30	years	USEPA, 1991

USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance:
"Standard Default Exposure Factors"; OSWER Directive 9285.6-03

CANCER RISK = INTAKE (mg/kg-day) x CANCER SLOPE FACTOR $(mg/kg\text{-}day)^{-1}$

HAZARD QUOTIENT = INTAKE (mg/kg-day) / REFERENCE DOSE (mg/kg-day)

$$\text{INTAKE} = \frac{CW \times IR \times EF \times ED \times CF}{BW \times AT \times 365\ days/year}$$

TABLE E-5-3

INGESTION OF GROUNDWATER AS DRINKING WATER FROM SURFICIAL AQUIFER(UNFILTERED SAMPLES) - SWMU 16
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, Group II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA

CARCINOGENIC EFFECTS

COMPOUND	WATER CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	CANCER SLOPE FACTOR [1] $(mg/kg\text{-}day)^{-1}$	CANCER RISK INGESTION
bis(2-ethylhexyl) phthalate	5	ug/liter	5.9E-05	0.014	8.2E-07
TOTAL CANCER RISK					8E-07

TABLE E-5-3

INGESTION OF GROUNDWATER AS DRINKING WATER FROM SURFICIAL AQUIFER(UNFILTERED SAMPLES) - SWMU 16
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, Group II SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA

NONCARCINOGENIC EFFECTS

COMPOUND	WATER CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	REFERENCE DOSE (mg/kg-day)	HAZARD QUOTIENT INGESTION
bis(2-ethylhexyl) phthalate	5	ug/liter	1.4E-04	0.02	6.8E-03
			TOTAL HAZARD INDEX		7E-03

ND = No data available

APPENDIX F

ECOLOGICAL RISK ASSESSMENT SUPPORT DOCUMENTATION INCLUDING

APPENDIX F-1

AQUATIC INFORMATION RETRIEVAL (AQUIRE) DATABASE INFORMATION AND SEARCH RESULTS

APPENDIX F-1
AQUIRE Information and Database Search Results

The Aquatic Information Retrieval database (AQUIRE) was developed by a research group associated with the Environmental Research Laboratory of the USEPA in Duluth, Minnesota. The information in AQUIRE was extracted from independently compiled data files and from literature published worldwide since 1970 on the toxicity of chemical substances to aquatic organisms. AQUIRE includes data on acute and chronic toxicity, bioaccumulation, and sublethal effects on both freshwater and saltwater species. Data on aquatic mammals, birds, and bacteria are not included.

AQUIRE search results for the RCRA Facility Investigation at Naval Air Station Cecil Field include data for fish, invertebrates, mollusks, amphibians, and plant species. Freshwater data was searched for surface water and groundwater ecological contaminants of potential concern . Each record in Appendix F-1 contains:

- Chemical substance;
- Test organism details (including scientific name, common name, and age or life stage);
- Experimental details (including test condition, method, duration, pH level, and endpoint)
- Results for one test or experiment as reported within the source document; and
- AQUIRE reference number and year of study publication.

AQUIRE was used in the ecotoxicity assessment to supplement aquatic toxicity benchmarks provided by the State of Florida Surface Water Quality Standard (FAC 62-302) and the Federal Ambient Water Quality Standard. Both sublethal and lethal data were searched. Sublethal and lethal AQUIRE data include the concentrations associated with an adverse effect on reproduction, growth, or survival.

All effect concentration units were standardized to $\mu g/l$ (micrograms per liter). Each record contains a study reliability value established by the EPA Environmental research Laboratory in Duluth. All data from studies which did not meet the criteria for reliability were excluded.

Appendix F-1
AQUIRE Information and Database Search Results

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc. (ug/l)	Aquire Ref. #	Yr
Acetone	Crassostrea virginica; American or virginia oyster	EGGS, 2 CELL STAGE	SW; LAB	ST - LAB	48 H	(NR)	DVP	10000	285617	79
Acetone	Alburnus alburnus; Bleak	8 CM	SW; LAB	ST - LAB	96 H	7.8	LC50	11000000	203562	79
Acetone	Nitocra spinipes; Harpacticoid copepod	0.6-0.8 MM, ADULTS	SW; LAB	ST - LAB	96 H	7.8	LC50	16700000	203563	79
Acetone	Artemia salina; Brine shrimp	NAUPLII	SW; LAB	ST - LAB	24 H	(NR)	LC50	2100000	201334	74
Acetone	Mercenaria mercenaria; Northern quahog or hard clam	2 D LARVAE	SW; LAB	RN - LAB	10 D	(NR)	MOR	250000	285619	79

Appendix F-1
AQUIRE Information and Database Search Results

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc. (ug/l)	Aquire Ref. #	Yr
1,2-Dichlorobenzene	Cyprinodon variegatus; Sheepshead minnow	NR	SW; LAB	ST - LAB	96 H	(NR)	LC50	9.7	216334	81
1,2-Dichlorobenzene	Menidia beryllina; Inland silverside	40-100 MM	SW; LAB	ST - LAB	96 H	7.6 to 7.9	LC50	7300	210863	77
1,2-Dichlorobenzene	Palaemonetes pugio; Daggerblade grass shrimp	NR	SW; LAB	ST - LAB	96 H	8.3 to 8.7	LC50	9400	210875	79
1,2-Dichlorobenzene	Palaemonetes pugio; Daggerblade grass shrimp	NR	SW; LAB	ST - LAB	48 H	8.3 to 8.7	LC50	10300	210875	79
1,2-Dichlorobenzene	Palaemonetes pugio; Daggerblade grass shrimp	NR	SW; LAB	ST - LAB	24 H	8.3 to 8.7	LC50	14300	210875	79
1,2-Dichlorobenzene	Palaemonetes pugio; Daggerblade grass shrimp	NR	SW; LAB	ST - LAB	96 H	8.3 to 8.7	LC50	10000	212965	81

Appendix F-1
AQUIRE Information and Database Search Results

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc. (µg/l)	Aquire Ref.#	Yr
Acenaphthene	Cyprinodon variegatus; Sheepshead minnow	NR	SW; LAB	ST - LAB	96 H	(NR)	LC50	2,200	278639	81

Appendix F-1
AQUIRE Information and Database Search Results

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc. (ug/l)	Aquire Ref. #	Yr
Benzoic acid	Mytilus californianus; Mussel	NR	SW; LAB	ST - LAB	NR	(NR)	FLT	4070000000	216562	80

Appendix F-1
AQUIRE Information and Database Search Results

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc. (ug/l)	Aquire Ref. #	Yr
Dibenzofuran	Cyprinodon variegatus; Sheepshead minnow	NR	SW; LAB	ST - LAB	96 H	(NR)	LC50	1800	262629	81

Appendix F-1
AQUIRE Information and Database Search Results

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc. (ug/l)	Aquire Ref. #	Yr
Diethyl phthalate	Gymnodinium breve; Dinoflagellate	1000-5000 CELLS/ML	SW; LAB	ST - LAB	96 H	(NR)	GRO	6100	258277	78
Diethyl phthalate	Gymnodinium breve; Dinoflagellate	1000-5000 CELLS/ML	SW; LAB	ST - LAB	96 H	(NR)	GRO	3000	258278	78
Diethyl phthalate	Cyprinodon variegatus; Sheepshead minnow	NR	SW; LAB	ST - LAB	96 H	(NR)	LC50	30000	265712	81
Diethyl phthalate	Gymnodinium breve; Dinoflagellate	1000-5000 CELLS/ML	SW; LAB	ST - LAB	96 H	(NR)	LC50	33000	258276	78

Appendix F-1
AQUIRE Information and Database Search Results

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc. (ug/l)	Aquire Ref. #	Yr
Dimethylphthalate	Gymnodinium breve; Dinoflagellate	1000-5000 CELLS/ML	SW; LAB	ST - LAB	96 H	(NR)	EC50GR	96000	258282	78
Dimethylphthalate	Gymnodinium breve; Dinoflagellate	1000-5000 CELLS/ML	SW; LAB	ST - LAB	96 H	(NR)	EC50GR	54000	258283	78
Dimethylphthalate	Alburnus alburnus; Bleak	8 CM	SW; LAB	ST - LAB	96 H	7.8	LC50	100000 to 115000	203807	79
Dimethylphthalate	Cyprinodon variegatus; Sheepshead minnow	NR	SW; LAB	ST - LAB	96 H	(NR)	LC50	58000	262621	81
Dimethylphthalate	Nitocra spinipes; Harpacticoid copepod	0.6-0.8MM, ADULTS	SW; LAB	ST - LAB	96 H	7.8	LC50	62000	203808	79
Dimethylphthalate	Gymnodinium breve; Dinoflagellate	1000-5000 CELLS/ML	SW; LAB	ST - LAB	96 H	(NR)	LC50	125000	258280	78
Dimethylphthalate	Gymnodinium breve; Dinoflagellate	1000-5000 CELLS/ML	SW; LAB	ST - LAB	96 H	(NR)	LC50	185000	258281	78

Appendix F-1
AQUIRE Information and Database Search Results

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc. (ug/l)	Aquire Ref. #	Yr
Fluorene	Nereis arenaceodentata; Polychaete	IMMATURE	SW; LAB	ST - LAB	96 H	(NR)	LC50	1000	204176	78

Appendix F-1
AQUIRE Information and Database Search Results

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc. (ug/l)	Aquire Ref. #	Yr
2-METHYLNAPHTHALENE	Cyclopterus lumpus; Lumpfish	EGG, 24 H POST-FER	SW; LAB	ST - LAB	4 D	(NR)	DVP	10000	286199	84
2-METHYLNAPHTHALENE	Gadus morhua; Atlantic cod	EGG, 24 H POST-FER	SW; LAB	ST - LAB	4 D	(NR)	DVP	300	286195	84
2-METHYLNAPHTHALENE	Hippoglossoides platessoides; Rough dab, american plaice	EGG, 24 H POST-FER	SW; LAB	ST - LAB	4 D	(NR)	DVP	1000	286196	84
2-METHYLNAPHTHALENE	Mallotus villosus; Capelin	EGG, 24 H POST-FER	SW; LAB	ST - LAB	4 D	(NR)	DVP	10000	286200	84
2-METHYLNAPHTHALENE	Pleuronectes platessa; Plaice, sand dab Pleuronectidae	EGG, 24 H POST-FER	SW; LAB	ST - LAB	4 D	(NR)	DVP	6000	286197	84
2-METHYLNAPHTHALENE	Cancer magister; Dungeness or edible crab	1ST INSTAR ZOEAE	SW; LAB	ST - LAB	96 H	(NR)	LC50	1300	204927	77
2-METHYLNAPHTHALENE	Cancer magister; Dungeness or edible crab	1ST INSTAR ZOEAE	SW; LAB	ST - LAB	48 H	(NR)	LC50	5000	204928	77
2-METHYLNAPHTHALENE	Eurytemora affinis; Calanoid copepod	NR	SW; LAB	ST - LAB	24 H	(NR)	LC50	1499	213261	78
2-METHYLNAPHTHALENE	Palaemonetes pugio; Grass shrimp, freshwater prawn	ADULT	SW; LAB	ST - LAB	96 H	8.1	LC50	1100	203234	78
2-METHYLNAPHTHALENE	Penaeus aztecus; Brown shrimp	JUVENILE, 0.3 G	SW; LAB	ST - LAB	96 H	8.1	LC50	600	203233	78
2-METHYLNAPHTHALENE	Cyclopterus lumpus; Lumpfish	NEWLY HAT LARVAE	SW; LAB	ST - LAB	4 D	(NR)	LET	3000	286203	84

Appendix F-1
AQUIRE Information and Database Search Results

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc. (ug/l)	Aquire Ref. #	Yr
2-METHYLNAPHTHALENE	Gadus morhua; Atlantic cod	NEWLY HAT LARVAE	SW; LAB	ST - LAB	NR	(NR)	LET	6000	286204	84
2-METHYLNAPHTHALENE	Gadus morhua; Atlantic cod	EGG, < 2 H POST-FER	SW; LAB	ST - LAB	2 D	(NR)	LET	3080	291651	82
2-METHYLNAPHTHALENE	Gadus morhua; Atlantic cod	EGG, < 2 H POST-FER	SW; LAB	ST - LAB	2 D	(NR)	LET	3300	291654	82
2-METHYLNAPHTHALENE	Gadus morhua; Atlantic cod	EGG	SW; LAB	ST - LAB	2 D	(NR)	LET	2900	294070	84
2-METHYLNAPHTHALENE	Gadus morhua; Atlantic cod	EGG	SW; LAB	ST - LAB	4 D	(NR)	LET	2000	294071	84
2-METHYLNAPHTHALENE	Hippoglossoides platessoides; Rough dab, american plaice	NEWLY HAT LARVAE	SW; LAB	ST - LAB	4 D	(NR)	LET	3000	286202	84
2-METHYLNAPHTHALENE	Mallotus villosus; Capelin	NEWLY HAT LARVAE	SW; LAB	ST - LAB	4 D	(NR)	LET	3000	286201	84
2-METHYLNAPHTHALENE	Platichthys flesus; Starry, european flounder	EGG, 24 H POST-FER	SW; LAB	ST - LAB	4 D	(NR)	LET	6000	286198	84
2-METHYLNAPHTHALENE	Platichthys flesus; Starry, european flounder	NEWLY HAT LARVAE	SW; LAB	ST - LAB	NR	(NR)	LET	6000	286206	84
2-METHYLNAPHTHALENE	Pleuronectes platessa; Plaice, sand dab	NEWLY HAT LARVAE	SW; LAB	ST - LAB	NR	(NR)	LET	6000	286205	84

Appendix F-1
AQUIRE Information and Database Search Results

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc. (ug/l)	Aquire Ref. #	Yr
2-METHYLNAPH THALENE	Stronglyocentrotus droebachien; Sea urchin	FERTILIZE D EGG	SW; LAB	ST - LAB	2 D	(NR)	LET	3080	291650	82
2-METHYLNAPH THALENE	Stronglyocentrotus droebachien; Sea urchin	FERTILIZE D EGG	SW; LAB	ST - LAB	2 D	(NR)	LET	3080	291652	82
2-METHYLNAPH THALENE	Stronglyocentrotus droebachien; Sea urchin	FERTILIZE D EGG	SW; LAB	ST - LAB	1 D	(NR)	LET	3300	291653	82
2-METHYLNAPH THALENE	Stronglyocentrotus droebachien; Sea urchin	EGG	SW; LAB	ST - LAB	2 D	(NR)	LET	2900	294068	84
2-METHYLNAPH THALENE	Stronglyocentrotus droebachien; Sea urchin	EGG	SW; LAB	ST - LAB	2 D	(NR)	LET	3000	294069	84

Appendix F-1
AQUIRE Information and Database Search Results

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc. (ug/l)	Aquire Ref. #	Yr
4-Nitrophenol	Artemia salina; Brine shrimp	NR	SW; LAB	ST - LAB	24 H	(NR)	REP	10000	218852	73
4-Nitrophenol	Crangon septemspinosa; Sand shrimp	3.8CM, 0.6G	SW; LAB	ST - LAB	96 H	(NR)	LC50	26400	215810	79
4-Nitrophenol	Cyprinodon variegatus; Sheepshead minnow	NR	SW; LAB	ST - LAB	96 H	(NR)	LC50	27	216334	81
4-Nitrophenol	Mya arenaria; Sand gaper, soft shell clam	5CM, 20G	SW; LAB	RN - LAB	96 H	(NR)	LC50	29400	215810	79

Appendix F-1
AQUIRE Information and Database Search Results

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc. (µg/l)	Aquire Ref.#	Yr
Arsenic	Phaeodactylum tricornutum; Diatom	NR	SW; LAB	ST - LAB	NR	(NR)	EC50	25000	311886	88

Appendix F-1
AQUIRE Information and Database Search Results

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Eff Conc. (ug/l)	Aquire Ref. #	Yr
Iron	Glenodinium halli; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	6 D	(NR)	PGR	100000	281951	80
Iron	Gymnodinium splendens; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	30000	281949	80
Iron	Gymnodinium splendens; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	35000	281950	80
Iron	Isochrysis galbana; Haptophyte	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	35000	281947	80
Iron	Thalassiosira guillardii; Diatom	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	20000	281948	80
Iron	Gymnodinium splendens; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	EC50GR	17500	281952	80
Iron	Gymnodinium splendens; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	EC50GR	26000	281954	80
Iron	Gymnodinium splendens; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	EC50GR	1000	281959	80
Iron	Gymnodinium splendens; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	EC50GR	1100	281960	80
Iron	Gymnodinium splendens; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	EC50GR	900	281961	80
Iron	Gymnodinium splendens; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	EC50GR	3700	281962	80
Iron	Isochrysis galbana; Haptophyte	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	EC50GR	9000	281956	80
Iron	Isochrysis galbana; Haptophyte	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	EC50GR	8500	281957	80

Appendix F-1
AQUIRE Information and Database Search Results

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
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Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc. (ug/l)	Aquire Ref. #	Yr
Iron	Isochrysis galbana; Haptophyte	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	EC50GR	9800	281958	80
Iron	Thalassiosira guillardii; Diatom	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	EC50GR	15000	281964	80
Iron	Thalassiosira guillardii; Diatom	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	EC50GR	15000	281965	80
Iron	Thalassiosira guillardii; Diatom	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	EC50GR	15000	281966	80
Iron	Thalassiosira guillardii; Diatom	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	EC50GR	15000	281967	80
Iron	Thalassiosira guillardii; Diatom	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	EC50GR	19000	281968	80
Iron	Glenodinium halli; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	200 to 2000	281945	80
Iron	Glenodinium halli; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	500 to 5000	281946	80
Iron	Gymnodinium splendens; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	200 to 5000	281939	80
Iron	Gymnodinium splendens; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	100 to 4000	281940	80
Iron	Isochrysis galbana; Haptophyte	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	500 to 20000	281941	80
Iron	Isochrysis galbana; Haptophyte	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	1000 to 25000	281942	80
Iron	Thalassiosira guillardii; Diatom	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	8000 to > 20000	281943	80

Appendix F-1
AQUIRE Information and Database Search Results

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc. (ug/l)	Aquire Ref. #	Yr
Iron	Thalassiosira guillardii; Diatom	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	7000 to > 20000	281944	80

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AQUIRE Information and Database Search Results

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc. (ug/l)	Aquire Ref. #	Yr
MANGANESE	Dreissena polymorpha; Zebra mussel	NR	SW; LAB	NR	NR	(NR)	OC	20000	252404	70
MANGANESE	Macoma balthica; Balthica macoma or clam	NR	SW; LAB	NR	NR	(NR)	OC	20000	252402	70
MANGANESE	Mya arenaria; Sand gaper, soft shell clam	NR	SW; LAB	NR	NR	(NR)	OC	20000	252403	70

Appendix F-1
AQUIRE Information and Database Search Results

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc. (ug/l)	Aquire Ref. #	Yr
Barium chloride	Cancer anthonyi; Yellow rock crab	EMBRYO	SW; LAB	RN - LAB	7 D	7.8	HAT	10000	307783	88
Barium chloride	Cancer anthonyi; Yellow rock crab	EMBRYO	SW; LAB	RN - LAB	7 D	7.8	MOR	10000	307781	88

Appendix F-1
AQUIRE Information and Database Search Results

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
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Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc. (ug/l)	Aquire Ref. #	Yr
Iron chloride	Cancer anthonyi; Yellow rock crab	EMBRYO	SW; LAB	RN - LAB	7 D	7.8	HAT	1000	307801	88
Iron chloride	Siganus fuscescens; Rabbitfish	NR	SW; LAB	ST - LAB	24 H	(NR)	LC50	68800	209505	89
Iron chloride	Tridentiger trigonocephalus; Striped goby	NR	SW; LAB	ST - LAB	24 H	(NR)	LC50	99400	209529	89
Iron chloride	Cancer anthonyi; Yellow rock crab	EMBRYO	SW; LAB	RN - LAB	7 D	7.8	MOR	100000	307799	88

APPENDIX F-2

BIOACCUMULATION FACTOR (BAF) DATA

Appendix F-2
Bioaccumulation Factor Data

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Analyte	log Kow [b]	Bioaccumulation or Biotransfer Factor [a]			
		Plant	Terrestrial Invertebrate	Mammal	Bird
VOLATILES					
Acetone	NR	NC	NC	NC	NC
SEMIVOLATILES					
Bis(2-ethylhexyl)phthalate	5.5	5.1E-03 [c]	NA [d]	4.8E-01 [e]	NA
Butylbenzylphthalate	5.5	5.1E-03 [c]	NA [d]	4.8E-01 [e]	NA
PESTICIDES/PCBs					
4,4'-DDE	6	1.0E-02 [f]	NA [d]	1.2E+00 [g]	2.9E+00 [h]
4,4'-DDT	6.4	1.0E-02 [f]	NA [d]	1.2E+00 [g]	2.9E+00 [h]
Chlordane	5.5	5.1E-03 [c]	NA [d]	5.5E-01 [i]	1.8E+00 [j]
INORGANICS					
Antimony	NA	4.0E-02 [k]	NA	NA	NA
Arsenic	NA	3.0E-01 [l]	6.6E-03 [m]	1.0E-01 [n]	NA
Barium	NA	3.0E-02 [k]	NA	7.5E-03 [n]	NA
Beryllium	NA	2.0E-03 [k]	NA	5.0E-02 [n]	NA
Chromium	NA	1.5E-03 [k]	1.6E-01 [o]	2.8E-01 [n]	NA
Cobalt	NA	4.0E-03 [k]	NA	1.0E+00 [n]	NA
Copper	NA	7.8E-01 [p]	1.6E-01 [o]	6.0E-01 [q]	NA
Lead	NA	0.0E+00 [r]	7.8E-02 [s]	2.8E-01 [n]	NA
Mercury	NA	1.8E-01 [k]	6.8E-02 [m]	5.0E+00 [t]	2.3E+00 [t]
Nickel	NA	1.2E-02 [k]	2.3E-01 [u]	3.0E-01 [n]	NA
Tin	NA	6.0E-03 [k]	NA	1.5E+00 [n]	NA
Zinc	NA	6.1E-01 [p]	1.8E+00 [o]	2.1E+00 [v]	NA

NOTES:

[a] Units for bioaccumulation factors are (mg/kg fresh wt. tissue over mg/kg dry wt soil) for invertebrates and plants, and (mg/kg fresh wt tissue over mg/kg fresh wt food) for small mammals and small birds.

[b] From Superfund Chemical Data Matrix (March 9, 1993) unless otherwise noted. Log Kows for classes of semivolatile compounds were averaged to provide an average BAF value. Compounds were grouped accordingly: PAHs (5.1); phthalates (5.5); phenols (1.7); and dibenzofuran (4.1).

[c] Calculated using the following equation in Travis and Arms (1988): log(Plant Uptake Factor)=1.588-0.578 log Kow. Converted from dry wt. to wet wt. plant concentration assuming 80% water content.

[d] Literature search was not completed because site-specific concentrations in earthworms are available and used in the risk assessment.

[e] Calculated using the following equation (Travis and Arms, 1988), unless otherwise noted: log BAF = log Kow-7.6; result multiplied by average of ingestion rates for non-lactating and lactating test animals to convert from BTFs to BAFs, divided by a factor of 0.2 to convert from dry feed to fresh feed. There is an uncertainty involved in using this equation for PAHs, because this study did not use any PAHs in the regression analysis. No BAFs were calculated for analytes with Log Kow < 5 because they are unlikely to bioaccumulate in animal tissue (Maughan, 1993).

[f] Geometric means of (4,4'-DDT, 4,4'-DDD, and 4,4'-DDT) BAFs (fresh wt./dry wt) reported for roots (carrot, potato, sugar beet), grains (corn, oats), and legumes (alfalfa) dervied from USEPA (1985) converted from dry wt. to wet - weight per values provided by Suter (1993).

[g] BAF for shrews and voles calculated using measured concentrations of DDT in stomach content and in whole body (Forsyth & Petrie, 1984).

[h] Whole body pheasant BAF for DDT presented in USEPA (1985), derived from Kenaga (1973).

[i] BAF calculated from data presented in Eisler, 1990. Rats fed 20 mg/kg diet technical chlordane (equivalent to 3.6 mg/kg diet cis- and trans-chlordane) for 350 days accumulated 20 mg/kg in lipids. Assuming 10% lipid content, the whole body concentration is about 2 mg/kg.

[j] BAF calculated from data presented in Eisler, 1990. Red-winged blackbirds fed 10 mg/kg diet technical chlordane (equivalent to 1.8 mg/kg diet cis- and trans-chlordane) for 84 days accumulated 1.8 mg/kg wet wt. whole body residue.

[k] Value from Baes et al. (1984) for leafy portions of plants multiplied by 0.2 to represent 80% water composition of plants.

[l] Average of BAF values reported from Wang et al. (1984), Sheppard et al. (1985), and Merry et al. (1986).

[m] Uptake value (fresh wt./dry wt.) for earthworms from USEPA (1985) sludge document. Fresh weight tissue concentrations calculated assuming 80% body water content.

[n] Value derived from biotransfer factors (BTFs) presented in Baes et. al. (1984) for uptake into cattle. BTF converted to BAF by multiplying by food ingestion rate of 50 kg/day wet weight.

[o] BCF for earthworms from Diercxsens et al. (1985).

[p] Median of valued reported from Levine et al. (1989).

[q] Levine et al. (1989).

[r] Lead does not accumulate in plant tissue, therefore a BAF of zero was assigned.

[s] Geometric mean of BAF values (fresh wt/wet wts.) for worms and woodlice (USEPA, 1985). Fresh weight tissue concentrations calculated assuming 80% body water content.

[t] USEPA, 1985

[u] Value from nickel sludge document (USEPA, 1985) multiplied by 0.2 to represent 80% water composition of earthworms.

[v] Mean of values for Microtus agrestis and Apodemus sylvaticus in MacFadyen (1980)

NR = Not Reported
NC = Not Calculated Available evidence suggests that the analyte does not bioaccumulate
NA = Not Available

Appendix F-2
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APPENDIX F-3

MODEL FOR POTENTIAL EXPOSURES AND RISKS FOR REPRESENTATIVE WILDLIFE SPECIES TO ECPCs IN SURFACE SOIL AT SWMU 15

Appendix F-3
Exposure Parameters and Assumptions for Representative Wildlife Species at SWMU 15

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs, Mayport, Florida

Representative Wildlife Species		Percent Prey in Diet [a]						Home Range [a] (acres)	ED [b]	Site Foraging Frequency [c]	Ingestion Rate [a] (kg/day)	Body Weight [a] (kg)
		Inverts	Plants	Small Mammals	Herpeto-fauna	Small Birds	Soil					
Short-tailed shrew	(Small Omniv. Mammal)	78%	12%	0%	0%	0%	10%	0.96	1	9.38E-01	0.002	0.02
Eastern cottontail	(Small Herb. Mammal)	0%	98%	0%	0%	0%	2%	7.39	1	1.22E-01	0.079	1.19
Gray fox	(Pred. Mammal)	20%	10%	57%	0%	10%	3%	1727	1	5.21E-04	0.237	4.50
American robin	(Omniv. Bird)	83%	7%	0%	0%	0%	10%	1.04	1	8.65E-01	0.011	0.08
Red-tailed hawk	(Pred. Bird)	0%	0%	70%	0%	29.5%	0.5%	4377	1	2.06E-04	0.115	0.96

SITE AREA: 0.9 acres

NOTES:
[a] From Table 6-c.
[b] ED = Exposure Duration (percentage of year receptor is expected to be found at study area)
[c] SFF = Site Foraging Frequency (calculated by dividing site area by receptor home range and multiplying by ED (cannot exceed 1.0))

Appendix F-3
Estimation of ECPC Exposure Concentrations for Representative Wildlife Species at SWMU 15
Maximum Exposure Point Concentrations
RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs, Mayport, Florida

EXPOSURE CONCENTRATION DATA		ESTIMATED TISSUE LEVELS IN PRIMARY FOOD ITEMS				BAF VALUES FOR OTHER FOOD ITEMS			
ECPC	Maximum Exposure Point Concentration [a] (mg/kg)	Invert BAF [b]	Concentration in Invertebrates [c] (mg/kg)	Plant Transfer Factor [b]	Concentration in Plant Tissue [d] (mg/kg)	Small Mammal BAF [b]	Concentration in Mammals [e] mg/kg	Small Bird BAF [b]	Concentration in Birds [f] mg/kg
Acetone	0.018		NA		0.0E+00		0.0E+00		0.0E+00
Butylbenzylphthalate	0.64		NA	5.10E-03	3.3E-03	4.80E-01	3.1E-01		0.0E+00
bis(2-ethylhexyl)phthalate	0.2		4.2E-01	5.10E-03	1.0E-03	4.80E-01	9.6E-02		0.0E+00
4,4'-DDE	2.8		1.0E+00	1.00E-02	2.8E-02	1.20E+00	3.4E+00	2.90E+00	8.1E+00
4,4'-DDT	790		2.6E+01	1.00E-02	7.9E+00	1.20E+00	9.5E+02	2.90E+00	2.3E+03
Chlordane	8.02		7.0E-01	5.10E-03	4.1E-02	5.50E-01	4.4E+00	1.80E+00	1.4E+01
Antimony	1.8		0.0E+00	4.00E-02	7.2E-02		0.0E+00		0.0E+00
Arsenic	4	6.60E-03	2.6E-02	3.00E-01	1.2E+00	1.00E-01	4.0E-01		0.0E+00
Barium	26.1		0.0E+00	3.00E-02	7.8E-01	7.50E-03	2.0E-01		0.0E+00
Beryllium	0.15		0.0E+00	2.00E-03	3.0E-04	5.00E-02	7.5E-03		0.0E+00
Chromium	11.4	1.60E-01	1.8E+00	1.50E-03	1.7E-02	2.80E-01	3.2E+00		0.0E+00
Cobalt	0.64		0.0E+00	4.00E-03	2.6E-03	1.00E+00	6.4E-01		0.0E+00
Copper	11.4	1.60E-01	1.8E+00	7.80E-01	8.9E+00	6.00E-01	6.8E+00		0.0E+00
Lead	296.5	7.80E-02	2.3E+01	0.00E+00	0.0E+00	2.80E-01	8.3E+01		0.0E+00
Mercury	0.4	6.80E-02	2.7E-02	1.80E-01	7.2E-02	5.00E+00	2.0E+00	2.30E+00	9.2E-01
Nickel	1.6	2.30E-01	3.7E-01	1.20E-02	1.9E-02	3.00E-01	4.8E-01		0.0E+00
Tin	3.2		0.0E+00	6.00E-03	1.9E-02	1.50E+00	4.8E+00		0.0E+00
Zinc	171.5	1.80E+00	3.1E+02	6.10E-01	1.0E+02	2.10E+00	3.6E+02		0.0E+00

[a] From Table 6-a .
[b] BAF = Bioaccumulation Factor. Values are from Appendix F-2 .
[c] Contaminant concentration in invertebrate tissue is equal to the invertebrate BAF multiplied by the soil concentration of the contaminant. For semivolatiles, pesticides, and PCBs contaminant concentration in invertebrates is derived from site-specific information contained in Appendix B.
[d] Contaminant concentration in plant tissue is equal to the plant transfer factor multiplied by the soil concentration of the contaminant.
[e] Contaminant concentration in mammal tissue is equal to the mammal BAF multiplied by the soil concentration of the contaminant.
[f] Contaminant concentration in bird tissue is equal to the bird BAF multiplied by the soil concentration of the contaminant.
ECPC = Ecological Chemical of Potential Concern

Appendix F-3
Hazard Quotients and Indices for Potential Lethal Effects for Representative Wildlife Species Associated with Maximum Exposure Point Concentrations of ECPCs in Surface Soils at SWMU 15

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs, Mayport, Florida

ANALYTE	*Short-tailed shrew*			*Eastern cottontail*			*Gray fox*		
	PDE	RTV	HQ	PDE	RTV	HQ	PDE	RTV	HQ
Acetone	2.4E-04	6.00E+02	3.97E-07	2.9E-06	1.07E+03	2.73E-09	1.5E-08	6.00E+02	2.47E-11
Butylbenzylphthalate	8.5E-03	4.66E+02	1.83E-05	1.3E-04	4.66E+02	2.78E-07	5.3E-06	4.66E+02	1.15E-08
bis(2-ethylhexyl)phthalate	4.6E-02	1.72E+03	2.68E-05	4.0E-05	1.72E+03	2.35E-08	4.0E-06	1.72E+03	2.31E-09
4,4'-DDE	1.4E-01	1.40E+02	1.01E-03	6.8E-04	1.40E+02	4.82E-06	8.3E-05	1.40E+02	5.91E-07
4,4'-DDT	1.3E+01	1.74E+01	7.63E-01	1.9E-01	5.00E+01	3.81E-03	2.2E-02	1.20E+01	1.83E-03
Chlordane	1.8E-01	1.00E+01	1.79E-02	1.6E-03	2.00E+01	8.11E-05	1.2E-04	1.00E+01	1.19E-05
Antimony	2.5E-02	1.40E+03	1.78E-05	8.6E-04	1.40E+03	6.16E-07	1.7E-06	1.40E+03	1.20E-09
Arsenic	7.5E-02	2.90E+01	2.58E-03	1.0E-02	2.90E+01	3.50E-04	1.3E-05	2.90E+01	4.48E-07
Barium	3.6E-01	4.30E+02	8.32E-04	1.0E-02	4.30E+02	2.43E-05	2.7E-05	4.30E+02	6.21E-08
Beryllium	2.0E-03	2.00E+00	9.95E-04	2.7E-05	2.00E+00	1.33E-05	2.4E-07	2.00E+00	1.21E-07
Chromium	3.4E-01			2.0E-03			6.9E-05		
Cobalt	8.5E-03	1.82E+01	4.68E-04	1.2E-04	1.50E+02	8.26E-07	1.1E-05	1.82E+01	5.79E-07
Copper	4.8E-01			7.2E-02			1.5E-04		
Lead	6.3E+00	6.00E+01	1.05E-01	4.8E-02	6.00E+01	8.00E-04	1.7E-03	6.00E+01	2.78E-05
Mercury	9.2E-03	4.40E+00	2.10E-03	6.4E-04	4.40E+00	1.44E-04	3.4E-05	4.40E+00	7.84E-06
Nickel	5.9E-02	1.34E+01	4.44E-03	4.1E-04	1.34E+01	3.07E-05	1.1E-05	1.34E+01	8.13E-07
Tin	4.3E-02	3.76E+01	1.13E-03	6.7E-04	3.76E+01	1.78E-05	7.8E-05	3.76E+01	2.07E-06
Zinc	3.6E+01	3.90E+02	9.18E-02	8.6E-01	3.90E+02	2.20E-03	7.8E-03	3.90E+02	1.99E-05
SUMMARY HAZARD INDEX			9.9E-01			7.5E-03			1.9E-03

PDE = Potential Dietary Exposure (mg/kgBW/day) calculated according to equations in Table 2-7 of the RFI General Information Report (ABB-ES, 1995).
RTV = Reference Toxicity Value (mg/kgBW/day) – 1/5th of lowest reported LD50 or lowest reported adverse effect level (LOAEL) for mortality from Appendix F-6 for closest related species.
HQ = Hazard Quotient (calculated by dividing PDE by RTV)

Appendix F-3
Hazard Quotients and Indices for Potential Lethal Effects for Representative Wildlife Species Associated with Maximum Exposure Point Concentrations of ECPCs in Surface Soils at SWMU 15

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs, Mayport, Florida

ANALYTE	*American robin*			*Red-tailed hawk*		
	PDE	RTV	HQ	PDE	RTV	HQ
Acetone	2.2E-04			2.2E-09		
Butylbenzylphthalate	7.9E-03			5.4E-06		
bis(2-ethylhexyl)phthalate	4.5E-02			1.7E-06		
4,4'-DDE	1.4E-01			1.2E-04		
4,4'-DDT	1.2E+01	1.19E+02	1.05E-01	3.3E-02	1.19E+02	2.79E-04
Chlordane	1.7E-01	4.80E+00	3.56E-02	1.8E-04	4.80E+00	3.80E-05
Antimony	2.3E-02			2.2E-07		
Arsenic	6.2E-02	6.46E+01	9.64E-04	7.4E-06	6.46E+01	1.15E-07
Barium	3.3E-01			6.6E-06		
Beryllium	1.8E-03			1.5E-07		
Chromium	3.3E-01	2.52E+01	1.30E-02	5.7E-05	2.52E+01	2.25E-06
Cobalt	7.9E-03			1.1E-05		
Copper	4.0E-01			1.2E-04		
Lead	6.0E+00			1.5E-03		
Mercury	8.3E-03	5.20E+00	1.60E-03	4.1E-05	5.20E+00	7.95E-06
Nickel	5.7E-02			8.5E-06		
Tin	4.0E-02			8.3E-05		
Zinc	3.5E+01	1292	2.68E-02	6.3E-03	1292	4.84E-06
SUMMARY HAZARD INDEX			1.8E-01			3.3E-04

PDE = Potential Dietary Exposure (mg/kgBW/day) calculated according to equations in Table 2-7 of the RFI General Information Report (ABB-ES, 1995).
RTV = Reference Toxicity Value (mg/kgBW/day) =1/5th of lowest reported LD50 or lowest reported adverse effect level (LOAEL) for mortality from Appendix F-6 for closest related species.
HQ = Hazard Quotient (calculated by dividing PDE by RTV)

Appendix F-3

Hazard Quotients and Indices for Potential Sublethal Effects for Representative Wildlife Species Associated with Maximum Exposure Point Concentrations of ECPCs in Surface Soils at SWMU 15

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs, Mayport, Florida

ANALYTE	*Short-tailed shrew*			*Eastern cottontail*			*Gray fox*		
	PDE	RTV	HQ	PDE	RTV	HQ	PDE	RTV	HQ
Acetone	2.4E-04	2.73E+05	8.73E-10	2.9E-06	2.73E+05	1.07E-11	1.5E-08	2.73E+05	5.43E-14
Butylbenzylphthalate	8.5E-03	4.90E+03	1.74E-06	1.3E-04	4.90E+03	2.64E-08	5.3E-06	4.90E+03	1.09E-09
bis(2-ethylhexyl)phthalate	4.6E-02	3.50E+01	1.31E-03	4.0E-05	3.50E+01	1.16E-06	4.0E-06	3.50E+01	1.14E-07
4,4'-DDE	1.4E-01			6.8E-04			8.3E-05		
4,4'-DDT	1.3E+01	2.00E-01	6.64E+01	1.9E-01	1.50E+02	1.27E-03	2.2E-02	3.54E+03	6.20E-06
Chlordane	1.8E-01	3.04E+00	5.89E-02	1.6E-03	3.04E+00	5.34E-04	1.2E-04	3.04E+00	3.92E-05
Antimony	2.5E-02			8.6E-04			1.7E-06		
Arsenic	7.5E-02	1.40E+01	5.34E-03	1.0E-02	1.40E+01	7.26E-04	1.3E-05	1.40E+01	9.28E-07
Barium	3.6E-01	1.98E+02	1.81E-03	1.0E-02	1.98E+02	5.27E-05	2.7E-05	1.98E+02	1.35E-07
Beryllium	2.0E-03			2.7E-05			2.4E-07		
Chromium	3.4E-01	1.40E+03	2.42E-04	2.0E-03	1.40E+03	1.41E-06	6.9E-05	1.40E+03	4.96E-08
Cobalt	8.5E-03			1.2E-04			1.1E-05		
Copper	4.8E-01	1.52E+02	3.16E-03	7.2E-02	1.52E+02	4.76E-04	1.5E-04	1.52E+02	9.92E-07
Lead	6.3E+00	2.00E+02	3.16E-02	4.8E-02	2.00E+02	2.40E-04	1.7E-03	2.00E+02	8.35E-06
Mercury	9.2E-03	4.00E+00	2.31E-03	6.4E-04	4.00E+00	1.59E-04	3.4E-05	4.00E+00	8.62E-06
Nickel	5.9E-02	5.00E+01	1.19E-03	4.1E-04	5.00E+01	8.22E-06	1.1E-05	5.00E+01	2.18E-07
Tin	4.3E-02			6.7E-04			7.8E-05		
Zinc	3.6E+01	2.00E+02	1.79E-01	8.6E-01	2.00E+02	4.29E-03	7.8E-03	2.00E+02	3.88E-05
SUMMARY HAZARD INDEX			6.7E+01			7.8E-03			1.0E-04

PDE = Potential Dietary Exposure (mg/kgBW/day) calculated according to equations in Table 2-7 of the RFI General Information Report (ABB-ES, 1995).
RTV = Reference Toxicity Value (mg/kgBW/day) = Lowest reported adverse effect level (LOAEL) for reproduction or growth from Appendix F-6 for closest related species.
HQ = Hazard Quotient (calculated by dividing PDE by RTV)

Appendix F-3
Hazard Quotients and Indices for Potential Sublethal Effects for Representative Wildlife Species Associated with Maximum Exposure Point Concentrations of ECPCs in Surface Soils at SWMU 15

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs, Mayport, Florida

ANALYTE	*American robin*			*Red-tailed hawk*		
	PDE	RTV	HQ	PDE	RTV	HQ
Acetone	2.2E-04			2.2E-09		
Butylbenzylphthalate	7.9E-03			5.4E-06		
bis(2-ethylhexyl)phthalate	4.5E-02			1.7E-06		
4,4'-DDE	1.4E-01	5.80E-01	2.36E-01	1.2E-04	3.90E-01	3.02E-04
4,4'-DDT	1.2E+01	1.40E-01	8.90E+01	3.3E-02	1.40E-01	2.37E-01
Chlordane	1.7E-01			1.8E-04		
Antimony	2.3E-02			2.2E-07		
Arsenic	6.2E-02			7.4E-06		
Barium	3.3E-01			6.6E-06		
Beryllium	1.8E-03			1.5E-07		
Chromium	3.3E-01	2.00E+02	1.63E-03	5.7E-05	2.00E+02	2.83E-07
Cobalt	7.9E-03			1.1E-05		
Copper	4.0E-01	2.90E+01	1.39E-02	1.2E-04	2.90E+01	4.13E-06
Lead	6.0E+00	1.25E+02	4.81E-02	1.5E-03	1.25E+02	1.18E-05
Mercury	8.3E-03	8.10E-01	1.03E-02	4.1E-05	8.10E-01	5.10E-05
Nickel	5.7E-02			8.5E-06		
Tin	4.0E-02			8.3E-05		
Zinc	3.5E+01			6.3E-03		
SUMMARY HAZARD INDEX			8.9E+01			2.4E-01

PDE = Potential Dietary Exposure (mg/kgBW/day) calculated according to equations in Table 2-7 of the RFI General Information Report (ABB-ES, 1995).
RTV = Reference Toxicity Value (mg/kgBW/day) = Lowest reported adverse effect level (LOAEL) for reproduction or growth from Appendix F-6 for closest related species.
HQ = Hazard Quotient (calculated by dividing PDE by RTV)

Appendix F-3
Estimation of ECPC Exposure Concentrations for Representative Wildlife Species at SWMU 15
Average Exposure Point Concentrations
RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs, Mayport, Florida

EXPOSURE CONCENTRATION DATA		ESTIMATED TISSUE LEVELS IN PRIMARY FOOD ITEMS				BAF VALUES FOR OTHER FOOD ITEMS			
ECPC	Average Exposure Point Concentration [a] (mg/kg)	Invert BAF [b]	Concentration in Invertebrates [c] (mg/kg)	Plant Transfer Factor [b]	Concentration in Plant Tissue [d] (mg/kg)	Small Mammal BAF [b]	Concentration in Mammals [e] mg/kg	Small Bird BAF [b]	Concentration in Birds [f] mg/kg
Acetone	0.0085		NA		0.0E+00		0.0E+00		0.0E+00
Butylbenzylphthalate	0.64		NA	5.10E-03	3.3E-03	4.80E-01	3.1E-01		0.0E+00
bis(2-ethylhexyl)phthalate	0.2		4.2E-01	5.10E-03	1.0E-03	4.80E-01	9.6E-02		0.0E+00
4,4'-DDE	0.415		1.0E+00	1.00E-02	4.2E-03	1.20E+00	5.0E-01	2.90E+00	1.2E+00
4,4'-DDT	27.331		2.6E+01	1.00E-02	2.7E-01	1.20E+00	3.3E+01	2.90E+00	7.9E+01
Chlordane	0.864		7.0E-01	5.10E-03	4.4E-03	5.50E-01	4.8E-01	1.80E+00	1.6E+00
Antimony	1.5		0.0E+00	4.00E-02	6.0E-02		0.0E+00		0.0E+00
Arsenic	2.4	6.60E-03	1.6E-02	3.00E-01	7.2E-01	1.00E-01	2.4E-01		0.0E+00
Barium	11.2		0.0E+00	3.00E-02	3.4E-01	7.50E-03	8.4E-02		0.0E+00
Beryllium	0.12		0.0E+00	2.00E-03	2.4E-04	5.00E-02	6.0E-03		0.0E+00
Chromium	6.3	1.60E-01	1.0E+00	1.50E-03	9.5E-03	2.80E-01	1.8E+00		0.0E+00
Cobalt	0.49		0.0E+00	4.00E-03	2.0E-03	1.00E+00	4.9E-01		0.0E+00
Copper	5.2	1.60E-01	8.3E-01	7.80E-01	4.1E+00	6.00E-01	3.1E+00		0.0E+00
Lead	59.8	7.80E-02	4.7E+00	0.00E+00	0.0E+00	2.80E-01	1.7E+01		0.0E+00
Mercury	0.11	6.80E-02	7.5E-03	1.80E-01	2.0E-02	5.00E+00	5.5E-01	2.30E+00	2.5E-01
Nickel	1	2.30E-01	2.3E-01	1.20E-02	1.2E-02	3.00E-01	3.0E-01		0.0E+00
Tin	2.4		0.0E+00	6.00E-03	1.4E-02	1.50E+00	3.6E+00		0.0E+00
Zinc	70.3	1.80E+00	1.3E+02	6.10E-01	4.3E+01	2.10E+00	1.5E+02		0.0E+00

[a] From Table 6-a.
[b] BAF = Bioaccumulation Factor. Values are from Appendix F-2.
[c] Contaminant concentration in invertebrate tissue is equal to the invertebrate BAF multiplied by the soil concentration of the contaminant. For semivolatiles, pesticides, and PCBs contaminant concentration in invertebrates is derived from site-specific information contained in Appendix B.
[d] Contaminant concentration in plant tissue is equal to the plant transfer factor multiplied by the soil concentration of the contaminant.
[e] Contaminant concentration in mammal tissue is equal to the mammal BAF multiplied by the soil concentration of the contaminant.
[f] Contaminant concentration in bird tissue is equal to the bird BAF multiplied by the soil concentration of the contaminant.
ECPC = Ecological Chemical of Potential Concern

Appendix F-3
Hazard Quotients and Indices for Potential Lethal Effects for Representative Wildlife Species Associated with Average Exposure Point Concentrations of ECPCs in Surface Soils at SWMU 15

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs, Mayport, Florida

ANALYTE	*Short-tailed shrew*			*Eastern cottontail*			*Gray fox*		
	PDE	RTV	HQ	PDE	RTV	HQ	PDE	RTV	HQ
Acetone	1.1E-04	6.00E+02	1.88E-07	1.4E-06	1.07E+03	1.29E-09	7.0E-09	6.00E+02	1.17E-11
Butylbenzylphthalate	8.5E-03	4.66E+02	1.83E-05	1.3E-04	4.66E+02	2.78E-07	5.3E-06	4.66E+02	1.15E-08
bis(2-ethylhexyl)phthalate	4.6E-02	1.72E+03	2.68E-05	4.0E-05	1.72E+03	2.35E-08	4.0E-06	1.72E+03	2.31E-09
4,4'-DDE	1.1E-01	1.40E+02	7.77E-04	1.0E-04	1.40E+02	7.15E-07	1.7E-05	1.40E+02	1.21E-07
4,4'-DDT	3.1E+00	1.74E+01	1.76E-01	6.6E-03	5.00E+01	1.32E-04	9.0E-04	1.20E+01	7.48E-05
Chlordane	8.4E-02	1.00E+01	8.38E-03	1.7E-04	2.00E+01	8.74E-06	1.6E-05	1.00E+01	1.63E-06
Antimony	2.1E-02	1.40E+03	1.49E-05	7.2E-04	1.40E+03	5.13E-07	1.4E-06	1.40E+03	1.00E-09
Arsenic	4.5E-02	2.90E+01	1.55E-03	6.1E-03	2.90E+01	2.10E-04	7.8E-06	2.90E+01	2.69E-07
Barium	1.5E-01	4.30E+02	3.57E-04	4.5E-03	4.30E+02	1.04E-05	1.1E-05	4.30E+02	2.66E-08
Beryllium	1.6E-03	2.00E+00	7.96E-04	2.1E-05	2.00E+00	1.07E-05	1.9E-07	2.00E+00	9.67E-08
Chromium	1.9E-01			1.1E-03			3.8E-05		
Cobalt	6.5E-03	1.82E+01	3.58E-04	9.5E-05	1.50E+02	6.32E-07	8.1E-06	1.82E+01	4.44E-07
Copper	2.2E-01			3.3E-02			6.9E-05		
Lead	1.3E+00	6.00E+01	2.12E-02	9.7E-03	6.00E+01	1.61E-04	3.4E-04	6.00E+01	5.61E-06
Mercury	2.5E-03	4.40E+00	5.78E-04	1.7E-04	4.40E+00	3.97E-05	9.5E-06	4.40E+00	2.16E-06
Nickel	3.7E-02	1.34E+01	2.77E-03	2.6E-04	1.34E+01	1.92E-05	6.8E-06	1.34E+01	5.08E-07
Tin	3.2E-02	3.76E+01	8.51E-04	5.0E-04	3.76E+01	1.34E-05	5.8E-05	3.76E+01	1.55E-06
Zinc	1.5E+01	3.90E+02	3.76E-02	3.5E-01	3.90E+02	9.01E-04	3.2E-03	3.90E+02	8.15E-06
SUMMARY HAZARD INDEX			2.5E-01			1.5E-03			9.5E-05

PDE = Potential Dietary Exposure (mg/kgBW/day) calculated according to equations in Table 2-7 of the RFI General Information Report (ABB-ES, 1995).
RTV = Reference Toxicity Value (mg/kgBW/day) =1/5th of lowest reported LD50 or lowest reported adverse effect level (LOAEL) for mortality from Appendix F-6 for closest related species.
HQ = Hazard Quotient (calculated by dividing PDE by RTV)

Appendix F-3
Hazard Quotients and Indices for Potential Lethal Effects for Representative Wildlife Species Associated with Average Exposure Point Concentrations of ECPCs in Surface Soils at SWMU 15

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs, Mayport, Florida

ANALYTE	*American robin*			*Red-tailed hawk*		
	PDE	RTV	HQ	PDE	RTV	HQ
Acetone	1.0E-04			1.1E-09		
Butylbenzylphthalate	7.9E-03			5.4E-06		
bis(2-ethylhexyl)phthalate	4.5E-02			1.7E-06		
4,4'-DDE	1.1E-01			1.7E-05		
4,4'-DDT	3.0E+00	1.19E+02	2.53E-02	1.1E-03	1.19E+02	9.65E-06
Chlordane	8.2E-02	4.80E+00	1.71E-02	2.0E-05	4.80E+00	4.10E-06
Antimony	1.9E-02			1.9E-07		
Arsenic	3.7E-02	6.46E+01	5.79E-04	4.4E-06	6.46E+01	6.88E-08
Barium	1.4E-01			2.8E-06		
Beryllium	1.5E-03			1.2E-07		
Chromium	1.8E-01	2.52E+01	7.17E-03	3.1E-05	2.52E+01	1.24E-06
Cobalt	6.1E-03			8.5E-06		
Copper	1.8E-01			5.5E-05		
Lead	1.2E+00			3.0E-04		
Mercury	2.3E-03	5.20E+00	4.40E-04	1.1E-05	5.20E+00	2.19E-06
Nickel	3.6E-02			5.3E-06		
Tin	3.0E-02			6.3E-05		
Zinc	1.4E+01	1292	1.10E-02	2.6E-03	1292	1.98E-06
SUMMARY HAZARD INDEX			6.2E-02			1.9E-05

PDE = Potential Dietary Exposure (mg/kgBW/day) calculated according to equations in Table 2-7 of the RFI General Information Report (ABB-ES, 1995).
RTV = Reference Toxicity Value (mg/kgBW/day) =1/5th of lowest reported LD50 or lowest reported adverse effect level (LOAEL) for mortality from Appendix F-6 for closest related species.
HQ = Hazard Quotient (calculated by dividing PDE by RTV)

Appendix F-3
Hazard Quotients and Indices for Potential Sublethal Effects for Representative Wildlife Species Associated with Average Exposure Point Concentrations of ECPCs in Surface Soils at SWMU 15

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs, Mayport, Florida

ANALYTE	*Short-tailed shrew*			*Eastern cottontail*			*Gray fox*		
	PDE	RTV	HQ	PDE	RTV	HQ	PDE	RTV	HQ
Acetone	1.1E-04	2.73E+05	4.12E-10	1.4E-06	2.73E+05	5.04E-12	7.0E-09	2.73E+05	2.56E-14
Butylbenzylphthalate	8.5E-03	4.90E+03	1.74E-06	1.3E-04	4.90E+03	2.64E-08	5.3E-06	4.90E+03	1.09E-09
bis(2-ethylhexyl)phthalate	4.6E-02	3.50E+01	1.31E-03	4.0E-05	3.50E+01	1.16E-06	4.0E-06	3.50E+01	1.14E-07
4,4'-DDE	1.1E-01			1.0E-04			1.7E-05		
4,4'-DDT	3.1E+00	2.00E-01	1.53E+01	6.6E-03	1.50E+02	4.39E-05	9.0E-04	3.54E+03	2.53E-07
Chlordane	8.4E-02	3.04E+00	2.76E-02	1.7E-04	3.04E+00	5.75E-05	1.6E-05	3.04E+00	5.35E-06
Antimony	2.1E-02			7.2E-04			1.4E-06		
Arsenic	4.5E-02	1.40E+01	3.20E-03	6.1E-03	1.40E+01	4.36E-04	7.8E-06	1.40E+01	5.57E-07
Barium	1.5E-01	1.98E+02	7.76E-04	4.5E-03	1.98E+02	2.26E-05	1.1E-05	1.98E+02	5.79E-08
Beryllium	1.6E-03			2.1E-05			1.9E-07		
Chromium	1.9E-01	1.40E+03	1.34E-04	1.1E-03	1.40E+03	7.82E-07	3.8E-05	1.40E+03	2.74E-08
Cobalt	6.5E-03			9.5E-05			8.1E-06		
Copper	2.2E-01	1.52E+02	1.44E-03	3.3E-02	1.52E+02	2.17E-04	6.9E-05	1.52E+02	4.53E-07
Lead	1.3E+00	2.00E+02	6.37E-03	9.7E-03	2.00E+02	4.84E-05	3.4E-04	2.00E+02	1.68E-06
Mercury	2.5E-03	4.00E+00	6.36E-04	1.7E-04	4.00E+00	4.37E-05	9.5E-06	4.00E+00	2.37E-06
Nickel	3.7E-02	5.00E+01	7.43E-04	2.6E-04	5.00E+01	5.14E-06	6.8E-06	5.00E+01	1.36E-07
Tin	3.2E-02			5.0E-04			5.8E-05		
Zinc	1.5E+01	2.00E+02	7.34E-02	3.5E-01	2.00E+02	1.76E-03	3.2E-03	2.00E+02	1.59E-05
SUMMARY HAZARD INDEX			1.5E+01			2.6E-03			2.7E-05

PDE = Potential Dietary Exposure (mg/kgBW/day) calculated according to equations in Table 2-7 of the RFI General Information Report (ABB-ES, 1995).
RTV = Reference Toxicity Value (mg/kgBW/day) = Lowest reported adverse effect level (LOAEL) for reproduction or growth from Appendix F-6 for closest related species.
HQ = Hazard Quotient (calculated by dividing PDE by RTV)

Appendix F-3
Hazard Quotients and Indices for Potential Sublethal Effects for Representative Wildlife Species Associated with Average Exposure Point Concentrations of ECPCs in Surface Soils at SWMU 15

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs, Mayport, Florida

ANALYTE	*American robin*			*Red-tailed hawk*		
	PDE	RTV	HQ	PDE	RTV	HQ
Acetone	1.0E-04			1.1E-09		
Butylbenzylphthalate	7.9E-03			5.4E-06		
bis(2-ethylhexyl)phthalate	4.5E-02			1.7E-06		
4,4'-DDE	1.1E-01	5.80E-01	1.85E-01	1.7E-05	3.90E-01	4.47E-05
4,4'-DDT	3.0E+00	1.40E-01	2.15E+01	1.1E-03	1.40E-01	8.20E-03
Chlordane	8.2E-02			2.0E-05		
Antimony	1.9E-02			1.9E-07		
Arsenic	3.7E-02			4.4E-06		
Barium	1.4E-01			2.8E-06		
Beryllium	1.5E-03			1.2E-07		
Chromium	1.8E-01	2.00E+02	9.03E-04	3.1E-05	2.00E+02	1.56E-07
Cobalt	6.1E-03			8.5E-06		
Copper	1.8E-01	2.90E+01	6.35E-03	5.5E-05	2.90E+01	1.88E-06
Lead	1.2E+00	1.25E+02	9.71E-03	3.0E-04	1.25E+02	2.38E-06
Mercury	2.3E-03	8.10E-01	2.83E-03	1.1E-05	8.10E-01	1.40E-05
Nickel	3.6E-02			5.3E-06		
Tin	3.0E-02			6.3E-05		
Zinc	1.4E+01			2.6E-03		
SUMMARY HAZARD INDEX			2.2E+01			8.3E-03

PDE = Potential Dietary Exposure (mg/kgBW/day) calculated according to equations in Table 2-7 of the RFI General Information Report (ABB-ES, 1995).
RTV = Reference Toxicity Value (mg/kgBW/day) = Lowest reported adverse effect level (LOAEL) for reproduction or growth from Appendix F-6 for closest related species.
HQ = Hazard Quotient (calculated by dividing PDE by RTV)

APPENDIX F-4

MODEL FOR PREDICTION OF GROUNDWATER TO SURFACE WATER TRANSPORT AND DILUTION OF ECPCs

Appendix F-4

Contaminant Transport Modeling Approach

Concentrations of CPCs were measured in groundwater sampled from monitoring wells located at SWMU 15 at NAVSTA Mayport. SWMU 15, the Old Pesticide Handling Area, is located some distance from the surface water body (St. John's River) into which the surficial aquifer groundwater discharges. Several physical processes act to reduce the concentrations of CPCs in groundwater as the groundwater flows between the contamination source and the point of discharge to surface water.

To obtain exposure point concentrations for organic CPCs, which are the concentrations of CPCs in groundwater at the point of discharge to surface water, groundwater contaminant transport modeling was performed. Each CPC was modeled individually to accomodate its unique characteristics. The model applied was an analytical solution to the classical advection-dispersion equation. The solution incorporates the processes of three-dimensional dispersion, transport velocity retardation assuming a linear sorption isotherm based on organic carbon partitioning and an assumed fraction of organic carbon in the subsurface media, and first-order decay due to biodegradation. The analytical solution applies for a physical system with one-dimensional groundwater flow , and a vertical planar continuous source oriented perpendicular to the direction of transport. Dispersion is modeled in the longitudinal direction, in two transverse directions, and one vertical direction (that is, the top of the source is located at the water table). The model is capable of predicting solute concentration at any point x,y,z within the flow field, at any selected time. Further, the model predicts the steady-state (maximum) concentration that can be expected for all time at a given point in the flow field.

The advection-dispersion equation, in three dimensions, including three dispersive components, a constant advective velocity, and one degradation term, can be stated as follows:

$$\alpha_x v \frac{\partial^2 C}{\partial x^2} + \alpha_y v \frac{\partial^2 C}{\partial y^2} + \alpha_z v \frac{\partial^2 C}{\partial z^2} - v \frac{\partial C}{\partial x} - \frac{r}{n} = \frac{\partial C}{\partial t}$$

where:

α_x, α_y, α_z are dispersivities in the x, y, and z directions
v is advective velocity
C is concentration
x, y, z are coordinates of the point of interest
r is some mathematical rate law
n is porosity, and
t is time

The analytical solution of the advection-dispersion equation that was applied was published by Domenico (1987) as:

$$C(x,y,z,t) = \left(\frac{C_0}{8}\right) \exp\left\{\left(\frac{x}{2\alpha_x}\right)\left[1-\left(1+\frac{4\lambda\alpha_x}{v}\right)^{1/2}\right]\right\}$$

$$erfc\left[\frac{x - vt\left(1+\frac{4\lambda\alpha_x}{v}\right)^{1/2}}{2(\alpha_x vt)^{1/2}}\right]$$

$$\left\{erf\left[\frac{\left(y+Y/2\right)}{2(\alpha_y x)^{1/2}}\right] - erf\left[\frac{\left(y-Y/2\right)}{2(\alpha_y x)^{1/2}}\right]\right\}$$

$$\left\{erf\left[\frac{(z+Z)}{2(\alpha_z x)^{1/2}}\right] - erf\left[\frac{(z-Z)}{2(\alpha_z x)^{1/2}}\right]\right\}$$

where:

$C(x,y,z,t)$ is solute concentration at a point in space and time
C_0 is the initial solute concentration
α_x, α_y, α_z are dispersivities in the x, y, and z directions
λ is a first-order degradation constant for the solute
v is advective velocity
erf is the standard error function
erfc is the complementary error function
Y is the width of the planar source
Z is the saturated thickness of the planar source

Along the line of symmetry y=z=0, the solution is (Domenico and Schwartz, 1990):

$$C(x,0,0,t) = \left(\frac{C_0}{2}\right) \exp\left\{\left(\frac{x}{2\alpha_x}\right)\left[1-\left(1+\frac{4\lambda\alpha_x}{v}\right)^{1/2}\right]\right\}$$

$$erfc\left[\frac{x - vt\left(1+\frac{4\lambda\alpha_x}{v}\right)^{1/2}}{2(\alpha_x vt)^{1/2}}\right]$$

$$\left\{erf\left[\frac{Y}{4(\alpha_y x)^{1/2}}\right] erf\left[\frac{Z}{2(\alpha_z x)^{1/2}}\right]\right\}$$

The second solution applies for points x directly downgradient of the source, at the water table, which is where concentrations would be highest for a dispersing solute. Features of the solutions to note are that if the rate constant lambda (λ) is zero (no biodegradation), the exponential term evaluates to $e^0=1$, and the concentration is controlled by the dispersion terms only. On the other hand, for a finite degradation rate, the exponential term is raised to a negative number. As λ becomes large relative to other variables in the dimensionless group $4\lambda\alpha_x/v$, the exponential term approaches zero, and the concentration approaches zero, reflecting the tremendous potential of degradation to reduce concentration.

Further, for a continuous solute source, at a point x in the flow field, solute concentration will be zero before solute is transported to that point, it will increase as the solute front passes by, and will approach a steady-state concentration well behind the solute front. At points x<<vt behind the solute front, input of solute from the source will be exactly balanced by loss of solute due to degradation, and the solute concentration will not change with time. This process is reflected in the argument of the complementary error function. The complementary error function asymptotically approaches a maximum of 2 as its argument approaches -2, which is the case when x<<vt. In other words, at a position x well behind the advective front vt, the concentration is at steady-state. Similarly, the complementary error function asymptotically approaches a minimum of 0 as its argument approaches 2. In other words, as stands to reason, concentrations are zero ahead of the solute front. For positions x where the argument of the complementary error function is between -2 and 2, concentrations are between zero and steady state, characteristic of the solute front breakthrough curve. By evaluating this argument for a distance x equal to the distance between solute source and the point of discharge, one can easily determine if discharge of that compound is at steady state, if it is still on the breakthrough curve and future discharge concentratations will be greater, or if discharge is not yet occurring.

Exposure point concentrations were calculated from the transport model solution for steady-state conditions because the steady-state concentration is the peak concentration the solute will attain for all time. For erfc(-2)=2, the solution for steady-state on the line of symmetry is derived from the second equation above to be as follows:

$$C(x,0,0) = (C_0)\exp\left\{\left(\frac{x}{2\alpha_x}\right)\left[1-\left(1+\frac{4\lambda\alpha_x}{v}\right)^{1/2}\right]\right\}$$

$$\left\{erf\left[\frac{Y}{4(\alpha_y x)^{1/2}}\right]erf\left[\frac{Z}{2(\alpha_z x)^{1/2}}\right]\right\}$$

Lastly, if degradation is not considered, that is, $\lambda = 0$, the exponetial term becomes 1, and the above equation simplifies to:

$$C(x,0,0) = (C_0)\left\{ erf\left[\frac{Y}{4(\alpha_y x)^{1/2}}\right] erf\left[\frac{Z}{2(\alpha_z x)^{1/2}}\right]\right\}$$

To account for retardation of transport velocity, the advective velocity term v was substituted with a retarded transport velocity, equal to the advective velocity divided by a retardation factor. The retardation factor was computed for each individual compound modeled, by the following calculation (adapted from Fetter, 1988):

$$R_f = 1 + \left(\frac{\gamma_d}{gn}\right) K_d$$

where:
R_f is the transport velocity retardation factor
γ_d is the dry unit weight of the aquifer material
g is the acceleration due to gravity
n is aquifer porosity, and
K_d is a distribution coefficient for the partitioning of a hydrophobic organic compound between groundwater and organic carbon present in interstices in the aquifer material.

K_d is calculated as follows:

$$K_d = K_{oc} f_{oc}$$

where:
K_{oc} is the compound's organic carbon partition coefficient
f_{oc} is the weight fraction of organic carbon in the aquifer material

Only the transport of organic compounds was modeled. Concentrations of inorganics were carried from the point of measurement to the point of discharge unchanged. The processes that affect transport of organics in groundwater are amenable to analytical solution. The processes which affect the transport of inorganics, however, are complex and are generally not quantifiable. A reliable model does not exist for the transport of metals in groundwater. It should be noted, however, that while the concentrations of inorganic CPCs have been assumed to not decrease during transport, a number of mechanisms do exist that would cause discharge concentrations to be much lower. The mechanisms and factors include sorption, redox potential, reaction and precipitation, speciation and solubility, cation exchange, and attenuation. These processes are in some degree irreversible. The evaluation for metals here, then, is very conservative, as sampling of surface waters suggests.

The variables in the solution for organic transport were the following:

hydraulic conductivity
hydraulic gradient
soil porosity
soil unit weight
fraction of organic carbon present in the subsurface soil (f_{oc})
scale-dependent dispersivities

initial source CPC concentration
contaminant source dimensions
transport distance between source and discharge
CPC aqueous anaerobic degradation rate
organic carbon partition coefficient (K_{oc})
age of source

Some parameters were measured quantities or chemical constants, while others were estimated based on literature review or site knowledge. Hydraulic conductivity and gradient were measured in the field. Typical values for porosity and soil unit weight for clean dense sand were assumed. A conservative low estimate of f_{oc}, typical of clean fluvial sand, was selected from the literature (Domenico & Schwartz, 1990). Experimental or predicted values for K_{oc} were found in EPA literature (USEPA, 1990). Experimental or predicted degradation rates (or analogous half-life times) were derived from literature (Howard, 1991) by selecting the slowest rate of ranges reported for anaerobic aqueous degradation. Travel time was taken to be the age of the source, as inferred from written site history. Similarly, source size was estimated based on sampling data and site history. Source concentration for each individual CPC was taken to be the concentration detected in monitoring wells.

Dispersivities are generally accepted to be scale and time-dependent (Domenico & Schwartz, 1990). These coefficients can be measured in bench-scale column experiments, but may be unreliable to apply to the field scale. Field scale dispersivity can be measured through the application of a tracer test or from contaminant data collected over time. However, long periods of time (months to years) may be required to reach steady-state, and such measurements require a site to be heavily instrumented. For NAVSTA Mayport, dispersivities are estimated by a procedure advocated by Gelhar and Axness (1981) which accounts for scale-dependence. Dispersivities are simply calculated to be a fraction of the travel distance.

Model solution was performed by hand. Calculation provided the predicted steady-state concentration of each CPC at the point of discharge. The steady-state concentration is the steady, peak concentration that is attained in the region some distance behind the solute front, where solute degradation is exactly

balanced by solute input from the continuous source. Also calculated was a parameter which indicates whether discharge of each CPC is at steady-state at the present time, or whether discharge is still on the breakthrough curve, or whether discharge of that CPC has not yet occurred. The total travel time required to reach steady-state discharge can also be calculated, but was not required in the analysis. The retardation factor for each CPC, required for the model solution, is the ratio of groundwater flow velocity to CPC transport velocity. This factor was also useful in deciding whether a compound detected in a particular monitoring well was likely to have originated from a given source area.

Because a degradation rate for carbon disulfide was not found in the literature, this compound was conservatively assumed to not degrade. As a result, carbon disulfide was modeled to discharge at very much greater concentration than if degradation had been incorporated.

References:

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Howard, P. H., et al., 1991. Handbook of Environmental Degradation Rates; Lewis Publishers; Chelsea, Michigan.

U. S. Environmental Protection Agency (USEPA), 1990. "Basics of Pump-and-Treat Ground-Water Remediation Technology"; Robert S. Kerr Environmental Research Laboratory; EPA-600/8-90/003; Ada, Oklahoma.

PROJECT	COMP. BY	JOB NO.
MODEL EQUATIONS	CHEYNE	
	CHK. BY	DATE 8-24-94

MODEL EQUATIONS:

WE WANT TO CALCULATE THE STEADY STATE CONCENTRATIONS AT THE POINT OF DISCHARGE. THAT IS, THE PEAK CONCENTRATION, WHICH WILL BE LOCATED SOMEWHERE $x \ll vt$ BEHIND THE ADVECTIVE FRONT.

THIS IS THE CASE WHEN THE ARGUMENT (β) FOR erfc (SEE BELOW) IS LESS THAN -2. AT SUCH β, $erfc(\beta)$ APPROACHES 2 ASYMPTOTICALLY.

HENCE WE WILL SIMPLY USE 2 FOR $erfc(\beta)$, RATHER THAN CALCULATING IT FOR A GIVEN t.

IN ADDITION, WE WILL CALCULATE CONCENTRATIONS ON THE LINE OF SYMMETRY OF FLOW. THAT IS, x & y BOTH $= \phi$. THIS MAKES THE FORM OF THE MODEL EQUATION SIMPLER.

FURTHER, WE WILL CALCULATE THE ARGUMENT β BASED ON THE ELAPSED TIME BETWEEN THE PRESUMED INTRODUCTION OF THE SOURCE & THE PRESENT TIME (I.E., $t \equiv$ SOURCE AGE). THIS SHOULD SIMULATE PRESENT CONDITIONS, & TELL US WHETHER CONTAMINATION HAS REACHED THE POINT OF DISCHARGE ($-2 < \beta < 2$) WHETHER IT IS AT STEADY STATE ($\beta < -2$, $erfc(\beta) \approx 2$) OR WHETHER IT HAS NOT YET REACHED THE POINT OF DISCHARGE ($\beta > 2$, $erfc(\beta) \approx 0$)

IN GENERAL, WE HAVE:

$$C(x,y,z,t) = \frac{C_0}{8} \exp\left\{\left(\frac{v x}{2\alpha_x}\right)\left[1 - \left(1 + \frac{4\lambda\alpha_x x}{v_R}\right)^{1/2}\right]\right\}$$

$$erfc\left[\frac{x - vt\left(1 + 4\lambda\alpha_x x / v_R\right)^{1/2}}{2\left(\alpha_x v_R t\right)^{1/2}}\right] \qquad (1)$$

$$erf\left[\frac{y + Y/2}{2(\alpha_y x)^{1/2}}\right] - erf\left[\frac{y - Y/2}{2(\alpha_y x)^{1/2}}\right]$$

$$erf\left[\frac{z + Z}{2(\alpha_z x)^{1/2}}\right] - erf\left[\frac{z - Z}{2(\alpha_z x)^{1/2}}\right]$$

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ON THE LINE OF SYMMETRY WE HAVE :

$$C(x,0,0,t) = \left(\frac{C_0}{2}\right)\exp\left\{\left(\frac{x}{2\alpha_x}\right)\left[1-\left(1+\frac{4\lambda\alpha_x}{V_R}\right)^{1/2}\right]\right\}$$

$$\operatorname{erfc}\left[\frac{x - V_R t\left(1+\left(\frac{4\lambda\alpha_x}{V_R}\right)\right)^{1/2}}{2(\alpha_x V_R t)^{1/2}}\right] \qquad (2)$$

$$\operatorname{erf}\left[\frac{Y}{4(\alpha_y x)^{1/2}}\right]\operatorname{erf}\left[\frac{Z}{2(\alpha_z x)^{1/2}}\right]$$

AT STEADY STATE, ON THE LINE OF SYMMETRY, WE HAVE: (BECAUSE WE SET $\beta = -2$, $\operatorname{erfc}(\beta) = 2$)

$$C_{MAX}(x,0,0) = (C_0)\exp\left\{\left(\frac{x}{2\alpha_x}\right)\left[1-\left(1+\frac{4\lambda\alpha_x}{V_R}\right)^{1/2}\right]\right\}\operatorname{erf}\left[\frac{Y}{4(\alpha_y x)^{1/2}}\right]\operatorname{erf}\left[\frac{Z}{2(\alpha_z x)^{1/2}}\right] \qquad (3)$$

AND LASTLY, IF WE DO NOT INCLUDE DEGRADATION ($\lambda = 0$)

$$C_{MAX}(x,0,0) = C_0\left\{\operatorname{erf}\left[\frac{Y}{4(\alpha_y x)^{1/2}}\right]\operatorname{erf}\left[\frac{Z}{2(\alpha_z x)^{1/2}}\right]\right\} \qquad (4)$$

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PROJECT	COMP. BY	JOB NO.
GW TO SW TRANSPORT AND DILUTION MODEL MAYPORT RFI Group II - Appendix F-4	CHK. BY	DATE

SWMU 15 - OLD PEST HANDLING AREA

INPUT PARAMETERS

K (ft/min)	0.0034		measured	hyd. conductivity
i	0.014		measured	hyd. gradient
γ_d gamma dry (kN/m³)	18	(115 lb/ft³)	assumed	unit weight
g (m/s²)	9.81		constant	gravity
n	0.35		measured	porosity
Foc	0.001		(assumed; based on Foc)	fractional organic carbon
t (yrs)	32		actual	age of source
L (x) (ft)	1800	(549 m)	measured	length of flow path
Y (ft)	210	(64 m)	measured	width of source (diagonal of rect. area ≈ parallel to flow path)
Z (ft)	10	(3.0 m)	assumed	est. thickness of source
alpha x (ft)	180	(54.9 m)	1/10 L (assumed)	longitudinal dispersivity
alpha y (ft)	60	(18.3 m)	1/3 alpha x (assumed)	transverse dispersivity
alpha z (ft)	18	(5.5 m)	1/100 alpha x (assumed)	vertical dispersivity

PROJECT	COMP. BY	JOB NO.
TRANSPORT MODEL MAYPORT RFI SPT	CHK. BY	DATE

SWMU 15

COPC	C_o (µg/l)	$t_{1/2}$ (hr)	K_{oc}
Carbon Disulfide	2	NA	54

① CALCULATE INTERMEDIATE PARAMETERS

$$V_{Retarded} = \frac{V_{advection}}{R_f}$$

R_f = retardation factor (organics) = $1 + \left(\frac{\gamma_d}{gn}\right) K_d$

K_d = distribution coefficient = $K_{oc} F_{oc}$

$$V_R = \frac{\frac{Ki}{n}}{1 + \left(\frac{\gamma_d}{gn}\right)(K_{oc} f_{oc})} = \frac{V_a}{R_f}$$

$$= \frac{\left(\frac{.0034\ ft}{min}\right)\left(\frac{.3048\ m}{ft}\right)\left(\frac{60\ min}{hr}\right)\left(\frac{0.014}{1}\right)\left(\frac{1}{0.35}\right)}{1 + \left(\frac{18{,}000\ kg \cdot m}{s^2 \cdot m^3}\right)\left(\frac{s^2}{9.81\ m}\right)\left(\frac{1}{.35}\right)\left(\frac{.001}{1}\right)\left(\frac{54\ ml}{g}\right)\left(\frac{.000\ g}{kg}\right)\left(\frac{m^3}{1 \cdot 10^6\ ml^3}\right)}$$

$$= \frac{.0025}{1.28} = 1.95 \times 10^{-3}\ m/hr$$

② HAS CONTAMINANT REACHED RIVER (DISCHARGE)?

$$\beta = \frac{x - V_r t}{2(\alpha_x V_r t)^{1/2}} = \frac{\left[\frac{1800\ ft}{1}\left(\frac{.3048\ m}{ft}\right)\right] - \left[\frac{1.95 \times 10^{-3}\ m}{hr}\left(\frac{8760\ hr}{yr}\right)\left(\frac{32\ yr}{1}\right)\right]}{2\left[\left(.80\ ft\right)\left(\frac{.3048\ m}{ft}\right)\left(\frac{1.95 \times 10^{-3}\ m}{hr}\left(\frac{8760\ hr}{yr}\right)\left(32\ y\right.\right.\right]}$$

PROJECT	COMP. BY	JOB NO.
Carbon disulfide p 2 of 2	CHK. BY	DATE

$$= \frac{548.64 - 546.62}{2\,(173.17)} = \frac{2.02}{346.34} = 0.006$$

0.006 is between −2 and +2, so carbon disulfide is reaching discharge now, but has not reached steady state

③ Calculate steady state concentration
* no degradation rates available ∴ assume none occurring ($\lambda = 0$)

EQN 14 $$C_{MAX}(x,0,0) = C_o \left\{ \mathrm{erf}\left[\frac{Y}{4(\alpha_y x)^{1/2}}\right] \mathrm{erf}\left[\frac{Z}{2(\alpha_z x)^{1/2}}\right] \right\}$$

$$= C_o \left\{ \mathrm{erf}\left[\frac{64m}{4[(18.3)(549)]^{1/2}}\right] \mathrm{erf}\left[\frac{3.1\,m}{2[(5.5m)(549m)]^{1/2}}\right] \right\}$$

$$= C_o \;\; \mathrm{erf}\left[\frac{64}{400.9}\right] \mathrm{erf}\left[\frac{3.1}{109.9}\right]$$

$$= 2 \left[\mathrm{erf}\,(0.16) \;\; \mathrm{erf}\,(0.028)\right]$$ see attached for calc. of erf

$$= 2 \left[(.174) \;\; (.032)\right]$$

$$= 2\,(.006)$$

$$= 0.012\ \mu g/l$$

VERY CONSERVATIVE EOC

PROJECT	COMP. BY	JOB NO.
	CHK. BY	DATE

BEHP $C_o = 14\ \mu g/l$ $t_{1/2} = 9336\ hr$ $K_{oc} = 5900\ ml/g$

① Calculate intermediate (V_R)

$$V_R = \frac{\left(\frac{.0034\ ft}{min}\right)\left(\frac{.3048\ m}{ft}\right)\left(\frac{60\ min}{hr}\right)\left(\frac{0.014}{1}\right)\left(\frac{1}{.35}\right)}{1 + \left(\frac{18000\ kgm}{s^2 \cdot m^3}\right)\left(\frac{s^2}{9.81\ m}\right)\left(\frac{1}{.35}\right)\left(\frac{.001}{1}\right)\left(\frac{5900\ ml}{g}\right)\left(\frac{1000\ g}{kg}\right)\left(\frac{m^3}{10^6\ ml^3}\right)}$$

$$\frac{V_a}{\rho_f} = \frac{.0025}{1 + 30.93} = \frac{.0025}{31.93} = 8 \times 10^{-5}\ m/hr$$

② Has contaminant reached river yet?

$$\beta = \frac{\left[\frac{1800\ ft}{1}\left(\frac{.3048\ m}{ft}\right)\right] - \left[\frac{8 \times 10^{-5}\ m}{hr}\left(\frac{8760\ hr}{yr}\right)\left(\frac{32\ yr}{1}\right)\right]}{2\left[\left(\frac{180\ ft}{1}\right)\left(\frac{.3048\ m}{ft}\right)\left(\frac{8 \times 10^{-5}\ m}{hr}\right)\left(\frac{8760\ hr}{yr}\right)\left(\frac{32\ yr}{1}\right)\right]^{1/2}}$$

$$= \frac{548.64 - 21.95}{2\ (35.08)} = \frac{526.69}{70.16} = 7.5$$

$\beta = 7.5 > 2$ $\quad erfc(\beta) \approx 0$

So BEHP is not yet discharging to the river

③ Calculate steady state peak concentration once it begins discharging

EQN (3) $$C_{MAX}(x,0,0) = C_o \exp\left\{\left(\frac{x}{2\alpha_x}\right)\left[1 - \left(1 + \frac{4\lambda\alpha x}{V_R}\right)^{1/2}\right]\right\} erf\left[\frac{y}{4(\alpha_y x)^{1/2}}\right]\left[\frac{z}{2(\alpha_z x)^{1/2}}\right]$$

PROJECT	COMP. BY	JOB NO.
BEHP 02	CHK. BY	DATE

$$C_{max}(x,0,0) = C_0 \exp\left\{\frac{x}{2\alpha_x}\left[1-\left(1+\frac{4\lambda\alpha_x}{V_R}\right)^{1/2}\right]\right\} \operatorname{erf}\left[\frac{y}{4(\alpha_y x)^{1/2}}\right] \operatorname{erf}\left[\frac{z}{2(\alpha_z x)^{1/2}}\right]$$

$$= C_0 \exp\left\{\left(\frac{549\,m}{109.8\,m}\right)\left[1-\left(1+\frac{4\left(\frac{693}{9336}\right)(54.9\,m)}{\frac{8\times10^{-5}\,m}{hr}}\right)^{1/2}\right]\right\} \operatorname{erf}\left[\frac{64\,m}{4\left(18.3\,(549)\right)^{1/2}}\right] \operatorname{erf}\left[\frac{3.1\,m}{2(5.5)(549)^{1/2}}\right]$$

$$\left\{(5)\left[1-\left(1+\left(\frac{0.016}{8\times10^{-5}}\right)^{1/2}\right)\right]\right\} \operatorname{erf}\left[\frac{64}{4(100.23)}\right] \operatorname{erf}\left[\frac{3.1}{2(54.9)}\right]$$

$$\underbrace{\left\{(5)\left[1-(1+14.14)\right]\right\}}_{(-14.14)} \operatorname{erf}\left[\frac{64}{400.92}\right] \operatorname{erf}\left[\frac{3.1}{109.8}\right]$$

$$C_0 \exp(-70.7) \operatorname{erf}(0.16) \operatorname{erf}(0.028)$$

$$14\,(1.97\times10^{-31})\left[\operatorname{erf}(.16)\operatorname{erf}(.028)\right]$$

$$= 14\,\mu g/L\,(1.97\times10^{-31})\quad .17\quad .032$$

$$= 1.5\times10^{-32}\,\mu g/L$$ STEADY STATE DISCHARGE CONCENTRATION

PROJECT	COMP. BY	JOB NO.
21 of 1	CHK. BY	DATE

α - BHC $\quad C_0 = 0.23 \quad t_{1/2} = 960 \quad K_{oc} = 3517$

① Calculate intermediate

$$V_R = \frac{V_a}{R_f} = \frac{.0025}{1 + \left(\frac{1}{18000}\right)\left(\frac{1}{9.81}\right)\left(\frac{1}{.35}\right)\left(\frac{.001}{1}\right)(3715)\left(\frac{1}{1000}\right)\left(\frac{1}{1\times10^6}\right)}$$

$$= \frac{.0025}{1 + \left(\frac{6687000}{3433500}\right)} = \frac{.0025}{1 + 19.48} = \frac{.0025}{20.48} = 1.2\times10^{-4}\ m/hr$$

② Has contaminant reached river?

$$\beta = \frac{548.6 - \left[1.2\times10^{-4}(8760)(32)\right]}{2\left[(180)(.3048)(1.2\times10^{-4})(8760)(32)\right]^{1/2}} = \frac{548.6 - 33.6}{2(42.96)} = \frac{515}{85.9}$$

$= 5.99 > 2 \quad \therefore$ not susceptible to river act

③ Calculate steady state peak concentrations once discharge ceases

$$C_{max} = C_0 \exp\left\{(5)\left[1 - \left(1 + \frac{4\left(\frac{.693}{960}\right)(54.9)}{1.2\times10^{-4}}\right)^{1/2}\right] \operatorname{erf}(Y) \operatorname{erf}(\Xi)\right.$$

$$\left[1 - \left(1 + \left(\frac{.158}{1.2\times10^{-4}}\right)\right)^{1/2}\right]$$

$= 0.23 \exp\left\{5\left[1 - (1 + 1316.7)^{1/2}\right]\right.$

$(0.23) \exp\left\{(5)(1 - 36.29)\right\} \quad (0.1) \quad 0.032$

$= -176.45$

$(0.23)\ (2.34\times10^{-77})(0.1)(0.032) = 2.92\times10^{-80}\ \mu g/L$

ABB Environmental Services, Inc.

FORM 00.01 REV 4/81

PROJECT	COMP. BY	JOB NO.
p 101	CHK. BY	DATE

β-BHC $C_o = 3.6$ $t_{1/2} = 2256$ $K_{oc} = 3715$

① Calculate intermediate (V_R)

$V_R = 1.2 \times 10^{-4}$ m/hr (same value as for α-BHC
(Koc values are equal)

② Has contaminant reached river yet?

$$\beta = \frac{548.64 - 33.6}{2(42.96)} = 5.99$$ (same as for α-BHC

∴ not discharging to river yet

③ Calculate steady state peak concentration once discharge begins

$$C_{max} = C_o \exp\left\{ 5 \left[1 - \left(1 + \frac{4\left(\frac{.693}{2256}\right)(54.9)}{1.2 \times 10^{-4}} \right)^{1/2} \right] \right\} \operatorname{erf}(Y) \operatorname{erf}(Z)$$

$$= 3.6 \exp\left\{ 5 \left[1 - \left(1 + \frac{.067}{1.2 \times 10^{-4}} \right)^{1/2} \right.\right.$$

$$1 - (563.14)^{1/2}$$

$$1 - 23.71$$

$$5(-22.71)$$

$$= 3.6 \exp(-113.55)(0.17)(0.032)$$

$$= (3.6)\ 4.85 \times 10^{-50}$$

$$= 9.5 \times 10^{-52}$$ STEADY STATE DISCHARGE

PROJECT	COMP. BY	JOB NO.
	CHK. BY	DATE

δ - BHC $\quad C_o = 0.029\ \mu g/l \quad t_{1/2} = 2400\ hr \quad K_{oc} = 6600\ \frac{ml}{g}$

① Calculate Intermediate (V_R)

$$V_r = \frac{\left(\frac{.0094\ ft}{min}\right)\left(\frac{.3048\ m}{ft}\right)\left(\frac{60\ min}{hr}\right)\left(\frac{0.014}{1}\right)\left(\frac{1}{0.35}\right)}{1 + \left(\frac{18000\ kg \cdot m}{s^2 \cdot m^3}\right)\left(\frac{s^2}{9.81\ m}\right)\left(\frac{1}{.25}\right)\left(\frac{.001}{1}\right)\left(\frac{6600\ ml}{g}\right)\left(\frac{1000\ g}{kg}\right)\left(\frac{m^3}{10^6\ m}\right)}$$

$$\frac{V_a}{R_f} = \frac{.0025}{1+34.6} = \frac{.0025}{35.6} = 7.0 \times 10^{-5}\ m/hr$$

② Has contaminant reached river yet?

$$\beta = \frac{\left[\frac{1800\ ft}{1}\left(\frac{.3048\ m}{ft}\right)\right] - \left[\frac{7\times10^{-5}\ m}{hr}\left(\frac{8760\ hr}{yr}\right)\left(\frac{32\ yr}{1}\right)\right]}{2\left[(180/.3048)(7\times10^{-5})(8760)(32)\right]^{1/2}}$$

$$= \frac{(548.64) - (19.62)}{2\ (1076.6)^{1/2}} = \frac{529.02}{65.6} = 8.06$$

$\beta = 8.06 > 2 \quad \therefore \quad \delta$ - BHC has not reached river yet.

③ Calculate steady state peak concentration since discharge begins

EQN (3) $$C_{max}(x,0,0) = C_o \exp\left\{\left(\frac{54.0}{109.8}\right)\left[1 - \left(1 + \frac{4\left(\frac{.693}{2400}\right)(54.0)}{7\times10^{-5}}\right)^{1/2}\right]\right\} \operatorname{erf}(y)\ \operatorname{erf}(z)$$

$$= 0.029 \exp \left[1 - \frac{.0027}{7\times10^{-5}}\right]$$

$$= 0.029 \exp\left[1 - \left(1 + 30\right)^{1/2}\right]$$

$$= 30$$

PROJECT	COMP. BY	JOB NO.
δ-BHC 3.2	CHK. BY	DATE

$$= (0.029)\exp\{5(-29)\}\,\mathrm{erf}^2(.6)\,\mathrm{erf}^2(.028)$$

$$= (0.029)\left[\exp(-145)\right](0.17)(0.032)$$

$$= (0.029)\left(1.06\times10^{-63}\right)(0.17)(0.032)$$

$$= 1.7\times10^{-67}\ \mu g/\ell$$

STEADY STATE DISCHARGE CONCENTRATIONS

APPENDIX F-5

INGESTION TOXICITY INFORMATION FOR TERRESTRIAL SPECIES

Appendix F-5
Ingestion Toxicity Information for Terrestrial Wildlife

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical	Test Species	Test Type	Duration	Effect	Result (mg/kgBW/day)		Reference
					Lethal	Sublethal	
VOLATILES							
Acetone	Rat	Oral	NR	LD50	5800		RTECS, 1994
	Rat	Single Oral Dose		LD50	9750		Sax, 1984
	Mouse	Oral	NR	LD50	3000		RTECS, 1994
	Rabbit	Oral	NR	LD50	5340		RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		273000	RTECS, 1994
SEMIVOLATILES							
Butylbenzylphthalate	Rat	Oral	NR	LD50	2330		RTECS, 1994
	Mouse	Oral	NR	LD50	4170		RTECS, 1994
	Guinea Pig	Oral	NR	LD50	13750		RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		21000	RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		16400	RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		16400	RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		4900	RTECS, 1994
Bis(2-ethylhexyl)phthalate	Rat	Oral	NR	LD50	30600		RTECS, 1994
	Mouse	Oral	NR	LD50	30000		RTECS, 1994
	Rabbit	Oral	NR	LD50	34000		RTECS, 1994
	Guinea pig	Oral	NR	LD50	26000		RTECS, 1994
	Rat	Single oral dose		LD50	26000		ATSDR, 1988

Appendix F-5
Ingestion Toxicity Information for Terrestrial Wildlife

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical	Test Species	Test Type	Duration	Effect	Result (mg/kgBW/day)		Reference
					Lethal	Sublethal	
	Rat	Single oral dose		LD50	8600		NIOSH, 1985
	Rat	Oral	NR	LOAEL for reproductive effects		7140	RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		35	RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		6000	RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		17200	RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		10000	RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		9766	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		78880	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		4200	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		50	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		1000	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		2040	RTECS, 1994
	Guinea pig	Oral	NR	LOAEL for reproductive effects		20000	RTECS, 1994
PESTICIDES/PCBs							
4,4-DDE	Rat	Oral	NR	LD50	880		RTECS, 1994

Appendix F-5
Ingestion Toxicity Information for Terrestrial Wildlife

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical	Test Species	Test Type	Duration	Effect	Result (mg/kgBW/day)		Reference
					Lethal	Sublethal	
	Mouse	Oral	NR	LD50	700		RTECS, 1994
	Hamster	Oral	NR	LD50	>5000		RTECS, 1994
	Mallard	Oral	NR	Eggshell thinning		2.91	USEPA, 1993
	Mallard	Oral	2 years	Embryo mortality, cracked eggs		0.58	USEPA, 1993
	Kestrel	Oral	NR	Eggshell thinning		0.39	USEPA, 1993
4,4-DDT	Rat	Oral	NR	LD50	87		RTECS, 1994
	Rat	Single oral dose		LD50	100		USEPA, 1985
	Rat	Oral	NR	LOAEL for reproductive effects		112	RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		100	RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		430	RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		1890	RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		250	RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		50	RTECS, 1994
	Rat	Oral	3 generations	LOAEL for reproductive effects		0.2	RTECS, 1994
	Rat	Oral	2 years	LOAEL for reproductive effects		2.5	RTECS, 1994
	Mouse	Oral	NR	LD50	135		RTECS, 1994

Appendix F-5
Ingestion Toxicity Information for Terrestrial Wildlife

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical	Test Species	Test Type	Duration	Effect	Result (mg/kgBW/day)		Reference
					Lethal	Sublethal	
	Mouse	Single oral dose		LD50	200		USEPA, 1985
	Mouse	Oral	NR	LOAEL for reproductive effects		504	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		81	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		124	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		148	RTECS, 1994
	Rabbit	Oral	NR	LD50	250		RTECS, 1994
	Rabbit	Oral	NR	LOAEL for reproductive effects		150	RTECS, 1994
	Guinea pig	Oral	NR	LD50	150		RTECS, 1994
	Hamster	Oral	NR	LD50	>5000		RTECS, 1994
	Dog	Single oral dose		LD50	150		RTECS, 1994
	Dog	Oral	NR	LD50	60		USEPA, 1985
	Dog	Oral	NR	LOAEL for reproductive effects		3540	RTECS, 1994
	Monkey	Oral	NR	LD50	200		RTECS, 1994
	Chicken	Oral	NR	Decreased reproductive success; toxic symptoms		91.4[b]	USEPA, 1985
	Rock dove	Single oral dose		LD50	4000		USFWS, 1984
	Black duck	Oral	NR	Reduced eggshell thickness		0.14[b]	Longcore and Stendell, 1977
	Mallard	Single oral dose		LD50	2240		USFWS, 1984

Appendix F-5
Ingestion Toxicity Information for Terrestrial Wildlife

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical	Test Species	Test Type	Duration	Effect	Result (mg/kgBW/day)		Reference
					Lethal	Sublethal	
	Mallard	Oral	NR	Reduced eggshell thickness		2.8	Longcore and Stendell, 1977
	Mallard	Oral	NR	Eggshell thinning		1.16	USEPA, 1993
	Mallard	Oral	NR	Eggshell thinning		2.91	USEPA, 1993
	Mallard	Oral	NR	LOAEL for reproductive effects		1.45	USEPA, 1993
	California quail	Single oral dose		LD50	595		USFWS, 1984
	Japanese quail	Single oral dose		LD50	841		USFWS, 1984
	Pheasant	Single oral dose		LD50	1334		USFWS, 1984
	Sandhill crane	Single oral dose		LD50	1200		USFWS, 1984
	Kestrel	Oral	NR	Reduced eggshell thickness		0.56*	USEPA, 1985
	Kestrel	Oral	NR	Reduced eggshell thickness		0.16*	Weimeyer, et al., 1986
	Barn owl	Oral	NR	Reduced eggshell thickness		0.14*	Longcore and Stendell, 1977
Chlordane	Rat	Oral	NR	LD50	283		RTECS, 1994
	Rat	Single oral dose		LD50	430		Allen et al., 1979
	Rat	Single oral dose		LD50	335		Allen et al., 1979
	Rat	Oral	NR	LD50	200		RTECS, 1994
	Mouse	Oral	NR	LD50	145		RTECS, 1994
	Rabbit	Single oral dose		LD50	300		Allen et al., 1979
	Rabbit	Single oral dose		LD50	100		RTECS, 1994
	Hamster	Oral	NR	LD50	1720		RTECS, 1994

Appendix F-5
Ingestion Toxicity Information for Terrestrial Wildlife

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical	Test Species	Test Type	Duration	Effect	Result (mg/kgBW/day)		Reference
					Lethal	Sublethal	
	Dog	Single oral dose		LD50	200		Allen et al., 1979
	Domestic mammal	Oral	NR	LD50	50		RTECS, 1994
	Goat	Single oral dose		LD50	180		Allen et al., 1979
	Chicken	Oral	NR	LD50	220		RTECS, 1994
	Duck	Oral	NR	LD50	1200		RTECS, 1994
	Japanese quail	Oral	5 days	LD50	35*		Hill et al., 1975
	Bobwhite	Oral	5 days	LD50	29*		Hill et al., 1975
	Mallard	Oral	5 days	LD50	62*		Hill et al., 1975
	Pheasant	Single oral dose	NR	LD50	24		USFWS, 1984
	Mouse	Oral	NR	LOAEL for reproductive effects		3.36	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		152	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		7	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		3.04	RTECS, 1994
INORGANICS							
Antimony	Rat	Oral	NR	LD50	7000		RTECS, 1994
	Rat	Oral	NR	LD50	763		RTECS, 1994
Arsenic	Mouse	Oral	NR	LD50	145		RTECS, 1994
	Pheasant	Single oral dose		LD50	386		Eisler, 1988
	Mallard	Single oral dose		LD50	323		Eisler, 1988

Appendix F-5
Ingestion Toxicity Information for Terrestrial Wildlife

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical	Test Species	Test Type	Duration	Effect	Result (mg/kgBW/day)		Reference
					Lethal	Sublethal	
	Hamster	Single oral dose	Gestation	7 - 36% fetal mortality		14	ATSDR, 1991
Barium	Rat	Oral	13 weeks	20% population mortality	430		Dietz et al., 1992
	Rat	Oral	10 days	Decreased ovarian weight		198	ATSDR, 1990
Beryllium	Rat	Single oral dose		LD50	10		USEPA, 1985
Chromium (Potassium dichromate)	Japanese quail	Oral	5 days	LD50	126		Hill and Camardese, 1986
Chromium (III)	Rat	Oral	90 days	NOAEL for reproductive effects		1400	Ivankovic and Preussman, 1975
	Black duck	Oral	5 months	NOAEL for reproductive effects		200	Outridge and Scheuhaemmer, 1993
Cobalt	Rat	Single oral dose		LD50	91		ATSDR, 1991
	Rat	Oral	NR	LD50	6171		RTECS, 1994
	Rabbit	Oral	NR	LD50	750		RTECS, 1994
Copper	Rat	Single oral dose		LOAEL for reproductive effects		152	NIOSH, 1985 and RTECS, 1994
	Mallard	Oral	NR	LOAEL		29	NRC, 1977
	Mouse	Oral	30 days	Decreased litter sizes with teratogenic effects		100	Lecyk, 1980
Lead	Guinea pig	Single oral dose		LD50	300		Sax, 1984
	Rat	Oral	3 weeks	50% of progeny dead		200	

Appendix F-5
Ingestion Toxicity Information for Terrestrial Wildlife

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical	Test Species	Test Type	Duration	Effect	Result (mg/kgBW/day)		Reference
					Lethal	Sublethal	
	Rat	Oral	NR	LOAEL for reproductive effects		790	RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		1140	RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		520	RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		1100	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		1120	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		6300	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		300	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		4800	RTECS, 1994
	Domestic animal	Oral	NR	LOAEL for reproductive effects		662	RTECS, 1994
Lead acetate	Chicken	Oral	4 weeks	Growth rate suppressed; no mortality or hemotological effects		169	Eisler, 1988
Metallic lead powder	American kestrel nestlings	Oral	10 days	Reduced growth and brain weight; abnormal development		125	Eisler, 1988
Tetraethyl lead	Rat	Single oral dose		LD50	12		Eisler, 1988
	Cattle	Oral	105 days	LOAEL for mortality	6		Eisler, 1988
	Horse	Oral	NR	LOAEL for mortality	2.4		Eisler, 1988

Appendix F-5
Ingestion Toxicity Information for Terrestrial Wildlife

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical	Test Species	Test Type	Duration	Effect	Result (mg/kgBW/day)		Reference
					Lethal	Sublethal	
Triethyl lead chloride	Starling	Oral	11 days	Reduced food consumption; no mortality		2.8	Eisler, 1988
Mercury	Mouse	Single oral dose		LD50	22		NIOSH, 1985
	Rat	Single oral dose		LD50	18		NIOSH, 1985
	Chicken	Single oral dose		LD50	20		Fimreite, 1979
	Bantam chicken	Single oral dose		LD50	190		Fimreite, 1979
	Mouse	Oral	50 days	Embryotoxicity		0.9	Suzuki, 1979
	Mouse	Oral	Day 0-18 (gest)	Embryolethality and teratogenicity		0.7	Suzuki, 1979
	Japanese quail	Oral	NR	LOAEL for reproductive effects		5	Fimreite, 1979
	Bobwhite quail	Oral	5 days	LD50	523		Hill et. al., 1975
Inorganic mercury	Mouse	Oral	18 days	LOAEL for mortality	6.3		Suzuki, 1979
	Mouse	Oral	38 days	LOAEL for mortality	5		Suzuki, 1979
	Mouse	Oral	Day 6-17 (gest)	Stillbirths and neonatal death		4	Suzuki, 1979
	Japanese quail	Diet	3 weeks	Depressed gonad weights		0.81*	Eisler, 1987
	Corturnix	NR	14d post treatment	LD50	26 - 54		Eisler, 1987
	Japanese quail	NR	14d post treatment	LD50	31.1		Eisler, 1987
Ethylmercury	Rock dove	Single oral dose		LD50	22.8		Eisler, 1987

Appendix F-5
Ingestion Toxicity Information for Terrestrial Wildlife

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical	Test Species	Test Type	Duration	Effect	Result (mg/kgBW/day)		Reference
					Lethal	Sublethal	
	Prairie chicken	Single oral dose		LD50	11.5		Eisler, 1987
	Chuckar	Single oral dose		LD50	26.9		Eisler, 1987
	Gray partridge	Single oral dose		LD50	17.6		Eisler, 1987
Methylmercury	House sparrow	NR	14d post treatment	LD50	12.6 - 37.8		Eisler, 1987
	Cortunix	NR	14d post treatment	LD50	11 - 27		Eisler, 1987
	Fulvous whistling duck	NR	14d post treatment	LD50	37.8		Eisler, 1987
	Northern bobwhite	NR	14d post treatment	LD50	23.8		Eisler, 1987
	Japanese quail	NR	14d post treatment	LD50	14.4 - 33.7		Eisler, 1987
	Ring-necked pheasant	NR	14d post treatment	LD50	11.5 - 26.8		Eisler, 1987
	Black duck	Oral	28 weeks	Reproduction inhibited		0.22*	Eisler, 1987
	Mink	Diet	2 months	Fatal to 100%	0.048*		Eisler, 1987
Organomercury	Mule deer	Single oral dose		LD50	17.9		Eisler, 1987
	River otter	Diet	NR	Fatal	0.14*		Eisler, 1987
	Rat	Oral	NR	Reduced fertility		0.5	Eisler, 1987
	Pig	Oral	Pregnancy	High incidence of stillbirths		0.5	Eisler, 1987
	Monkey	Oral	Day 20-30 (gest)	Maternally toxic and abortient		0.5	Eisler, 1987

Appendix F-5
Ingestion Toxicity Information for Terrestrial Wildlife

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical	Test Species	Test Type	Duration	Effect	Result (mg/kgBW/day)		Reference
					Lethal	Sublethal	
	Cat	Oral	Day 10-58 (gest)	Increased incidence of anomalous fetuses		0.25	Eisler, 1987
	Dog	Oral	Pregnancy	High incidence of stillbirths		0.1 - 0.25	Eisler, 1987
	Mallard	Oral	NR	Reproduction, behavior		0.064	USEPA, 1993
	Gray pheasant	Oral	30 days	Reduced reproductive ability		0.64	Eisler, 1987
Nickel	Rat	Single oral dose		LD50	67		ATSDR, 1987
	Rat	Oral	NR	LOAEL for reproductive effects		158	RTECS, 1994
	Rat	Oral	2 yrs	Decreased body weight gain		50	ATSDR, 1987
Selenium	Rat	Oral	NR	LD50	6700		RTECS, 1994
	Rat	Oral	2 years	Decrease in breeding		0.2	ATSDR, 1988
	Mouse	Oral	NR	LOAEL for reproductive effects		134	RTECS, 1994
	Japanese quail	Oral	NR	Reduced egg hatching		0.6	Eisler, 1985
	Mallard	Oral	3 months	Reduced hatchability		1.75	Eisler, 1985
Tin	Rat	Single oral dose		LD50	188		Eisler, 1989
Zinc	Rat	Single oral dose		LD50	2510		Sax, 1984
	Rat	Oral	Gestation	Fetal resorptions in 4 - 20% of population		200	Shlicker and Cox, 1968
	Ferret	Oral	3-13 days	LOAEL for mortality	390		Straube et. al., 1980
Zinc phosphide	Mallard	Diet	5 days	LC50	6458*		Hill et. al., 1975

Appendix F-5
Ingestion Toxicity Information for Terrestrial Wildlife

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical	Test Species	Test Type	Duration	Effect	Result (mg/kgBW/day)		Reference
					Lethal	Sublethal	

Notes:

LD50 =	Dose resulting in 50% mortality in test population
BW =	Body weight
LOAEL =	Lowest Observed Adverse Effect Level
NOAEL =	No Observed Adverse Effect Level
NR =	Not reported

a) Converted to dose per kilogram body weight by multiplying by food ingestion rate and dividing by body weight.
b) LD_{50} based on a small number of test organisms.

Appendix F-5
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APPENDIX F-6

SUMMARY OF INGESTION TOXICITY INFORMATION FOR REPRESENTATIVE WILDLIFE SPECIES

Appendix F-6
Summary of Reference Ingestion Toxicity Values for Wildlife Receptors
(mg/kg/BW)

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical Name	Short-tailed shrew		Eastern cottontail		Red fox		American robin		Red-tailed hawk	
	Lethal	Sublethal	Lethal	Sublethal	Lethal	Sublethal	Lethal	Sublethal	Lethal	Sublethal
Acetone	600	273000	1068	273000	600	273000				
Butylbenzylphthalate	466	4900	466	4900	466	4900				
Bis (2-ethylhexyl) phthalate	1720	35	1720	35	1720	35				
4,4-DDE	140		140		140			0.58		0.39
4,4-DDT	17.4	0.2	50	150	12	3540	119	0.14	119	0.14
Chlordane	10	3.04	20	3.04	10	3.04	4.8		4.8	
Antimony	1400		1400		1400					
Arsenic	29	14	29	14	29	14	64.6		64.6	
Barium	430	198	430	198	430	198				
Beryllium	2		2		2					
Chromium		1400		1400		1400	25.2	200	25.2	200
Cobalt	18.2		150		18.2					
Copper		152		152		152		29		29
Lead	60	200	60	200	60	200		125		125
Mercury (inorganic) [c]	4.4	4	4.4	4	4.4	4	5.2	0.81	5.2	0.81
Organomercury [c]	3.6	0.5	3.6	0.5	0.14	0.1	2.52	0.64	2.3	0.64
Nickel	13.4	50	13.4	50	13.4	50				
Tin	37.6		37.6		37.6					
Zinc	390	200	390	200	390	200	1292		1292	

[a] 1/5th of the LD50 value or lowest reported dose associated with mortality for the closest related species.
[b] The lowest reported dose associated with adverse effects to growth, reproduction, or survival for the closest related species.
[c] For surface soil spreadsheets, inorganic mercury RTV values are used for the shrew, rabbit, and robin. Organomercury values are used for the fox and hawk.

APPENDIX F-7

PHYTOXICITY BENCHMARK VALUES FOR SURFACE SOIL ECPCs

Appendix F-7
Phytoxicity Benchmark Values for Surface Soil ECPCs

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical	Growth Medium	Form	Species	Duration (days)	LOEC (mg/kg)	Parameter	pH	Reference
Antimony	Surface soil	NR	NR	NR	5	Phytotoxic	NR	Kloke, 1979
Arsenic	Fine sandy loam	As2O3	Cotton	42	11.2	Dry wgt. shoot	NR	Deuel and Swoboda, 1972
Arsenic	Fine sandy loam	As2O3	Soybean	42	11.2	Dry wgt. shoot	NR	Deuel and Swoboda, 1972
Barium	Loam	Ba(NO3)2	Barley	14	500	Dry wgt. plant	NR	Chaudhry, et. al., 1977
Barium	Loam	Ba(NO3)2	Bush beans	14	2,000	Dry wgt. plant	NR	Chaudhry, et. al., 1977
Beryllium	Surface soil	NR	NR	NR	10	Phytotoxic	NR	Kloke, 1979
Chromium	Humic sand	K2Cr2O7	Tomato	14	21	Fresh wgt. shoot	5.1	Adema and Henzen, 1989
Chromium	Humic sand	K2Cr2O7	Oat	14	31	Fresh wgt. shoot	5.1	Adema and Henzen, 1989
Chromium	Humic sand	K2Cr2O7	Lettuce	14	11	Fresh wgt. shoot	5.1	Adema and Henzen, 1989
Cobalt	Surface soil	NR	NR	NR	25	Phytotoxic	NR	Linzon, 1978
Copper	Soil	NR	Clover	120	40	Phytotoxic	NR	Dvorak, et. al, 1978
Copper	Surface soil	NR	NR	NR	60	Phytotoxic	NR	Kovalskiy, 1974
Lead	Loamy sand	PbCl2	Corn	5	500	Root length	6.5	Hassett, et. al, 1976
Mercury	Soil	NR	NR	NR	0.3	LCT - Phytotoxic	NR	Kloke, 1979
Nickel	Loam	NiSO4	Corn	19	250	Dry wgt. shoot	4.2	Wallace, et. al., 1977

Appendix F-7
Phytoxicity Benchmark Values for Surface Soil ECPCs

RCRA Facility Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

Chemical	Growth Medium	Form	Species	Duration (days)	LOEC (mg/kg)	Parameter	pH	Reference
Nickel	Loam	NiSO4	Bush beans	16	250	Dry wgt. shoot	7.5	Wallace, et. al., 1977
Nickel	Loam	NiSO4	Corn	19	250	Dry wgt. shoot	5.6	Wallace, et. al., 1977
Nickel	Loam	NiSO4	Bush beans	28	100	LCT - Dry wgt. shoot	NR	Wallace, et. al., 1977
Nickel	Loam	NiSO4	Barley	28	25	LCT - Dry wgt. shoot	NR	Wallace, et. al., 1977
Nickel	Loam	NiSO4	Corn	19	250	Dry wgt. shoot	4.2	Wallace, et. al., 1977
Nickel	Loam	NiSO4	Bush beans	16	100	LCT - Dry wgt. shoot	5.8	Wallace, et. al., 1977
Nickel	Sand	NiCl2	Corn	35	294	Dry wgt. plant	5	Traynor and Knezek, 1973
Nickel	Sandy loam	NiCl2	Red Oak	112	50	Dry wgt. plant	6	Dixon, 1988
Nickel	Loam	NiSO4	Rye grass	28	180	Dry wgt. shoot	4.7	Khalid and Tinsley, 1980
Tin	Surface soil	NR	NR	NR	50	Phytotoxic	NR	Kloke, 1979
Zinc	Soil	ZnSO4	Soybean	NR	25	Seeds per plant	NR	Aery and Sarkar, 1991

Notes: LOEC = Lowest Observed Effect Concentration.
LCT = Lowest Concentration Tested.

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APPENDIX F-8

PROTOCOLS AND RESULTS OF TOXICITY TESTING OF SOIL

DRAFT

TOXICITY EVALUATION OF THE SEDIMENT COLLECTED FROM NAVAL STATION MAYPORT, JACKSONVILLE, FLORIDA

ABB Environmental Services, Inc.
2590 Executive Center Circle East
Tallahassee, Florida

SLI Report #94-9-5456
SLI Study #13109-0794-6113/6114-6115/630-123/131

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Springborn Laboratories, Inc.
Environmental Sciences Division
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14 November 1994

FINAL REPORT

DRAFT

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1.0 INTRODUCTION

Decisions regarding the need for remediation and efficacy of remedial alternatives at sites containing waste materials often depend on information concerning the environmental risks posed by conditions at the site. As part of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) remedial alternatives or removal actions for hazardous waste sites should include an environmental impact studies. An essential part of the environmental impact studies is the assessment of the degree and spatial extent of contamination in water column and sediments at the site.

The environmental program at Naval Station Mayport has been designed to address environmental degradation and the risk to ecological receptors in various locations. A laboratory testing program was incorporated into the environmental program to assess the potential toxicity of sediments to the aquatic amphipods, *Hyalella azteca* and *Ampelisca abdita*. Earthworms, *Eisenia foetida* were used to measure toxicity and bioaccumulation potential of soil samples collected at Naval Station Mayport. Information derived from this testing program can be used as a "weight-of-evidence" approach to evaluate ecological risk in aquatic systems at Naval Station Mayport and may also be used to help derive preliminary remedial goals and/or target cleanup levels for contaminated sites.

The hazards posed by a chemical when released into the environment are a function of both the concentration achieved in the water column and sediment as a result of its use and environmental conditions that determine their bioavailability. The process of environmental assessment combines the knowledge of the properties which influence the behavior of a chemical in the environment with an understanding of the acute and chronic toxicity of the chemical and its potential for bioaccumulation. Bioavailability of sediment-associated contaminants can be defined as a fraction of the total contaminant in the interstitial water and on the sediment particles that are available to the organism. Chemical measurement of contaminant concentration in sediments do not always reflect the bioavailable fraction of sediment-associated

contaminants, therefore, a simple measure of the sediment residue is insufficient to define the contaminant concentration to which biota are exposed. Further, because feeding by benthic organisms is generally limited to the fine grain material which sorbs most contaminants, the potential exposure could be much greater than anticipated from the whole sediment concentration when ingestion is a route of exposure. The assessment of the effects of contaminants in sediment environments is complicated by the fact that organisms can be exposed, simultaneously to multiple toxicants with different mode of action and routes of affects.

The acute toxicity of the bulk sediment samples was measured using epibenthic freshwater amphipod, *Hyalella azteca* and benthic marine amphipod, *Ampelisca abdita*. The toxicity and bioaccumulation potential in seven soil samples were measured using a 30-day test with earthworms, *Eisenia foetida*. Each species selected for this program is ecologically relevant.

All testing was conducted at Springborn Laboratories, Inc. (SLI), Environmental Sciences Division, Wareham, Massachusetts. All original raw data and the final report produced during this study are stored at Springborn.

2.0 MATERIALS AND METHODS

2.1 Test Samples

The toxicity tests were conducted using sediments collected from specific locations at Naval Station Mayport. Approximately 1 liter of sediment was collected from each location by ABB Environmental Services personal. Sample IDs, the dates on which the samples were collected and the dates at which they were received at Springborn are as follows: samples MPT025D12TOX and MPT025D14TOX were collected on 27 July 1994 and received on 28 July 1994, samples MPT025D16, MPT025D19, MPT025D22 and MPT025D31 were collected on 28 July 1994 and received on 29 July 1994, samples MPT025D17, MPT025D20, MPT025D25, MPT025D26, MPT025D28, MPT025D32, MPT025D34 and MPT025D39 were collected from 29 July 1994 to 31 July 1994 and received on 2 August 1994 and samples 005D01TOX, 025D37TOX and

025D38TOX were collected on 1 August 1994 and 3 August 1994 and were received on 4 August 1994.

The toxicity tests were conducted using soil collected from specific locations at Naval Station Mayport. Approximately 4 liters of soil was collected from each location by ABB Environmental Services personal. Sample IDs, the dates on which the samples were collected and the dates at which they were received at Springborn are as follows: samples 15U01501, 15U01201, 15U01701, 15U01601, 15U02001, 15U02301, and 15U03001 were collected on 13 September 1994 and received on 16 September 1994.

Following receipt at Springborn, any samples that were not immediately tested were stored refrigerated at approximately 4 ±2 °C. Refrigerated samples were warmed to room temperature before use in the toxicity tests.

2.2 Toxicity Tests

This testing program consisted of five 14-day acute toxicity tests with *Hyalella azteca* conducted with five bulk sediment samples and twelve 10-day acute toxicity tests with *Ampelisca abdita*.

The soil samples tested during the subacute toxicity test with earthworms (*Eisenia foetida*) were collected from specific locations at Naval Station Mayport by ABB personnel. All samples were received at Springborn on 16 September 1994. Each sample was received in two 4-liters plastic containers. All samples that were not tested immediately were stored refrigerated at approximately 5 °C. Refrigerated samples were warmed to test temperature before use in the toxicity tests.

Survival of both species of amphipods - *Hyalella azteca* and *Ampelisca abdita* was used to estimate acute toxicity of the bulk sediment samples. The freshwater amphipod, *Hyalella azteca* was used as the test organism for the sediment samples collected from areas were the

overlying water had a salinity of ≤10 ‰, while *Ampelisca abdita* was used as the test organism for the samples collected from areas were salinity of overlying water was >10 ‰. Both test organisms were placed in beakers containing the sediment and clean overlying water and were incubated under standard conditions for 10 or 14-days. Salinity of the overlying water in control treatments was adjusted to approximate salinity of the samples tested. After the exposure, the surviving organisms were counted. Toxicity was estimated by comparing the survival in each sediment sample to the survival of the organisms in the reference sediment. The freshwater reference sediment was collected by Springborn personal from Strohs Folly Brook, Wareham, Massachusetts, while marine reference sediment was collected from Wickford Cove, Rhode Island. Both reference sediments are known to be free of contaminants and support existing populations of benthic organisms.

2.2.1 Preparation of the Sediment Samples

Prior to use, each sediment sample was sieved through a 2-mm stainless steel sieve to remove rocks, debris and large clumps of sediment. Sediment samples were homogenized in a clean 1000 mL glass beaker by stirring for 10 minutes prior to dividing into the individual replicate test vessels. Eight-hundred milliliters of the sediment was used to initiate each acute test with *Hyalella azteca* and *Ampelisca abdita* (200 milliliters per replicate).

2.2.2 Preparation of the Soil Samples

Prior to use in the toxicity tests, each soil sample was pressed through a 64 mm stainless steel sieve to remove rock and debris. Large clumps of soil present in the samples were pressed through the sieve. The moisture fraction, water holding capacity (WHC) and pH were then determined for each soil sample. The moisture fraction was determined by drying 125 g of each soil sample in an oven at a temperature of 103 to 105 °C for 24 hours. To determine the WHC of each soil sample, filter paper (Whatman, 185 mm) was placed in a funnel and moistened with 9.0 mL of deionized water. The funnel containing the filter paper was then weighed. One hundred gram aliquots of each soil sample were weighed into individual 250 mL glass beakers to which 100 mL of deionized water was then added and mixed. The resulting soil slurries were

added to the funnels containing the filter paper and an initial weight was obtained. Each funnel was covered with aluminum foil and allowed to drip for three hours. After three hours, the funnel, filter paper and soil samples were again weighed to determined the amount of water retained by the soil sample. The amount of water retained in each soil sample was considered the 100% WHC. From the results obtained, the amount of water needed to be added to each soil sample to establish the desired WHC (75% for the earthworm toxicity test) was calculated. Any soil sample which contained greater than the desired WHC was tested at the WHC at which it was received. To determine the pH of each soil sample, 25 mL of deionized water was added to a 25 g sample of each soil sample and stirred with a glass rod. The resultant slurry was allowed to settle for 5 minutes after which the pH was determined and recorded.

2.2.3. Acute Toxicity Test with *Hyalella azteca*

2.2.3.1 Study Protocol and Conduct

Procedures used in the acute toxicity test followed those described in Springborn test method SED-Ha-123 entitled "Protocol for Conduct of a Static-Renewal Acute Toxicity Test with Amphipods (*Hyalella azteca*) to Meet U.S. EPA Guidelines for Bioassessment of Hazardous Waste Site Sediment", Springborn Laboratories Protocol #:080394/SED-Ha-123. The methods described in this protocol meet the standard procedures described in the ASTM Guideline for conducting Sediment Toxicity Tests with Freshwater Invertebrates (ASTM, 1992). The 14-day toxicity tests were conducted from 3 August 1994 to 17 August 1994 with the following samples: MPT025D12-TOX, MPT025D14TOX, MPT025D22, MPT025D26 and MPT025D39. Salinity of the water from these samples ranged from 3 to 10 ‰. The overlying water in reference control treatments used during testing with these samples was adjusted to 5 ‰.

2.2.3.2 Test Organisms

The test organism, *Hyalella azteca*, ≤one week old, were obtained from cultures maintained at Springborn Laboratories. Amphipods were cultured under flow-through conditions in 20 liter glass aquaria, containing approximately 10 liters of culture water. One week or less old amphipods were obtained by removing adult amphipods from the culture tanks and placing

them in 9.5 liter aquaria with approximately 8 liters of culture water, 7 to 10 days prior to test initiation. The young produced by these isolated adult amphipods were removed daily and pipeted into separate holding vessels (i.e., 1000 ml beakers). Salinity of the culture water in the holding vessels, 5 days prior to initiation, was adjusted at a rate of 1 ‰ per day to acclimate the test organisms to test conditions (i.e., 5 ‰).

The *H. azteca* cultures were fed a combination of trout chow suspension and supplemented with Zigler Brothers flaked fish food. The trout chow suspension was prepared by adding 25 grams of trout food and 5.0 grams of Sigma cereal leaves in 1000 mL of distilled water and mixing in a commercial blender.

2.2.3.3 Test Procedures

The water used during this study was well water which had been supplemented with untreated water from the Town of Wareham, Massachusetts. During the study period, this water was characterized as having total hardness and total alkalinity ranges as $CaCO_3$ of 35 to 38 mg/L and 23 to 24 mg/L, respectively, a pH range of 7.2 to 7.3 and a specific conductivity range of 120 to 130 μmhos/cm (Gravity Feed Tank Water Quality Analysis Logbook, Volume 9).

Prior to use in the toxicity test, the well water used was adjusted to a salinity of 5 ‰ by adding 720 ml of natural, filtered seawater (i.e., approximately 32 ‰) collected from the Cape Cod Canal to 4.5 liters of well water. This water was used as the initial overlying water and at each renewal period during the toxicity test.

The test vessels used during this test were 1000-mL beakers. Four replicate test vessels were maintained for each sediment sample. The test was conducted in a temperature controlled water bath designed to maintain a temperature of the test solutions at 20 $\pm$ 1 °C. The test area had a photoperiod of 16 hours of light and 8 hours of darkness, with a light intensity range of 35 to 80 footcandles. Lighting was provided by Sylvania Growlux® and Cool White® fluorescent bulbs.

Prior to use in the toxicity tests, all sediment samples were passed through a 2.0 mm stainless steel sieve to remove rocks, debris and large clumps of sediment. Each sediment sample was homogenized for 10 minutes prior to dividing between the replicate test vessels. Each test vessel contained 200 mL of the respective sediment with 2 cm sediment layer in each test vessel. Overlying water (800 mL) was then gently added to each replicate, one day prior to initiation of the test organisms to allow the sediment and water to equilibrate. Sediment collected from Strohs Folly Brook, Wareham, Massachusetts was used as the reference control. The sediment is known to be free of contaminants and supports local populations of benthic invertebrates. The reference sediment was collected and passed through a 2.0 mm sieve and stored at 4 ± 2°C, prior to use in the toxicity test. The test was initiated when 20 amphipods were added to each replicate exposure vessel (80 amphipods per test sample and control). Test vessels were covered with plastic wrap and aeration was provided to each test vessel throughout the exposure period.

Renewal of the overlying water in each replicate test vessel was performed three times weekly by carefully siphoning off 75% (approximately 600 mL) of the existing overlying water and gently replacing it with fresh overlying water at 5 ‰. Test amphipods were fed a suspension of trout chow daily, at a rate of 300 μL, respectively, per test vessel. Survival was determined at test termination by sieving the sediment from each replicate test vessel to remove the amphipods for observation.

At test initiation and at each subsequent 24-hour interval, biological observations and the physical characteristics of the test solutions were observed and recorded. The dissolved oxygen concentration, pH, temperature and salinity were measured in each replicate test vessel at test initiation (day 0), mid-term (day 7) and at test termination (day 14). On the remaining days of the exposure, these measurements were recorded in alternating test vessels of each test samples and the reference control. On renewal days, water quality measurements were made on old and new test sample and the reference control solutions. Dissolved oxygen concentrations were measured using a Yellow Springs Instrument (YSI) Model #57 dissolved oxygen meter and

probe; pH was measured with a Jenco Model 601A pH meter and combination electrode; salinity was measured using a Atago Model 9205 refractometer and daily temperature was measured with an Ertco alcohol and Fisher thermometer. In addition, temperature of the test solutions was continuously monitored throughout the study using a Fisher Min/Max thermometer. Light intensity was measured with a General Electric type 217 light meter.

2.2.3.4 Statistical Analysis

At test termination, survival for each test sample was statistically compared to the performance of the reference control organisms to establish significant effects. Results were first analyzed using a t-test. If different variances were observed then Welch's t-test was used to establish significant differences. All statistical analyses were performed at the 95% level of certainty.

2.2.4 Acute Toxicity Test with *Ampelisca abdita*

2.2.4.1 Study Protocol and Conduct

Procedures used in the acute toxicity test followed those described in Springborn test method SED-Aa-131 entitled "Protocol for Conduct of a Static Acute Toxicity Test with Marine Amphipods (*Ampelisca abdita*) to Meet U.S. EPA Guidelines for Bioassessment of Hazardous Waste Site Sediment", Springborn Laboratories Protocol #:080494/SED-Aa-131. The methods described in this protocol meet the standard procedures described in the ASTM Guideline for conducting 10-day Static Sediment Toxicity Tests with Marine and Estuarine Amphipods (ASTM, 1992). The 10-day toxicity tests were conducted from 4 August 1994 to 14 August 1994 with the following samples: MPT025D16, MPT025D17, MPT025D19, MPT025D20, MPT025D25, MPT025D28, MPT025D31, MPT025D32 and MPT025D34, while the remaining samples 025D37TOX, 025D38TOX and 005D01TOX were tested from 9 August to 19 August 1994. Salinity of the water from these samples ranged from 11.5 to 26 ‰. Because of a wide salinity range the sediment samples were divided into three groups and salinity of the overlying water in each reference control group was adjusted to reflect salinity of the tested samples. Salinity of MPT025D16, MPT025D17, MPT025D19, MPT025D25, MPT025D31 and MPT025D32 samples

ranged between 11.5 and 18.5 ‰, therefore a reference control salinity was adjusted to 15 ‰. Salinity of MPT025D20, MPT025D28 and MPT025D34 samples ranged from 20 to 26 ‰, therefore tested salinity of a reference control was adjusted to 23 ‰. Salinity of the remaining samples, 025D37TOX, 025D38TOX and 005D01TOX ranged from 14 to 20 ‰, therefore salinity of a reference control was adjusted to 19 ‰.

2.2.4.2 Test Organisms

The *Ampelisca abdita* used in testing were obtained from a reliable supplier of marine amphipods. Upon receipt the test organisms were acclimated to test temperature (i.e, 20 °C). Temperature changes did not exceed ± 2 °C per day. In addition, one week prior to initiation, three separate populations were acclimated to the appropriate test salinities (i.e., 15, 19 and 23 ‰). Salinity of each population was reduce from approximately 32 ‰ to the appropriate test salinity at a rate of 2 ‰ per day. The amphipods were held in 1 gallon containers with a sediment depth of 2 cm and 3 liters of overlying water. The density of amphipods was approximately 400 amphipods per holding container.

During the holding and acclimation period prior to test initiation, each holding container was fed the marine diatom, *Skeletonema sp.* (1.0×10^7 cells per mL), at a rate of 200 mL per day. During the 10 day toxicity test, amphipods were not fed.

2.2.4.3 Test Procedures

The water used during this study was natural, filtered seawater from the Cape Cod Canal, Massachusetts. During the study period, this water was characterized as having salinity of 31 to 33 ‰, a pH of 7.9 to 8.1 and a temperature of 18 to 25 °C (Seawater Characterization Logbook, Volume 9). Prior to use in the toxicity test, the filtered seawater used was adjusted to salinities of 15, 19 and 23 ‰. Water of 15 ‰ was prepared by mixing 9 liters of natural, filtered seawater with 9 liters of well water. Water of 19 ‰ was prepared by mixing 10.5 liters of natural, filtered seawater with 7.5 liters of well water and the water of 23 ‰ was prepared by mixing 13 liters of

natural, filtered seawater with 5 liters of well water. These three types of water were used as the overlying waters.

The test vessels used during this test were 1000-mL beakers. Four replicate test vessels were maintained for each sediment sample. The test was conducted in a temperature controlled water bath designed to maintain the temperature of the test solutions at 20 ± 1 °C. The test area had a photoperiod of 16 hours of light and 8 hours of darkness, with a light intensity range of 30 to 100 footcandles. Lighting was provided by Sylvania Growlux® and Cool White® fluorescent bulbs.

Prior to use in the toxicity tests, all sediment samples were passed through a 2.0 mm stainless steel sieve to remove rocks, debris and large clumps of sediment. Each sediment sample was homogenized for 10 minutes prior to dividing between the replicate test vessels so that each test vessel contained 200 mL of the respective sediment. The resultant sediment layer in each test vessel was 2 cm deep. Overlying water (800 mL) was then gently added to each replicate, one day prior to initiation of the test organisms to allow the sediment and water to equilibrate. Sediment collected from Wickford Cove, Rhode Island was used as the reference control. The sediment is known to be free of contaminants and supports local populations of benthic invertebrates. The reference sediment was collected and passed through a 2.0 mm sieve and stored at 4 ± 2°C, prior to use in the toxicity test. The test was initiated when 20 amphipods were added to each replicate exposure vessel (80 amphipods per test sample and control). Test vessels were covered with plastic wrap and aeration was provided to each test vessel throughout the exposure period.

During the exposure period, amphipods were not fed. Survival was determined at test termination by sieving the sediment from each replicate test vessel to remove the amphipods for observation.

At test initiation and at each subsequent 24-hour interval, biological observations and the physical characteristics of the test solutions were observed and recorded. The dissolved oxygen concentration, pH, temperature and salinity were measured in each replicate test vessel at test initiation (day 0) and at test termination (day 10). On the remaining days of the exposure, these measurements were recorded in alternating test vessels of each test samples and the reference control. Dissolved oxygen concentrations were measured using a Yellow Springs Instrument (YSI) Model #57 dissolved oxygen meter and probe; pH was measured with a Jenco Model 601A pH meter and combination electrode; salinity was measured using a Atago Model 9205 refractometer and daily temperature was measured with an Ertco alcohol and Fisher thermometer. In addition, temperature of the test solutions was continuously monitored throughout the study using a Fisher Min/Max thermometer. Light intensity was measured with a General Electric type 217 light meter.

2.2.4.4 Statistical Analysis

At test termination, survival for each test sample was statistically compared to the performance of the reference control organisms to establish significant effects. Results were first analyzed using a t-test. If different variances were observed then Welch's t-test was used to establish significant differences. All statistical analyses were performed at the 95% level of certainty.

2.2.5 Subacute Test with Earthworms

2.2.5.1 Test Method and Conduct

Procedures used in the 30-day subacute toxicity test with earthworms followed those described in the Springborn protocol entitled "30-Day Earthworm Subacute and Bioaccumulation Toxicity Test for Bioassessment of Soil", Springborn Laboratories Protocol #: 080994/E.foetida-30 Day. The methods described in this protocol generally meet the standard procedures described in the protocol for short term toxicity screening of hazardous waste site soil (Greene *et.al.*, 1989).

2.2.5.2 Test Organism

The earthworms (*Eisenia foetida*) used in this toxicity test (SLI Lot # 94A23) were approximately 8 months old and were originally obtained from the Carolina Biological Supply Company, Burlington, North Carolina on 18 February 1994. Species identification was verified at Springborn based on Reynolds (1977). Upon receipt at Springborn, the earthworms were added to culture medium which consisted of 4.8 kg Magic Worm Bedding® peat moss (Magic Products, Inc.), 0.50 kg composted cattle manure (dry weight) and approximately nine liters of NANOpure® water which provided a moisture content of approximately 75%. The pH of this medium was determined to be 6.9 after mixing the components in a Hobart® (Model A-200) mixer and was not adjusted. The culture medium was prepared one day prior to receipt of the earthworms. Culture vessels consisted of plastic containers (26 cm height X 62 cm length x 42 cm width) and lids. Culture temperature was maintained at a similar range to the test temperature (20 ±2 °C). The earthworms were maintained under these conditions in the two vessels until test initiation. Cultures were periodically fed 500 g composted cattle manure.

2.2.5.3 Test Procedures

The artificial soil medium used for the controls during the earthworm toxicity tests consisted of 70% industrial sand, 20% Kaolin clay and 10% sphagnum peat (finely ground). The appropriate volume of each component was measured and the components were mixed together using a Hobart Model A-200 mixer.

The 30-day subacute toxicity tests were conducted from 19 September 1994 to 20 October 1994. Test vessels were 950 mL glass canning jars which were covered with perforated lids to allow air exchange. Four replicate test vessels were established for each test sample and control. The control vessels contained artificial soil medium and were maintained under the same exposure conditions as the test samples.

The test was conducted in a temperature-controlled water bath designed to maintain the temperature of the test soil at 20 ± 2 °C. The test area received a photoperiod of 24 hours of

light and 0 hours darkness, with a light intensity within the range of 50 to 70 footcandles. Lighting was provided by Sylvania incandescent and Duro-Test Vita-Lite® fluorescent bulbs.

At test initiation, 400 g (dry weight) of each soil sample and the controls was added to the respective test vessels. The earthworms to be used in the test were first isolated from the two cultures. Twenty earthworms at a time were then arbitrarily removed, rinsed in distilled water, blotted dry and weighed. The average weight per individual was calculated from the group weight. Earthworms were then assigned to each vessel and placed on the soil surface. This procedure was repeated until each test vessel contained twenty organisms. Earthworms were fed 50 g (dry weight) of composted cattle manure on day 14 of the exposure.

Earthworm mortality and health assessments were performed on test days 7, 14 and 28. Mortality was assessed by emptying the test medium onto a tray, sorting the earthworms from the medium and then testing their reaction to a mechanical stimulus at the anterior end. Mortality is defined as a lack of visible movement after gentle mechanical stimulation is applied. The general health of the earthworms was assessed, and recorded, by observing color changes, lethargy, softness, coiling, shortening, lengthening, lesions and the presence of cocoons. At test termination, the average weight of the earthworms was determined on a per replicate basis for the surviving organisms.

Soil moisture content, pH and temperature were measured in one replicate of the test samples and the controls on day 0 (test initiation), day 14 and day 30 (test termination). The pH and temperature of the soils was measured with a LaMotte Model HA pH meter and combination electrode and Brooklyn alcohol thermometer on day) 0, 14, and 30. In addition, the temperature of the surrounding water in the water bath was continuously monitored throughout the study using a Fisher Min/Max thermometer. Light intensity was measured with a IL 1350 Radiometer/Photometer.

2.2.5.4 Statistical Analysis

At test termination, mortality and percent weight change data for earthworms exposed to each soil sample was determined. Mortality observed among earthworms exposed to the soil samples was compared to the mortality of the control sample using a T-test. Mortality was only analyzed for those samples in which the mean mortality was less than the mean mortality of the control. Percent weight change of earthworms exposed to all soil samples was compared to the percent weight change of earthworms exposed to the control using a t-test.

3.0 RESULTS

3.1 Acute Toxicity Tests with *Hyalella azteca*

A summary of the water quality characteristics conducted with the sediment samples (i.e., ≤10 ‰) is presented in Table 1, while a summary of the biological results from the acute tests with *Hyalella azteca* is presented in Table 2. Survival of amphipods after 14 days of exposure ranged from 91% to 100%. According to T-test the amphipods survival was statistically different in MPT025D12, MPT025D22 and MPT025D39 samples (i.e., 91, 95 and 95% survival, respectively) compared to 100% survival in the reference control sample. Although statistically different compared to the reference control organisms, survival of amphipods in these samples was not biologically significant. Summaries of the acute tests conducted with *H. azteca* are presented in Appendix I.

3.2 Acute Toxicity Tests with *Ampelisca abdita*

A summary of the water quality characteristics conducted with the sediment samples (i.e., >10 ‰) is presented in Table 3, while a summary of the biological results from the acute tests with *Ampelisca abdita* is presented in Table 4. Survival of amphipods after 10 days of exposure ranged from 23% to 90%. According to T-test the amphipods survival was statistically different in MPT025D17, MPT025D25, MPT025D31 and MPT025D32 samples (i.e., 23%, 69%, 74% and 33% survival, respectively) compared to survival of 86% in the reference control (salinity 15 ‰). Survival of amphipods was statistically different in 025D37TOX, 025D38TOX and 005D01TOX samples (i.e., 89, 78 and 90% survival, respectively) compared to 99% survival in the reference control (salinity 19 ‰). Survival of amphipods was statistically different in MPT025D20, MPT025D28 and MPT025D34 (i.e., 49, 44 and 33% survival, respectively) compared to 90% survival in the reference control (salinity 23 ‰). Although amphipod survival of 89 and 90% in samples 025D37TOX and 005D01TOX was statistically different compared to the reference control at 19 ‰ (i.e., 99% survival), it is not biologically significant. Summaries of the acute tests conducted with *A. abdita* are presented in Appendix II.

3.3 Acute Toxicity Tests with *Eisenia foetida*

A summary of the soil characteristics conducted with the soil samples (i.e., pH, temperature, and percent moisture) is presented in Table 5, while a summary of the biological results from the acute tests with *Eisenia foetida* is presented in Table 6. Survival of earthworms after 30 days of exposure ranged from 0 to 100%. Based on Fisher's Exact Test, earthworm survival in sample 15U01501 was significantly different compared to survival of earthworms in the control. Earthworms weight varied after 30 days of exposure to soil samples collected from Mayport. Earthworms gained weight in all samples, with the exception of sample #15U02301 (Table 6). The weight change recorded in 15U02301 was significantly different compared to weight change in the control.

REFERENCES

ASTM. 1992. Standard Guide for Conducting Sediment Toxicity Test with Freshwater Invertebrates. American Society for Testing and Materials. 1916 Race Street, Philadelphia, PA. Volume 11.04. Designation: E 1383-92 pgs. 1116-1138.

ASTM. 1992. Standard Guide for Conducting 10-day Static Sediment Toxicity Test with Marine and Estuarine Amphipods. American Society for Testing and Materials. 1916 Race Street, Philadelphia, PA. Volume 11.04. Designation: E 1367-90 pgs. 1083-1106.

Green, J.C., C.L. Bartels, W.J. Warren-Hicks, B.R. Parkhurst, G.L. Linder, S.A. Peterson and W.e. Miller. 1989. Protocols for the Short Term Toxicity Screening of Hazardous Waste Sites. EPA 600/3-88/029.

TABLES

Table 1. Water quality parameters (dissolved oxygen, pH, temperature, salinity) measured in the exposure solutions during the 14-day static acute renewal toxicity tests with *Hyalella azteca*.

Sediment I.D.	Dissolved Oxygen Concentration (mg/L)	pH	Temperature (°C)	Salinity (‰)
Test Dates: 3 August to 17 August 1994				
MPT025D12	4.7 - 8.7	7.6 - 8.3	20 - 21	5 - 7
MPT025D14	6.9 - 8.9	7.5 - 8.2	20 - 21	5 - 7
MPT025D22	7.1 - 8.8	7.6 - 8.3	20 - 21	5 - 6
MPT025D26	7.0 - 8.8	7.2 - 8.1	20 - 21	5 - 6
MPT025D39	5.5 - 8.7	7.6 - 8.1	20 - 21	5 - 7
Control (5 ‰)	7.2 - 8.9	7.4 - 8.1	20 - 21	5 - 8

Table 2. Percent mortality observed for each sediment sample at the termination the 14-day static acute renewal toxicity tests with *Hyalella azteca*.

Sediment I.D.	Percent Mortality				
	Rep A	Rep B	Rep C	Rep D	Mean
Test Dates: 3 August to 17 August 1994					
MPT025D12	5	10	10	10	9[a]
MPT025D14	0	0	0	0	0
MPT025D22	10	0	5	5	5[a]
MPT025D26	0	0	0	0	0
MPT025D39	5	5	10	0	5[a]
Control (5 ‰)	0	0	0	0	0

[a] Statistically different as compared to the reference control (5 ‰).

Table 3. Water quality parameters (dissolved oxygen, pH, temperature, salinity) measured in the exposure solutions during the 10-day static acute toxicity test with *Ampelisca abdita*.

Sediment I.D.	Dissolved Oxygen Concentration (mg/L)	pH	Temperature (°C)	Salinity (‰)
Test Dates: 4 August to 14 August 1994				
MPT025D16	7.4 - 8.7	7.6 - 8.4	20 - 21	16 - 18
MPT025D17	7.2 - 8.6	7.8 - 8.1	20 - 21	15 - 20
MPT025D19	7.6 - 8.9	7.5 - 8.3	20 - 21	16 - 19
MPT025D25	7.6 - 8.8	7.6 - 8.3	20 - 21	15 - 17
MPT025D31	7.5 - 8.8	7.8 - 8.2	20 - 21	16 - 19
MPT025D32	6.2 - 8.9	7.5 - 8.2	20 - 21	15 - 17
Control (15 ‰)	6.1 - 8.8	7.7 - 8.1	20 - 21	16 - 20
MPT025D20	4.0 - 8.7	7.8 - 8.2	20 - 21	21 - 25
MPT025D28	6.6 - 8.9	7.9 - 8.4	20 - 21	21 - 25
MPT025D34	7.1 - 8.8	7.4 - 8.2	20 - 21	21 - 25
Control (23 ‰)	7.0 - 8.9	7.8 - 8.2	20 - 21	21 - 25
Test Dates: 9 August to 19 August 1994				
025D37TOX	5.9 - 7.7	7.5 - 8.1	21	19
025D38TOX	6.0 - 7.8	7.7 - 8.2	21	19 - 21
005D01TOX	5.9 - 8.0	7.5 - 8.0	20 - 21	19
Control (19 ‰)	6.5 - 8.2	7.6 - 8.4	19 - 21	19 - 21

Table 4. Percent mortality observed for each sediment sample at the termination the 10-day static acute toxicity tests with *Ampelisca abdita*.

Sediment I.D.	Percent Mortality				
	Rep A	Rep B	Rep C	Rep D	Mean
Test Dates: 4 August to 14 August 1994					
MPT025D16	15	30	0	45	20
MPT025D17	75	55	95	85	77[a]
MPT025D19	10	40	10	25	21
MPT025D25	15	35	40	35	31[a]
MPT025D31	20	20	30	35	26[a]
MPT025D32	45	60	75	90	67[a]
Control (15 ‰)	15	10	15	15	14
MPT025D20	40	50	65	50	51[b]
MPT025D28	55	80	45	45	56[b]
MPT025D34	80	60	70	60	67[b]
Control (23 ‰)	0	5	20	15	10
Test Dates: 9 August to 19 August 1994					
025D37TOX	10	10	20	5	11[c]
025D38TOX	35	15	35	5	22[c]
005D01TOX	10	15	5	10	10[c]
Control (19 ‰)	5	0	0	0	1

[a] Statistically different as compared to the reference control (15 ‰).

[b] Statistically different as compared to the reference control (23 ‰).

[c] Statistically different as compared to the reference control (19 ‰).

Table 5. Soil quality parameters (pH, temperature and percent moisture) measured in the exposure soils during the 30-day toxicity tests with earthworms *Eisenia foetida*.

Soil Sample I.D.	Day	pH 0	pH 14	pH 30	Temperature °C 0	Temperature °C 14	Temperature °C 30	Percent Moisture 0	Percent Moisture 14	Percent Moisture 30
Control		6.5	6.4	6.1	20	20	21	18	17	18
15U01501		6.4	8.1	8.2	20	20	21	8	9	7
15U01201		6.7	6.8	6.2	20	20	21	7	9	17
15U01701		6.8	6.8	6.5	20	20	21	9	9	8
15U01601		7.0	6.9	6.5	20	20	21	9	9	10
15U02001		7.0	6.9	6.3	20	20	21	8	8	6
15U02301		6.9	6.1	6.4	20	20	21	9	8	10
15U03001		7.0	6.4	6.5	20	20	21	9	8	10

Table 6. Percent weight change and mortality recorded at the termination of the 30-day toxicity tests with earthworms *Eisenia foetida*.

Soil Sample I.D.	Weight Change Mean (%)	Mortality (%) Rep A	Rep B	Rep C	Rep D	Mean
Control	21.5	0	0	0	0	0
15U01501	NA	100	100	100	100	100
15U01201	8.5	10	0	5	10	6.25
15U01701	30.0	0	0	0	0	0
15U01601	25.8	0	0	0	0	0
15U02001	13.6	5	0	0	0	1.25
15U02301	-6.2 *	15	0	15	5	8.75
15U03001	24.0	0	0	0	0	0

* Significantly different from the control

NA - not aplicable, all earthworms were dead at test termination

SIGNATURES AND APPROVAL

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5.0 APPENDIX I - HYALELLA TEST SUMMARIES

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	MPT025D12
SLI STUDY TITLE:	14-Day Static Renewal Acute Toxicity Test With *Hyalella azteca*
SAMPLE TYPE:	Sediment
DATE TEST SAMPLE COLLECTED:	27 July 1994
DATE TEST SAMPLE RECEIVED:	28 July 1994
TEST DATES:	3 August to 17 August 1994
TEST SPECIES:	*Hyalella azteca*; ≤ 7 days old source: SLI cultures
OVERLYING WATER:	Laboratory well water adjusted to 5 ‰ with natural, filtered seawater pH: 7.0 - 8.5 dissolved oxygen: 4.7 - 8.3 mg/L temperature: 20 - 21 °C salinity: 5 - 7 ‰
TEST VESSELS:	Four replicate 1000-mL glass beakers each containing 200 mL of sediment and 800 mL of overlying water
TEST CONDITIONS:	14-day duration, solution temperature of 20 ± 1 °C, light intensity of 35 to 80 footcandles
NUMBER OF ORGANISMS EXPOSED:	Eighty; twenty *H. azteca* per replicate
RESULTS:	91% survival, statistically different from reference control at 5 ‰ (100% survival).

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	MPT025D14
SLI STUDY TITLE:	14-Day Static Renewal Acute Toxicity Test With *Hyalella azteca*
SAMPLE TYPE:	Sediment
DATE TEST SAMPLE COLLECTED:	27 July 1994
DATE TEST SAMPLE RECEIVED:	28 July 1994
TEST DATES:	3 August to 17 August 1994
TEST SPECIES:	*Hyalella azteca*; ≤ 7 days old source: SLI cultures
OVERLYING WATER:	Laboratory well water adjusted to 5 ‰ with natural, filtered seawater pH: 7.5 - 8.2 dissolved oxygen: 6.9 - 8.9 mg/L temperature: 20 - 21 °C salinity: 5 - 7 ‰
TEST VESSELS:	Four replicate 1000-mL glass beakers each containing 200 mL of sediment and 800 mL of overlying water
TEST CONDITIONS:	14-day duration, solution temperature of 20 ± 1 °C, light intensity of 35 to 80 footcandles
NUMBER OF ORGANISMS EXPOSED:	Eighty; twenty *H. azteca* per replicate
RESULTS:	100% survival

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	MPT025D22
SLI STUDY TITLE:	14-Day Static Renewal Acute Toxicity Test With *Hyalella azteca*
SAMPLE TYPE:	Sediment
DATE TEST SAMPLE COLLECTED:	28 July 1994
DATE TEST SAMPLE RECEIVED:	29 July 1994
TEST DATES:	3 August to 17 August 1994
TEST SPECIES:	*Hyalella azteca*; ≤ 7 days old source: SLI cultures
OVERLYING WATER:	Laboratory well water adjusted to 5 ‰ with natural, filtered seawater pH: 7.6 - 8.3 dissolved oxygen: 7.1 - 8.8 mg/L temperature: 20 - 21 °C salinity: 5 - 6 ‰
TEST VESSELS:	Four replicate 1000-mL glass beakers each containing 200 mL of sediment and 800 mL of overlying water
TEST CONDITIONS:	14-day duration, solution temperature of 20 ± 1 °C, light intensity of 35 to 80 footcandles
NUMBER OF ORGANISMS EXPOSED:	Eighty; twenty *H. azteca* per replicate
RESULTS:	95% survival, statistically different from reference control at 5 ‰ (100% survival).

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	MPT025D26
SLI STUDY TITLE:	14-Day Static Renewal Acute Toxicity Test With *Hyalella azteca*
SAMPLE TYPE:	Sediment
DATE TEST SAMPLE COLLECTED:	30 July 1994
DATE TEST SAMPLE RECEIVED:	2 August 1994
TEST DATES:	3 August to 17 August 1994
TEST SPECIES:	*Hyalella azteca*; ≤ 7 days old source: SLI cultures
OVERLYING WATER:	Laboratory well water adjusted to 5 ‰ with natural, filtered seawater pH: 7.2 - 8.1 dissolved oxygen: 7.0 - 8.8 mg/L temperature: 20 - 21 °C salinity: 5 - 6 ‰
TEST VESSELS:	Four replicate 1000-mL glass beakers each containing 200 mL of sediment and 800 mL of overlying water
TEST CONDITIONS:	14-day duration, solution temperature of 20 ± 1 °C, light intensity of 35 to 80 footcandles
NUMBER OF ORGANISMS EXPOSED:	Eighty; twenty *H. azteca* per replicate
RESULTS:	100% survival

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	MPT025D39
SLI STUDY TITLE:	14-Day Static Renewal Acute Toxicity Test With *Hyalella azteca*
SAMPLE TYPE:	Sediment
DATE TEST SAMPLE COLLECTED:	29 July 1994
DATE TEST SAMPLE RECEIVED:	2 August 1994
TEST DATES:	3 August to 17 August 1994
TEST SPECIES:	*Hyalella azteca*; ≤ 7 days old source: SLI cultures
OVERLYING WATER:	Laboratory well water adjusted to 5 ‰ with natural, filtered seawater pH: 7.6 - 8.1 dissolved oxygen: 5.5 - 8.7 mg/L temperature: 20 - 21 °C salinity: 5 - 7 ‰
TEST VESSELS:	Four replicate 1000-mL glass beakers each containing 200 mL of sediment and 800 mL of overlying water
TEST CONDITIONS:	14-day duration, solution temperature of 20 ± 1 °C, light intensity of 35 to 80 footcandles
NUMBER OF ORGANISMS EXPOSED:	Eighty; twenty *H. azteca* per replicate
RESULTS:	95% survival, statistically different from the reference control at 5 ‰ (100% survival).

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	Reference Control (5 ‰)
SLI STUDY TITLE:	14-Day Static Renewal Acute Toxicity Test With *Hyalella azteca*
SAMPLE TYPE:	Reference Sediment
DATE TEST SAMPLE COLLECTED:	11 July 1994
TEST DATES:	3 August to 17 August 1994
TEST SPECIES:	*Hyalella azteca*; ≤ 7 days old source: SLI cultures
OVERLYING WATER:	Laboratory well water adjusted to 5 ‰ with natural, filtered seawater pH: 7.4 - 8.1 dissolved oxygen: 7.2 - 8.9 mg/L temperature: 20 - 21 °C salinity: 5 - 8‰
TEST VESSELS:	Four replicate 1000-mL glass beakers each containing 200 mL of sediment and 800 mL of overlying water
TEST CONDITIONS:	14-day duration, solution temperature of 20 ± 1 °C, light intensity of 35 to 80 footcandles
NUMBER OF ORGANISMS EXPOSED:	Eighty; twenty *H. azteca* per replicate
RESULTS:	100% survival

6.0 APPENDIX II - AMPELISCA TEST SUMMARIES

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	MPT025D16
SLI STUDY TITLE:	10-Day Static Acute Toxicity Test With *Ampelisca abdita*
SAMPLE TYPE:	Sediment
DATE TEST SAMPLE COLLECTED:	28 July 1994
DATE TEST SAMPLE RECEIVED:	29 July 1994
TEST DATES:	4 August to 14 August 1994
TEST SPECIES:	*Ampelisca abdita*; ≥0.7 mm and <1.7 mm in length source: commercial supplier
OVERLYING WATER:	Natural, filtered seawater adjusted to 15 ‰ with laboratory well water pH: 7.6 - 8.4 dissolved oxygen: 7.4 - 8.7 mg/L temperature: 20 - 21 °C salinity: 16 - 18 ‰
TEST VESSELS:	Four replicate 1000-mL glass beakers each containing 200 mL of sediment and 800 mL of overlying water
TEST CONDITIONS:	10-day duration, solution temperature of 20 ± 1 °C, light intensity of 30 to 100 footcandles
NUMBER OF ORGANISMS EXPOSED:	Eighty; twenty *A. abdita* per replicate
RESULTS:	80% survival

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	MPT025D17
SLI STUDY TITLE:	10-Day Static Acute Toxicity Test With *Ampelisca abdita*
SAMPLE TYPE:	Sediment
DATE TEST SAMPLE COLLECTED:	29 July 1994
DATE TEST SAMPLE RECEIVED:	2 August 1994
TEST DATES:	4 August to 14 August 1994
TEST SPECIES:	*Ampelisca abdita*; ≥0.7 mm and <1.7 mm in length source: commercial supplier
OVERLYING WATER:	Natural, filtered seawater adjusted to 15 ‰ with laboratory well water pH: 7.8 - 8.1 dissolved oxygen: 7.2 - 8.6 mg/L temperature: 20 - 21 °C salinity: 15 - 20 ‰
TEST VESSELS:	Four replicate 1000-mL glass beakers each containing 200 mL of sediment and 800 mL of overlying water
TEST CONDITIONS:	10-day duration, solution temperature of 20 ± 1 °C, light intensity of 30 to 100 footcandles
NUMBER OF ORGANISMS EXPOSED:	Eighty; twenty *A. abdita* per replicate
RESULTS:	33% survival, statistically different from the reference control at 15 ‰ (86% survival).

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	MPT025D19
SLI STUDY TITLE:	10-Day Static Acute Toxicity Test With *Ampelisca abdita*
SAMPLE TYPE:	Sediment
DATE TEST SAMPLE COLLECTED:	28 July 1994
DATE TEST SAMPLE RECEIVED:	29 July 1994
TEST DATES:	4 August to 14 August 1994
TEST SPECIES:	*Ampelisca abdita*; ≥0.7 mm and <1.7 mm in length source: commercial supplier
OVERLYING WATER:	Natural, filtered seawater adjusted to 15 ‰ with laboratory well water pH: 7.5 - 8.3 dissolved oxygen: 7.6 - 8.9 mg/L temperature: 20 - 21 °C salinity: 16 - 19 ‰
TEST VESSELS:	Four replicate 1000-mL glass beakers each containing 200 mL of sediment and 800 mL of overlying water
TEST CONDITIONS:	10-day duration, solution temperature of 20 ± 1 °C, light intensity of 30 to 100 footcandles
NUMBER OF ORGANISMS EXPOSED:	Eighty; twenty *A. abdita* per replicate
RESULTS:	79% survival

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	MPT025D25
SLI STUDY TITLE:	10-Day Static Acute Toxicity Test With *Ampelisca abdita*
SAMPLE TYPE:	Sediment
DATE TEST SAMPLE COLLECTED:	31 July 1994
DATE TEST SAMPLE RECEIVED:	2 August 1994
TEST DATES:	4 August to 14 August 1994
TEST SPECIES:	*Ampelisca abdita*; ≥0.7 mm and <1.7 mm in length source: commercial supplier
OVERLYING WATER:	Natural, filtered seawater adjusted to 15 ‰ with laboratory well water pH: 7.6 - 8.3 dissolved oxygen: 7.6 - 8.8 mg/L temperature: 20 - 21 °C salinity: 15 - 17 ‰
TEST VESSELS:	Four replicate 1000-mL glass beakers each containing 200 mL of sediment and 800 mL of overlying water
TEST CONDITIONS:	10-day duration, solution temperature of 20 ± 1 °C, light intensity of 30 to 100 footcandles
NUMBER OF ORGANISMS EXPOSED:	Eighty; twenty *A. abdita* per replicate
RESULTS:	69% survival, statistically different from the reference control at 15 ‰ (86% survival).

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	MPT025D31
SLI STUDY TITLE:	10-Day Static Acute Toxicity Test With *Ampelisca abdita*
SAMPLE TYPE:	Sediment
DATE TEST SAMPLE COLLECTED:	28 July 1994
DATE TEST SAMPLE RECEIVED:	29 July 1994
TEST DATES:	4 August to 14 August 1994
TEST SPECIES:	*Ampelisca abdita*; ≥0.7 mm and <1.7 mm in length source: commercial supplier
OVERLYING WATER:	Natural, filtered seawater adjusted to 15 ‰ with laboratory well water pH: 7.8 - 8.2 dissolved oxygen: 7.5 - 8.8 mg/L temperature: 20 - 21 °C salinity: 16 - 19 ‰
TEST VESSELS:	Four replicate 1000-mL glass beakers each containing 200 mL of sediment and 800 mL of overlying water
TEST CONDITIONS:	10-day duration, solution temperature of 20 ± 1 °C, light intensity of 30 to 100 footcandles
NUMBER OF ORGANISMS EXPOSED:	Eighty; twenty *A. abdita* per replicate
RESULTS:	74% survival, statistically different from the reference control at 15 ‰ (86% survival).

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	MPT025D32
SLI STUDY TITLE:	10-Day Static Acute Toxicity Test With *Ampelisca abdita*
SAMPLE TYPE:	Sediment
DATE TEST SAMPLE COLLECTED:	29 July 1994
DATE TEST SAMPLE RECEIVED:	2 August 1994
TEST DATES:	4 August to 14 August 1994
TEST SPECIES:	*Ampelisca abdita*; ≥0.7 mm and <1.7 mm in length source: commercial supplier
OVERLYING WATER:	Natural, filtered seawater adjusted to 15 ‰ with laboratory well water pH: 7.5 - 8.2 dissolved oxygen: 6.2 - 8.9 mg/L temperature: 20 - 21 °C salinity: 15 - 17 ‰
TEST VESSELS:	Four replicate 1000-mL glass beakers each containing 200 mL of sediment and 800 mL of overlying water
TEST CONDITIONS:	10-day duration, solution temperature of 20 ± 1 °C, light intensity of 30 to 100 footcandles
NUMBER OF ORGANISMS EXPOSED:	Eighty; twenty *A. abdita* per replicate
RESULTS:	33% survival, statistically different from the reference control at 15 ‰ (86% survival).

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	Reference Control (15 ‰)
SLI STUDY TITLE:	10-Day Static Acute Toxicity Test With *Ampelisca abdita*
SAMPLE TYPE:	Reference Sediment
DATE TEST SAMPLE COLLECTED:	29 July 1994
TEST DATES:	4 August to 14 August 1994
TEST SPECIES:	*Ampelisca abdita*; ≥0.7 mm and <1.7 mm in length source: commercial supplier
OVERLYING WATER:	Natural, filtered seawater adjusted to 15 ‰ with laboratory well water pH: 7.7 - 8.1 dissolved oxygen: 6.1 - 8.8 mg/L temperature: 20 - 21 °C salinity: 16 - 20 ‰
TEST VESSELS:	Four replicate 1000-mL glass beakers each containing 200 mL of sediment and 800 mL of overlying water
TEST CONDITIONS:	10-day duration, solution temperature of 20 ± 1 °C, light intensity of 30 to 100 footcandles
NUMBER OF ORGANISMS EXPOSED:	Eighty; twenty *A. abdita* per replicate
RESULTS:	86% survival

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	MPT025D20
SLI STUDY TITLE:	10-Day Static Acute Toxicity Test With *Ampelisca abdita*
SAMPLE TYPE:	Sediment
DATE TEST SAMPLE COLLECTED:	31 July 1994
DATE TEST SAMPLE RECEIVED:	2 August 1994
TEST DATES:	4 August to 14 August 1994
TEST SPECIES:	*Ampelisca abdita*; ≥0.7 mm and <1.7 mm in length source: commercial supplier
OVERLYING WATER:	Natural, filtered seawater adjusted to 23 ‰ with laboratory well water pH: 7.8 - 8.2 dissolved oxygen: 4.0 - 8.9 mg/L temperature: 20 - 21 °C salinity: 21 - 25 ‰
TEST VESSELS:	Four replicate 1000-mL glass beakers each containing 200 mL of sediment and 800 mL of overlying water
TEST CONDITIONS:	10-day duration, solution temperature of 20 ± 1 °C, light intensity of 30 to 100 footcandles
NUMBER OF ORGANISMS EXPOSED:	Eighty; twenty *A. abdita* per replicate
RESULTS:	49% survival, statistically different from the reference control at 23 ‰ (90% survival).

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	MPT025D28
SLI STUDY TITLE:	10-Day Static Acute Toxicity Test With *Ampelisca abdita*
SAMPLE TYPE:	Sediment
DATE TEST SAMPLE COLLECTED:	31 July 1994
DATE TEST SAMPLE RECEIVED:	2 August 1994
TEST DATES:	4 August to 14 August 1994
TEST SPECIES:	*Ampelisca abdita*; ≥0.7 mm and <1.7 mm in length source: commercial supplier
OVERLYING WATER:	Natural, filtered seawater adjusted to 23 ‰ with laboratory well water pH: 7.9 - 8.4 dissolved oxygen: 6.6 - 8.9 mg/L temperature: 20 - 21 °C salinity: 21 - 25 ‰
TEST VESSELS:	Four replicate 1000-mL glass beakers each containing 200 mL of sediment and 800 mL of overlying water
TEST CONDITIONS:	10-day duration, solution temperature of 20 ± 1 °C, light intensity of 30 to 100 footcandles
NUMBER OF ORGANISMS EXPOSED:	Eighty; twenty *A. abdita* per replicate
RESULTS:	44% survival, statistically different from the reference control at 23 ‰ (90% survival).

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	MPT025D34
SLI STUDY TITLE:	10-Day Static Acute Toxicity Test With *Ampelisca abdita*
SAMPLE TYPE:	Sediment
DATE TEST SAMPLE COLLECTED:	30 July 1994
DATE TEST SAMPLE RECEIVED:	2 August 1994
TEST DATES:	4 August to 14 August 1994
TEST SPECIES:	*Ampelisca abdita*; ≥0.7 mm and <1.7 mm in length source: commercial supplier
OVERLYING WATER:	Natural, filtered seawater adjusted to 23 ‰ with laboratory well water pH: 7.4 - 8.2 dissolved oxygen: 7.1 - 8.8 mg/L temperature: 20 - 21 °C salinity: 21 - 25 ‰
TEST VESSELS:	Four replicate 1000-mL glass beakers each containing 200 mL of sediment and 800 mL of overlying water
TEST CONDITIONS:	10-day duration, solution temperature of 20 ± 1 °C, light intensity of 30 to 100 footcandles
NUMBER OF ORGANISMS EXPOSED:	Eighty; twenty *A. abdita* per replicate
RESULTS:	33% survival, statistically different from the reference control at 23 ‰ (90% survival).

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	Reference Control (23 ‰)
SLI STUDY TITLE:	10-Day Static Acute Toxicity Test With *Ampelisca abdita*
SAMPLE TYPE:	Reference Sediment
DATE TEST SAMPLE COLLECTED:	29 July 1994
TEST DATES:	4 August to 14 August 1994
TEST SPECIES:	*Ampelisca abdita*; ≥0.7 mm and <1.7 mm in length source: commercial supplier
OVERLYING WATER:	Natural, filtered seawater adjusted to 23 ‰ with laboratory well water pH: 7.8 - 8.2 dissolved oxygen: 7.0 - 8.9 mg/L temperature: 20 - 21 °C salinity: 21 - 25 ‰
TEST VESSELS:	Four replicate 1000-mL glass beakers each containing 200 mL of sediment and 800 mL of overlying water
TEST CONDITIONS:	10-day duration, solution temperature of 20 ± 1 °C, light intensity of 30 to 100 footcandles
NUMBER OF ORGANISMS EXPOSED:	Eighty; twenty *A. abdita* per replicate
RESULTS:	90% survival

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	025D37TOX
SLI STUDY TITLE:	10-Day Static Acute Toxicity Test With *Ampelisca abdita*
SAMPLE TYPE:	Sediment
DATE TEST SAMPLE COLLECTED:	1 August 1994
DATE TEST SAMPLE RECEIVED:	4 August 1994
TEST DATES:	9 August to 19 August 1994
TEST SPECIES:	*Ampelisca abdita*; ≥0.7 mm and <1.7 mm in length source: commercial supplier
OVERLYING WATER:	Natural, filtered seawater adjusted to 19 ‰ with laboratory well water pH: 7.5 - 8.1 dissolved oxygen: 5.9 - 7.7 mg/L temperature: 21 °C salinity: 19 ‰
TEST VESSELS:	Four replicate 1000-mL glass beakers each containing 200 mL of sediment and 800 mL of overlying water
TEST CONDITIONS:	10-day duration, solution temperature of 20 ± 1 °C, light intensity of 30 to 100 footcandles
NUMBER OF ORGANISMS EXPOSED:	Eighty; twenty *A. abdita* per replicate
RESULTS:	89% survival, statistically different from the reference control at 19 ‰ (99% survival).

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	025D38TOX
SLI STUDY TITLE:	10-Day Static Acute Toxicity Test With *Ampelisca abdita*
SAMPLE TYPE:	Sediment
DATE TEST SAMPLE COLLECTED:	1 August 1994
DATE TEST SAMPLE RECEIVED:	4 August 1994
TEST DATES:	9 August to 19 August 1994
TEST SPECIES:	*Ampelisca abdita*; ≥0.7 mm and <1.7 mm in length source: commercial supplier
OVERLYING WATER:	Natural, filtered seawater adjusted to 19 ‰ with laboratory well water pH: 7.7 - 8.2 dissolved oxygen: 6.0 - 7.8 mg/L temperature: 21 °C salinity: 19 - 21 ‰
TEST VESSELS:	Four replicate 1000-mL glass beakers each containing 200 mL of sediment and 800 mL of overlying water
TEST CONDITIONS:	10-day duration, solution temperature of 20 ± 1 °C, light intensity of 30 to 100 footcandles
NUMBER OF ORGANISMS EXPOSED:	Eighty; twenty *A. abdita* per replicate
RESULTS:	78% survival, statistically different from the reference control at 19 ‰ (99% survival).

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	005D01TOX
SLI STUDY TITLE:	10-Day Static Acute Toxicity Test With *Ampelisca abdita*
SAMPLE TYPE:	Sediment
DATE TEST SAMPLE COLLECTED:	3 August 1994
DATE TEST SAMPLE RECEIVED:	4 August 1994
TEST DATES:	9 August to 19 August 1994
TEST SPECIES:	*Ampelisca abdita*; ≥0.7 mm and <1.7 mm in length source: commercial supplier
OVERLYING WATER:	Natural, filtered seawater adjusted to 19 ‰ with laboratory well water pH: 7.5 - 8.0 dissolved oxygen: 5.9 - 8.0 mg/L temperature: 20 - 21 °C salinity: 19 ‰
TEST VESSELS:	Four replicate 1000-mL glass beakers each containing 200 mL of sediment and 800 mL of overlying water
TEST CONDITIONS:	10-day duration, solution temperature of 20 ± 1 °C, light intensity of 30 to 100 footcandles
NUMBER OF ORGANISMS EXPOSED:	Eighty; twenty *A. abdita* per replicate
RESULTS:	90% survival, statistically different from the reference control at 19 ‰ (99% survival).

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	Reference Control (19 ‰)
SLI STUDY TITLE:	10-Day Static Acute Toxicity Test With *Ampelisca abdita*
SAMPLE TYPE:	Reference Sediment
DATE TEST SAMPLE COLLECTED:	29 July 1994
TEST DATES:	9 August to 19 August 1994
TEST SPECIES:	*Ampelisca abdita*; ≥0.7 mm and <1.7 mm in length source: commercial supplier
OVERLYING WATER:	Natural, filtered seawater adjusted to 23 ‰ with laboratory well water pH: 7.6 - 8.4 dissolved oxygen: 6.5 - 8.2 mg/L temperature: 19 - 21 °C salinity: 19 - 21 ‰
TEST VESSELS:	Four replicate 1000-mL glass beakers each containing 200 mL of sediment and 800 mL of overlying water
TEST CONDITIONS:	10-day duration, solution temperature of 20 ± 1 °C, light intensity of 30 to 100 footcandles
NUMBER OF ORGANISMS EXPOSED:	Eighty; twenty *A. abdita* per replicate
RESULTS:	99% survival

7.0 APPENDIX III - EARTHWORM TEST SUMMARIES

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	Control
SLI STUDY TITLE:	30-Day Earthworm Subacute Toxicity Test
SAMPLE TYPE:	Soil
DATE TEST SAMPLE COLLECTED:	13 September 1994
DATE TEST SAMPLE RECEIVED:	16 September 1994
TEST DATES:	19 September 1994 to 20 October 1994
TEST SPECIES:	Earthworm (*Eisenia foetida*), species verified with Reynolds key (Reynolds, 1977) source: Carolina Biological Supply Company
TEST SOIL CHARACTERIZATION:	Initial: 0.045 moisture fraction, 53.8 mL/100 g dry soil water holding capacity, pH 6.5
TEST VESSELS:	950 mL glass canning jars containing 200 g soil (dry weight)
TEST CONDITIONS:	30-day duration, soil temperature of 20 ± 2 °C, continuous lighting at 50 to 70 footcandles, ≥ 75% water holding capacity, fed composted cattle manure on day 14
NUMBER EXPOSED:	Twenty earthworms per replicate; four replicates per test sample and control

RESULTS:	**Soil Sample**
INITIAL MEAN E.W. WEIGHT (g)	0.3024
FINAL MEAN E.W. WEIGHT (g)	0.3659
WEIGHT CHANGE (%)	21.5
MORTALITY DAY 7 (%)	0
MORTALITY DAY 14 (%)	0
MORTALITY DAY 30 (%)	0

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	15U03001
SLI STUDY TITLE:	30-Day Earthworm Subacute Toxicity Test
SAMPLE TYPE:	Soil
DATE TEST SAMPLE COLLECTED:	13 September 1994
DATE TEST SAMPLE RECEIVED:	16 September 1994
TEST DATES:	19 September 1994 to 20 October 1994
TEST SPECIES:	Earthworm (*Eisenia foetida*), species verified with Reynolds key (Reynolds, 1977) source: Carolina Biological Supply Company
TEST SOIL CHARACTERIZATION:	Initial: 0.060 moisture fraction, 25.3 mL/100 g dry soil water holding capacity, pH 7.0
TEST VESSELS:	950 mL glass canning jars containing 200 g soil (dry weight)
TEST CONDITIONS:	30-day duration, soil temperature of 20 ± 2 °C, continuous lighting at 50 to 70 footcandles, ≥ 75% water holding capacity, fed composted cattle manure on day 14
NUMBER EXPOSED:	Twenty earthworms per replicate; four replicates per test sample and control

RESULTS:	**Soil Sample**
INITIAL MEAN E.W. WEIGHT (g)	0.2913
FINAL MEAN E.W. WEIGHT (g)	0.3594
WEIGHT CHANGE (%)	24.0
MORTALITY DAY 7 (%)	0
MORTALITY DAY 14 (%)	0
MORTALITY DAY 30 (%)	0

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	15U02301
SLI STUDY TITLE:	30-Day Earthworm Subacute Toxicity Test
SAMPLE TYPE:	Soil
DATE TEST SAMPLE COLLECTED:	13 September 1994
DATE TEST SAMPLE RECEIVED:	16 September 1994
TEST DATES:	19 September 1994 to 20 October 1994
TEST SPECIES:	Earthworm (*Eisenia foetida*), species verified with Reynolds key (Reynolds, 1977) source: Carolina Biological Supply Company
TEST SOIL CHARACTERIZATION:	Initial: 0.070 moisture fraction, 24.6 mL/100 g dry soil water holding capacity, pH 6.9
TEST VESSELS:	950 mL glass canning jars containing 200 g soil (dry weight)
TEST CONDITIONS:	30-day duration, soil temperature of 20 ± 2 °C, continuous lighting at 50 to 70 footcandles, ≥ 75% water holding capacity, fed composted cattle manure on day 14
NUMBER EXPOSED:	Twenty earthworms per replicate; four replicates per test sample and control

RESULTS:	**Soil Sample**
INITIAL MEAN E.W. WEIGHT (g)	0.2893
FINAL MEAN E.W. WEIGHT (g)	0.2713
WEIGHT CHANGE (%)	- 6.24 *
MORTALITY DAY 7 (%)	1.25
MORTALITY DAY 14 (%)	1.25
MORTALITY DAY 30 (%)	5.0

* Statistically different from control

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	15U02001
SLI STUDY TITLE:	30-Day Earthworm Subacute Toxicity Test
SAMPLE TYPE:	Soil
DATE TEST SAMPLE COLLECTED:	13 September 1994
DATE TEST SAMPLE RECEIVED:	16 September 1994
TEST DATES:	19 September 1994 to 20 October 1994
TEST SPECIES:	Earthworm (*Eisenia foetida*), species verified with Reynolds key (Reynolds, 1977) source: Carolina Biological Supply Company
TEST SOIL CHARACTERIZATION:	Initial: 0.054 moisture fraction, 22.6 mL/100 g dry soil water holding capacity, pH 6.4
TEST VESSELS:	950 mL glass canning jars containing 200 g soil (dry weight)
TEST CONDITIONS:	30-day duration, soil temperature of 20 ± 2 °C, continuous lighting at 50 to 70 footcandles, ≥ 75% water holding capacity, fed composted cattle manure on day 14
NUMBER EXPOSED:	Twenty earthworms per replicate; four replicates per test sample and control

RESULTS:	**Soil Sample**
INITIAL MEAN E.W. WEIGHT (g)	0.2934
FINAL MEAN E.W. WEIGHT (g)	0.3313
WEIGHT CHANGE (%)	13.6
MORTALITY DAY 7 (%)	0
MORTALITY DAY 14 (%)	0
MORTALITY DAY 30 (%)	1.25

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	15U01601
SLI STUDY TITLE:	30-Day Earthworm Subacute Toxicity Test
SAMPLE TYPE:	Soil
DATE TEST SAMPLE COLLECTED:	13 September 1994
DATE TEST SAMPLE RECEIVED:	16 September 1994
TEST DATES:	19 September 1994 to 20 October 1994
TEST SPECIES:	Earthworm (*Eisenia foetida*), species verified with Reynolds key (Reynolds, 1977) source: Carolina Biological Supply Company
TEST SOIL CHARACTERIZATION:	Initial: 0.068 moisture fraction, 30.4 mL/100 g dry soil water holding capacity, pH 7.0
TEST VESSELS:	950 mL glass canning jars containing 200 g soil (dry weight)
TEST CONDITIONS:	30-day duration, soil temperature of 20 ± 2 °C, continuous lighting at 50 to 70 footcandles, ≥ 75% water holding capacity, fed composted cattle manure on day 14
NUMBER EXPOSED:	Twenty earthworms per replicate; four replicates per test sample and control

RESULTS:	**Soil Sample**
INITIAL MEAN E.W. WEIGHT (g)	0.2754
FINAL MEAN E.W. WEIGHT (g)	0.3443
WEIGHT CHANGE (%)	25.8
MORTALITY DAY 7 (%)	0
MORTALITY DAY 14 (%)	0
MORTALITY DAY 30 (%)	0

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	15U01501
SLI STUDY TITLE:	30-Day Earthworm Subacute Toxicity Test
SAMPLE TYPE:	Soil
DATE TEST SAMPLE COLLECTED:	13 September 1994
DATE TEST SAMPLE RECEIVED:	16 September 1994
TEST DATES:	19 September 1994 to 20 October 1994
TEST SPECIES:	Earthworm (*Eisenia foetida*), species verified with Reynolds key (Reynolds, 1977) source: Carolina Biological Supply Company
TEST SOIL CHARACTERIZATION:	Initial: 0.039 moisture fraction, 19.3 mL/100 g dry soil water holding capacity, pH 6.4
TEST VESSELS:	950 mL glass canning jars containing 200 g soil (dry weight)
TEST CONDITIONS:	30-day duration, soil temperature of 20 ± 2 °C, continuous lighting at 50 to 70 footcandles, ≥ 75% water holding capacity, fed composted cattle manure on day 14
NUMBER EXPOSED:	Twenty earthworms per replicate; four replicates per test sample and control

RESULTS:	**Soil Sample**
INITIAL MEAN E.W. WEIGHT (g)	0.2972
FINAL MEAN E.W. WEIGHT (g)	----
WEIGHT CHANGE (%)	----
MORTALITY DAY 7 (%)	0
MORTALITY DAY 14 (%)	100
MORTALITY DAY 30 (%)	100 *

* Statistically different from control

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	15U01701
SLI STUDY TITLE:	30-Day Earthworm Subacute Toxicity Test
SAMPLE TYPE:	Soil
DATE TEST SAMPLE COLLECTED:	13 September 1994
DATE TEST SAMPLE RECEIVED:	16 September 1994
TEST DATES:	19 September 1994 to 20 October 1994
TEST SPECIES:	Earthworm (*Eisenia foetida*), species verified with Reynolds key (Reynolds, 1977) source: Carolina Biological Supply Company
TEST SOIL CHARACTERIZATION:	Initial: 0.059 moisture fraction, 20.6 mL/100 g dry soil water holding capacity, pH 6.8
TEST VESSELS:	950 mL glass canning jars containing 200 g soil (dry weight)
TEST CONDITIONS:	30-day duration, soil temperature of 20 ± 2 °C, continuous lighting at 50 to 70 footcandles, ≥ 75% water holding capacity, fed composted cattle manure on day 14
NUMBER EXPOSED:	Twenty earthworms per replicate; four replicates per test sample and control

RESULTS:	**Soil Sample**
INITIAL MEAN E.W. WEIGHT (g)	0.2697
FINAL MEAN E.W. WEIGHT (g)	0.3485
WEIGHT CHANGE (%)	30.0
MORTALITY DAY 7 (%)	0
MORTALITY DAY 14 (%)	0
MORTALITY DAY 30 (%)	0

TEST SAMPLE SITE:	Naval Station Mayport Jacksonville, Florida
TEST SAMPLE I.D.:	15U01201
SLI STUDY TITLE:	30-Day Earthworm Subacute Toxicity Test
SAMPLE TYPE:	Soil
DATE TEST SAMPLE COLLECTED:	13 September 1994
DATE TEST SAMPLE RECEIVED:	16 September 1994
TEST DATES:	19 September 1994 to 20 October 1994
TEST SPECIES:	Earthworm (*Eisenia foetida*), species verified with Reynolds key (Reynolds, 1977) source: Carolina Biological Supply Company
TEST SOIL CHARACTERIZATION:	Initial: 0.048 moisture fraction, 20.3 mL/100 g dry soil water holding capacity, pH 6.7
TEST VESSELS:	950 mL glass canning jars containing 200 g soil (dry weight)
TEST CONDITIONS:	30-day duration, soil temperature of 20 ± 2 °C, continuous lighting at 50 to 70 footcandles, ≥ 75% water holding capacity, fed composted cattle manure on day 14
NUMBER EXPOSED:	Twenty earthworms per replicate; four replicates per test sample and control

RESULTS:

	Soil Sample
INITIAL MEAN E.W. WEIGHT (g)	0.2990
FINAL MEAN E.W. WEIGHT (g)	0.3243
WEIGHT CHANGE (%)	8.5
MORTALITY DAY 7 (%)	0
MORTALITY DAY 14 (%)	0
MORTALITY DAY 30 (%)	6.25

APPENDIX F-9

STATISTICAL ANALYSIS OF BIOLOGICAL AND CHEMICAL DATA

APPENDIX F-9

STATISTICAL ANALYSIS OF BIOLOGICAL AND CHEMICAL DATA

Simple linear regressions were completed to determine if a relationship is present between pesticides in surface soil at SWMU 15 and mortality and weight change observed in surface soil toxicity testing with earthworms (*Eisenia foetida*). The results of the regressions are distinguished by a box. Although DDT, DDE, and chlordane were selected as ECPCs for SWMU 15 surface soil, regressions were completed for only DDT and DDE. Chlordane was detected in only three of the seven surface soil samples submitted for toxicity testing; therefore, statistical testing is not valid due to the small sample size.

Appendix F-9

Statistical Analyses of Biological and Chemical Data
RCRA Facilities Investigation
U.S. Naval Station, Group II SWMUs
Mayport, Florida

DDT in Surface Soil versus Earthworm Mortality

	DDT (ug/kg) (x)	Earthworm Mortality (%) (y)
MPT-15-SS12	56	6.3
MPT-15-SS15	2.5	100
MPT-15-SS16	340	0
MPT-15-SS17	89	0
MPT-15-SS20	3.1	1.3
MPT-15-SS23	790000	8.8
MPT-15-SS30	2.2	0

Regression Output:

Constant		17.93602
Std Err of Y Est		40.27794
R Squared		0.008761
No. of Observations		7
Degrees of Freedom		5
X Coefficient(s)	-1.2E-05	
Std Err of Coef.	0.000055	

DDT in Surface Soil versus Weight Change

	DDT (ug/kg) (x)	Weight Change (%) (y)
MPT-15-SS12	56	8.5
MPT-15-SS15	2.5	NA
MPT-15-SS16	340	25.8
MPT-15-SS17	89	30
MPT-15-SS20	3.1	13.6
MPT-15-SS23	790000	-6.2
MPT-15-SS30	2.2	24

Regression Output:

Constant		20.38279
Std Err of Y Est		8.975857
R Squared		0.646204
No. of Observations		6
Degrees of Freedom		4
X Coefficient(s)	-3.4E-05	
Std Err of Coef.	0.000012	

DDE in Surface Soil versus Earthworm Mortality

	DDE (ug\kg) (x)	Earthworm Mortality (%) (y)
MPT-15-SS12	220	6.3
MPT-15-SS15	1.1	100
MPT-15-SS16	560	0
MPT-15-SS17	93	0
MPT-15-SS20	4.8	1.3
MPT-15-SS23	ND	8.8
MPT-15-SS30	3.8	0

Regression Output:

Constant		26.68571
Std Err of Y Est		42.60097
R Squared		0.10508
No. of Observations		6
Degrees of Freedom		4
X Coefficient(s)	-0.05949	
Std Err of Coef.	0.086809	

DDE in Surface Soil versus Weight Change

	DDE (ug\kg) (x)	Weight Change (%) (y)
MPT-15-SS12	220	8.5
MPT-15-SS15	1.1	NA
MPT-15-SS16	560	25.8
MPT-15-SS17	93	30
MPT-15-SS20	4.8	13.6
MPT-15-SS23	ND	-6.2
MPT-15-SS30	3.8	24

Regression Output:

Constant		19.31715
Std Err of Y Est		10.23567
R Squared		0.024279
No. of Observations		5
Degrees of Freedom		3
X Coefficient(s)	0.006028	
Std Err of Coef.	0.022062	

APPENDIX G

RESPONSE TO FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND U.S. ENVIRONMENTAL PROTECTION AGENCY COMMENTS

PROJECT REVIEW COMMENTS

RCRA Facility Investigation, Group II SWMUs
U.S. Naval Station
Mayport, Florida

INTRODUCTION

ABB Environmental Services, Inc. (ABB-ES), under the Comprehensive Long-term Environmental Action, Navy (CLEAN) Contract, No. N62467-89-D-0317, is conducting a Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) on behalf of the U.S. Navy at the Naval Station (NAVSTA) Mayport, Florida. This investigation is being conducted in accordance with the Hazardous and Solid Waste Amendment (HSWA) permit No. FL9-170-024-260, issued by the U.S. Environmental Protection Agency (USEPA) on March 25, 1988, and revised and reissued June 15, 1993.

The purpose of this document is to respond to comments by the USEPA and the Florida Department of Environmental Protection (FDEP) concerning the report entitled Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI), Group II Solid Waste Management Units (SWMUs), NAVSTA Mayport, Mayport, Florida (ABB-ES, 1995). The following provides a listing of the correspondence received from the USEPA and FDEP.

- July 6, 1995, From Reginald G. Rogers, Ecologist, ESAT Contractor, to Mr. Elmer W. Akin, Chief, Office of Health Assessment; Subject: Ecologist review comments on RCRA Facility Investigation, NAVSTA Mayport.

- July 7, 1995, From Jane Fugler, Hazardous Waste Sites Technical Review, FDEP, to Mr. James Cason, Bureau of Waste Cleanup (BWC), FDEP; Subject: Review of Ecological Risk Assessment for SWMUs 6, 7, 8, 9, 10, 11, 12, 15, and 16 at NAVSTA Mayport.

- July 11, 1995, From Stephen M. Roberts, Ph.D., Center for Environmental and Human Toxicology, University of Florida, to Ms. Ligia Mora-Applegate, BWC, FDEP; Subject: Human Health Risk Assessments for SWMU 6-11 (OWTP Area), SWMU 12, SWMU 15, and SWMU 16 at NAVSTA Mayport.

- July 21, 1995, From Ligia Mora-Applegate, BWC, FDEP, to Mr. Jim Cason, DOD Facilities, Technical Review Section, FDEP; Subject: Human Health Risk Assessment for SWMUs 6, 7, 8, 10, 11, 12, 15, and 16, NAVSTA Mayport.

- July 26, 1995, From Clifford A. Opdyke, Ph.D., Toxicologist, ESAT Contractor, to Mr. Elmer W. Akin, Chief, Office of Health Assessment; Subject: RCRA Facility Investigation, NAVSTA Mayport.

- August 16, 1995, from Mr. James H. Cason, P.G., Remedial Project Manager, FDEP to Mr. David Driggers, Department of the Navy, Southern Division, Naval Facilities Engineering Command (SOUTHNAVFACENGCOM); Subject: Draft RCRA Facility Investigation Report for Group II SWMUs, NAVSTA Mayport, June 1995.

- Undated, from A.T. Kearney, Inc., to Jay Bassett, remedial Project Manager, Region IV USEPA; Subject: Draft RCRA Facility Investigation Report for Group II SWMUs, NAVSTA Mayport, June 1995.

The following sections of this response to comments provide point-by-point responses to USEPA and FDEP comments. The report is organized to include the following:

- Section 2.0 contains responses to comments made in correspondence dated August 16, 1995, by the FDEP concerning the site characterization portions of the RCRA Facility Investigation for the Group II SWMUs, NAVSTA Mayport.

- Section 3.0 contains responses to comments made in correspondence dated July 26, 1995, from USEPA's ESAT contractor, and July 11, 1995, by FDEP's contractor and July 21 from the FDEP concerning the human health risk assessment portions of the RCRA Facility Investigation for the Group II SWMUs, NAVSTA Mayport. The review comments in the July 11, 1995, correspondence also include comments pertaining to the ecological risk assessment.

- Section 4.0 contains responses to comments made in correspondence dated July 6, 1995, by the USEPA's ESAT contractor, and July 7, 1995, by the FDEP concerning the ecological risk assessment portions of the RCRA Facility Investigation for the Group II SWMUs, NAVSTA Mayport.

Site Characterization

The following provides a response to comments in correspondence dated August 16, 1995, from FDEP to SOUTHNAVFACENGCOM:

1. **References to Florida soil cleanup goals should be to *Cleanup Goals for the Military Sites, April, 1995 (FDEP memorandum by Ms. Ligia Mora-Applegate*. This reference is used in the text, but is missing in the bibliography.**

   Editorial revisions to text, tables, and figures will be made to the draft Group II RFI report prior to being finalized.

2. **Section 2.2.4. Please document the disposition of the soils removed from SWMU 16, including their testing before and after removal to confirm their non-regulatory nature. See comment 10.**

   Documentation to be included in the final Group II RFI report will consist of the locations where the Navy collected soil samples from the soil pile and the results of analysis of the soil samples using an immunoassay testing method (EnSys™). Currently, the soils are stockpiled near the site to the southwest. Pictures of the completed paving project and of the soil removed from the SWMU are provided in Attachment A.

3. **Please note the successful installation and removal of monitoring wells MPT-8-MW19S and MPT-8-MW20S from the shallow water in the St. Johns River. Their location in Figure 3-1 and 3-2, without explanation is confusing.**

   The monitoring wells were installed to assess whether the dissolved constituents from the floating free-phase hydrocarbons have migrated to the St. Johns River. The monitoring wells were successfully installed and removed from the bank of the St. Johns River. The Group II RFI text will be amended to include these statements.

4. **In Table 4-3, Summary of Compounds Detected in Oily Waste Treatment Plant, the Florida Guidance Concentrations referenced are those for groundwater; this should be duly noted and the reason for their use given in the footnotes.**

   On page 4-15, Section 4.2.1 Surface Water Samples, it was stated that the FDEP groundwater guidance concentrations were used because of the potential for surface water to infiltrate into the groundwater. This statement will be added to Table 4-3.

5. **The approximate location of the sodium hydroxide spill should be noted on Figure 5-1. Additionally, this area should be considered as an Area of Concern (AOC) irrespective of and unrelated to SWMU 12.**

The approximate location is not known; placing these data on the figure would be misleading. Testing of soil pH will be used to identify this area, if still present. The Navy concurs that the site should be an AOC separate from SWMU 12. An SWMU assessment report separate from SWMU 12 would be conducted to assess the potential impact to the environment, if any, from the sodium hydroxide release.

6. **Section 6.0, SWMU 15: Because of the type of contamination distribution (assumably random disposal to the surface), the use of a statistical sampling regime to assure proper "hot spot" assessment should be confirmed and discussed, as was done for SWMU 16.**

Corrective measures for this SWMU will include statistical sampling. This will be noted in the Group II RFI text and in the NELP technology implementation plan. The NELP technology implementation plan describes the sampling and analytical activities that will be conducted to assess the performance of the bioremediation of the pesticides at SWMU 15.

7. **Recommendations for SWMU 6, 7, 8, 9, 10, and 11: I agree with the recommendation to conduct a CMS for free-phase hydrocarbons at these SWMUs. The statement that SWMU 7 is undergoing remediation under the NELP program is not quite correct. The NELP program will evaluate one technology which may be utilized in the remediation of the SWMU.**

This statement will be clarified to describe the interim measure to remove free-phase hydrocarbons from the groundwater and explain that the NELP program will conduct a technology demonstration for the treatment of soils at SWMU 7 OWTP Sludge Drying Beds using thermal desorption.

A risk assessment of surface and subsurface soil was not conducted at SWMU 7 because of plans to conduct a thermal desorption technology demonstration under the NELP program. The interim measures are to consist of excavation and treatment of a portion of the soils at SWMU 7 to assess this technology's ability to remediate soils containing hydrocarbons and related chemicals. Thermal desorption will be one of the alternatives described in the CMS, and it is likely that this technology will be the final remedy proposed.

It is understood that should the remediation of SWMU 7 not be conducted or not be completed, evaluation of this potential exposure pathway by a baseline risk assessment will become a requirement for the RFI to be considered complete.

8. **Recommendations for SWMU 12: I agree that this SWMU does not require further investigation as it relates to SWMU designation; however, my comment (5.) above, should be considered as this is pursued. I note also that all questions regarding the equivalency demonstration have not been completely answered, and while I don't expect serious problems, this may have a bearing on this recommendation.**

Comment noted; see response to the comment in Section **2.5 Comment 5**.

9. **Recommendations for SWMU 15: I agree with the recommendation to conduct a CMS on this SWMU. It should also be noted that this SWMU is being investigated under the NELP program as a possible candidate for bioremediation.**

   The text will be revised to state that a technology demonstration of bioremediation is being conducted under the NELP program and that the performance of the technology will be evaluated against industrial, residential, and leaching to groundwater exposure scenarios for 4,4'-DDT and chlordane, plus an ecological exposure scenario based on a robin ingesting 4,4'-DDT.

10. **Recommendation of SWMU 16: I agree that the SWMU does not require further investigation at this time, however, documentation of the removal, testing, and disposition of the soil should be added to the RFI.**

    Comment noted; see response in Section 2.2 Comment 2.

Human Health Risk Assessment, July 11, 1995

The following sections provide response to comments dated July 11, 1995, from FDEP's risk assessment review contractor, July 11, 1995, from the FDEP, and July 26 from USEPA's ESAT contractor.

General Comment

There is one aspect that does concern me, however, and that is the averaging procedure applied to concentrations of contaminants in groundwater from various monitoring wells. It is unclear from the documentation I have reviewed whether the averaging is of samples taken within the contaminant plume, or instead of samples from the area in general. This is a significant point. Spatial averaging is clearly appropriate for soil exposures, since exposure of an individual to soil under most scenarios will be to some extent random over a certain area, i.e. an individual's soil exposure is unlikely to be confined to a single, discrete location. In the case of groundwater, however, unless a drinking water supply is drawn from multiple wells and mixed (which is unlikely for private residential wells), the exposure will, in fact, be to water from one location. Some averaging of concentrations from within a contaminant plume might be justifiable in estimating the risks posed by the contamination, but including the averaging values from outside the plume leads to a risk estimate of questionable meaning. A rationale for the selection of groundwater data to be averaged must be presented; simple averaging of site-wide data (if that was the approach taken) would not be acceptable.

The derivation of the exposure point concentrations for groundwater was consistent with USEPA Region IV guidance (Supplemental Region IV Risk Assessment Guidance, March 26, 1991). In that guidance, Region IV states: "The exposure point concentration should be the 95% upper confidence limit (UCL) of the arithmetic average unless it is higher than the maximum detected

concentration." This guidance further states: "The data points for calculating the groundwater exposure point concentration for a future scenario should consist of wells located within the contamination plume."

The exposure point concentrations were calculated and include either samples taken from wells within a defined plume or all samples hydraulically downgradient from a SWMU if no plume was defined. The approach is intended to utilize samples from the contaminated area and not to include uncontaminated samples which were collected from outside the contaminated area. The 95% UCL values are from multiple wells. Therefore, these values may overestimate the risk because not all analytes were detected at either the 95 percent UCL or maximum detected concentration in a single well. This approach is conservative and consistent with the USEPA Region IV guidance.

The rationale for this approach will be clarified in the Group II RFI. In addition, 10 or more samples from a medium (sediment, surface water, soil or groundwater) will be used to calculate the 95 percent UCL. The 95 percent UCL will not be calculated for a medium with less than 10 samples.

SWMU 6-11 (OWTP Area).

1. **2-Methylnaphthalene was identified as a human health chemical of potential concern (HHCPC) (see Table 4-22), but was dropped from the quantitative portion of the risk assessment and is missing from the table of remedial goal options (RGOs) for this portion of the site. Some mention of the rationale for dropping this HHCPC from the risk assessment and its significance should be provided.**

   Risk due to ingestion of 2-methylnaphthalene in drinking water could not be calculated because no oral reference dose is available for this analyte. If the oral reference dose for naphthalene (0.04 mg/kg-day) is used as a surrogate, however, the hazard quotient calculated for 2-methylnaphthalene is $3x10^{-2}$. This would not change the hazard index for groundwater at the OWTP Area, nor would it require remedial goal options to be developed for 2-methylnaphthalene.

2. **The human health risk assessment for these SWMUs is limited to groundwater. The document states on page 4-82 that, "Surface soil was not evaluated because there were no reported releases outside of the sludge lagoons. The Navy Environmental Leadership Program plans to remediate the sludge lagoons at the OWTP Area. Subsurface soil was not evaluated because any potential subsurface soil contamination for this area will be evaluated in the CMS along with the free product removal in accordance with Florida petroleum cleanup regulations (62-770, FAC)." It should be noted that the validity of the human health risk assessment for the OWTP Area is contingent on these planned activities actually taking place.**

Comment noted. The Navy has contracted, through the NELP program, Southwest Soil Remediation, Tuscon, Arizona, to conduct a technology demonstration of their thermal desorption equipment. See response to the comment in Section 2.7 Comment 7.

3. **In the Conclusions and Recommendations regarding SWMUs 6-11, it states that "The cancer risk is attributable to arsenic and lead." (pg 8-1). In fact, all of the cancer risk is attributable to arsenic.**

The recommendations for this area (section 8.1.3, pg 8-2) mention the subsurface soil and sludge drying beds, but are silent regarding groundwater. Section 8.1.1 points out that arsenic concentrations in groundwater, which pose a cancer risk outside the usual acceptable range, are below State and Federal maximum contaminant level (MCLs). Under these circumstances, as implied, remediation for arsenic in groundwater would not be warranted. It should be noted, however, that the 95% UCL concentration for manganese exceeds its Florida secondary standard by about 25-fold, and phenanthrene exceeds its Florida minimum criterion based on organoleptic considerations by about 10-fold.

Because no cancer slope factor is available for lead, cancer risk could not be calculated for lead. The text will be changed to reflect that arsenic is the only carcinogenic risk calculated for groundwater at the OWTP Area.

The recommendations for the OWTP Area will be changed to include a statement that the 95 percent UCL concentration for manganese (1,249 μg/l) exceeds the Florida Guidance Concentration (50 μg/l). It should be noted that the 95 percent UCL concentration of phenanthrene (8 μg/l) does not exceed the Florida Guidance Concentration (10 μg/l), which is based on systemic toxicity, not organoleptic properties.

4. **Discussion of the ecological risk assessment (section 8.1.2) suggests that concentrations of contaminants in groundwater are acceptable assuming at least a 5-fold dilution in the St. Johns River. Of course, as you are aware, such dilution of groundwater to reach surface water standards is unacceptable by rule in Florida.**

The purpose of a worst-case or undiluted groundwater exposure scenario is to assess a hypothetical discharge to a water body where a discharge is not currently occurring. The intent is not to justify the discharge of groundwater and a contaminant plume to surface water. Ecological toxicity testing should be conducted where a contaminant plume actually discharges to a surface water body. The ecological toxicity testing may also include assessment of groundwater, surface water, and or sediment samples.

The dilution of existing groundwater conditions is used to model a reasonable scenario where groundwater through advection, dispersion, mixing, and retardation would discharge to a surface water body. This is used to assess whether an adverse impact to the environment is probable.

Currently, analysis of groundwater samples (refer to subsection 4.2.4 of the Group II RFI report) collected from monitoring wells installed along the St. Johns River and two monitoring wells located on the southern bank of the St. Johns River suggest that neither dissolved nor free-phase hydrocarbons appear to be discharging to the St. Johns River.

The CMS to be conducted for the recovery of free-phase hydrocarbon at SWMUs 6, 7, and 11 should describe a monitoring program that achieves the following: assess the effectiveness of the free-phase hydrocarbon recovery system; assess whether the free-phase hydrocarbons or related chemicals are migrating toward the St. Johns River; assess the need for ecological testing of sediments along the St. Johns River in areas that are likely being impacted by discharge of free-phase hydrocarbons or related chemicals; and assess the need for a human health and/or ecological risk assessment.

SWMU 12

1. **Recommendations for this SWMU in section 8.2.3 include the following, apparently contradictory statements, "No further investigation is recommended for SWMU 12. Subsurface soil samples should be collected from the area where the sodium hydroxide release occurred to evaluate its effects on soil." I agree that some follow-up regarding the sodium hydroxide release is warranted, and should include some evaluation, if only qualitative, of the potential health hazards posed by residual material in soil and its potential migration to groundwater.**

   The area where the sodium hydroxide was released will become an AOC and will be studied separately from SWMU 12. See the response to the comment in Section 2.5 Comment 5.

2. **As with the OWTP Area, dilution of contaminated groundwater in surface water cannot be used to achieve surface water quality standards (see pg 8.3).**

   See response to Comment 4 in Section 3.1.2 SWMU 6-11 (OWTP Area). It should also be noted that the data collected at SWMU 12 suggest that a release from SWMU 12 has not occurred.

SWMU 15

1. **This area has significant contamination of groundwater and surface soils with pesticides posing cancer risks. The RGOs for soils in Tables 6-21 and 6-22 include both Florida Clean-up Goals and values calculated by the contractor using risk-based procedures. Given the FDEP cancer risk goal of 10^{-6}, values in Tables 6-21 and 6-22 corresponding to this risk level -- or the Florida Clean-up Goals – would be acceptable remediation goals for this site.**

   Comment noted.

2. **The comment regarding dilution and groundwater impacts on surface water bodies (see above) applies here as well.**

   See response to Comment 4 in Section 3.1.2 SWMU 6-11 (OWTP Area). It should also be noted that the current data collected at SWMU 15 suggest that the pesticides detected in the groundwater samples are not discharging to the St. Johns River (please refer to the calculations in Appendix F-4). Should it be determined that chemicals from SWMU 15 are migrating into the St. Johns River, then the appropriate samples and analysis will be conducted to assess whether this represents a threat to human health or the environment.

SWMU 16

The comment regarding groundwater impacts on surface water bodies (see above) may be applicable here also.

See response to Comment 4 in Section 3.1.2 SWMU 6-11 (OWTP Area). It should also be noted that currently the data collected at SWMU 16 suggest that a release to the groundwater from SWMU 16 has not occurred.

RESPONSE TO COMMENTS DATED JULY 21, 1995.

1. **Dilution to meet the surface water standards is not allowed for this type of discharge (contaminated groundwater potentially seeping into surface water). The surface water standards and minimum criteria must be meet prior to mixing. This comment applies to all SWMUs.**

   See response to Comment 4 in Section 3.1.2 SWMU 6-11 (OWTP Area).

2. **Toxicity bioassay to determine compliance with Rule 62-302 530 (62) F.A.C., is needed in wells adjacent to surface water. A memorandum from Dr. Landon Ross that identifies test methods is attached.**

   Ecological toxicity testing should be conducted where a contaminant plume actually discharges to a surface water body. Current analytical results suggest that target analytes attributable to a release from Group II SWMUs are not discharging to the St. Johns River.

3. **The FDEP acceptable risk level is 1.0×10^{-6}.**

   Comment noted. FDEP's risk management goal will be incorporated into tables and/or discussions of potential human health risk and/or remedial goal options.

4. **Averaging to determine groundwater concentrations for use in risk assessment is not typically acceptable. The maximum concentrations of each chemical should be used unless there is a site specific circumstance that warrants a different approach, in which case the rationale should be thoroughly discussed and justified.**

   See response to Section 3.1.1 General Comment.

5. **Usually, in G-II aquifers the minimum criteria and the primary and secondary standards apply for all the contaminants of concern. In cases of salt water intrusion, the standards that would apply as cleanup goals are the marine surface water standards and minimum criteria if indeed the only receptors of concern are the aquatic organisms. The PRPs must file a deed restriction/well moratorium for all groundwater use. A letter from the appropriate water authority agreeing to not permit any groundwater use at this site is also required by the Department.**

   Comment noted. The term "saltwater intrusion" should not have been used in the RFI text. Tidal fluctuations result in the diffusion of marine and/or brackish water into the surficial aquifer. A definable saltwater intrusion boundary has not been determined to exist. A study conducted by the USGS at NAVSTA Mayport suggests that salinity increases with depth in the surficial aquifer beneath NAVSTA Mayport and that pumping of the aquifer could result in upwelling of the more saline waters (Franks, 1980).

   We understand that where groundwater discharges to a surface water body, FDEP wants groundwater to be evaluated using both groundwater quality and surface water quality criteria, and these criteria also should be considered in determining remedial goal options.

   Under current use, a deed restriction is not necessary; however, should use of the site or NAVSTA Mayport change from the Navy's control, a deed restriction(s) and other precautionary measures may be necessary.

6. **SWMUs 6 through 11 (Oily Waste Treatment Plant Area): The document states that the Navy plans to remediate the sludge lagoons at the OWTP Area. In addition, subsurface soil will need to be evaluated and remediated (if warranted) in conjunction with free-phase product removal pursuant to Chapter 62-770 F.A.C., as discussed that it will be done/proposed on the Corrective Measures Study (CMS). Unless these task are accomplished, this portion of the Risk Assessment will be rendered invalid.**

   Comment noted; see the response to the comment in Section 2.7 Comment 7.

7. **SWMU 12: Soil assessment is needed to determine the horizontal and vertical extent of contamination and the need for cleanup of the area where the sodium hydroxide spill occurred.**

Comment noted. See the response to the comment in Section 2.5 Comment 5.

8. **SWMU 15: RGOs that correspond to the $1x10^{-6}$ risk level in Tables 6-21 and 6-22 are acceptable. The Florida cleanup goals obviously are also acceptable. If an industrial scenario is chosen, a deed restriction for residential land use will be needed.**

Comment noted. Under current use, a deed restriction is not necessary, however, should use of the site or NAVSTA Mayport change from the Navy's control, a deed restriction(s) and other precautionary measures may be necessary.

RESPONSE TO COMMENTS DATED JULY 26, 1995.

1. **The arsenic slope factor was recently changed on IRIS from 1.75 to 1.5 $(mg/kg\text{-}day)^{-1}$. Because arsenic is a major contaminant at almost all of the SWMUs in this report this change is essential.**

The change in the arsenic slope factor results in lower calculated risks attributable to arsenic. The risk assessment will be updated to reflect the revised risk estimates.

2. **It is clear from the General Information Report that future child receptors in the ingestion of groundwater were not to be considered in any of the SWMUs. What is the rationale for their exclusion?**

The groundwater risk assessment was conducted in a manner consistent with USEPA's Risk Assessment Guidance for Superfund, Volume I, Part A, Human Health Evaluation Manual (USEPA 1989) which discusses the adult residential receptor for drinking water and the USEPA's Human Health evaluation manual, supplemental guidance: "Standard Default Exposure Factors" (USEPA, 1991) which presents only adult exposure parameters for the residential drinking water scenarios.

Correspondence dated June 12, 1995, from Marland Dulaney, ABB-ES, to Mike Deliz, FDEP, states: "ABB-ES is following standard USEPA guidance in evaluating a 30-year adult exposure for drinking water, which includes ingestion of 2 liters per day and inhalation of volatile organics during showering. ABB-ES believes that the USEPA approach is adequately protective of public health. However, noncancer HQs greater than 0.5 for CPCs where the critical effect is developmental or may pose a threat to a developing child will be further evaluated by a toxicologist and the results of this analysis discussed in uncertainty analysis."

3. **Certain chemicals, such as acetone, have a maximum detected concentration above the RBC yet below the Florida Guidance Concentration, and are eliminated from the list of chemicals of potential concern (i.e. Table 4-20). Those chemicals that exceed the RBCs should be included as chemicals of potential concern regardless of whether they exceed the Florida**

Guidance Concentrations. Also, the asterisks after some of the numbers are not explained in the notes section of this table.

The maximum detected concentration of acetone in unfiltered groundwater at the OWTP Area was 330 μg/l. The risk-based screening concentration and the Florida Guidance Concentration for acetone are 370 μg/l and 700 μg/l, respectively. Therefore, acetone should not have been selected as a chemical of potential concern.

The asterisks are explained in note 2 at the end of Table 4-20: "A value indicated by an asterisk is the average of the detected concentrations in a sample and its duplicate. For nondetected values, one-half the contract required quantitation limit/contract required detection limit (CRQL/CRDL) is used as a surrogate."

4. **The asterisks in Table 6-3 are not explained in the notes section of the table.**

   See the response to the comment in Section 3.3.3 Comment 3.

5. **In the middle of the page 6-59 there is a sentence that is incomplete: "In the Tseng et al. study, the overwhelming of the normal detoxification. . . ." This sentence should be rewritten.**

   The sentence will be revised as follows. "In the Tseng et al. study, the saturation of the normal detoxification pathways, coupled with an underestimate of exposure, may have resulted in an overestimate of cancer risk."

6. **Surface soil was not evaluated in section 7.3.1 for purposes of the risk assessment because of future plans to pave over the site. However, those plans may change. Because the intent of the risk assessment is to explore any possible adverse effects to human health now or in the future, the surface soil exposure pathway, in the absence of paving should be included in the risk assessment; this should include ingestion and dermal contact by current workers and future residents.**

   Comment noted. See the response to Section 2.2 Comment 2.

RESPONSE TO COMMENTS FROM A.T. KEARNEY, INC.

1. **Provide a rationale behind the selection of an exposure frequency of 30 days and 24 days for the child and adult trespassers, respectively. Considering the location of the facility and typically mild climate, it would seem reasonable to expect more frequent access on the site, particularly for children who have a good deal of school vacation time.**

NAVSTA mayport is a military installation where access to the SWMUs is limited by institutional controls to Navy personnel and visitors. Because the sites have limited access, the standard 45-day exposure frequency assumption probably overestimates risk for the exposure pathway of the transient adult hunter. The human health risk assessment for NAVSTA Mayport assumed 24 days per year for the adult transient's exposure based on 8 days per month for a 3-month long (November through January) deer hunting season. Child transients are assumed to include children living at the facility and visiting guests. A 30-day exposure for the child transient was based on 1 full day exposure occurring at a frequency of 2 weeks for a year.

2. **Justify the use of an exposure duration of 19 years for the Adult Trespasser scenario. The use of 19 years is not supported in the EPA guidance source cited in Table D-2.**

The trespasser scenario, like the residential exposure, assumed a 30-year exposure duration. This duration was divided into an 11-year child exposure period and an adult exposure period of 19 years (total of 30 years). The child exposure consists of the ages 6 through 16 (total of 11 years). Because this is a semirestricted area, it was assumed that a child before the age of six would not have the opportunity to trespass on the site.

3. **The scenario intended to be covered by the site worker is not clearly described in the text of the GIR. Distinguish how the site worker is different from the occupational worker identified on Table D-5. Explain the exposure assumptions in greater detail in the text of the report.**

The occupational worker scenario is representative of a long-term work environment. The worker is present at the site 8 hours every working day (250 days per year) for a total of 25 years. The site maintenance worker scenario represents an acute exposure resulting from an occasional laborer (i.e., lawn maintenance worker) visiting the site. The site maintenance worker is exposure for only 30 days for only 1 year. Because maintenance workers will be performing physical activities, This soil ingestion and dermal absorption rates are much higher than occupational workers. The soil ingestion rates for occupational workers and site maintenance workers are 50 mg/day and 480 mg/day, respectively (see response to question 1.4.4.1). Also, the site maintenance worker was assumed to be wearing a short sleeved shirt and pants for a total exposure skin surface area of 2300 cm^2. The occupational worker's exposed skin area was assumed to be 5,750 cm^2.

4. **Explain why only 12 days of exposure per year is considered a realistic assumption for the site worker. Worker exposure is typically considered to occur over 250 days per year.**

The occupational worker represents a daily working exposure of 250 days per year for 25 years. The site maintenance worker is exposed less frequently (30 day per year), but has a higher soil ingestion rate and larger exposed skin area. See response to question 1.4.3.1 for additional information.

5. **The reference source cited for the soil ingestion rate does not support the value given in Table D-4. The source cited recommends a soil ingestion value of 480 milligrams per day for certain outdoor occupations such as construction worker or landscaping. Revise Table D-4 and the risk assessment results calculated accordingly.**

   The 480 mg/day for the excavation worker scenario comes from the 1991 OSWER directive 9285.6-03 entitled Human Health Evaluation Manual, Supplemental Guidance, Standard Default Exposure Factors. The adherence factor used in the equation for soil ingestion was USEPA guidance document entitled Dermal Exposure Assessment: Principals and Applications, document number EPA/600/8/8-9/011B, dated January 1992.

6. **The reference source cited for the non-cancer exposure duration of 1 year does not support the value given in Table D-4. Provide an explanation for the selection of a 1 year exposure duration.**

   The citation is from Attachment B of USEPA, 1991, Human Health Evaluation manual, supplemental guidance, "Standard Default Exposure Parameters," Interim Final (OSWER Directive 9285.6-03.

7. **Explain the rationale behind selecting an exposure frequency of 45 days/year for the adult and child trespasser scenario. Explain why this differed from the trespasser exposure frequencies provided in Table D-2.**

   The 45 days/year for surface water and sediment contact comes from a letter from Elmer Aiken on Region IV Risk Assessment Guidance, dated March 26, 1991.

8. **Explain why the child dermal surface are is listed as "site specific". Identify the value(s) used in the risk assessment calculations. Explain why the child surface area is considered site specific. Either provide the site specific data collected for evaluation or identify the conservative assumptions that were used in subsequent risk calculations.**

   This value is an assumption based on the climate in the area. One hundred swimming days per year represent a high exposure frequency and should be protective of human health.

Ecological Risk Assessment, July 6, 1995

The following sections provide response to comments dated July 6 from USEPA's ESAT contractor and July 7, 1995, from the FDEP.

1. **(SWMUs 6, 7, 8, 9, 10 and 11). Exposure point concentrations of phenanthrene, cyanide, iron, nickel, and mercury exceed the lowest toxicity benchmark concentrations. If**

groundwater entering the St. Johns River is diluted at least 5 times it is presumed that no risk for aquatic life will result from potential exposures to phenanthrene, cyanide, iron, and nickel. Mercury in groundwater exceeds toxicity benchmarks but does not seem to come from these SWMUs. If concentrations of mercury detected in groundwater are discharged to the river they could represent a risk for aquatic receptors due to bioconcentration and bioaccumulation in fish and invertebrate tissue. A CMS is recommended for free-phase hydrocarbons and contaminants in subsurface soils because the contaminants have migrated downward and have spread laterally in the soil just above the water table.

Comment noted; see response to the comment in Section 2.7 Comment 7.

2. **(SWMU 12). Exposure point concentrations of copper, lead, and nickel in groundwater exceed toxicity benchmark values. However, if groundwater is diluted 10 times when it enters the river there should be no risk to the aquatic resources. No further investigation is recommended for this SWMU.**

   Comment noted; see responses to the comments in Sections 2.9 Comment 9 and 3.1.4 Comment 2.

3. **(SWMU 15). Pesticides 4,4'-DDE, 4,4'-DDT and chlordane were detected in surface soil and subsurface soil. The maximum groundwater exposure point concentrations of cyanide, lead and mercury exceed the toxicity benchmark values. If dilution of the groundwater entering the river is 5 times there should not be any risk to the aquatic biota. Mercury does not seem to originate at this site. A CMS is recommended to determine the extent of pesticides in the soil and the source of pesticides in groundwater.**

   Comment noted; see response to the comments in Sections 2.9 Comment 9 and 3.1.4 SWMU 15, Comment 2.

4. **(SWMU 16). If groundwater is diluted 5 times when it enters the river, copper should not present any risk to the aquatic receptors. No further investigation at this time are recommended for SWMU 16.**

   Comment noted; see response to the comments in Sections 2.10 Comment 10 and 3.1.5 SWMU 16, Comment 1.

RESPONSE TO COMMENTS DATED July 7, 1995.

1. **It is not clearly stated that the FDEP criteria and guidance concentrations were used for screening ecological chemicals of potential concern (ECPC) in section 2.4.1, page 2-51 in the GIR; however, it was evident later during the review of the assessment that the FDEP values**

were used. In future assessments, the use of FDEP criteria and guidance concentrations should be more clearly stated.

Comment noted. In the future, it will be clearly stated that the FDEP criteria and guidance concentrations were used for screening ecological chemicals of potential concern.

2. **It is inappropriate to calculate the 95 percent (%) upper confidence level for a chemical with less than five samples; however, a minimum of 10 samples is preferred for this calculation. When there are insufficient samples available, the highest detected concentrations should be used as the maximum exposure point concentration. This process was not used in numerous situations. One example of this is demonstrated in Table 6-24 for antimony: one sample in eight had a concentration of 2.8 ppm, the 95% UCL was calculated as 1.8 parts per million (ppm) and the 1.8 value was used as the maximum exposure point concentration. The exposure point concentration should be reevaluated.**

   Maximum exposure point concentrations were reevaluated based on the maximum detected concentration, not the 95 percent UCL, except in cases where 10 or more samples were collected. Tables 6-24, 6-25, and 7-16 will be revised. The change will not result in a change in the overall results and conclusions of the assessment.

3. **FDEP does not allow the use of dilution of groundwater entering a surface water body in determining exposure point concentration. The benthic organisms are not protected nor the species that ingest the organisms, sediments and water. Also, these discharges are unregulated non-point sources. The conclusion in section 8 state that because of dilution of contaminated groundwater entering into the St. Johns River, no risk for aquatic receptors is expected. These conclusions should be reexamined.**

   When the potential exists for groundwater to be discharging to surface water, the concentrations of ECPCs detected in groundwater samples collected from hydraulic downgradient monitoring well(s) nearest the surface water body will be compared to Florida Class III marine surface water quality standards. See response to Comment 4 in Section **3.1.2 SWMU 6-11 (OWTP Area)**.

4. **In several tables for these risk assessments, ECPC exposure concentrations are compared to benchmarks. These benchmarks include values from FDEP and EPA ambient water quality criteria and AQUIRE data. In Table 4-27 (page 4-108), the conclusion for acenaphthene is that the benchmark was not exceeded and therefore no longer an ECPC because the AQUIRE value was higher that the detected concentrations and the FDEP criteria were established for human health. FDEP has established an aquatic toxicity value for acenaphthene of 3.0 $\mu g/\ell$, which the detected concentrations exceed. This value was also taken from the AQUIRE data base. This raises a concern the AQUIRE values used in the assessments may not represent the most sensitive species tested and listed in the AQUIRE**

database. FDEP recommends the following when determining aquatic toxicity values from the AQUIRE database:

- **review data with codes 1, 2, or 5;**
- **use only LC_{50} data;**
- **eliminate data from salmonid fish;**
- **select the test and organism showing the greatest sensitivity to the toxicant; and**
- **apply a factor of 5% to the LC_{50} value to generate a recommended criteria (62-302.200(4)(a) F.A.C.**

The Florida Surface Water Quality Standard of 3 μg/l for acenaphthene is based on human consumption of fish and is not appropriate for use as a benchmark of toxicity to aquatic life. The toxicity value of 3 μg/l was not taken from the AQUIRE database. Acenaphthene remains to be an ECPC; however, maximum exposure concentrations of this contaminant (7.9 μg/l) are well below the applicable benchmark value (2,200 μg/l) taken from the AQUIRE database. This value is based on a sheepshead minnow LC50.

Aquatic toxicity values taken from the AQUIRE database are subjected to a number of quality control checks. Only data with codes 1, 2, and 5 are used. Aquatic toxicity data from freshwater salmonid fish were not included. A summary of the number and range of adverse effects to fish, invertebrates, mollusks, and aquatic plants for each of the surface water and groundwater ECPCs is provided. The lowest value (based on species that are expected to occur at the site) is selected as one of the reference toxicity values. In addition to LC50 values, sublethal effects (e.g., adverse effects to growth and reproduction) are also considered as aquatic toxicity values.

5. **Some of the maximum exposure point concentrations should be recalculated in Table 6-25 (page 6-68), some of the values appear exceedingly small, such as 2.9×10^{-80}. Also, no explanation is provided for the use of the asteric in Tables 6-24 and 6-25.**

The maximum exposure point concentrations for organic ECPCs in groundwater listed in Table 6-25 are based on a model that predicts the transport of groundwater to surface water for SWMUs that are not adjacent to water bodies. Because SWMU 15 is not located adjacent to the St. Johns River, this model was used to calculate the amount of an organic contaminant in groundwater that would reach the surface water at the point of discharge. This number was used as the exposure point concentration for aquatic life and assumes no dilution. There is not a suitable model available for inorganic contaminants. The model, which is presented in Appendix F-4, predicts exposure concentrations of ECPCs in groundwater based on hydraulic, soil, and subsurface soil properties; the contaminant source; transport distance; and the physical and chemical properties of the contaminant.

The explanation for the use of the asterisk is included as footnote 2 in Tables 6-24 and 6-25. A value indicated by an asterisk is the average of the detected concentration in a sample and its duplicate.

6. **Threatened and endangered species were listed for these SWMUs, including SWMU 15. The Florida Gopher frog and the Gopher tortoise were included in this list for SWMU 15. However, these two species were not accounted for during the assessment for terrestrial species in SWMU 15. The Green frog and eastern box turtle are recommended to be used as representative species. Uncertainty factors may be added to the turtle to account for size differences and skin exposure during burrowing.**

The ecological risk assessment completed for Mayport does consider risks for the rare, endangered, and threatened species, including the Gopher tortoise and Gopher frog. This is done by selecting species as "representatives" of the wildlife that is most likely to be exposed to the contamination via identified exposure routes. The "special" species may not be within the pathway of exposure and may not represent the maximally exposed species. It is assumed that if mammals and birds are protected (where there are data available to assess risks), then reptiles also should be protected. Therefore, these "representatives" also represent any rare, endangered, and threatened species that may be within the pathway of exposure.

7. **For this and future assessments, the contaminant concentrations for the media used for toxicity testing should be provided. This information was not available for the soil toxicity test conducted for SWMU 15.**

Surface soil samples, including those at toxicity testing sampling locations, were analyzed for semivolatile organics (USEPA method 8270), chlorinated pesticides and PCBs (USEPA method 8080), organophosphate pesticides (USEPA method 8140), and chlorinated herbicides (USEPA method 8150). The results are provided in Tables 6-1 through 6-4. Earthworms surviving the toxicity testing were analyzed for semivolatile organics (USEPA method 8270), and pesticides and PCBs (USEPA method 8080). Table 6-28 was amended to include both the percent mortality and weight change data, and a summary of the analytical results.

8. **Toxicity testing should be conducted in sediments collected along the shoreline of the St. Johns River adjacent to Group II SWMUs. These samples should not be composited, but tested and analyzed individually.**

Based on information gathered to date, toxicity testing of sediments in the St. Johns River is currently not necessary. Petroleum-related constituents and the free-phase hydrocarbons in groundwater have not migrated to the river; therefore, there is no current exposure to the associated sediment where the groundwater would discharge to the St Johns River. During interim measures for free-phase product removal, the potential for sediment contamination and the need for sediment testing will be reevaluated as part of a monitoring program presented in the Corrective Measures

Study (CMS). Sediment testing will be considered for areas in the St. Johns where discharge of the plume is identified. Evaluation of data (e.g., groundwater flow direction, water quality) obtained during the interim measures should provide the data to assess the appropriate location for sampling of surface water and or sediments, if required.

9. **Toxicity test should be conducted in groundwater from the monitoring wells:**

MPT-8-MW17S	**MPT-9-MW02S**
MPT-8-MW16S	**MPT-9-MW03S**
MPT-S-MW02S	**MPT-11-MW02S**
MPT-S-MW03S	**MPT-11-MW03S**

Ecological toxicity testing of groundwater from these or other monitoring wells will be evaluated during the monitoring program for the interim measures recovery of free-phase hydrocarbons. Evaluation of data (e.g., groundwater flow direction, water quality) obtained during the interim measures monitoring program should provide the information to assess the appropriate location for sampling and ecological toxicity testing of groundwater, if required.

10. **No data was available pertaining to the projection of groundwater plume movements. The appendix only discusses the model used. Therefore, it was difficult to project what the future groundwater/surface water contaminant levels would be.**

Hydrogeological conditions at the Group II SWMUs were discussed in Section 3.2 Hydrogeology. The only plume defined was the free-phase hydrocarbons in the vicinity of SWMUs 6, 7, and 11. The direction of groundwater flow for SWMUs 6, 7, 8, 9, 10, and 11 was described on page 3-9 to be toward the north (see Figure 3-2). Also, it was indicated that the potentiometric surface map may not accurately depict anomalous water levels from tidal influences and from local topographic features such as the potential hydrogeologic barrier imposed by cut-and-cover fuel storage tanks and the potential for underground piping that is constructed below the water table to be a preferred flowpath conduit for the groundwater. Because of the uncertainties that currently exist in assessing the rate and direction of flow of the free-phase hydrocarbons, a groundwater monitoring plan is to be presented in the CMS.

REFERENCES

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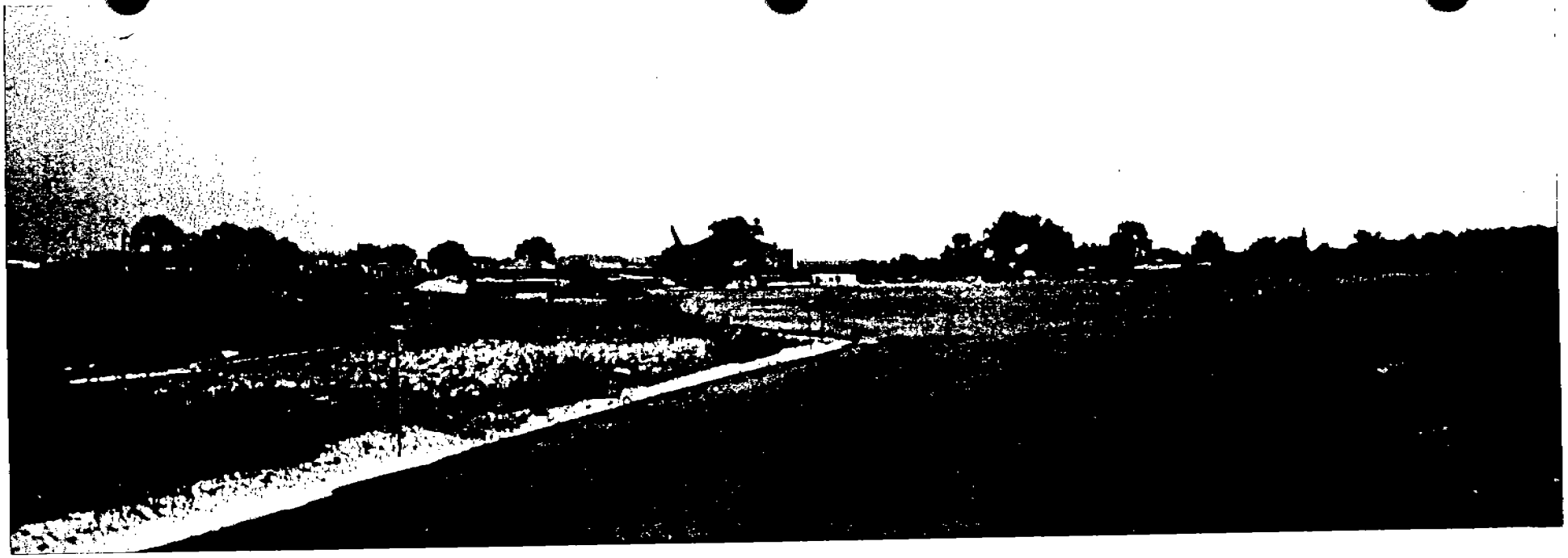
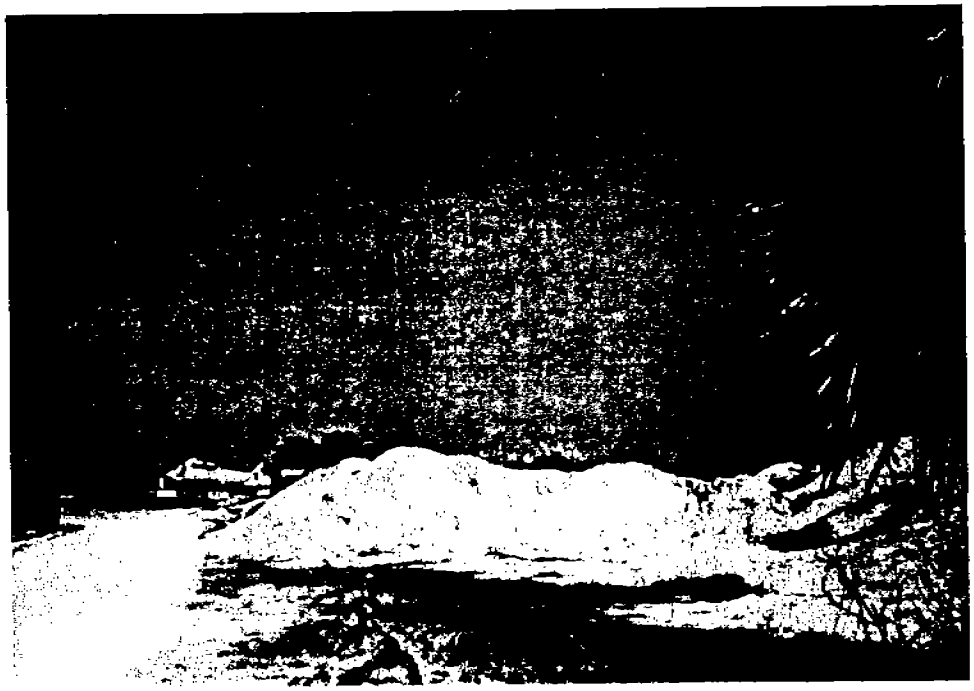
ABB-ES, 1995a, Resource Conservation and Recovery Act (RCRA) Corrective Action Program General Information Report, NAVSTA Mayport, Florida (Volumes I and II), prepared for SOUTHNAVFACENGCOM, North Charleston, South Carolina, February.

ABB-ES, 1995b, RCRA Facility Investigation, Group II SWMUs NAVSTA Mayport, Mayport, Florida (Volumes I and II): prepared for SOUTHNAVFACENGCOM, North Charleston, South Carolina, June.

ABB-ES, 1995c, Corrective Measures Study, Group II Solid Waste Management Unit, NAVSTA Mayport, Mayport, Florida (Volumes I and II): prepared for SOUTHNAVFACENGCOM, North Charleston, South Carolina, July.

Franks, B.J., 1980, The Surficial Aquifer at the U.S. Naval Station near Mayport, Florida: U.S. Geological Survey open-file report 80-765.





TOP PHOTOGRAPH: View looking southwest of the temporary stockpile location from the southwest corner of the SWMU 16 paved area. The temporary stockpile is in the right side of the photograph.

LEFT PHOTOGRAPH: View of the temporary stockpile from the west looking east. In the background of the photograph is the aircraft display area and a ship at Mayport Turning Basin.

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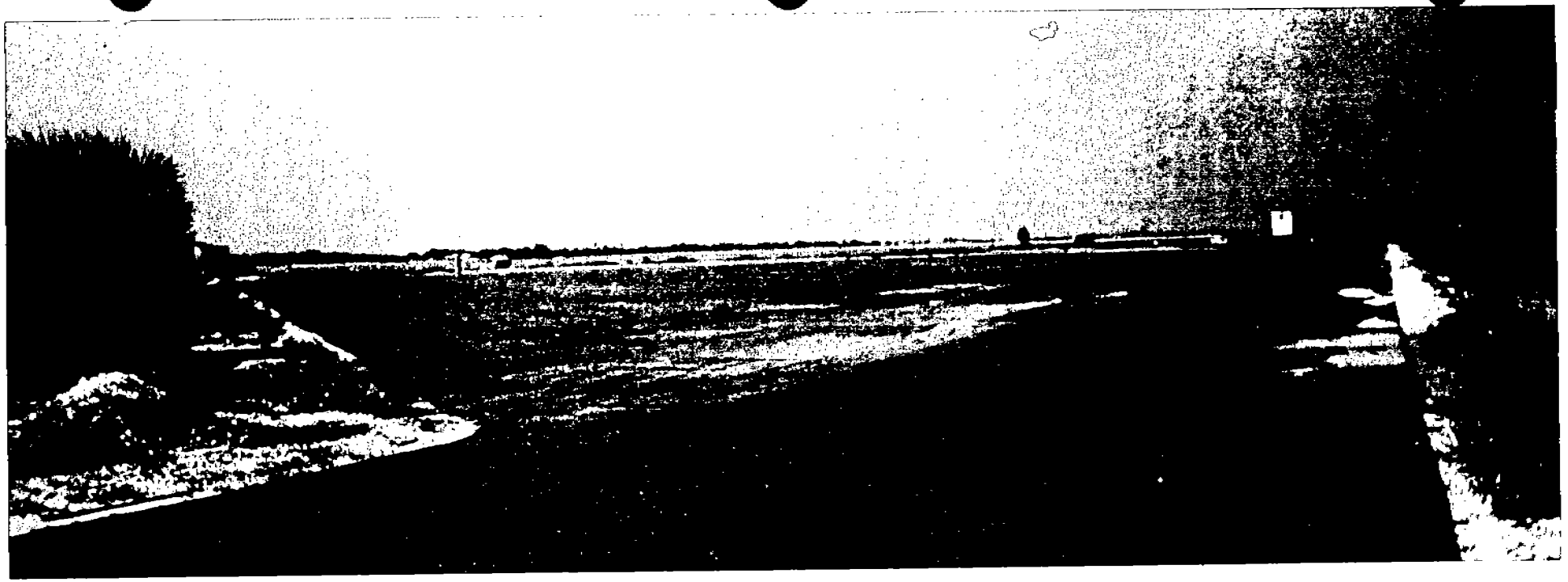
View of SWMU 16 from the south looking north. The NSC Fuel Farm is on the left (west) side of the photograph.

View of SWMU 16 from the northeast corner of the site looking west. Patrol Road is on the right (north) side of the photograph. The mounds in the background are the NSC Fuel Farm.



View of SWMU 16 from the southwest corner of the paved area looking northeast.

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