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U.S. NAVAL STATION MAYPORT, FLORIDA

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December 1996

This document, Resource Conservation and Recovery Act (RCRA) Facility Investigation, Group III Solid Waste Management Units, 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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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: December 5, 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 cleanup 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 Mayport are presently being conducted under the RCRA Corrective Action Program. Earlier preliminary investigations had been conducted at Naval Station (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) 820-5501.

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 Naval Station (NAVSTA), Mayport. 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 RFI report presents the findings, conclusions, and recommendations for each solid waste management unit (SWMU) or groups of SWMUs investigated.

This report summarizes the RFI for the Group III SWMUs; 1, 14, 17, 18, 23, 24, 25, 44 and 45. SWMUs 1, 23, 24, 25, 44 and 45 were evaluated as one area because they are contiguous sites associated with the industrial Shipyard Area (SWMUs 1, 23, 24, and 25) and the stations wastewater treatment plant (SWMUs 44 and 45). SWMU 1 was reported to be the original landfill at the station. SWMUs 23, 24 and 25 are areas where land-based repair activities are conducted for ships berthed at Mayport Turning Basin. SWMU 44 are clarifiers used to contain water used in firefighting training activities, and SWMU 45 are sludge drying beds for the Stations Federally-owned wastewater treatment plant. These sites share a similar topographic and hydrogeologic setting, and similar contaminants.

SWMU 17 was a furnace used to reduce the volume of domestic solid waste using diesel fuel or waste oil as auxiliary fuels and, because it was not located near the other Group III SWMUs, was evaluated singularly.

SWMUs 14 and 18 were evaluated together because they share a similar topographic and hydrogeologic setting, and similar contaminants. SWMU 14 was reported to have drums of mercuric nitrate formerly stored at the site and is the site of firefighting training activities. SWMU 18 is a concrete containment pad for collection of stormwater at a diesel powered electrical generator.

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 site characterization and human health and ecological risk assessments.

<u>SWMUs 1, 23, 24, 25, 44 and 45</u>. The following presents a summary of the site characterization, risk assessments, and recommendations for SWMUs 1, 23, 24, 25, 44 and 45:

<u>Site Characterization</u>. Shallow soil in the vicinity of the Shipyard Area consists of fine grained, well-sorted sand which typically contain shell fragments. At some of the soil boring locations, thin (less than 1 foot) seams of clay or clayey-to-silty fine sand were encountered.

Geophysical surveys and soil borings were conducted to confirm the location of SWMU 1. Geophysical anomalies were detected that could not be readily explained by cultural interferences. The anomalies were investigated with ground-penetrating radar and interpreted to be related to buried utilities, not landfilled materials. Landfill materials were not discovered during the drilling of soil borings at the reported location of SWMU 1.

The direction of groundwater flow is generally to the north, toward the Mayport Turning Basin entrance channel (Plate 1). Groundwater in the water table zone at and north of the northern boundaries of the Shipyard Area may be affected by tidal fluctuations. It is likely that the effect in the water table zone of the surficial aquifer is limited to areas located less than 330 feet from the shoreline of the St. Johns River.

Results of water quality indicator parameters suggest that groundwater in the vicinity of the Shipyard Area do not meet the criteria of a Class G-I or G-II drinking water supply. An appropriate designation for the surficial aquifer beneath the Shipyard Area would be Class G-III.

Human Health Risk Assessment. Risk characterization was conducted for potential exposures to surface and subsurface soil, and groundwater under current and future land-use scenarios. The sludge drying beds at SWMU 45 were evaluated under current-use scenarios, as it is assumed that the material is to be excavated and disposed of sometime in the future.

None of the excess lifetime cancer risk (ELCR) exceed the U.S. Environmental Protection Agency's (USEPA) target risk range ($1x10^{-4}$ to $1x10^{-6}$), however, the Florida Department of Environmental Protection Agency's (FDEP) target risk level ($1x10^{-6}$) was exceeded for current and future land-use exposure scenarios for surface soil. Noncancer risks associated with surface soil exposure pathways for current and future land use are below the USEPA's and FDEP's target hazard index (HI) of 1. The chemicals (semivolatile organic compounds [SVOCs], pesticides, and metals) that result in the ELCR are likely the result of industrial activities.

Human Health Chemicals of Potential Concern (HHCPC) were determined to not exist for subsurface soil during the screening evaluation, therefore, a risk characterization was not conducted for this medium.

None of the ELCR exceed the USEPA's target risk range or the FDEP target risk level for the sludge drying beds at SWMU 45.

Currently, the surficial aquifer is not used as a water supply, however, under a hypothetical future-use scenario the ELCR exceeds USEPA's target risk range and FDEP's target risk level. In addition, the HI for the hypothetical future use (ingestion) of groundwater exceeds the USEPA and FDEP target level of 1.

Ecological Risk Assessment. Exposure pathways evaluated for aquatic receptors include direct contact with the groundwater as it discharges to surface water. Exposures associated with potential contamination in surface soil to terrestrial receptors were not evaluated. Terrestrial ecological receptors are not expected to occur in the vicinity of the Shipyard Area because the majority of the site is paved with asphalt or concrete and is located in an industrialized area.

Maximum and average exposure concentrations for two ecological chemicals of potential concern (ECPC), cyanide and iron, in groundwater slightly exceed the Florida surface water quality standards Standard and Federal ambient water quality criteria (AWQC).

Maximum and average exposure concentrations for iron detected in groundwater samples from monitoring wells at SWMUs 1, 23, 24, 25, 44, and 45 and background

monitoring wells exceed the Florida surface water quality standards (Florida Administrative Code [FAC] 62-302) and the lowest reported adverse effect reported in Aquatic Information Retrieval (AQUIRE) (dinoflagellate population growth). However, the maximum exposure point concentration of cyanide is within the range of concentrations detected in background surface water samples collected from the St. Johns River. This suggests that the discharge of cyanide and iron from groundwater to surface water would not result in an increase risk to aquatic receptors under the current conditions.

Based on these assumptions, groundwater discharges from the Shipyard Area to the surface water of the St. Johns River do not pose a risk to aquatic receptors.

Recommendations. The recommendations are based on the current use of the Shipyard Area as an industrial area and that this use will not change in the foreseeable future. Additional investigation of surface and subsurface soil, sludge or groundwater are not warranted at this time under a current use scenario. SWMUs 1, 23, 24, 25, 44 and 45 should be designated as industrial areas and the use of the surficial aquifer as a water supply prohibited.

An interim measure should be considered for eliminating the hot spots where SVOCs and inorganics exceed FDEP's industrial soil cleanup goals in surface soil. The goal of the interim measure should be to reduce the risk under current use for trespasser, occupational worker, and hypothetical residential exposure scenarios to levels that are less than or near the FDEP target cancer risk for industrial exposure.

SWMU 17. The following presents a summary of the site characterization, risk assessments and recommendations for SWMU 17:

Site Characterization. Shallow soil in the vicinity of the Carbonaceous Fuel Boiler plant consists of relatively uniform, light tan to tan, brown to dark brown, or gray, very fine-to fine-grained sand, and silty sand with shell fragments that may make up to approximately 20 percent of the soil sample.

The Carbonaceous Fuel Boiler plant is located on the southwestern side of Mayport Turning Basin (Plate 1). This location is not directly affected by the groundwater mound that dominates flow patterns in the rest of the Group III Area. Groundwater flow in the area near SWMU 17 appears to be to the northeast toward Mayport Turning Basin. Retaining walls constructed for the ship berthing piers may also divert groundwater around the retaining walls, flow beneath the wall, or through stormwater outfalls.

Results of water quality indicator parameters suggest that groundwater in the vicinity of the Carbonaceous Fuel Boiler meet the criteria of a Class G-I or G-II drinking water supply.

Human Health Risk Assessment. Risk characterization was conducted for potential exposures to surface and subsurface soil, and groundwater under current and future land-use scenarios.

None of the ELCR exceed USEPA target risk range ($1x10^{-4}$ to $1x10^{-6}$), however, the FDEP target risk level ($1x10^{-6}$) was exceeded for future land-use exposure scenarios for surface soil. Noncancer risks associated with surface soil

exposure pathways for current and future land-use are below USEPA's and FDEP's target HI of 1.

HHCPCs were determined to not exist for subsurface soil during the screening evaluation, therefore, a risk characterization was not conducted for this medium.

Currently, the surficial aquifer is not used as a water supply, however, under a hypothetical future-use scenario the ELCR is within USEPA's target risk range and is at FDEP's target risk level. The noncancer risk associated with groundwater ingestion is below the USEPA's and FDEP's target HI of 1.

Ecological Risk Assessment. Exposure pathways evaluated for aquatic receptors include direct contact with the groundwater as it discharges to surface water. Exposures associated with potential contamination in surface soil to terrestrial receptors were not evaluated. Terrestrial ecological receptors are not expected to occur in the vicinity of the Carbonaceous Fuel Boiler because the majority of the site is paved with asphalt or concrete and is located in an industrialized area.

Maximum and average exposure concentrations for iron detected in groundwater samples from monitoring wells at SWMU 17 and background monitoring wells exceed the Florida surface water quality standards (FAC 62-302) and the lowest reported adverse effect reported in AQUIRE (dinoflagellate population growth). With the exception of iron, maximum exposure point concentrations are less than the lowest toxicity benchmark concentrations for all ECPCs in groundwater. This suggests that the discharge of cyanide and iron from groundwater to surface water would not result in an increase risk to aquatic receptors under the current conditions.

Based on these assumptions, groundwater discharges from the Shipyard Area to the surface water of the St. Johns River do not pose a risk to aquatic receptors.

Recommendations. The recommendations are based on the current use of SWMU 17 as an industrial area and that this use will not change in the foreseeable future. Additional investigation of surface soil, subsurface soil, or groundwater are not warranted at this time under a current-use scenario. SWMU 17 should be designated as an industrial area and the use of the surficial aquifer as a water supply prohibited.

SWMUs 14 and 18. The following presents a summary of the site characterization, risk assessments and recommendations for SWMUs 14 and 18:

Site Characterization. Shallow soil in the vicinity of SWMUs 14 and 18 typically consists of various shades from light tan to brown, dark gray, or black fine-grained sand or silty sand. Minor amounts of shell material are present in some of the borings.

The SWMUs comprising the Fleet Training Center Area are located due south of the St. Johns River, and approximately 1,000 feet west of the Atlantic Ocean in the northeastern part of NAVSTA Mayport. The direction of groundwater flow is generally to the north, towards the St. Johns River (Plate 1). Tidal influence of the water table zone of the surficial aquifer was observed to occur in an area north of the Fleet Training Center Area SWMUs, approximately 400 feet or less from the shoreline.

Concentrations of chloride detected in the two surface water samples suggest that surface water in the vicinity of SWMUs 14 and 18 could be classified as predominantly marine water (concentrations of chloride greater than 1,500 milligrams per liter [mg/ℓ]) according to Florida Administrative Code 62-302 Surface Water Quality standards (Table 6-12).

Results of water quality indicator parameters suggest that groundwater in the vicinity of SWMUs 14 and 18 meet the criteria of a Class G-I or G-II drinking water supply.

Human Health Risk Assessment. Risk characterization was conducted for potential exposures to surface and subsurface soil, sediment, and groundwater under current and future land-use scenarios.

None of the ELCR exceed USEPA target risk range, however, the FDEP target risk level was exceeded for current and future land use exposure scenarios for surface soil. Noncancer risks associated with the surface soil exposure pathways for current and future land-use are below USEPA's and FDEP's target HI of 1. The chemicals (SVOCs) that result in the ELCR are likely the result of industrial activities.

HHCPCs were determined to not exist for subsurface soil during the screening evaluation, therefore, a risk characterization was not conducted for this medium.

None of the ELCR exceed USEPA target risk range, however, the FDEP target risk level was exceeded for current and future land-use exposure scenarios for sediment. Noncancer risks associated with the sediment exposure pathways for current and future land use are below the USEPA's and FDEP's target HI of 1. The chemicals (SVOCs) that result in the ELCR are likely the result of industrial activities.

No volatile organic compounds were detected in the groundwater samples collected from the monitoring wells installed at SWMU 14 and 18, therefore, cancer risk associated with the inhalation of volatiles was not evaluated.

Currently, the surficial aquifer is not used as a water supply, however, under a hypothetical future use scenario the ELCR is within the USEPA's target risk range and is above FDEP's target risk level. The noncancer risk associated with groundwater ingestion is below the USEPA's and FDEP's target HI of 1.

Ecological Risk Assessment. Exposure pathways evaluated for terrestrial and aquatic receptors include direct contact with surface water, sediment and the groundwater as it discharges to surface water. Exposures associated with potential contamination in surface soil to terrestrial receptors were not evaluated. Terrestrial ecological receptors are not expected to occur in the vicinity of SWMUs 14 and 18 because the majority of the site is paved with asphalt or concrete and is located in an industrialized area.

No risks to terrestrial wildlife populations are assumed because the HIs for maximum exposure point concentrations did not exceed 1.

Concentrations of iron detected in surface water samples collected from the drainage ditch exceed the available aquatic toxicity benchmarks. However, the concentrations of iron are below the Florida surface water quality standards (FAC

62-302) and the maximum detected concentration of iron in the background surface water samples. It is not likely that the concentrations of iron detected in the surface water samples pose a risk to aquatic receptors because of the ephemeral nature of the system.

Comparison of the analytical data with the benchmarks suggest that adverse risks to aquatic receptors in the drainage ditch are associated with the polynuclear aromatic hydrocarbons (PAHs) and pesticides detected in the sediment samples.

PAHs were detected at concentrations exceeding the State of Florida permissible exposure limit (PEL) in sediment samples collected at a drainage ditch located north of SWMU 14. The PEL defines the lower limit of the range of contaminant concentrations that are usually or always associated with adverse biological effects. Concentrations of PAHs that exceed the PEL are considered to represent a hazard to aquatic organisms.

A sediment sample from the tidal pool area contained 4,4'-dichlorodiphenyltrichloroethane (DDT) at a concentration that exceeded the State of Florida PEL and the concentration of dieldrin exceeded the (TEL). 4,4'-DDT and dieldrin were not detected in the sediment sample from the other sampling location at the tidal pool area. The close proximity of the two sampling locations in the tidal pool area suggest that 4,4'-DDT and dieldrin are a localized hot spot.

Recommendations. The recommendations are based on the current use of the Shipyard Area as an industrial area and that this use will not change in the foreseeable future. Additional investigation of surface and subsurface soil, surface water, sediment, or groundwater are not warranted at this time under a current-use scenario. SWMUs 14 and 18 should be designated as industrial areas and the use of the surficial aquifer as a water supply prohibited.

An interim measure should be considered for eliminating the SVOCs detected in open drainage culverts that exceed FDEP's industrial soil cleanup goals. The goal of the interim measure should be to reduce the risk under current use for a trespasser and hypothetical residential exposure scenarios to levels that are less than or near the FDEP target cancer risk for industrial exposure.

An interim measure should also be considered for eliminating the PAHs detected in the drainage ditch north of SWMU 14 that exceed FDEP's industrial soil cleanup goals and the Florida sediment quality goals. The goal of the interim measure should be to reduce the risk to human receptors under current use for a trespasser and hypothetical residential exposure scenarios and for ecological receptors to concentrations of PAHs less than the Florida sediment quality goal TEL.

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GLOSSARY

ABB-ES	ABB Environmental Services, Inc.
AMI	Atlantic Marine, Inc.
AQUIRE	Aquatic Information Retrieval
APHA	American Public Health Association
AOC	area of concern
AWQC	ambient water quality criteria
bls	below land surface
CAMP	corrective action management plan
CEC	cation exchange capacity
CFB	Carbonaceous Fuel Boiler
CFR	Code of Federal Regulations
CLP	Contract Laboratory program
CMS	
CRDL	contract-required detection limit
CRQL	contract-required quantitation limits
CSF	cancer slope factor
DQOs	data quality objectives
ELCR	excess lifetime cancer risk
EDS	effects data set
EPC	exposure point concentration
ERA	ecological risk assessment
ER-L	effects range-low
ER-M	effects range-medium
ESI	expanded site inspection
FAC	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FFTA	firefighter training area
FOWTP	Federally-owned Wastewater Treatment Plant
ft	feet
ft/d	feet per day
ft/ft	feet per foot
ft/yr	feet per year
FTC	Fleet Training Center
GC	gas chromatograph
GIR	General Information Report
GPR	ground-penetrating radar
HEAST	Health Effects Assessment Summary Tables
HHCPCs	Human Health Contaminants of Potential Concern
HHRA	human health risk assessment
HI	hazard index
HQ	hazard quotient
HSWA	Hazardous and Solid Waste Amendment

GLOSSARY (Continued)

IRIS	Integrated Risk Information System
ℓ/min	liters per minute
LD_{50}	low dose where 50 percent of animals die
MCL	maximum contaminant level
MS/MSD	matrix spike and matrix spike duplicate
MDL	method detection limit
mg/kg	milligrams per kilogram
mg/ℓ	milligrams per liter
μg/kg	micrograms per kilograms
μg/ℓ	micrograms per liter
NAVSTA	Naval Station
NEDS	no effects data set
NEESA	Naval Energy and Environmental Support Activity
NFSI	North Florida Shipyard, Inc.
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NTU	nephelometric turbidity units
OWTP	oily waste treatment plant
PAH	polynuclear aromatic hydrocarbons
PARCC	precision, accuracy, representativeness, completeness, and comparability
PCB	polychlorinated biphenyl
PDE	potential dietary exposure
PEL	probable effect level
PID	photoionization detector
QA/QC	quality assurance and quality control
QAPP	quality assurance project plan
RBC	risk based concentration
RCRA	Resource Conservation and Recovery Act
RFA	Resource Conservation and Recovery Act (RCRA) facility assessment
RfDRFI	reference dose
RFI	Resource Conservation and Recovery Act (RCRA) facility investigation
RGOs	remedial goal options
RPD	relative percent difference
SMP	site management plan
SQAG	Assessment of Sediment Quality in Florida Coastal Waters
SU	standard units

GLOSSARY (Continued)

SV	sampling visit
SVOC	semivolatile organic compound
SWMU	solid waste management unit
TAL	target analyte list
TCL	target compound list
TDS	total dissolved solids
TEL	threshold effect level
™	trademark
TOC	total organic carbon
TPH	total petroleum hydrocarbons
UCL	upper confidence limit
USCS	Unified Soil Classification System
USEPA	U.S. Environmental Protection Agency
UST	underground storage tank
VOC	volatile organic compound
VSI	visual site inspection
<	less than

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.

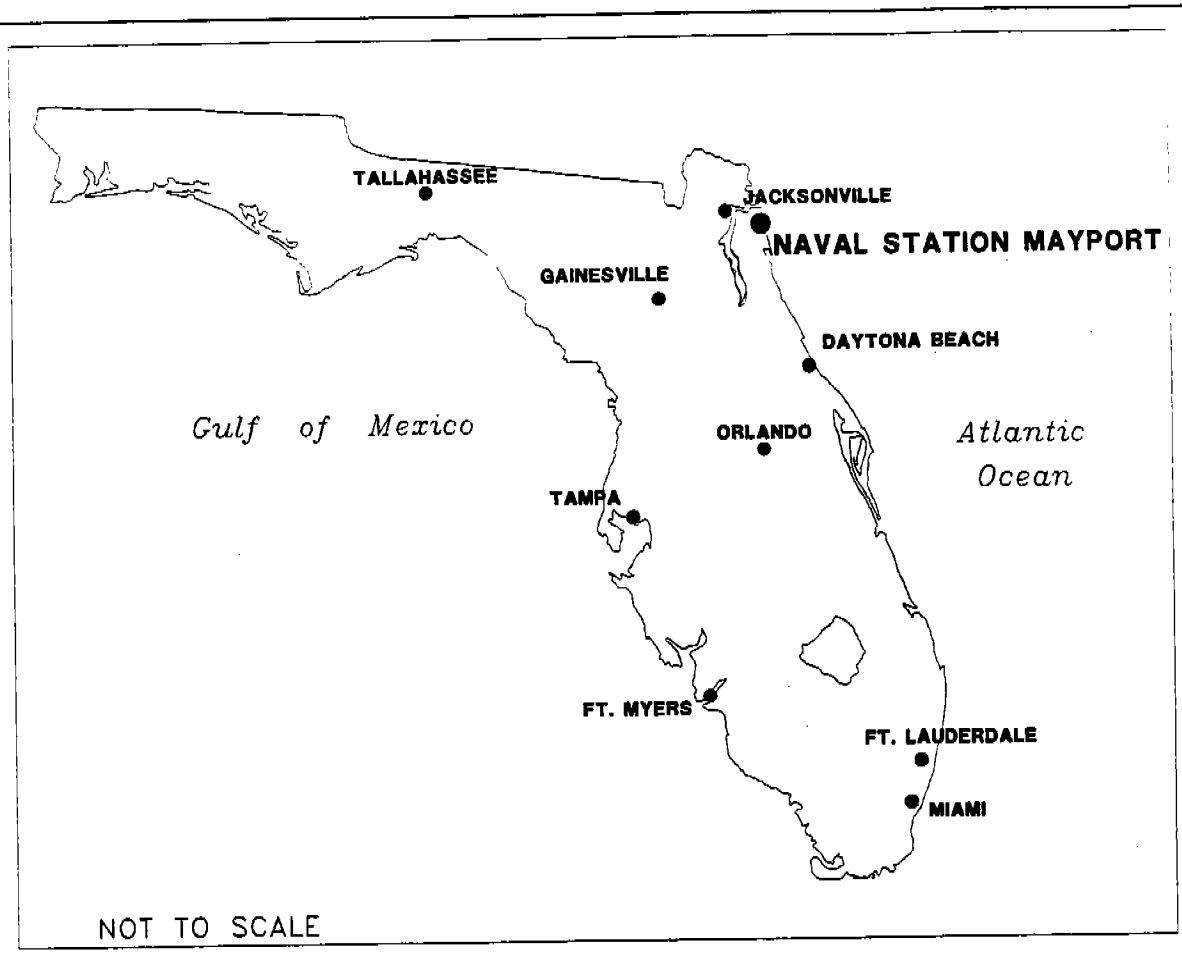
The RCRA Corrective Action General Information Report (GIR) for NAVSTA Mayport (ABB Environmental Services, Inc. [ABB-ES], 1995a) provides information common to all Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) being investigated. The information includes background sampling information and analytical methodology, risk assessment approach, and the ecological characterization of NAVSTA Mayport. The NAVSTA Mayport GIR also includes a summary of published information, including geography, physiography, demographics, climate, regional geology, and hydrogeology; methods and procedures used to conduct risk assessments; and characterization of station-wide 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.

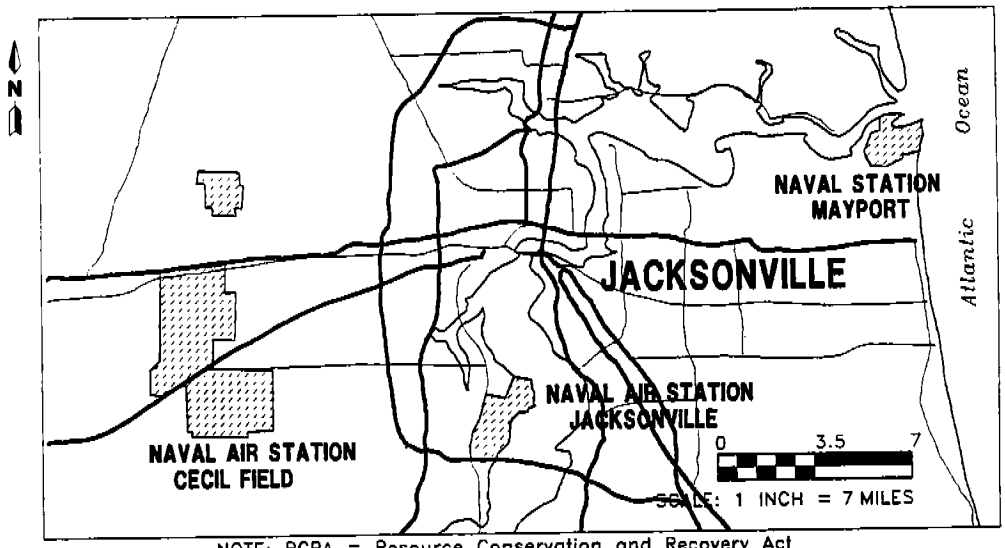
1.1 BACKGROUND. Two investigations were conducted at NAVSTA Mayport prior to the commencement of RFI activities: (1) an Initial Assessment Study in 1985 (Environmental Science and Engineering, 1986), and (2) an Expanded Site Investigation (ESI) in 1987 (E.C. Jordan Company, 1988). These studies identified 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, 1988a). 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, the 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, 1991). 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).

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.





NOTE: RCRA = Resource Conservation and Recovery Act

FIGURE 1-1
FACILITY LOCATION MAP

RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

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

RCRA Facility Investigation, Group III SWMUs
U.S. Naval Station
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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.
SWMUs = solid waste management units.
NAVSTA = naval station.
RFI = RCRA Facility Investigation.
QA/QC = quality assurance and quality control.

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. This report presents the findings of the Group III (SWMUs 1, 14, 17, 18, 23, 24, 25, 44, and 45) (Figure 1-2).

The Group III SWMUs are located in the northeastern part of NAVSTA Mayport adjacent to the Mayport Turning Basin and include isolated areas with suspected contaminants confined to localized areas. The SWMUs were incorporated into Group III because of their: (1) proximity to each other, the Turning Basin, the St. Johns River, and the Atlantic Ocean; (2) similarity of surrounding land use; and (3) potential for similar or related corrective measures. Group III SWMUs were ranked as Priority 3 because of a low perceived risk for potential contaminants to impact soil and groundwater. The contaminants are of localized areal extent and affect small volumes of 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, sediment, and groundwater;

(3) identify potential receptors;

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

(5) determine whether or not contaminants released from an 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 at Group I SWMUs, December 1992 through February 1993 at Group II SWMUs, March 1994 through December 1994 at Group I and II SWMUs, and most recently, the Group III field activities which took place from March 1995 through October 1995. Field activities at NAVSTA Mayport have included:

- monitoring well and piezometer installation;
- surface soil and subsurface soil sample collection;
- surface water sample collection;
- sediment sample collection;
- sludge sample collection;
- groundwater sample collection;
- monitoring well, piezometer, and sample location topographic surveys;

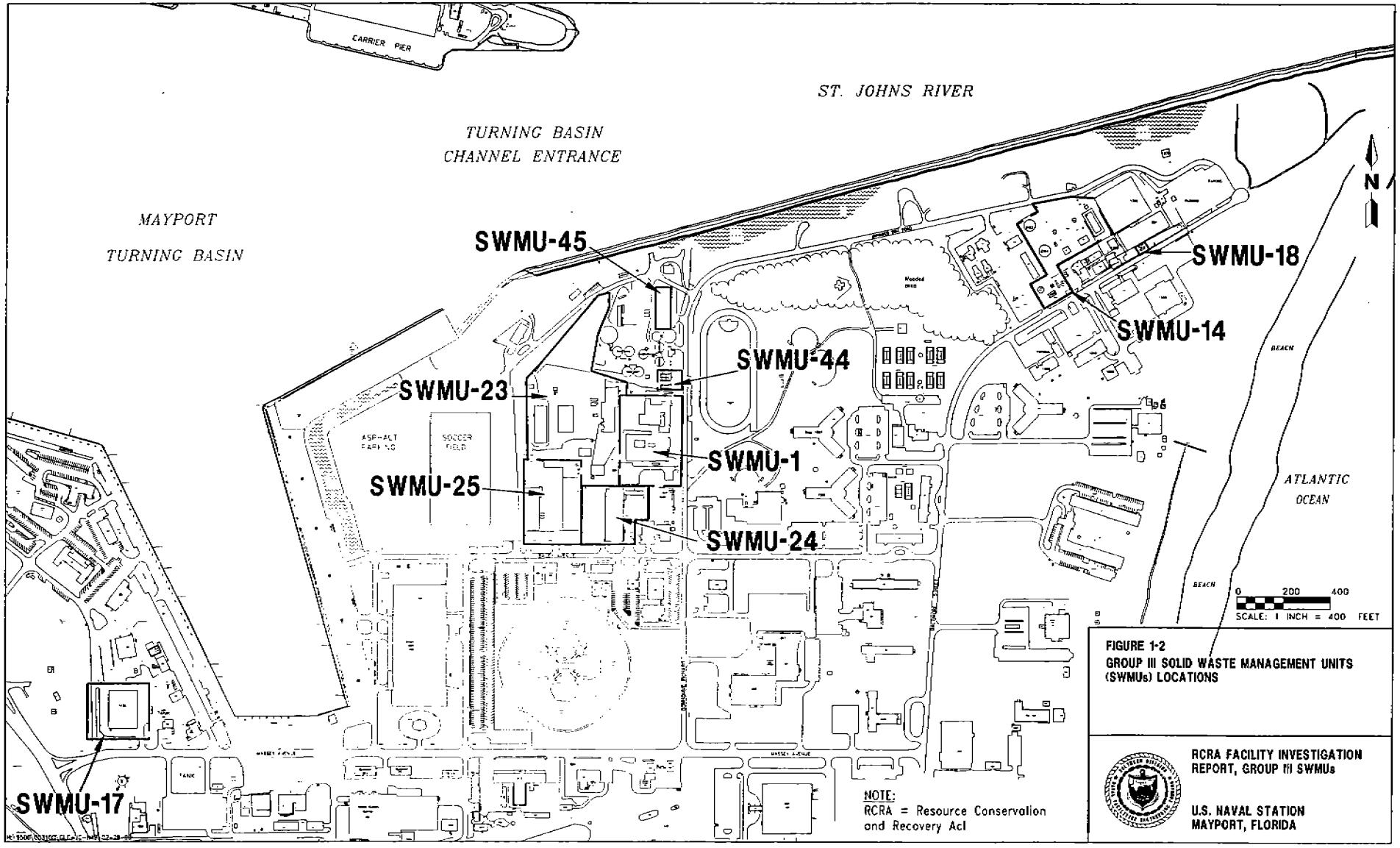


FIGURE 1-2
GROUP III SOLID WASTE MANAGEMENT UNITS (SWMUs) LOCATIONS

RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

U.S. NAVAL STATION
MAYPORT, FLORIDA

- *in situ* slug testing of aquifer properties at selected monitoring well and piezometer locations;
- tidal studies of selected monitoring wells and piezometers;
- a biological inventory of terrestrial and aquatic habitats; and
- laboratory analyses of target analytes selected from Appendix IX Groundwater Monitoring List Compounds (40 Code of Federal Regulations [CFR] 264), and USEPA Contract Laboratory Program (CLP) target compound list (TCL) and target analyte list (TAL).

1.4 GROUP III RCRA FACILITY INVESTIGATION (RFI) REPORT LAYOUT. The Group III RFI report is divided into seven chapters. Chapter 1.0 is an introduction, providing basic background information about NAVSTA Mayport, the Group III 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, sediment, and sludge. The discussion of data evaluation includes the procedures used for screening analytical data against stationwide background samples and human health- and ecological-based guidance concentrations (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 III SWMUs including site geology, hydrogeology, and the environmental and ecological setting. 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 6.0 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 elements listed below.

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

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

Findings presents the results of laboratory analyses of environmental samples (surface and subsurface soil, surface water, sediment, sludge, and groundwater) collected during the Group III 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 7.0 presents conclusions and recommendations. The recommendation for a corrective measures study (CMS) is based on data interpretation and the findings of 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, 1991), RFI Workplan Addenda 1, 2, 3 (ABB-ES, 1992), and Addendum 5, Group III SWMUs (ABB-ES, 1994a). 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 III RFI activities.

2.0 PROCEDURES FOR ANALYTICAL DATA MANAGEMENT AND EVALUATION

This chapter describes how the data generated during the Group III RFI field investigations at NAVSTA Mayport were managed and evaluated. Section 2.1 describes the analytical program and data management for the Group III 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 Group III RFI field investigations were analyzed using field screening and offsite laboratory analytical methods. Table 2-1 summarizes the number of samples collected at each SWMU and the analytical methods. Sample results are presented in Appendix A, and cross-referenced lists of sample identifiers and sampling locations are presented in Appendix B.

Screening level analysis were performed at the Fleet Training Center (FTC) and Shipyard SWMUs. Groundwater samples collected using direct-push technology (TerraProbe℠) were screened for halogenated organics and aromatic organics using HNU Systems portable gas chromatograph (GC) with Photoionization Detector (PID). Ten percent of the screened samples were sent to an offsite laboratory for confirmatory analysis by USEPA SW-846 Methods 8010, 8020, and modified 8015 for fuel quantitation. The screening level data were not validated.

Environmental samples (surface soil, subsurface soil, surface water, sediment, sludge, and groundwater) were collected by ABB-ES personnel and subsequently within 24 hours shipped by overnight delivery to an offsite laboratory. The laboratory used SW-846 methodology (USEPA, 1986a) to analyze the samples for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), metals and cyanide. Some groundwater samples were also analyzed for total petroleum hydrocarbons (Method 418.1) and wet chemistry analyses. The laboratory analytical program is described in more detail in Section 2.2 of the NAVSTA Mayport GIR (ABB-ES, 1995a).

Analytical results obtained from the offsite laboratory for all environmental samples during the Group III sampling event were submitted as Naval Energy and Environmental Support Activity (NEESA) Level C (USEPA Level III) analytical packages for VOCs, SVOCs, pesticides, PCBs, metals, cyanide, and wet chemistry.

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, 1991).
- NEESA guidance document 20.2-047B, Sampling and Chemical Analysis Quality Assurance Requirements for the Navy Installation Program (NEESA, 1988).

Table 2-1
Analyses Performed by Media

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

SWMU #	Medium Sampled	Number of samples/ Duplicates	VOC 8010, 8020, 8015(Mod)	VOC 8240	SVOC 8270	Pest/PCB 8080	Metals 6010,7000	WQ	TPH 418.1
SWMUs 1, 23, 24, 25, 44, and 45 (Shipyard area)	Groundwater (TerraProbe™)	5/1	5/1						
	Surface Soil	72/10		72/10	72/10	72/10	72/10		
	Subsurface Soil	21/1		21/1	21/1	21/1	21/1		
	Sludge	16/2		16/2	16/2	16/2	16/2		
	Groundwater	24/4		24/4	24/4	24/4	24/4	24/0	3/0
SWMUs 14 and 18 (FTC Area)	Groundwater (TerraProbe™)	7/1	7/1						
	Surface Soil	27/5		27/5	27/5	27/5	27/5		
	Subsurface Soil	15/1		15/1	15/1	15/1	15/1		
	Surface Water	2/1		2/1	2/1	2/1	2/1	2/0	
	Sediment	11/2		11/2	11/2	11/2	11/2		
	Groundwater	17/2		17/2	17/2	17/2	17/2	17/0	16/0
SWMU 17	Surface Soil	15/2		15/2	15/2	15/2	15/2		
	Subsurface Soil	3/1		3/1	3/1	3/1	3/1		
	Groundwater	3/1		3/1	3/1	3/1	3/1	3/0	1/0

Notes: RCRA = Resource Conservation and Recovery Act.
SWMU = solid waste management unit.
# = number.
VOC = volatile organic compound.
Mod = modified.
SVOC = semivolatile organic compound.
Pest/PCB = pesticides and polychlorinated biphenyls.
WQ = groundwater and surface water quality parameters (pH, alkalinity, ammonia-nitrogen, chloride, color, hardness, phosphorus(total), sulfate, sulfide, total dissolved solids, total kjeldahl nitrogen, total organic carbon, and TPH).
TPH = total petroleum hydrocarbons.
SM = service mark.
FTC = Fleet Training Center.

- Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses (USEPA, 1988b).

- National Functional Guidelines for Organic Data Review (USEPA, 1990a).

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

The data were reviewed, validated, and evaluated using the PARCC specified in the DQOs. PARCC criteria are described in Section 2.3 of the NAVSTA Mayport GIR (ABB-ES, 1995a). The evaluation of the data according to the PARCC criteria are presented as Appendix B. The Subsections below summarize the PARCC criteria evaluation of the 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 Group III 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 evaluation of precision for the Group III sampling event is summarized below.

The RPD criteria were not met for environmental samples and associated duplicates for several organic and inorganic analytes. The RPD criteria for 5 SVOC analytes in two soil samples, and 10 pesticide/PCB analytes in 6 soil samples may not have been met because of sample heterogeneity. None of the organic analytical results were qualified during the data validation process based on RPD criteria for environmental and associated duplicate sample pairs. The RPD criteria for several inorganic analytes in six soil samples may not have been met because of sample heterogeneity. The inorganic analytical results were qualified during the data validation process based on the RPD evaluation criteria.

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 soil samples in 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 Group III 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 evaluation of accuracy for the Group III sampling event is summarized below.

The percent recovery for some of the soil, sediment 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 SVOCs (4-nitroquinoline-1-oxide, 1,4-napthoquino-

none, aramite, and hexachlorophene) 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. The rejection of this data is not expected to adversely impact the conclusions or recommendations contained in this report.

Some of the inorganic analytical results for groundwater samples collected at SWMU 23 and surface soil samples at SWMU 25 were qualified for antimony because the percent recovery of spiked compounds in MS samples was less than 30 percent. When this condition occurred, the non-detect values were either rejected or estimated, and positive values were qualified with a "J" qualifier. There were no positive results, therefore, this should not have an adverse impact on conclusions and recommendations contained in this report. However, it should be noted that if the results are false negative values, low bias because of insufficient recovery, this data loss could adversely impact the conclusions and recommendations contained in this report.

2.2.3 Representativeness Representativeness is the degree to which the data obtained from an environmental sample accurately reflects 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 evaluation of representativeness for the Group III sampling event is summarized below.

Sampling and analysis holding times for each analytical fraction were met with the exception of mercury in nine soil samples. Mercury was not detected in eight of the soil samples, but was detected in sample 24S00701. In accordance with data validation guidelines (USEPA, 1988b), the data associated with the missed holding time were flagged as estimated, "UJ" for non detects and "J" for detects. Several reextracts and reanalyses were also performed outside of holding times. The data was qualified by the data validators as estimated, "UJ" for nondetects and "J" for detects.

Qualification of the environmental samples were required because of the detection of target analytes in laboratory and field blanks. Qualification of the Group III data, based on blank contamination, were performed according to USEPA data validation guidelines (USEPA, 1988b 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. The sampling, shipment, and analytical protocols were consistent with USEPA standard operation procedures (USEPA, 1991a; and USEPA, 1996) and methodologies described in workplans for the NAVSTA Mayport RFI throughout the period from March to July 1995.

2.2.5 Completeness Completeness is the percentage of useable data reported and validated compared with the total number of measurements made. Useable data are

those measurements that were not rejected (qualified with an "R") during the validation process. The goal for analytical completeness for the Group III sampling event was 95 percent useable data. The completeness goal of 95 percent was met for all matrices and all parameters. Overall, the data generated during the sampling event meet established DQOs 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 III RFI consists of analytical results for samples collected from March to July 1995, including quality assurance and quality control (QA/QC) samples. Appendix A presents the Group III 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 Group III 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 method detection limits (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 appropriate results were used in the final data set (Please refer to Appendix B).

6. In cases where samples were diluted to quantify specific compounds (DL suffix on sample identification), the dilution recommended by the data validator was used in the final data set (Please refer to Appendix B).

7. For 1,2-, 1,3-, and 1,4-dichlorobenzene, the analytical results from SW-846 Method 8240 analyses were used in place of the results from SW-846 Method 8270 analyses. The Method 8240 results were used because this method has lower detection limits for these compounds.

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 non qualified 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 Group III RFI field investigations were screened against background data and various benchmarks for the purposes of assessing the nature and distribution of chemicals detected in environmental media and selecting human health and ecological chemicals of potential concern for the human health and ecological risk assessments. The background screening values and benchmark values for analytes detected in NAVSTA Mayport background samples are presented in the NAVSTA Mayport GIR (ABB-ES, 1995a).

The initial screening of site-specific data is presented in the nature and distribution section associated with each SWMU in Chapters 4.0 through 6.0. The analytical data for each environmental medium were also screened against human health- and ecological-based benchmarks in the respective human health- and ecological-risk assessment sections of Chapter 4.0 through 6.0. Below is a description of the benchmarks that were used to screen the analytical results for assessment of nature and extent of chemicals at each SMWU or group of SWMUs, the human health risk assessments, and ecological risk assessments.

Nature and Extent Screening Criteria. Analytical results for all environmental media were compared to background screening concentrations (ABB-ES, 1994b and 1995a). Analytical results for surface soil, subsurface soil, sludge, and sediment samples were compared with Region III Risk-Based Concentrations (RBCs) (USEPA, 1995a) and Florida Soil Cleanup Goals (Florida Department of Environmental Protection [FDEP], 1995; 1995b; and 1996a). The residential receptor was used for surface soil (land surface to a depth of 1 foot) and sediment, and the industrial receptor was used for subsurface soil and sludge.

Analytical results for sediment samples were also compared with threshold effects levels (TELs) published in "Development and Evaluation of Sediment Quality Assessment Guidelines" (MacDonald, 1994) and effects range-low (ER-L) concentrations published in "Incidence of Adverse Biological Effects Within Ranges of Chemical concentrations in Marine and Estuarine Sediments," (National Oceanic and Atmospheric Administration, 1994).

Analytical results for surface water samples (unfiltered) were compared to Federal Ambient Water Quality Criteria for consumption of fish (USEPA, 1986b), and Florida Surface Water Quality Standards for Class III marine waters as identified in Florida Administrative Code (FAC) 62-302 (1995).

Analytical results for groundwater samples (unfiltered) were compared to Florida Guidance Concentrations (FDEP, 1994) and Region III RBCs (USEPA, 1995a).

Human Receptor Screening Criteria. Analytical results for all environmental media were compared to background screening concentrations (ABB-ES, 1994b and 1995a). Analytical results for surface soil, subsurface soil, sludge, and sediment samples were compared with Region III RBCs (USEPA, 1995a) and Florida Soil Cleanup Goals (FDEP, 1995a; 1995b; and 1996). The residential receptor was used for surface soil (land surface to a depth of 1 foot) and sediment, and the industrial receptor was used for subsurface soil and sludge.

Analytical results for groundwater samples (unfiltered) were compared to Region III RBCs (USEPA, 1995a), Federal Maximum Contaminant Levels (MCLs) (USEPA, 1994b), and Florida Guidance Concentrations (FDEP, 1994).

Analytical results for surface water samples (unfiltered) were compared to the same benchmarks as groundwater and Florida Surface Water Quality Standards for Class III marine waters as identified in FAC 62-302 (1995).

Ecological Receptor Screening Criteria. Analytical results for all environmental media were compared to background screening concentrations (ABB-ES, 1994b and 1995a). Analytical results for sediment samples were compared with TEL and probable effects level (PEL) concentrations published in "Development and Evaluation of Sediment Quality Assessment Guidelines" (MacDonald, 1994) and ER-L and effects range-median (ER-M) concentrations published in "The Potential for Biological Effects of Sediment-sorbed Contaminants Tested in the National Status and Trends Program" (Long and Morgan, 1990) and "Incidence of Adverse Biological Effects Within Ranges of Chemical Concentrations in Marine and Estuarine Sediments" (Long, et.al., 1994).

Analytical results for groundwater (unfiltered) and surface water (unfiltered) samples were compared to Florida Surface Water Quality Standards for Class III marine waters as identified in FAC 62-302 (1995) and/or Federal Ambient Water Quality Criteria (USEPA, 1986b). The maximum and average exposure point concentrations for groundwater and surface water were compared to Florida Surface Water Quality Standards for Class III marine waters, Federal Ambient Water Quality Criteria (USEPA, 1986b), and the lowest reported adverse effect concentration in the Aquatic Information Retrieval (AQUIRE) data-base.

3.0 GROUP III SOLID WASTE MANAGEMENT UNIT (SWMUs) PHYSICAL CHARACTERISTICS

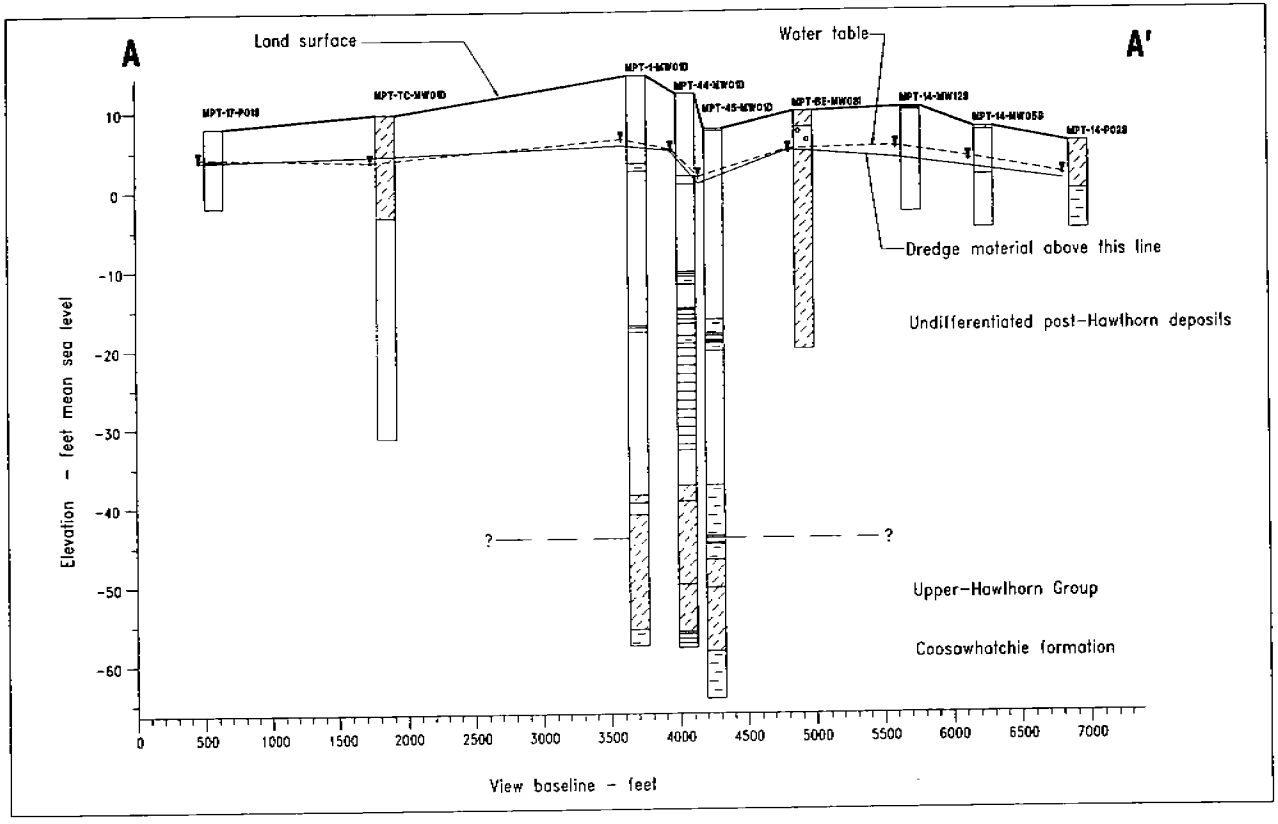
A detailed description of the physical characteristics of NAVSTA Mayport, including topography, demography, climate, soil types, and regional hydrogeology has been presented in Section 1.4 and Chapter 3.0 of the NAVSTA Mayport GIR (ABB-ES, 1995a). Below is a summary of geologic and hydrologic data collected at the Group III SWMUs during 1995. 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 III SWMUs.

3.1 GEOLOGY. More than 200 borings have been completed at NAVSTA Mayport for various field investigation tasks. Approximately 54 borings have been completed as monitoring wells or piezometers within or near Group III SWMUs (including background locations). In addition, 31 monitoring wells have been installed in the Group III area for investigation of underground storage tank (UST) sites not related to the Group III RFI. These 31 monitoring wells were installed using similar specifications and, therefore, were acceptable to generate hydrogeological data for this report. All monitoring wells and piezometers used in this report are shown on Plate 1 except for the background monitoring wells MPT-B-MW01S, MPT-B-MW01I, and MPT-B-MW01D, which are shown on Plate 1 of the NAVSTA Mayport GIR (ABB-ES, 1995a).

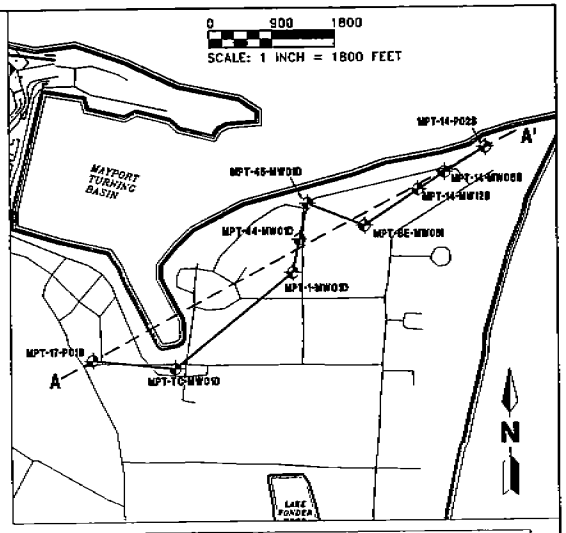
Tables 3-1 and 3-2 in the NAVSTA Mayport GIR (ABB-ES, 1995a) summarize the locations, designations, and screened interval information for all wells and piezometers installed at NAVSTA Mayport to date, including those referenced in this report. Boring logs for all monitoring wells and piezometers are included in Appendix A, Volume II of the NAVSTA Mayport GIR (ABB-ES, 1995a). The information summarized in the boring logs were used to generate a geologic cross-section traverse, Figure 3-1. Below is a description of the geologic units depicted in the Group III cross-section Figure 3-1.

In the Group III Area, dredge material overlies undifferentiated post-Hawthorn deposits to depths of approximately 8 to 16 feet below land surface (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 consists predominantly of fine-grained, well-sorted sands which may include marine shell fragments. Color ranges from light tan to tan to brown to light gray. Where color change occurs, the change is typically gradational over several feet. Underlying the dredge materials are sediments that comprise the undifferentiated post-Hawthorn deposits (Scott, 1988). These sediments primarily consist of fairly uniform, well sorted, fine-grained sands (Unified Soil Classification System [USCS] designation SP), which typically contain minor amounts of silt and clay and frequently include numerous shell fragments and subrounded pea-size gravel. These undifferentiated post-Hawthorn deposits frequently include clay layers that vary in character from very soft to stiff, white to greenish-gray to dark-gray, and with various amounts of silts, fine sands, and shell fragments (USCS designation CL or CH, based on visual observation).

The undifferentiated post-Hawthorn deposits are likely the product of Miocene to Holocene fluvial and marine deposition and the erosion and redeposition of Hawthorn Group sediments. River and marine depositional processes have produced



NOTE:
View from southwest to northeast of selected borings showing dredge material, undifferentiated post-Hawthorn deposits, and upper-Hawthorn Group deposits.



LEGEND

- Silty-sands, sand-silt mixtures
- Poorly-graded sands, gravelly-sands, little or no fines
- Inorganic clays of low to medium plasticity, gravelly-clays, sandy clays, silty clays, lean clays
- Clayey-sands, sand-clay mixtures
- Fill
- Water table
- MPT-17-P01S — Monitoring well location and designation

NOTE:
SWMU = Solid waste management unit

FIGURE 3-1
CROSS SECTION A-A'
GROUP III SWMUs

RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

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a highly variable set of lithologic units that are horizontally and vertically anisotropic throughout the study area. 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 used to estimate that the Upper Hawthorn Group was encountered at a depth of approximately 70 to 72 feet bls in the Group III Area.

The paragraph below presents a description of the shallow soil encountered at Group III SWMUs 1, 14, 17, 18, 23, 24, 25, 44, and 45. These summaries are based on lithologic descriptions from 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 feet (ft) bls.

Shipyard Area SWMUs 1, 23, 24, 25, 44, and 45. Shallow soil in the vicinity of the Shipyard Area consists of fine-grained, well-sorted sands which typically contain shell fragments. At some of the soil boring locations, thin (less than 1 foot) seams of clay or clayey to silty-fine sand were encountered. These seams appear to be restricted in areal extent.

Seven shallow borings to the water table were conducted at SWMU 1 to assess whether or not landfill materials were present. Landfilled materials were not encountered.

Four deep borings drilled to install monitoring wells MPT-1-MW01D, MPT-23-MW05D, MPT-44-MW01D, and MPT-45-MW01D were terminated at depths ranging from 70 to 72 ft bls, respectively. Tables 3-1, 3-2, 3-3 and 3-4 describe the lithology (including the associated USCS symbol) of subsurface materials encountered at each of the four monitoring wells.

SWMU 17 (Carbonaceous Fuel Boiler). Shallow soil in the vicinity of the Carbonaceous Fuel Boiler plant consists of relatively uniform, light-tan to tan, brown to dark-brown, or gray, very fine to fine-grained sand and silty sand with shell fragments that may make up to approximately 20 percent of the soil sample. These sands are interpreted to primarily be dredge material. A minor amount of these materials may be engineered fill that was constructed over the last 55 years.

SWMUs 14 (Mercury/Oil Waste Spill Area and SWMU 18 the Fleet Training Center Diesel Generator Sump). Shallow soil in the vicinity of the Mercury/Oily Waste Spill and Fleet Training Center Diesel Generator Sump, collectively referred to as the Fleet Training Center Area, typically consists of various shades from light-tan to brown, dark-gray, or black fine-grained sand or silty sand. Minor amounts of shell material are present in some of the borings. This description is similar to the soil found in Group I and II and is consistent with natural sand dunes and the placement of dredge material observed in aerial photographs dating from the early 1940s and historical descriptions of the area.

Minor differences were observed in soil samples collected from borings drilled for the installation of monitoring wells MPT-14-MW01S, MPT-14-MW02S, MPT-14-P01S, and MPT-14-P02S. These wells are located along the southern bank of the St. Johns River north of SWMUs 14 and 18. Soil samples from these locations exhibit features that differ from soil samples collected from locations to the south or

Table 3-1
Lithology at Monitoring Well Location MPT-1-MW01D

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

Depth, Feet Beneath Land Surface		Lithologic Description	USCS Symbol
From	To		
Land Surface	11	Gray to light gray, fine-grained sand with shell fragments.	SP
11	12	Dark gray, fine-grained, sandy clay.	SC
12	31.5	Fine to very fine-grained, gray sand.	SP
31.5	32.5	Dark gray, sandy clay.	CL
32.5	53	Fine to very fine-grained, gray sand with shell fragments.	SP
53	54	Fine-grained, grayish to white silty sand.	SM
54	56	Fine-grained, gray sand.	SP
56	70	Fine to medium-grained, light tan, silty sand.	SM
70	72	Silty sandy clay with trace limestone.	SC

Notes: D = duplicate.
RCRA = Resource Conservation and Recovery Act.
SWMUs = solid waste management units.
USCS = Unified Soil Classification System.

Table 3-2
Lithology at Monitoring Well Location MPT-23-MW05D

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

Depth, Feet Beneath Land Surface		Lithologic Description	USCS Symbol
From	To		
Land Surface	25.5	Gray, fine-grained sand with shell fragments.	SP
25.5	28	Dark greenish-gray, very clayey fine-grained sand.	CL
28	32	Gray clay with trace fine-grained sand.	CL
32	33	Dark greenish-gray, sandy clay.	SC
33	40	Dark gray clay with trace fine-grained sand.	CL
40	50.5	Intermittent seams of clay and sand.	SC
50.5	63.5	Light tan to gray to white, fine to medium grained, silty sand.	SM
63.5	70	Dark green, medium-grained, clayey sand.	SC
70	72	Greenish-gray, stiff silty clay with coarse-grained sand.	CL

Notes: D = duplicate.
RCRA = Resource Conservation and Recovery Act.
SWMUs = solid waste management units.
USCS = Unified Soil Classification System.

Table 3-3
Lithology at Monitoring Well Location MPT-44-MW01D

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

Depth, Feet Beneath Land Surface		Lithologic Description	USCS Symbol
From	To		
Land Surface	22.5	Light to dark gray, fine-grained sand with shell fragments.	SP
22.5	23	Dark gray, stiff clay with some sand.	CL
23	24	Gray, silty clay.	CL
24	27	Dark gray, fine-grained sand.	SP
27	29	Dark gray, soft clay with minor sand.	CL
29	30.5	Gray, fine to very fine-grained sand.	SP
30.5	31.5	Dark gray, clayey sand.	SC
31.5	45	Gray, fine to very fine-grained sand, inter-bedded with seams of clay.	SP/CL
45	49.5	Gray to dark gray sand with shell fragments.	SP
49.5	51.5	Greenish-gray, fine-grained, silty sand.	SM
51.5	68	Light tan to white to greenish-gray, fine-grained, silty sand.	SM
68	70	Dark greenish-gray, stiff to hard clay with trace of limerock.	CL

Notes: D = duplicate.
RCRA = Resource Conservation and Recovery Act.
SWMUs = solid waste management units.
USCS = Unified Soil Classification System

Table 3-4
Lithology at Monitoring Well Location MPT-45-MW01D

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

Depth, Feet Beneath Land Surface		Lithologic Description	USCS Symbol
From	To		
Land Surface	24	Gray, fine-grained sand with shell fragments.	SP
24	26	Dark gray, stiff clay with trace sand, grading to minor sand with depth.	CL
26	28	Dark gray, sandy clay with 3-inch organic seam.	CL
28	45	Dark gray to gray, very fine to fine-grained sand with shell fragments.	SP
45	51.5	Gray, fine to very fine-grained sand with clay and shell fragments.	SC
51.5	52.5	Greenish-gray clay with trace sand.	CL
52.5	54.5	Fine to very fine-grained sand with clay and shell fragments.	SC
54.5	58	Light tan to white silty sand with lime rock and trace clay.	SM
58	66	Light tan to white silty sand with trace clay.	SM
66	72	Dark green, medium to fine-grained sandy clay with trace lime rock.	CL

Notes: D = duplicate.
RCRA = Resource Conservation and Recovery Act.
SWMUs = solid waste management units.
USCS = Unified Soil Classification System

farther inland. The observed features, which are not found in all locations, include: layering of fine sands, a 6-inch clay layer, and a generally higher silt content. These features are likely a result of subaqueous deposition by marine processes or the St. Johns River.

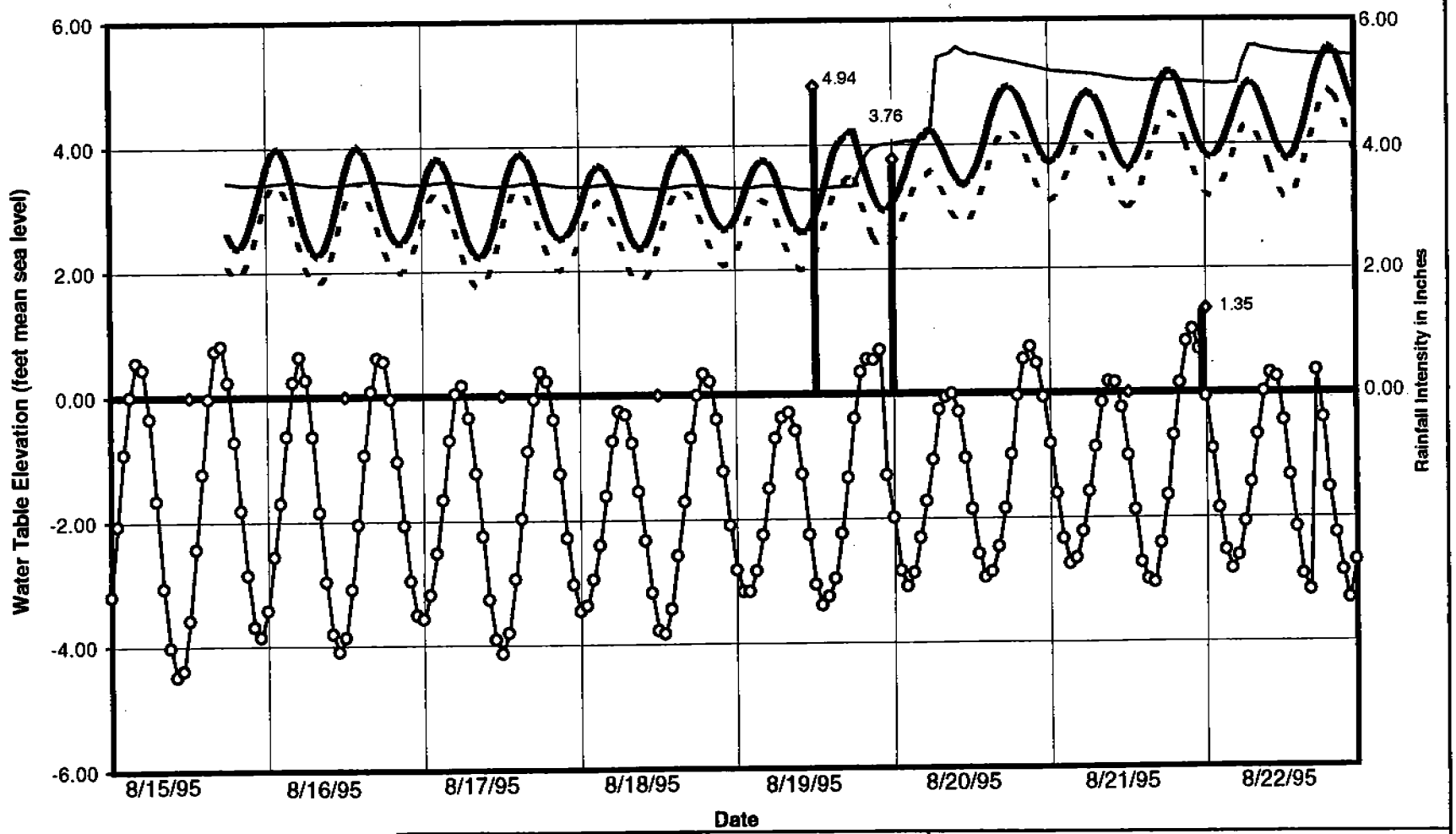
3.2 HYDROGEOLOGY. The objective of the hydrogeologic investigation conducted at NAVSTA Mayport was to characterize variables that influence contaminant fate and transport. Hydrogeologic characterization activities included: (1) evaluation of tidal influence on the shallow aquifer, (2) developing a potentiometric surface map of the Group III Area, (3) estimation of groundwater flow directions, (4) estimating the hydraulic conductivity and seepage velocity, and (5) determining soil physical properties that may affect contaminant transport in groundwater.

3.2.1 Tidal Influence A tidal influence study was conducted to assess the impact of tidal fluctuations on the surficial aquifer in the Group III area at NAVSTA Mayport. Monitoring wells located near the banks of the St. Johns River and areas distant from the river were included in the survey. The monitoring wells were monitored electronically during August 15, 1995, through October 23, 1995. Please 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 a previous tidal effects study for Groups I and II are presented in Subsection 3.2.2 of the NAVSTA Mayport GIR (ABB-ES, 1995a).

Eleven monitoring wells located in two separate areas along the NAVSTA Mayport Turning Basin Channel were included in a tidal influence survey. Water level fluctuations in the monitoring wells were compared to real-time tidal data that was obtained from a monitoring station located in the Mayport Turning Basin entrance channel adjacent to the Fleet Training Center (Plate 1). The tidal data was collected by the FDEP Bureau of Survey and Mapping. The FDEP monitoring station continuously measures the water surface elevation in 6-minute intervals. Rainfall data measured at the NAVSTA Mayport Runway Control Tower was also obtained for the period between August through October 1995.

Groundwater elevations, tidal displacement, and rainfall versus time were plotted for the monitoring wells included in the study. Graphic presentations for monitoring wells located in Group III are as follows: monitoring well cluster MPT-1-P01S, MPT-45-MW01I, and MPT-45-MW01D (Figure 3-2), MPT-23-MW05S, MPT-45-MW02S and MPT-44-MW03S (Figure 3-3), located near the Jacksonville Shipyard Area: and MPT-14-MW01S, MPT-14-MW05S, MPT-14-MW06S, MPT-14-MW10S, and MPT-14-MW11S (Figure 3-4), located in the Fleet Training Center Area. Each figure presents data obtained over an 8-day period which is presented along the horizontal axis of the figure. Tidal fluctuations relative to mean sea level are referenced to a scale on the left vertical axis. Rainfall intensity is referenced to a scale on the right vertical axis. Below is an interpretation of the groundwater level measurements obtained from the electronic data loggers during the tidal study.

Figures 3-2, 3-3, and 3-4 all compare tidal fluctuation with groundwater level measurements and rainfall events. In each figure the diurnal tidal fluctuation of the St. Johns River is shown for the same period. The range in tidal fluctuations during the 8-day monitoring period are from approximately -4.5 feet mean sea level on August 15, 1995, to approximately 1 foot mean sea level on



Rain
St. Johns River
MPT-1-P01S
MPT-45-MW01I
MPT-45-MW01D

NOTES:
Rainfall in inches
RCRA = Resource Conservation and Recovery Act
SWMU = Solid waste management unit

FIGURE 3-2
HYDROGRAPH OF MONITORING WELLS MPT-1-P01S, MPT-45-MW01I, AND MPT-45-MW01D AUGUST 15, 1995 TO AUGUST 22, 1995

RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

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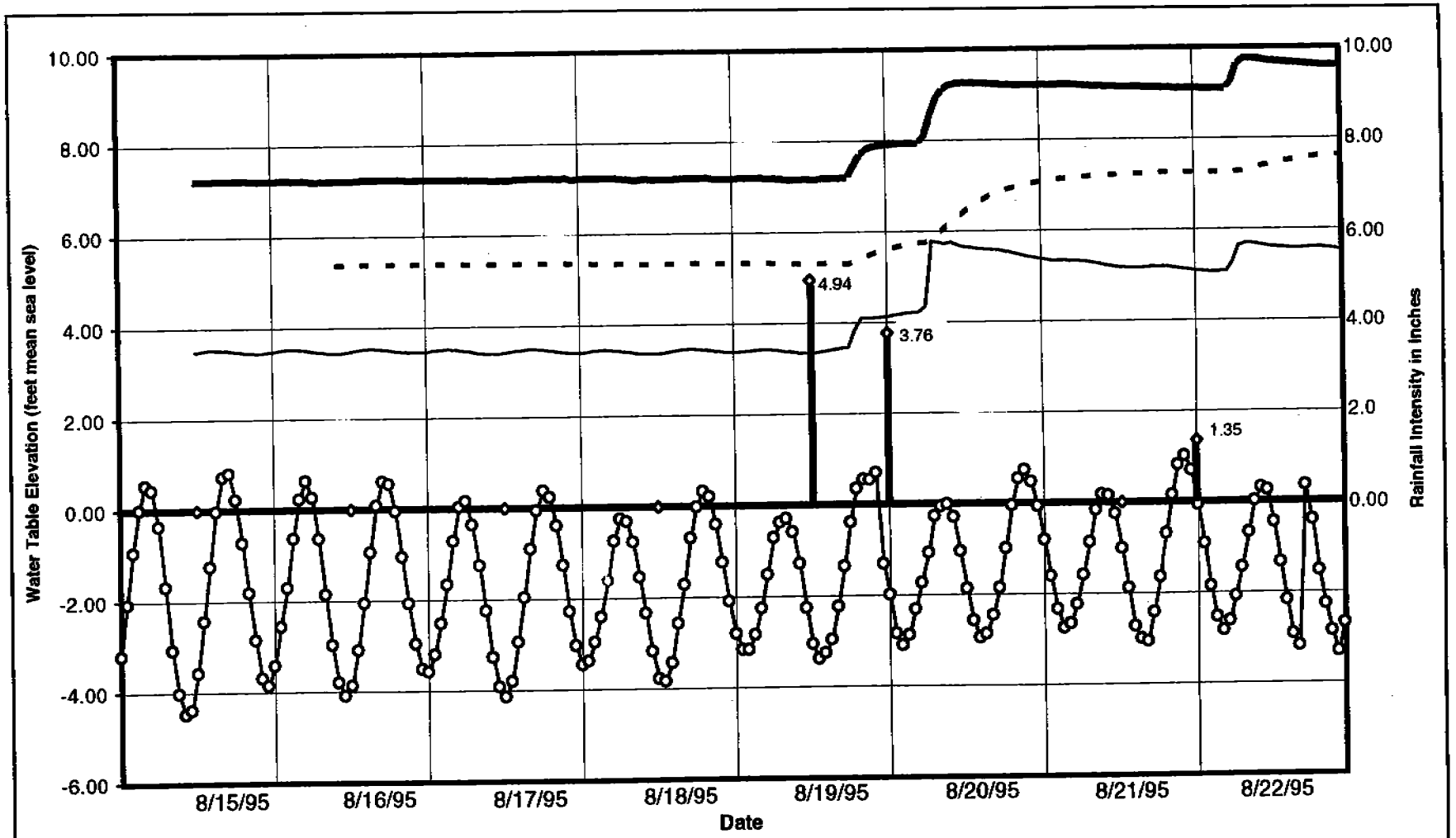
FRAME: MAC: 8534-09-TKB\FIG 3-2 FRAME



Rain
St. Johns River
MPT-23-MW05S
MPT-45-MW02S
MPT-44-MW03S

NOTES:
Rainfall in inches
RCRA = Resource Conservation and Recovery Act
SWMU = Solid waste management unit

FIGURE 3-3
HYDROGRAPH OF MONITORING WELLS MPT-23-MW05S, MPT-44-MW03S, AND MPT-45-MW02S AUGUST 15, 1995 TO AUGUST 22, 1995

RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

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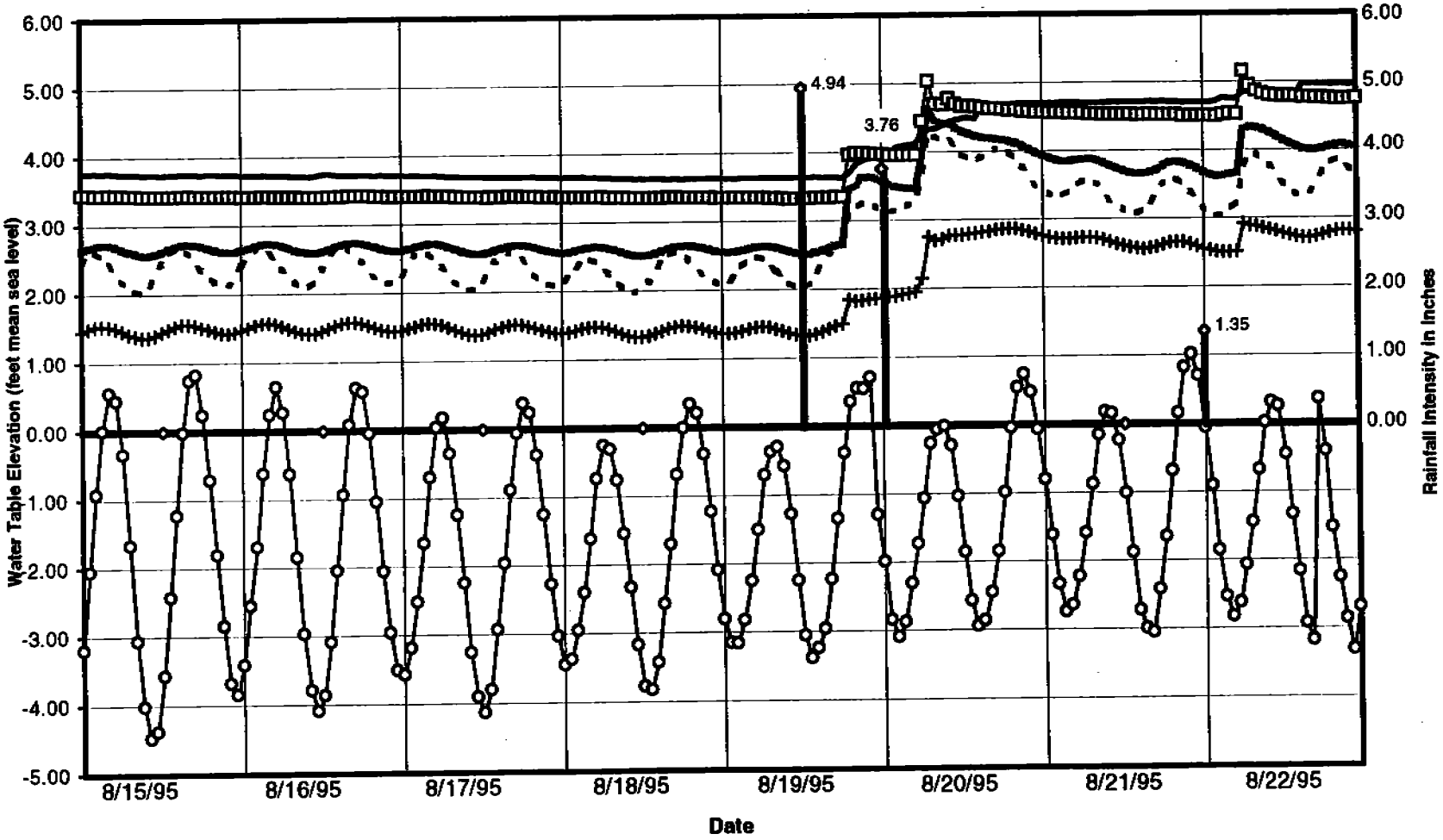
FRAME: MAC: 8534-09-TKB\FIG 3-3 FRAME



Rain
St. Johns River
MPT-14-MW01S
MPT-14-MW05S
MPT-14-MW06S
MPT-14-MW10S
MPT-14-MW11S

NOTES:
Rainfall in inches
RCRA = Resource Conservation and Recovery Act
SWMU = Solid waste management unit

FIGURE 3-4
HYDROGRAPH OF MONITORING WELLS MPT-14-MW01S, MPT-14-MW05S, MPT-14-MW06S, MPT-14-MW10S, AND MPT-14-MW11S AUGUST 15, 1995 TO AUGUST 22, 1995

RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

H:\MWELSH\MAYPORT\8534-09\MAYAUG3.XLS 11-696 MAW
FRAME: MAC: 8534-09-TKB\FIG 3-4 FRAME

August 21, 1995. The amplitude of the tidal fluctuations ranged from approximately 2.5 to 5 feet. Three rainfall events occurred during the 8-day monitoring period and are shown on the figures as upward spikes of 4.94, 3.76, and 1.35 inches. The water levels in each of the monitoring wells exhibited a response suggesting that recharge to the surficial aquifer occurred after the rainfall events.

Figure 3-2 shows the response of groundwater to tidal fluctuations of the St. Johns River at monitoring well cluster MPT-1-P01S, MPT-45-MW01I, MPT-45-MW01D, which is located at the Shipyard Area SWMUs. This well cluster is located approximately 160 feet from the river. The response in monitoring well MPT-1-P01S, which is screened from 5 to 10 foot bls, is muted with variations of amplitude of less than 0.1 foot. There does not appear to be much lag time in the response of groundwater to the tidal fluctuation in the shallow well, as the cycles for the groundwater and tide appear to roughly coincide. A stronger response to diurnal tidal fluctuations with variations of amplitude of approximately 1.0 foot were observed at the location of monitoring wells MPT-45-MW01I and MPT-45-MW01D. These wells are screen from 30 to 35 and 60 to 70 feet bls respectively. Response lag time in these two wells appears to vary from 6.0 to 7.5 hours.

A stronger response to tidal fluctuations was observed in the intermediate and deep monitoring wells relative to the shallow monitoring wells. This response suggests that the intermediate and deep zone of the surficial aquifer are more transmissive than the shallow water table zone.

Figure 3-3 shows the response of groundwater to tidal fluctuations of the St. Johns River in monitoring wells MPT-23-MW05S, MPT-45-MW02S, and MPT-44-MW03S, which are located at the Shipyard Area SWMUs. These wells are located approximately 200, 330, and 420 feet, respectively, from the river. These three monitoring wells have 10-foot length screens which were installed at depths ranging from 3 to 14 feet bls. The response of groundwater to tidal fluctuation at monitoring well MPT-23-MW05S is muted with variations of amplitude of less than 0.1 feet and a time lag 6.0 to 7.5 hours relative to tidal fluctuations. There was no apparent response by groundwater to diurnal tidal fluctuations at the location of monitoring wells MPT-44-MW03S and MPT-45-MW02S.

Figure 3-4 shows the response of groundwater to tidal fluctuations of the St. Johns River in five monitoring wells: MPT-14-MW01S, MPT-14-MW05S, MPT-14-MW06S, MPT-14-MW10S, and MPT-14-MW11S, which are located at the Fleet Training Center SWMUs. These wells are located approximately 230, 290, 200, 500, and 625 feet, respectively, from the river. These five monitoring wells have 10-foot length screens, which were installed at depths ranging from 2.5 to 12.5 feet bls. Strong responses of groundwater to tidal fluctuation were observed at monitoring wells MPT-14-MW01S and MPT-14-MW05S; amplitudes of 0.3 and 0.25 feet, respectively. The strongest response was observed at the location of well MPT-14-MW06S at an amplitude of 0.6 foot. A time lag of approximately 10 to 12 hours relative to the tidal fluctuation was observed for the three monitoring wells. There was no apparent response by groundwater to diurnal tidal fluctuation at the locations of monitoring wells MPT-44-MW03S and MPT-45-MW02S.

Based on the tidal influence study, groundwater in the water table zone at and north of the northern boundaries of the Shipyard Area and Fleet Training Center SWMUs may be affected by tidal fluctuations. It is likely that the effect in the

water table zone of the surficial aquifer is limited to areas located less than 330 feet from the shoreline of the St. Johns River at the Shipyard Area, and 400 feet at the Fleet Training Center (based on half of the distance between MPT-14-MW05S and MPT-14-MW10S).

3.2.2 Potentiometric Surface A discussion of the potentiometric surface on a stationwide basis was summarized in Subsection 3.2.5 in the NAVSTA Mayport GIR (ABB-ES, 1995a). Monitoring of water levels was conducted on a monthly basis during 1993 and most of 1994. The 1993 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 III 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 III Area.

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). The mound associated with Group III is assumed to be oriented north/south, with discharge zones in the Group III area roughly coincident with the Mayport Turning Basin, St. Johns River, and the Atlantic Ocean located to the west, north, and east, respectively. Despite localized influences on groundwater flow, the overall flow direction of the surficial aquifer at Group III SWMUs is north toward the Mayport Turning Basin Channel and St. Johns River with minor components to the east and west (Plate 1). It should also be noted that the retaining walls for Mayport Turning Basin may limit the amount of water that could discharge to the particular site area.

The Group III SWMUs are divided into three subgroups for the following discussion of the potentiometric surface. These groupings are SWMUs 1, 23, 24, 44, and 45, the Shipyard Area; SWMU 17, the Carbonaceous Fuel Boiler; and SWMUs 14 and 18, the Fleet Training Center Area. The rationale for grouping the SWMUs was the separation of the Shipyard Area from SWMU 17 by approximately 2,000 feet, and 1,800 feet separation between the Shipyard Area and the Fleet Training Center Area. The hydrogeologic setting for these three areas are dissimilar relative to the position of the groundwater mound.

The potentiometric surface of the surficial aquifer in the vicinity of Group III SWMUs has been estimated from data collected on July 19, 1995 (Table 3-5). Below is an assessment of groundwater directions for each of the three Group III SWMU subgroups: the Shipyard Area, the Fleet Training Center Area, and the Carbonaceous Fuel Boiler.

The Shipyard Area (SWMUs 1, 23, 24, 25, 44, and 45). The SWMUs comprising the Shipyard Area are located due south of the Mayport Turning Basin entrance channel. The direction of groundwater flow is generally to the north, toward the Mayport Turning Basin entrance channel (Plate 1). The hydraulic position of monitoring wells in relation to the Shipyard Area SWMUs are provided in Table 3-6. Tidal influence of the water table zone of the surficial aquifer was observed to occur in an area north of the Shipyard Area SWMUs, approximately 330

Table 3-5
Summary of Group III Water-Level Data for July 19, 1995

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

Wells and Piezometers	Elev. of TOC (MSL)	Time (local)	Measured depth below TOC	Elev. (MSL)	Wells and Piezometers	Elev. of TOC (MSL)	Time (local)	Measured Depth below TOC	Elev. (MSL)
MPT-B-MW01S[1]	7.19	13:31	5.44	1.75	MPT-14-MW05S	7.42	14:03	5.12	2.30
MPT-B-MW01I[1]	7.19	13:29	4.89	2.13	MPT-14-MW06S	5.97	9:27	3.34	2.36
MPT-B-MW01D[1]	7.50	13:28	5.34	2.16	MPT-14-MW07S	5.96	14:16	3.06	2.90
MPT-BE-MW01S	9.38	10:33	4.38	5.0	MPT-14-MW08S	6.58	14:05	3.75	2.83
MPT-BE-MW02S	9.49	10:15	4.5	4.99	MPT-14-MW09S	6.38	14:21	3.12	3.26
MPT-BE-MW03S	10.35	11:35	5.18	5.17	MPT-14-MW10S	5.77	13:57	2.50	3.20
MPT-BE-MW04S	9.98	11:08	4.86	5.12	MPT-14-MW11S	6.88	14:25	3.26	3.62
MPT-BE-MW05S	9.27	10:45	4.24	5.03	MPT-14-MW12S	9.92	10:05	5.88	4.04
MPT-BE-MW06S	10.98	10:50	5.94	5.04	MPT-14-MW13S	5.68	14:14	2.79	2.89
MPT-BE-MW07S	9.31	10:55	4.24	5.07	MPT-14-MW14S	6.55	14:00	3.82	2.73
MPT-BE-MW08I	9.73	11:00	4.78	4.95	MPT-14-P01S	6.50	9:14	4.20	2.30
MPT-BE-MW09S	9.8	11:20	5.04	4.76	MPT-14-P02S	5.71	9:47	3.73	1.98
MPT-BQ-MW01S	10.47	13:30	NA	NA	MPT-17-MW01S	8.60	13:08	4.95	3.65
MPT-BQ-MW02S	10.18	12:30	5.72	4.46	MPT-17-MW02S	8.34	13:10	4.67	3.67
MPT-BQ-MW03S	8.63	13:20	4.2	4.43	MPT-17-MW03S	8.17	13:15	4.44	3.73
MPT-BQ-MW04S	11.95	13:15	7.6	4.35	MPT-17-P01S	7.42	10:00	3.78	3.64
MPT-BQ-MW05S	10.58	13:25	6.2	4.38	MPT-17-P02S	6.82	9:55	3.42	3.40
MPT-BQ-MW06S	12.27	12:50	7.9	4.37	MPT-18-MW01S	7.42	10:00	3.78	3.64
MPT-BQ-MW07S	12.07	13:00	NA	NA	MPT-18-MW02S	6.82	9:55	3.42	3.40
MPT-CU-MW01S	11.28	16:33	4.76	6.52	MPT-18-MW03S	7.48	9.53	4.30	3.19
MPT-CU-MW02S	11.28	16:29	4.74	6.54	MPT-20-MW01S	13.49	12:51	4.20	9.29
MPT-CU-MW03S	11.29	16:37	4.89	6.4	MPT-20-MW02S	13.68	11:55	4.23	9.45
MPT-CU-MW04S	11.54	16:34	5.09	6.45	MPT-20-MW03S	12.01	12:33	4.01	8.00
MPT-CU-MW05S	11.71	16:12	5.29	6.42	MPT-21-MW01S	13.21	12:46	3.77	9.44
MPT-CU-MW06S	11.05	16:43	4.77	6.28	MPT-21-MW02S	12.79	12:59	3.47	9.23
MPT-CU-MW07S	11.33	16:31	4.85	6.48	MPT-21-MW03S	12.36	13:02	2.95	9.41
MPT-CU-MW08I	11.37	16:36	4.97	6.4	MPT-23-MW01S	13.59	11:24	7.88	5.71
MPT-TC-MW01S	9.56	12:16	4.72	4.84	MPT-23-MW02S	12.86	11:20	6.80	6.06
MPT-TC-MW01D	9.60	NM	NA	NA	MPT-23-MW03S	12.72	11:18	6.75	5.97

See notes at end of table.

Table 3-5 (Continued)
Summary of Group III Water Level Data for July 19, 1995

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

Wells and Piezometers	Elev. of TOC (MSL)	Time (local)	Measured depth below TOC	Elev. (MSL)	Wells and Piezometers	Elev. of TOC (MSL)	Time (local)	Measured Depth below TOC	Elev. (MSL)
MPT-TC-MW02S	10.89	12:14	6.06	4.83	MPT-23-MW04S	9.72	8:22	6.94	2.78
MPT-TC-MW03S	8.68	12:06	3.88	4.80	MPT-23-MW05S	7.42	8:29	4.30	3.12
MPT-TC-MW04S	8.78	12:40	3.78	5.00	MPT-23-MW05I	7.45	8:31	5.38	2.07
MPT-TC-MW05S	8.73	12:38	3.77	4.96	MPT-23-MW05D	7.47	8:33	5.87	1.60
MPT-TC-MW06S	9.84	12:36	3.75	6.09	MPT-23-MW06S	12.78	11:10	8.32	4.46
MPT-1-MW01S	16.96	11:38	10.99	5.97	MPT-23-MW07S	13.65	15:45	8.05	5.60
MPT-1-MW01I	14.09	11:37	8.41	5.68	MPT-24-MW01S	12.51	11:44	5.73	6.78
MPT-1-MW01D	14.11	11:36	9.15	4.96	MPT-44-MW01S	11.78	10:52	7.14	4.64
MPT-1-MW02S	16.89	11:15	11.44	5.45	MPT-44-MW01I	11.69	10:51	7.95	3.74
MPT-1-MW03S	8.47	10:57	10.33	2.32	MPT-44-MW01D	11.73	10:50	8.34	3.39
MPT-1-P01S[2]	7.11	8:41	3.98	3.13	MPT-44-MW02S	13.79	10:39	8.86	4.93
MPT-1-P02S	11.77	10:19	7.50	4.27	MPT-44-MW03S	10.87	11:01	6.78	4.09
MPT-1-P03S	11.04	10.32	7.68	3.36	MPT-45-MW01I	7.24	8:44	5.40	1.84
MPT-14-MW01S	7.41	9:00	5.80	1.76	MPT-45-MW01D	7.40	8:45	5.94	1.46
MPT-14-MW02S	8.47	8:53	6.32	2.32	MPT-45-MW02S	9.12	11:04	5.05	4.07
MPT-14-MW03S	6.17	14:37	3.52	2.65	MPT-52-MW01S	7.48	15:03	3.68	3.80
MPT-14-MW04S	6.37	8:57	3.91	2.46					

[1] MPT-B-MW01S, MPT-B-MW01I and MPT-B-MW01D are shown on Plate 1 of the NAVSTA Mayport General Information Report (ABB-ES, July 1995a).
[2] MPT-1-P01S is located in a cluster with MPT-45-MW01I and MPT-45-MW01D.

Notes: RCRA = Resource Conservation and Recovery Act.
SWMUs = solid waste management units.
TOC = top of casing as datum.
Elev. = elevation.
B = Background groundwater monitoring wells.
MSL = mean sea level.
BE = Bachelor Enlisted Quarters, Building 1586.
BQ = Bachelor Enlisted Quarters, Building 1587.
NA = No access at the time of the survey.
CU = Credit Union, Building 460.
TC = Naval Supply Center, Building 191.
NM = not measured.

Table 3-6
Hydraulic Position of Monitoring Wells and Piezometers Relative to SWMUs 1, 23, 24, 25, 44, and 45

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

SWMU Number	Monitoring Well No.	Hydraulic Position	Diameter (inches)	Total Depth (feet)	Screened Interval (feet bls)
1	MPT-1-MW01S	U of 1	2	15	5 to 15
1	MPT-1-MW01I	U of 1	2	35.5	30 to 35
1	MPT-1-MW01D	U of 1	4	72	60 to 70
23	MPT-23-MW01S	U of 23 and D of 24	2	15	5 to 15
23	MPT-23-MW02S	U of 23 and D of 25	2	15	5 to 15
23	MPT-23-MW03S	U of 23 and D of 25	2	14	4 to 14
23	MPT-23-MW04S	D of 23	2	15	5 to 15
23	MPT-23-MW05S	D of 1, 23 and 44	2	13	3 to 13
23	MPT-23-MW05I	D of 1, 23 and 44	2	44	39 to 44
23	MPT-23-MW05D	D of 1, 23 and 44	4	72	60 to 70
23	MPT-23-MW06S	D of 23	2	15	5 to 15
23	MPT-23-MW07S	U of 23 and D of 24	2	15	5 to 15
24	MPT-24-MW01S	D of 24	2	15	5 to 15
44	MPT-44-MW01S	D of 44	2	15	5 to 15
44	MPT-44-MW01I	D of 44	2	38	32 to 37
44	MPT-44-MW01D	D of 44	4	70	58 to 68
44	MPT-44-MW02S	U of 44 and D of 1	2	15	5 to 15
44	MPT-44-MW03S	D of 44 and D of 1	2	14	4 to 14
45	MPT-45-P01S	D of 45	2	10	5 to 10
45	MPT-45-MW01I	D of 45	2	36	30 to 35
45	MPT-45-MW01D	D of 45	4	72	60 to 70
45	MPT-45-MW02S	S of 45 and D of 44	2	14	4 to 14

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

feet or less from the shoreline. It should be noted that except in this area along the St. Johns River, tidal influence on the shallow aquifer is not likely a direct influence on the groundwater flow direction(s) at the Shipyard Area SWMUs.

The Fleet Training Center Area (SWMUs 14 and 18). The SWMUs comprising the Fleet Training Center Area are located due south of the St. Johns River, approximately 1,000 feet west of the Atlantic Ocean in the northeastern part of NAVSTA Mayport. The direction of groundwater flow is generally to the north, toward the St. Johns River (Plate 1). The hydraulic position of the monitoring wells in relation to the SWMUs are provided in Table 3-7. Tidal influence of the water table zone of the surficial aquifer was observed to occur in an area north of the Fleet Training Center Area SWMUs, approximately 400 feet or less from the shoreline. It should be noted that except in this area along the St. Johns River, tidal influence on the shallow aquifer is not likely a direct influence on the groundwater flow direction(s) at the Fleet Training Center Area SWMUs.

The Carbonaceous Fuel Boiler. The Carbonaceous Fuel Boiler plant is located on the southwestern side of Mayport Turning Basin (Plate 1). This location is not directly affected by the groundwater mound that dominates flow patterns in the rest of the Group III Area. Groundwater flow in the area near SWMU 17 appears to be to the northeast toward Mayport Turning Basin. Retaining walls along Mayport Turning Basin were constructed in two episodes: The original Mayport Turning Basin retaining wall was constructed of double-wall, steel-sheet piles with the interior filled with concrete. The existing Mayport Turning Basin retaining walls were constructed when the berthing piers were extended approximately 40 feet into the basin. The construction consisted of steel pile cofferdam cells with depths approximately 48 feet beneath mean sea level. The cofferdam cells were filled with material dredged from Mayport Turning Basin. Therefore, groundwater may also be diverted around the retaining walls, flow beneath the wall, or through stormwater outfalls. The hydraulic positions of the monitoring wells in relation to the SWMU 17 are provided in Table 3-8. Tidal influence of the shallow aquifer in the vicinity of the Carbonaceous Fuel Boiler plant is likely limited due to the presence of the Mayport Turning Basin retaining walls (ABB-ES, 1993).

Water level data were also used to assess horizontal and vertical hydraulic gradients. Stationwide data, which can be used for comparison with the Group III Data, are summarized in Tables 3-7 and 3-8 in the NAVSTA Mayport GIR (ABB-ES, 1995a). Horizontal hydraulic gradients were calculated using water levels collected from monitoring wells on July 19,1995 (Table 3-9). Horizontal hydraulic gradients ranged from approximately 0.002 to 0.006 foot per foot (ft/ft) in the vicinity of the Shipyard Area, approximately 0.0014 ft/ft in the vicinity of SWMU 17, and from approximately 0.0008 to 0.004 ft/ft in the vicinity of the Fleet Training Center Area.

The vertical hydraulic gradient at Group III SWMUs was calculated using data from five monitoring well clusters which include monitoring well pairs MPT-1-MW01S, MPT-1-MW01I and MPT-1-MW01D; MPT-23-MW05S, MPT-23-MW05I and MPT-23-MW05D; MPT-44-MW01S, MPT-44-MW01I and MPT-44-MW01D; MPT-1-P01S, MPT-45-MW01I and MPT-45-MW01D; and MPT-B-MW01S, MPT-B-MW01I and MPT-B-MW01D, the background wells, shown on Plate 1 of the NAVSTA Mayport GIR (ABB-ES, 1995a). The vertical gradient was calculated using groundwater level data collected on July 19, 1995, from monitoring wells typically screened from 2 to 12 ft bls (shallow), 25 to 30 ft

Table 3-7
Hydraulic Position of Monitoring Wells and Piezometers Relative to SWMUs 14 and 18

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

SWMU Number	Monitoring Well No.	Hydraulic Position	Diameter (inches)	Total Depth (feet)	Screened Interval (feet bls)
14	MPT-14-MW01S	D of 14	2	13	3 to 13
14	MPT-14-MW02S	D of 14	2	13	3 to 13
14	MPT-14-MW03S	D of 14	2	12.5	2.5 to 12.5
14	MPT-14-MW04S	D of 14	2	12.5	2.5 to 12.5
14	MPT-14-MW05S	D of 14	2	12.5	2.5 to 12.5
14	MPT-14-MW06S	D of 14	2	12.5	2.5 to 12.5
14	MPT-14-MW07S	D of 14	2	12.5	2.5 to 12.5
14	MPT-14-MW08S	D of 14	2	12.5	2.5 to 12.5
14	MPT-14-MW09S	D of 14	2	12.5	2.5 to 12.5
14	MPT-14-MW10S	D of 14	2	12.5	2.5 to 12.5
14	MPT-14-MW11S	D of 14	2	12.5	2.5 to 12.5
14	MPT-14-MW12S	U of 14	2	12.5	2.5 to 12.5
14	MPT-14-MW13S	D of 14	2	12.5	2.5 to 12.5
14	MPT-14-MW14S	D of 14	2	12.5	2.5 to 12.5
14	MPT-14-P01S	S of 14	2	10	5 to 10
14	MPT-14-P02S	S of 14	2	11	6 to 11
18	MPT-18-MW01S	U of 18	2	12.5	2.5 to 12
18	MPT-18-MW02S	D of 18	2	12.5	2.5 to 12
18	MPT-18-MW03S	D of 18	2	12.5	2.5 to 12

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

Table 3-8
Hydraulic Position of Monitoring Wells and Piezometers Relative to SWMU 17

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

SWMU Number	Monitoring Well No.	Hydraulic Position	Diameter (inches)	Total Depth (feet)	Screened Interval (feet bls)
17	MPT-17-MW01S	U of 17	2	15	3 to 13
17	MPT-17-MW02S	U of 17	2	15.5	3 to 13
17	MPT-17-MW03S	D of 17	4	15	4 to 14
17	MPT-17-P01S	U of 17	2	10	5 to 10
17	MPT-17-P02S	S of 17	2	12	7 to 12

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

Table 3-9
Summary of Horizontal Hydraulic Gradients July 19, 1995

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

Hydraulic Upgradient Location	Water Level[1] (ft MSL)	Hydraulic Downgradient Location	Water Level[1] (ft MSL)	Horizontal Distance[2]	Average Hydraulic Gradient (ft/ft)
Shipyard Area:					
MPT-1-MW01S	5.97	MPT-[illegible]-MW02S	4.93	480	0.002
MPT-23-MW03S	5.97	MPT-1-P03S	3.36	420	0.006
MPT-23-MW06S	4.46	MPT-23-MW05S	3.12	440	0.003
MPT-24-MW01S	6.78	MPT-23-MW06S	4.47	420	0.006
MPT-24-MW01S	6.78	MPT-1-MW02S	5.45	380	0.004
MPT-44-MW02S	4.93	MPT-1-P01S	3.13	560	0.003
Carbonaceous Fuel Boiler Area:					
MPT-17-MW01S	3.65	MPT-17-MW03S	3.37	200	0.0014
MPT-17-MW02S	3.67	MPT-17-MW03S	3.37	220	0.0014
Fleet Training Center Area:					
MPT-14-MW09S	3.26	MPT-14-MW03S	2.65	160	0.004
MPT-14-MW10S	3.20	MPT-14-MW05S	2.30	220	0.004
MPT-14-MW11S	3.62	MPT-14-MW04S	2.46	350	0.003
MPT-14-MW12S	4.04	MPT-14-MW10S	3.20	500	0.002
MPT-18-MW01S	3.64	MPT-18-MW03S	3.19	550	0.0008

[1] Potentiometric water table elevation July 19, 1995.
[2] Distance along groundwater flow lines between monitoring wells and/or piezometers in feet.

Notes: RCRA = Resource Conservation and Recovery Act.
SWMUs = solid waste management units.
ft MSL = feet mean sea level, National Geodetic Vertical Datum of 1929.
ft/ft = foot per foot.

bls (intermediate), and 60 to 70 ft bls (deep). Vertical gradients were determined for the shallow to intermediate zone and for the intermediate to deep zone. Four of the five well clusters are located in the vicinity of the Shipyard Area. The fifth monitoring well cluster is composed of the background wells located 3,100 feet to the south of the Shipyard Area on the west side of Lake Wonderwood.

The shallow to intermediate and intermediate to deep zones have calculated vertical hydraulic gradients of the same order of magnitude typically ranging from approximately 0.01 to 0.05 ft/ft (Table 3-10). 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 in the Group III Area.

The background well cluster exhibited an upward hydraulic gradient. The shallow to intermediate vertical hydraulic gradient is approximately -0.015 ft/ft and the intermediate to deep gradient is approximately -0.0009 ft/ft. The background well cluster is located near a tidal channel that connects Lake Wonderwood to Sherman Creek. The apparent upward hydraulic gradient is likely the result of tidal influence on the deeper zone of the surficial aquifer.

An evaluation of the horizontal and vertical groundwater hydraulic gradients and velocities at the Group III SWMUs suggest that contaminants, if present, may migrate both horizontally and vertically in the shallow surficial aquifer.

3.2.3 **Hydraulic Conductivity** Hydraulic conductivity tests were conducted at locations across NAVSTA Mayport. Testing within Group III SWMUs consisted of *in situ* slug tests of 47 monitoring well or piezometer locations to characterize radial hydraulic conductivity and laboratory testing of two undisturbed soil samples to characterize vertical hydraulic conductivity. Supporting documentation is included in Appendix C of this report.

Radial hydraulic conductivity values were estimated using the results from rising-head slug tests. A maximum of three or a minimum of two tests were conducted on each monitoring well to determine a statistical average value for radial conductivity in the vicinity of each well. All, but two of the test locations (intermediate aquifer zone monitoring well MPT-23-MW01I and deep aquifer zone monitoring well MPT-23-MW05D in Group III), were from wells or piezometers screened across the water table; therefore, most of the conductivity estimates are for the water table zone of the surficial aquifer. The values for radial hydraulic conductivity are summarized in Table 3-11 for the water table zone of the surficial aquifer and Table 3-12 for the intermediate and deep aquifer zone of the surficial aquifer. Previously obtained results for radial hydraulic conductivity for SWMU Groups I, II and III are summarized in Table 3-2 of the NAVSTA Mayport GIR (ABB-ES, 1995a). The data presented for Group III in the NAVSTA Mayport GIR have been combined with the data presented in Table 3-11.

Overall, the average values for radial hydraulic conductivity at the Group III Area range from approximately 1.2 to 72.2 feet per day (ft/d). The wide range of conductivity values is likely a reflection of the heterogeneity of the fine- to coarse-grained dredge materials that comprise the shallow aquifer (see Section 3.1 of this report). Below is a summary of radial hydraulic conductivity values at each of the Group III SWMU subgroups.

Table 3-10
Summary of Vertical Hydraulic Gradients July 19, 1995

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

Hydraulic Upgradient Location	Water Level[1] (ft MSL)	Hydraulic Downgradient Location	Water Level[1] (ft MSL)	Vertical Distance[2]	Average Hydraulic Gradient (ft/ft)[3]
Shipyards Area:					
MPT-1-MW01S	5.97	MPT-1-MW01I	5.68	22.5	0.013
MPT-1-MW01I	5.68	MPT-1-MW01D	4.96	32.5	0.02
MPT-23-MW05S	3.12	MPT-23-MW05I	2.07	33.5	0.03
MPT-23-MW05I	2.07	MPT-23-MW05D	1.60	23.5	0.02
MPT-44-MW01S	4.64	MPT-44-MW01I	3.74	24.5	0.04
MPT-44-MW01I	3.74	MPT-44-MW01D	3.39	28.5	0.01
MPT-1-P01S	3.13	MPT-45-MW01I	1.84	25	0.05
MPT-45-MW01I	1.84	MPT-45-MW01D	1.46	32.5	0.01
Background Wells:[4]					
MPT-B-MW01S	1.75	MPT-B-MW01I	2.13	25.5	-0.015
MPT-B-MW01I	2.13	MPT-B-MW01D	2.16	31.5	-0.0009

[1] Potentiometric water table elevation July 19, 1995.
[2] Distance between midpoint of screened interval of monitoring wells in feet.
[3] Negative hydraulic gradient values indicate an upward flow of groundwater; positive hydraulic gradient values indicate a downward flow of groundwater.
[4] MPT-B-MW01S, MPT-B-MW01I and MPT-B-MW01D are shown on Plate 1 of the NAVSTA Mayport General Information Report (ABB-ES, July 1995a).

Notes: RCRA = Resource Conservation and Recovery Act.
SWMUs = solid waste management units.
ft MSL = feet mean sea level, National Geodetic Vertical Datum of 1929.
ft/ft = foot per foot.

Table 3-11
***In Situ* Radial Hydraulic Conductivity (K)**
in Shallow Monitoring Wells

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

SWMU No.	Location	Screened Interval (feet bls)	No. of Test	Range of K (ft/d)	Average K (ft/d)
Shipyard Area					
1	MPT-1-P01S	5 to 10	5	14.9 to 236.3	46
1	MPT-1-P02S	10 to 15	5	21.3 to 27.5	24.5
1	MPT-1-P03S	10 to 15	5	15.2 to 19.1	16.6
23	MPT-23-MW01S	5 to 15	3	1.5 - 2.2	1.8
23	MPT-23-MW02S	5 to 15	3	0.98 - 1.6	1.2
23	MPT-23-MW03S	4 to 14	3	1.68 - 2.2	1.9
23	MPT-23-MW04S	5 to 15	3	5.2 - 5.6	5.4
23	MPT-23-MW05S	3 to 13	3	7.81 - 9.85	9.0
23	MPT-23-MW06S	5 to 15	3	2.3 - 2.58	2.5
23	MPT-23-MW07S	5 to 15	3	1.17 - 1.66	1.4
24	MPT-24-MW01S	5 to 15	3	1.0 - 1.9	1.4
44	MPT-44-MW01S	5 to 15	3	3.4 - 3.6	3.5
44	MPT-44-MW02S	5 to 15	3	1.0 - 1.4	1.2
44	MPT-44-MW03S	4 to 14	3	4.0 - 6.0	4.8
45	MPT-45-MW02S	4 to 14	3	7.69 - 8.91	8.3
			Average K for the Shipyard Area		8.6
Fleet Training Center					
14	MPT-14-P01S	5 to 10	4	10.9 to 13.5	11.8
14	MPT-14-P02S	6 to 11	4	17.5 to 28.1	22.1
14	MPT-14-MW03S	2.5 to 12.5	3	10.7 to 14.5	12.7
14	MPT-14-MW04S	2.5 to 12.5	3	7.4 to 11.3	9.4
14	MPT-14-MW05S	2.5 to 12.5	3	10.5 - 12.0	11.1
14	MPT-14-MW06S	2.5 to 12.5	3	10.7 to 11.7	11.3
14	MPT-14-MW07S	2.5 to 12.5	3	7.5 - 8.7	8.2
14	MPT-14-MW08S	2.5 to 12.5	3	8.8 - 13.2	11.0
14	MPT-14-MW09S	2.5 to 12.5	3	7.7 - 9.2	8.2
14	MPT-14-MW10S	2.5 to 12.5	3	17.8 - 19.0	18.5
14	MPT-14-MW11S	2.5 to 12.5	3	17.3 - 23.5	21.4
14	MPT-14-MW12S	3 to 13	3	13.3 - 15.5	14.0
14	MPT-14-MW13S	2.5 to 12.5	3	8.2 - 9.6	8.7
14	MPT-14-MW14S	2.5 to 12.5	3	10.4 - 17.5	12.8

See notes at end of Table.

Table 3-11 (Continued)
***In Situ* Radial Hydraulic Conductivity (K)**
in Shallow Monitoring Wells

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

SWMU No.	Location	Screened Interval (feet bls)	No. of Test	Range of K (ft/d)	Average K (ft/d)
Fleet Training Center (Continued)					
18	MPT-18-MW13S	2.5 to 12.5	3	10.9 - 16.2	10.2
18	MPT-18-MW02S	2.5 to 12.5	3	8.8 - 9.7	7.2
18	MPT-18-MW03S	2.5 to 12.5	3	15.6 - 17.5	9.9
		Average K for the Fleet Training Center Area			12.2
Carbonaceous Fuel Boiler					
17	MPT-17-MW01S	3 to 13	3	9.3 - 12.0	9.3
17	MPT-17-MW02S	3 to 13	3	6.6 - 8.14	10.2
17	MPT-17-MW03S	3 to 13	3	7.9 - 12.3	7.2
17	MPT-17-P01S	5 to 10	4	62.1 to 82.0	72.2
17	MPT-17-P02S	7 to 12	6	17.7 to 26.7	22.8
		Average K for the Carbonaceous Fuel Boiler Area			24.3

Notes: RCRA = Resource Conservation and Recovery Act.
SWMUs = solid waste management units.
bls = below land surface.
Range of K = range of radial hydraulic conductivity values obtained from each test.
ft/d = foot per day.
Average K = arithmetic mean of radial hydraulic conductivity values.

Table 3-12
***In Situ* Radial Hydraulic Conductivity (K) in Intermediate and Deep Monitoring Wells**

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

SWMU No.	Location	Screened Interval (feet bls)	No. of Test	Range of K (ft/d)	Average K (ft/d)
Shipyard Area	MPT-23-MW05I	39 - 44	2	1.25 - 1.35	1.3
	MPT-23-MW05D	60 - 70	2	0.54 - 0.68	0.6

Notes: RCRA = Resource Conservation and Recovery Act.
SWMUs = solid waste management units.
bls = below land surface.
Range of K = range of radial hydraulic conductivity values obtained from each test.
ft/d = foot per day.
Average K = arithmetic mean of radial hydraulic conductivity values.

Shipyard Area (SWMUs 1, 23, 24, 25, 44, and 45). Radial hydraulic conductivity values in the vicinity of the Jacksonville Shipyard Area ranged from approximately 1.2 to 46 ft/d, with an average of 8.6 ft/d. The average value for the monitoring well screened in the intermediate aquifer zone was approximately 1.3 ft/d and for the deep aquifer zone was approximately 0.6 ft/d.

Fleet Training Center (SWMUs 14 and 18). Radial hydraulic conductivity values in the vicinity of the Fleet Training Center ranged from approximately 7.2 to 22.1 ft/d with an average of approximately 12.2 ft/d. No monitoring wells have been screened in the intermediate or deep aquifer zones at the Fleet Training Center area.

Carbonaceous Fuel Boiler SWMU 17. Radial hydraulic conductivity values in the vicinity of the Carbonaceous Fuel Boiler Plant ranged from approximately 7.2 to 72.2 ft/d, with an average of 24.3 ft/d. No monitoring wells have been screened in the intermediate or deep aquifer zones at the Carbonaceous Fuel Boiler area.

Laboratory permeability test to determined vertical hydraulic conductivity values were conducted in accordance with test method American Society for Testing and Materials (ASTM)-D5084. Two soil samples, collected from Group III soil borings drilled for the installation of monitoring wells, were analyzed by this procedure. The soil sample collected from monitoring well location MPT-1-MW01I at a sample interval from 33 to 35 feet bls is a silty fine sand and the soil sample collected from monitoring well location MPT-44-MW01D at 44 to 46 ft bls is very sandy silt. Each sample was selected to represent a zone of low permeability. The results of the analyses are provided in Table 3-13. The average of the two values was calculated to be 0.34 ft/d. Based on this limited and biased data, the vertical hydraulic conductivity has the potential of being several orders of magnitude less than the horizontal radial hydraulic conductivity values where fine-grained materials predominate.

Table 3-13
Laboratory Hydraulic Conductivity (K) at NAVSTA Mayport

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

Location	Sample Depth (feet bls)	Laboratory Vertical Hydraulic Conductivity (cm/sec)	Laboratory Vertical Hydraulic Conductivity (ft/d)
MPT-1-MW01I	33 - 35	0.00000008	0.00023
MPT-44-MW01D	44 - 46	0.00024	0.68

Notes: NAVSTA = Naval Station.
RCRA = Resource Conservation and Recovery Act.
SWMUs = solid waste management units.
bls = below land surface.
cm/sec = centimeters per second.
ft/d = foot per day.

3.2.4 Groundwater Flow Velocity Groundwater flow velocities 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.

Horizontal and vertical groundwater flow velocities were calculated for the surficial aquifer beneath the Group III SWMUs using the groundwater level data obtained on July 19, 1995, the average values for radial hydraulic conductivity in Table 3-11 and an effective porosity of 0.35. The groundwater flow velocities were calculated for the three Group III Subgroups: the Shipyard Area, the Fleet Training Center Area, and the Carbonaceous Fuel Boiler (Table 3-14).

Shipyard Area (SWMUs 1, 23, 24, 25, 44, and 45). Horizontal groundwater flow velocities in the surficial aquifer beneath the Shipyard Area SWMUs are estimated to range from approximately 0.05 ft/d (18 feet per year [ft/yr]) to 0.15 ft/d (54 ft/yr).

Fleet Training Center (SWMUs 14 and 18). Horizontal groundwater flow velocities in the surficial aquifer beneath the Fleet Training Center Area, SWMUs 14 and 18 are estimated to range from approximately 0.03 ft/d (10 ft/yr) to 0.14 ft/d (51 ft/yr).

The Carbonaceous Fuel Boiler (SWMu 17). The horizontal groundwater flow velocity in the surficial aquifer beneath the Carbonaceous Fuel Boiler Area is estimated to be approximately 0.1 ft/d (35 ft/yr).

The horizontal groundwater flow rates for Group III are within the range of values for the Group I and II SWMUs presented in Table 3-9 in the NAVSTA Mayport GIR, (ABB-ES, 1995a). The values presented for Group III in this report are lower than the single value presented in the NAVSTA Mayport GIR. The values for horizontal groundwater flow velocities presented in this report are considered to be more representative of the hydrogeologic setting at Group III SWMUs than the value previously presented in the NAVSTA Mayport GIR.

Vertical linear flow velocities were calculated from data collected from a single nested well cluster, MPT-23-MW05S, MPT-23-MW05I and MPT-23-MW05D located on the north side of the Shipyard Area SWMUs. Screen depths for the monitoring wells in this cluster are 3 to 13 feet bls for the shallow well, 39 to 44 feet bls for the intermediate well, and 60 to 70 feet bls for the deep well. The estimated vertical flow rate at the Shipyard Area was 0.11 ft/d or approximately 41 ft/yr from the shallow surficial aquifer to the intermediate zone and 0.03 ft/d or approximately 13 ft/yr from the intermediate zone to the deep zone of the surficial aquifer (Table 3-15) (compare Table 3-10, NAVSTA Mayport GIR). Based on this limited data, values for the vertical linear groundwater flow rate are likely similar to the horizontal linear groundwater flow rates in the Shipyard Area. However, the higher transmissivity of deep portions of the surficial aquifer that was suggested by the tidal influence study data is not confirmed because of the limited number of intermediate and deep wells installed at Group III SWMUs.

Assuming a value of 36 ft/yr (Table 3-14) for the horizontal linear groundwater velocity and no retardation of contaminants, the time for contaminants to migrate from the Shipyard Area, which ranges from 200 to 1,050 feet from the St. Johns River, would be approximately 6 to 29 years.

Table 3-14
Summary of Horizontal Groundwater Flow Rates, Group III SWMUs

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

Group III Area	Hydraulic Upgradient Well	Hydraulic Downgradient Well	A Estimated Hydraulic Conductivity (K, ft/d)	B Average Hydraulic Gradient (I, ft/ft)	C Estimated Effective Porosity (N_e, %)	D Estimated Linear Groundwater Flow Rate (V_D, ft/d)	E Estimated Linear Groundwater Flow Rate (ft/yr)
Shipyard Area:							
	MPT-1-MW01S	MPT-44-MW02S	8.6	0.002	0.35	0.05	18
	MPT-23-MW03S	MPT-1-P03S	8.6	0.006	0.35	0.15	54
	MPT-23-MW06S	MPT-23-MW05S	8.6	0.003	0.35	0.07	27
	MPT-24-MW01S	MPT-23-MW06S	8.6	0.006	0.35	0.15	54
	MPT-24-MW01S	MPT-1-MW02S	8.6	0.004	0.35	0.10	36
	MPT-44-MW02S	MPT-1-P01S	8.6	0.003	0.35	0.07	27
		Average Estimated Linear Groundwater Flow Rate Shipyard Area					36
Fleet Training Center:							
	MPT-14-MW09S	MPT-14-MW03S	12.2	0.004	0.35	0.14	51
	MPT-14-MW10S	MPT-14-MW05S	12.2	0.004	0.35	0.14	51
	MPT-14-MW11S	MPT-14-MW04S	12.2	0.003	0.35	0.1	38
	MPT-14-MW12S	MPT-14-MW10S	12.2	0.002	0.35	0.07	25
	MPT-18-MW01S	MPT-18-MW03S	12.2	0.0008	0.35	0.03	10
		Average Estimated Linear Groundwater Flow Rate Fleet Training Center Area					35
Carbonaceous Fuel Boiler:							
	MPT-17-MW01S	MPT-17-MW03S	24.3	0.0014	0.35	0.1	35
	MPT-17-MW02S	MPT-17-MW03S	24.3	0.0014	0.35	0.1	35
		Average Estimated Linear Groundwater Flow Rate Carbonaceous Fuel Boiler					35

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
Calculations = columns $(A \times B)/C = D \times 365 = E$.
K = radial hydraulic conductivity.
ft/d = feet per day.
I = hydraulic gradient.
ft/ft = foot per foot.
N_e = effective porosity.
% = percent.
V_D = linear groundwater velocity (V_D/N_e); (V_D = Hydraulic Conductivity (K) multiplied by the hydraulic gradient (i)). N_e = effective porosity.
ft/yr = feet per year.

Table 3-15
Summary of Vertical Groundwater Flow Rates, Group III SWMUs

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

Group III Area	Hydraulic Upgradient Well	Hydraulic Downgradient Well	A Estimated Hydraulic Conductivity (K, ft/d)	B Average Hydraulic Gradient (I, ft/ft)	C Estimated Effective Porosity (N_e, %)	D Estimated Linear Groundwater Flow Rate (V_D, ft/d)	E Estimated Linear Groundwater Flow Rate (ft/yr)
Shipyard Area	MPT-23-MW05S	MPT-23-MW05I	1.3	0.03	0.35	0.11	41
	MPT-23-MW05I	MPT-23-MW05D	0.61	0.02	0.35	0.03	13

Notes: Calculations = columns $(A \times B)/C = D \times 365 = E$.
SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
K = radial hydraulic conductivity.
ft/d = feet per day.
I = hydraulic gradient.
ft/ft = foot per foot.
N_e = effective porosity.
% = percent.
V_D = linear groundwater velocity, V_D/N_e; (V_D = KI).
ft/yr = feet per year.

Assuming a value of 35 ft/yr (Table 3-14) for the horizontal linear groundwater velocity and no retardation of contaminants, the time of travel for contaminants from SWMU 14 to the St. Johns River (approximately 300 feet) would be 9 years, and SWMU 18 to the St. Johns River (approximately 550 feet) would be 16 years.

Assuming a value of 35 ft/yr (Table 3-14) for the horizontal linear groundwater velocity and no retardation of contaminants, the time of travel for contaminants from SWMU 17 to Mayport Turning Basin (approximately 300 feet) is estimated to be approximately 9 years.

3.2.5 Physical Characteristics of Soil Physical characteristics of near surface soil and surficial aquifer material were described in Subsection 3.2.3 of the NAVSTA Mayport GIR (ABB-ES, 1995a). Soil samples from the Group III Area were submitted to a geotechnical laboratory analysis of grain size, moisture content, cation exchange capacity (CEC), pH, total organic carbon (TOC) content, and percent total solids. All results, except grain size analysis data, are summarized in Table 3-16. Grain size analysis data is included in Appendix C of this report.

Ten soil samples were collected for analysis of physical characteristics from eight soil borings that were drilled for the installation of monitoring wells at Group III SWMUs. Five samples were collected from three locations at the Shipyard Area (SWMUs 1, 23, 24, 25, 44, and 45), one sample was collected at the Carbonaceous Fuel Boiler Plant Area (SWMU 17), and four samples were collected from the Fleet Training Center (SWMUs 14 and 18).

Grain size distributions for nine soil samples from various locations across NAVSTA Mayport are reported in Subsection 3.2.3 of the NAVSTA Mayport GIR (ABB-ES, 1995a). The grain size data were used to determine the uniformity coefficient and to assist in classifying the soil relative to the Unified Soil Classification System using grain-size distribution charts. Based on the particle size distributions, an estimated effective porosity of 0.35 percent was selected for calculating linear groundwater velocities.

Two soil samples from monitoring wells MPT-1-MW01D and MPT-44-MW01D were collected using a Shelby Tube and submitted to a geotechnical laboratory for analysis of grain size. Unlike the nine soil samples previously collected as a cross section of soil found at NAVSTA Mayport and reported in the NAVSTA Mayport GIR, these samples were intentionally biased to represent finer-grained soil in the Group III Area. Sample MPT-1-MW01D is primarily (75.6 percent) fine-grained sand with 24.4 percent silt and clay size material. Sample MPT-44-MW01D is primarily 56.1 percent silt and clay size material and 43.9 percent fine-grained sand. The grain-size distribution graphs are provided in Appendix C of this report.

The pH of the soil samples from the Group III SWMUs were basic, ranging from 8.27 standard units (SUs) to 9.43 SUs, and had low CEC values (<0.8 to 2.5 milli-equivalents per 100 grams), suggesting that inorganic elements with exchangeable cations, if in a mobile phase, would not likely be adsorbed.

Table 3-16
Summary of Physical Soil Characteristics

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

Sample Location	Sample Depth (feet)	Moisture (%)	CEC	pH	TOC	Percent Total Solids
Shipyard Area:						
MPT-1-MW01D	9 to 11	98	1.7	8.34	3,360	72.9
MPT-1-MW01D	46 to 48	75.6	1.6	9.19	1,000	78.5
MPT-1-MW01D	64 to 66	77	2.5	9.43	640	81.9
MPT-44-MW01D	35 to 37	43.9	1.4	8.58	9,220	75.7
MPT-45-MW01S	7 to 9	98.5	0.8	8.94	500	82.4
Carbonaceous Fuel Boiler:						
MPT-17-MW03S	5 to 7	97	0.8	8.33	691	80.6
Fleet Training Center Area:						
MPT-14-MW07S	6 to 8	98	2.2	8.27	226	82.0
MPT-14-MW09S	6 to 8	97	<0.8	8.68	164	81.8
MPT-14-MW14S	6 to 8	–	<0.8	9.13	152	80.5
MPT-18-MW03S	4 to 6	94	1.0	8.98	254	80.1

Notes: RCRA = Resource Conservation and Recovery Act.
SWMU = solid waste management unit.
% = percent.
CEC = cation exchange capacity (milliequivalents per 100 grams).
TOC = Total Organic Carbon milligrams per kilogram.
< = less than.
– = not analyzed.

The value for TOC in soils (0 to 11 feet bls) ranged from 152 to 3,360 milligrams per kilogram (mg/kg), and in the subsurface soil samples (35 to 66 feet bls) ranged from 640 to 9,220 mg/kg. This implies that limited sorption of organic compounds may occur and that some organic carbon is available as a nutrient source for microbial degradation.

The relatively low CEC and TOC values suggest that the soil in the Group III Area have a limited ability to retard contaminant migration; therefore, contaminants, if present, in the surficial aquifer may migrate at rates near linear groundwater flow velocities.

4.0 THE SHIPYARD AREA, SWMUs 1, 23, 24, 25, 44, and 45

RFI SWMU 1 and Resource Conservation and Recovery Act (RCFA) Facility Assessment (RFA) sampling visit (SV) SWMUs 23, 24, 25, 44, and 45 (SWMUs requiring confirmatory sampling) were grouped together for RFI field investigations and reporting and are collectively referred to as the Shipyard Area. The Shipyard Area is an industrial area located in the northeastern part of NAVSTA Mayport (Figure 1-2). RFA SWMUs 23, 24, 25, 44, and 45 are located adjacent to RFI SWMU 1 (Landfill A) (Figure 1-2) and are being assessed with SWMU 1 because they share similar topographic and hydrogeologic settings and contaminants.

Additionally, SWMU 23 (Jacksonville Shipyard, Inc. [JSI]) and the two SWMUs at the domestic Federally-owned Wastewater Treatment Plant (FOWTP) (SWMU 44, Wastewater Treatment Facility Clarifiers 1 and 2 and SWMU 45, Wastewater Treatment Facility Sludge Drying Beds) occupy part of what used to be Landfill A. SWMU 1 (Landfill A) includes an area of approximately 4 acres located approximately 600 feet to the south of the entrance to Mayport Turning Basin (Figure 4-1).

SWMU 24 (North Florida Shipyard, Inc. [NFSI]) and SWMU 25 (Atlantic Marine, Inc. [AMI]) were also added to this investigation because of their proximity to SWMU 1 and the similarity of ship repair activities among SWMUs 23, SWMU 24, and SWMU 25.

This chapter provides a description and history of each SWMU (including previous investigations), a summary of the Group III field investigations at each SWMU, results and interpretation of environmental sample analysis, and human health and ecological risk assessments.

4.1 SITE DESCRIPTION AND BACKGROUND. This section describes historical information for SWMUs 1, 23, 24, 25, 44, and 45; previous investigations; and a summary of the Group III field investigations conducted from March through October 1995. Historical information concerning the operation of SWMUs 1, 23, 24, 25, 44 and 45 was obtained from the RFA conducted by A.T. Kearney in 1989 on behalf of the USEPA. A current land-use description of each SWMU is presented below. More detailed information on the flora and fauna at the Shipyard Area SWMUs may be obtained from the NAVSTA Mayport GIR (ABB-ES, 1995a).

SWMU 1, Landfill A. The RFA report described Landfill A as consisting of a series of trenches approximately 15 feet wide, 400 feet long, and 8 feet deep. Industrial and sanitary wastes disposed of in the landfill included waste oils, paints, solvents, sanitary garbage, and construction rubble (A.T. Kearney, Inc., 1989). The landfill's operating routine was reported in the RFA report to consist of filling a part of a trench, then each Monday through Friday afternoon the flammable materials were burned. Once the trenches were filled to the approximate 400-foot length, they were covered with soil. The Navy operated the landfill from 1942 to 1960 (A.T. Kearney, Inc., 1989).

Anecdotal evidence from the NAVSTA Mayport Public Works Department, obtained during research for the NAVSTA Mayport RFI Workplan Addendum 5 (ABB-ES, 1994b), indicated that in 1989 landfill material was uncovered in the area of the new clarifiers being constructed at the FOWTP. Uncovered in the excavation for the clarifiers were scrap metal, sheeting, pipes, and 27 empty drums previously containing xylene. This suggests that SWMU 1, Landfill A, probably extends

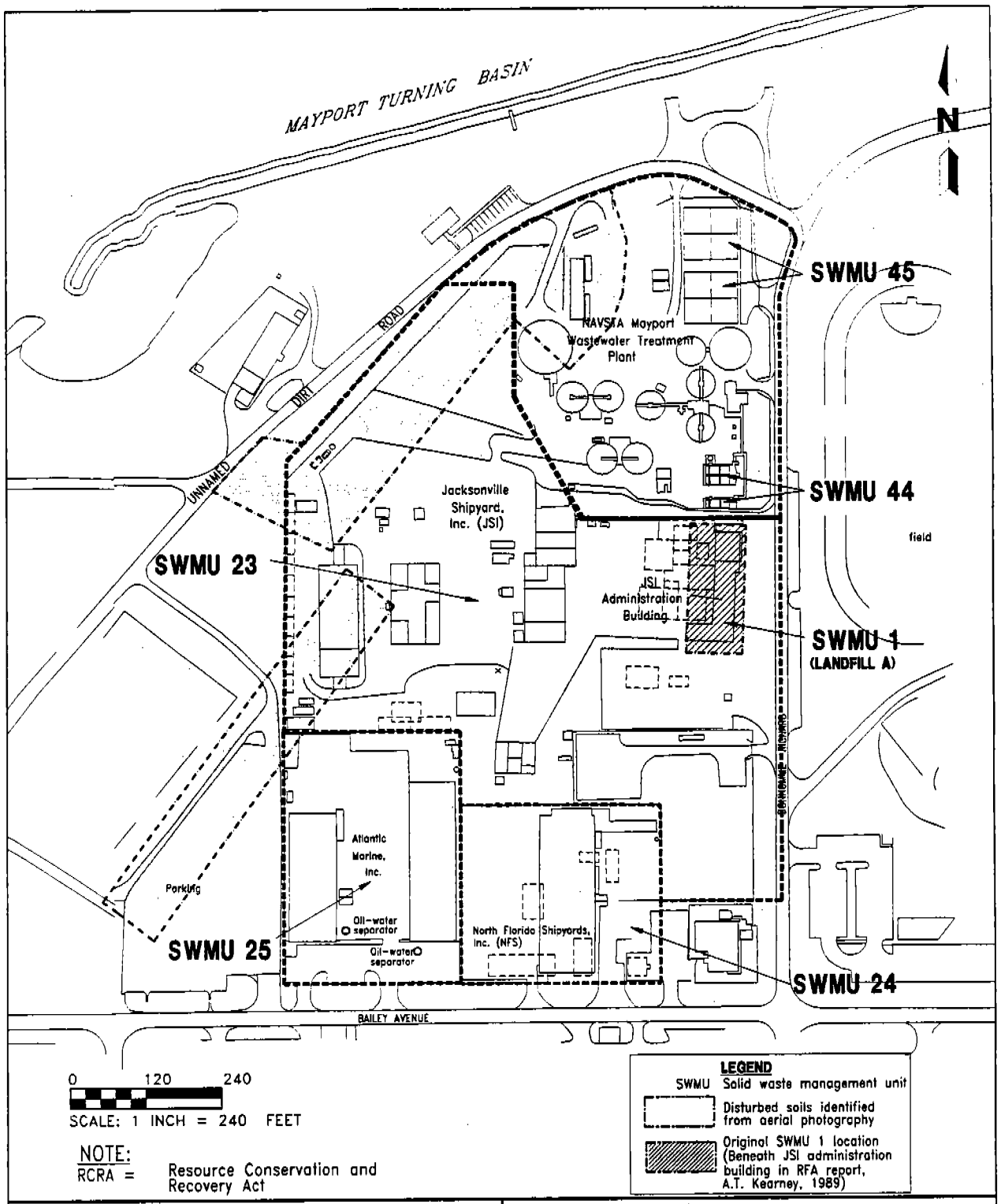


FIGURE 4-1
POTENTIAL LOCATIONS OF LANDFILL A

H:MAYPORT\SWMU14\NAB\02-28-96

RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

farther to the north and west than originally proposed in the RFA report by A.T. Kearney. Written information documenting the excavation and disposition of the drums of xylene and scrap metal has not been found.

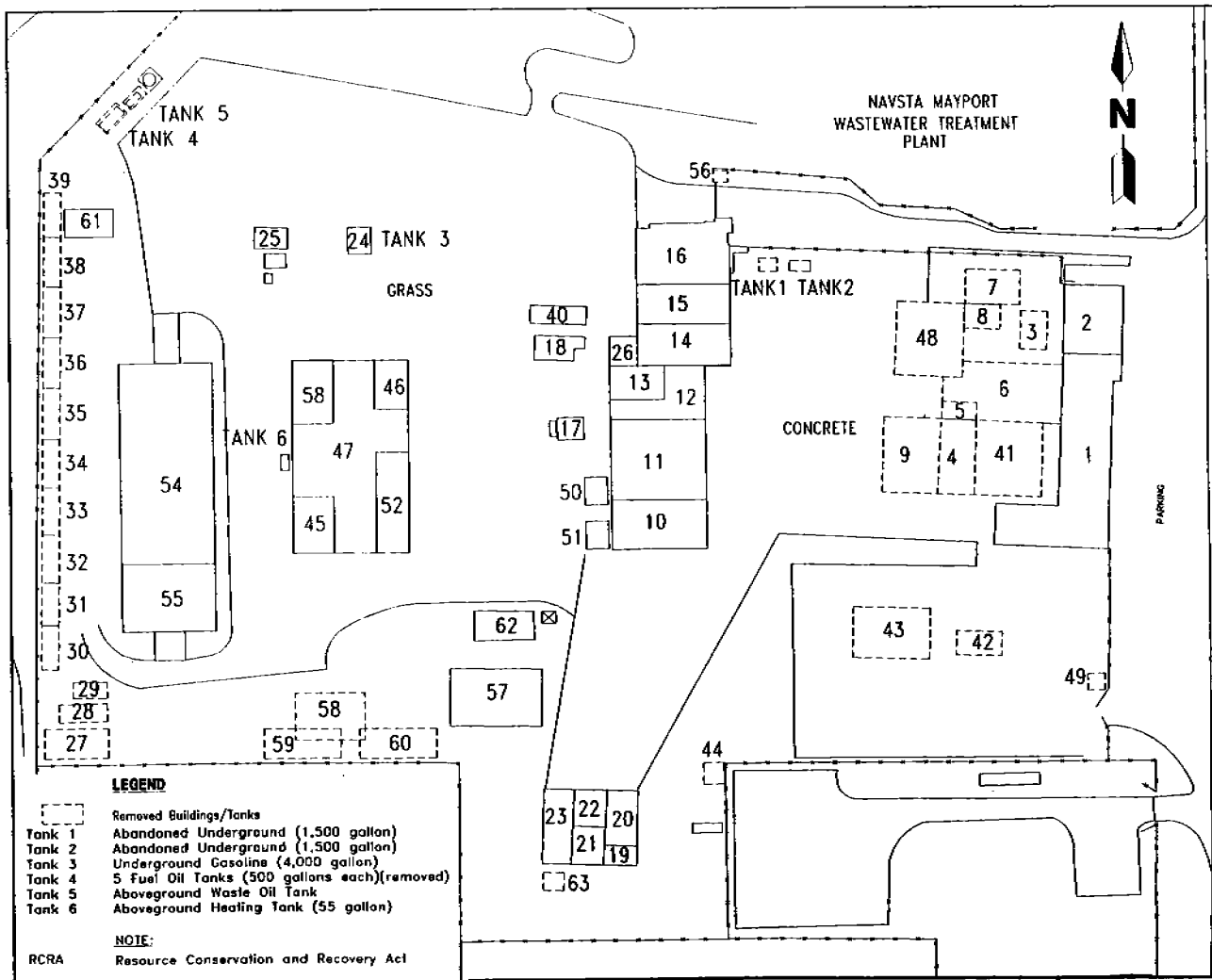
A review of historical aerial photographs was also performed as part of preparing the NAVSTA Mayport RFI Workplan Addendum 5 (ABB-ES, 1994a). Two aerial photographs taken in 1945 and 1948 do not suggest that earth-moving activities were occurring in the area of Landfill A. During the period after the initial construction of NAVSTA Mayport in 1942, and when the station was placed on caretaker status from 1948 to 1949, another landfill may have been operated on-station or a local landfill off-station may have been used. Interpretation of an aerial photograph dated 1951 suggests the presence of two trenches located in an area directly in front of the JSI Administration Building in what is now the middle of BonHomme Richard Avenue (Figure 4-1). Except for the two trenches observed in the 1951 photograph, no other sources of information were found that would suggest Landfill A was located beneath the JSI Administration Building as described in the RFA report (A.T. Kearney, Inc., 1989).

Reviews of aerial photographs taken between 1954 and 1961 suggest the presence of three areas of disturbed soil where earthmoving activities were occurring (excluding dredging and filling operations) during this period. The location of the three areas of disturbed soil in relation to the location of Landfill A and the area identified in the RFA Report are depicted in Figure 4-1. The first disturbed soil area was located to the north and west of the FOWTP Sludge Drying Beds (SWMU 45). The second area of disturbed soil was located to the west of the JSI Administration Building, within the JSI area (SWMU 23). The third disturbed soil area was located adjacent to AMI (SWMU 25).

SWMU 23, JSI. SWMU 23, JSI was located approximately 400 feet east of the Mayport Turning Basin (Figure 4-1). JSI occupied approximately 4 acres of land and is bounded on the north by the FOWTP (the location of SWMUs 44 and 45), on the east by BonHomme Richard Avenue, on the west by a dirt road and parking lot, and on the south by NFSI and AMI. JSI was a commercial shipyard company that formerly worked under contract to the Supervisor of Shipbuilding (SUPSHIPs). The JSI property is owned by NAVSTA Mayport and was leased to the company for use in conducting maintenance and repair work on Navy ships. JSI has gone out of business and the site is closed. JSI was at this location from approximately 1961 until 1992. Figure 4-2 is a map showing the JSI area and the locations of existing and former buildings.

Operations conducted at JSI included abrasive media blasting, fabrication of metal parts, metal working, degreasing, paint stripping, welding, automobile maintenance and repair, and other ship support operations. Because of the variety of JSI operations, there are several areas where contaminants could potentially have been released, including oils used in milling of parts, heavy metals in paints, solvents used in cleaning of parts, and fuel storage.

Painting operations were conducted in the southern part of the facility, mainly around areas 20, 21, 22, 23, and 57 (Figure 4-2). It was indicated in the RFA report that during the visual site inspection (VSI) in 1989 there were numerous empty and partially empty paint and solvent cans stored in a small storage building. The location of this storage area was not identified in the RFA report. However, the storage building may be either Building 27, 57, or 63. Buildings 27 and 63 have been removed, but building 57 remains on the site.



LEGEND

- Removed Buildings/Tanks
- Tank 1 Abandoned Underground (1,500 gallon)
- Tank 2 Abandoned Underground (1,500 gallon)
- Tank 3 Underground Gasoline (4,000 gallon)
- Tank 4 5 Fuel Oil Tanks (500 gallons each)(removed)
- Tank 5 Aboveground Waste Oil Tank
- Tank 6 Aboveground Heating Tank (55 gallon)

NOTE:
RCRA Resource Conservation and Recovery Act

1 JSI Administration Building
2 Conference Room
3 Ladies Restroom
4 Shipfitters
5 Tool Room
6 Store Room
7 Inventory Pipe Storage
8 Govt. Furn. Mat.
9 Brake & Shear
10 Carpenter Shop
11 Sheetmetal Shop
12 Outside Machine Shop
13 Electric Shop
14 Inside Machine Shop
15 Outside Machine Shop
16 Production Office
17 Compressor
18 Oxygen-Acetylene
19 Paint & Labor Office
20 Open
21 Paint Storage
22 Flammable Storage
23 Weld. Machine Storage
24 Gasoline Pump
25 Transportation
26 Transformer
27 Quonset Hut
28 Tank Storage
29 Welding Storage
30 Saratoga Office Port.
31 Roosevelt Office Port.
32 Port. Tool & Store Room
33 Port. P.A. & First Aid Ofc.
34 Port. Paint, Labor, Pipe
35 Port. Riggers & Boiler
36 Port. Weld. & Electric
37 Port Tool & Bench Storage
38 Port. Shipfit & Sheet Mtl.
39 Port. Carp. Hose Shop
40 Electric Storage
41 Fab Shop
42 Repair & Maintenance Bldg.
43 Government Furnished Material
44 Security Office
45 Pipe Storage
46 X-ray Storage, NDT Office
47 Pipe Shop
48 Welding Shop
49 Front Guard Bldg.
50 Sheet Metal Office
51 Lumber Storage
52 Rigger Shop
53 Boiler Shop
54 Machine Shop
55 Inside Machine Shop
56 Side Guard Bldg.
57 Blasting Facility
58 Unknown Quonset Hut (1982)
59 Unknown Quonset Hut (1977)
60 Unknown Quonset Hut (1977)
61 Unknown
62 Open Block Beauty Storage Bin
63 Unknown Small Shed

Source: From Kearney, 1989, updated by ABB-ES, 1994

0 60 120
SCALE: 1 INCH = 120 FEET

MAYPORT/SHIPYARD/NAB/02-29-96

FIGURE 4-2
SWMU 23, JACKSONVILLE SHIPYARD, INC.

RCRA FACILITY INVESTIGATION WORKPLAN, ADDENDUM 5

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The RFA report indicated that in 1989 approximately 100 55-gallon drums were stored in the southwestern part of the JSI site. Some of the drums were stacked on pallets and some were stacked directly on the soil. Stained soil and stressed vegetation were noted near some of the stored drums. JSI personnel indicated to A.T. Kearney personnel during the VSI that the drums contained lubrication oil, transmission oils, synthetic oils, and engine oil. The RFA report did not identify the exact location where the drums were stored, however, the drums may have been stored outside of Building 57 (Figure 4-2). A large circular tank was also reported to have existed in the southwestern part of JSI (A.T. Kearney, Inc., 1989). The contents of the tank were not known and, since the tank had been removed, its original location was also unknown (A.T. Kearney, Inc., 1989).

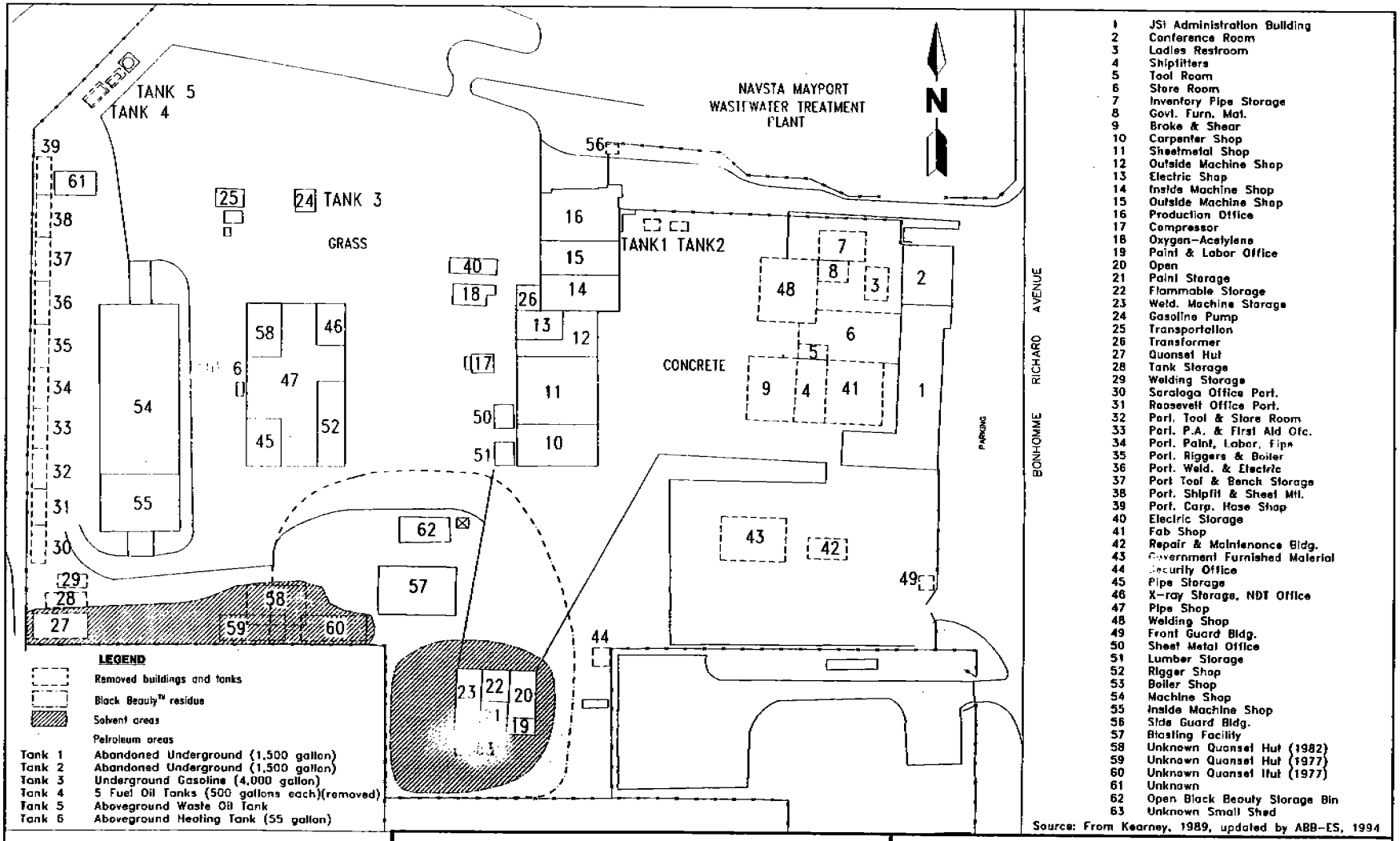
Abrasive blasting was conducted in the southeastern part of the area using a material called Black Beauty™ (Figure 4-2). The blasting media was used to remove paint from metal objects. At the time of the VSI in 1989, the Black Beauty™ was observed to cover much of the ground over the southern and southeastern parts of JSI (A.T. Kearney, Inc., 1989).

Petroleum fuels were stored in several areas at JSI. Two underground storage tanks (Tanks 1 and 2 in Figure 4-3) with a combined capacity of 3,000 gallons may exist near the location of the machine shop (Building 15) (Figure 4-3). The tanks were used in the 1960s and may have been removed in 1972 during construction of the machine shop (A.T. Kearney, Inc., 1989). No reports have been found concerning the condition of the tanks at removal or if environmental samples were collected during removal of the tanks. In approximately 1989, a 4,000-gallon underground tank (Tank 3 in Figure 4-3) was located next to the transportation shed (Building 25 in Figure 4-3) (A.T. Kearney, Inc., 1989). This tank was reportedly replaced because it was leaking (A.T. Kearney, Inc., 1989). However, no records have been found concerning the collection of environmental samples during the tank removal and replacement action.

Currently, three concrete containment structures exist along the JSI northwestern fenceline (see area referenced as Tank 5 in Figure 4-3). Two of the containment structures are empty and the third holds an aboveground tank labeled "waste-oil." The RFA report indicated that during the VSI in 1989 five aboveground 500-gallon diesel storage tanks were located in the same approximate area. The RFA also indicated that soil beneath the tanks was stained, which suggests that the five tanks predated the containment structures. No reports have been found that identify the year these five tanks were removed or if environmental samples were collected to assess if there had been the potential for a release into the environment.

A 55-gallon capacity aboveground storage tank containing fuel oil was reported to exist at the west side of Building 47, the pipe shop (Figure 4-3); stained soil was reported to exist beneath the tank. This tank is still located along the west side of Building 47 (A.T. Kearney, Inc., 1989).

<u>SWMU 24, NFSI</u>. The NFSI area is approximately 1½ acres and is located along the southern boundary of JSI (Figure 1-2). NFSI is a commercial shipyard company that conducts maintenance and repair operations on Navy ships under contract to the SUPSHIPs. NFSI has been at this location since approximately 1982. The property where NFSI is located is owned by NAVSTA Mayport and is leased to the company for use in conducting maintenance and repair operations on Navy ships.



NOTE:

RCRA Resource Conservation and Recovery Act

0 60 120

SCALE: 1 INCH = 120 FEET

MAYPORT/SHIPYARD/NAB/02-29-96

FIGURE 4-3
AREAS OF POTENTIAL CONTAMINATION

RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

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Activities conducted at NFSI are similar to those conducted by JSI, although NFSI operations at NAVSTA Mayport appear to be on a smaller scale.

During the VSI in 1989, one 55-gallon drum used for storage of heating oil was located on the eastern side of the NFSI building and approximately 15 55-gallon drums of waste oil and other materials were located in an outdoor area along the northern fenceline on the west side of the NFSI shop building (Figure 4-4) (A.T. Kearney, Inc., 1989). The RFA report did not provide a figure illustrating the location of the drums. NFSI personnel indicated to A.T. Kearney's personnel during the VSI that the contents of the drums on the westside were unknown and that the drums had been stored there for at least 5 years. However, NFSI personnel reported that analyses were being performed at that time on the unknown material in the drums to identify appropriate disposal methods (A.T. Kearney, Inc., 1989). The results of the analyses of the materials in the drums and the subsequent disposal methods are unknown.

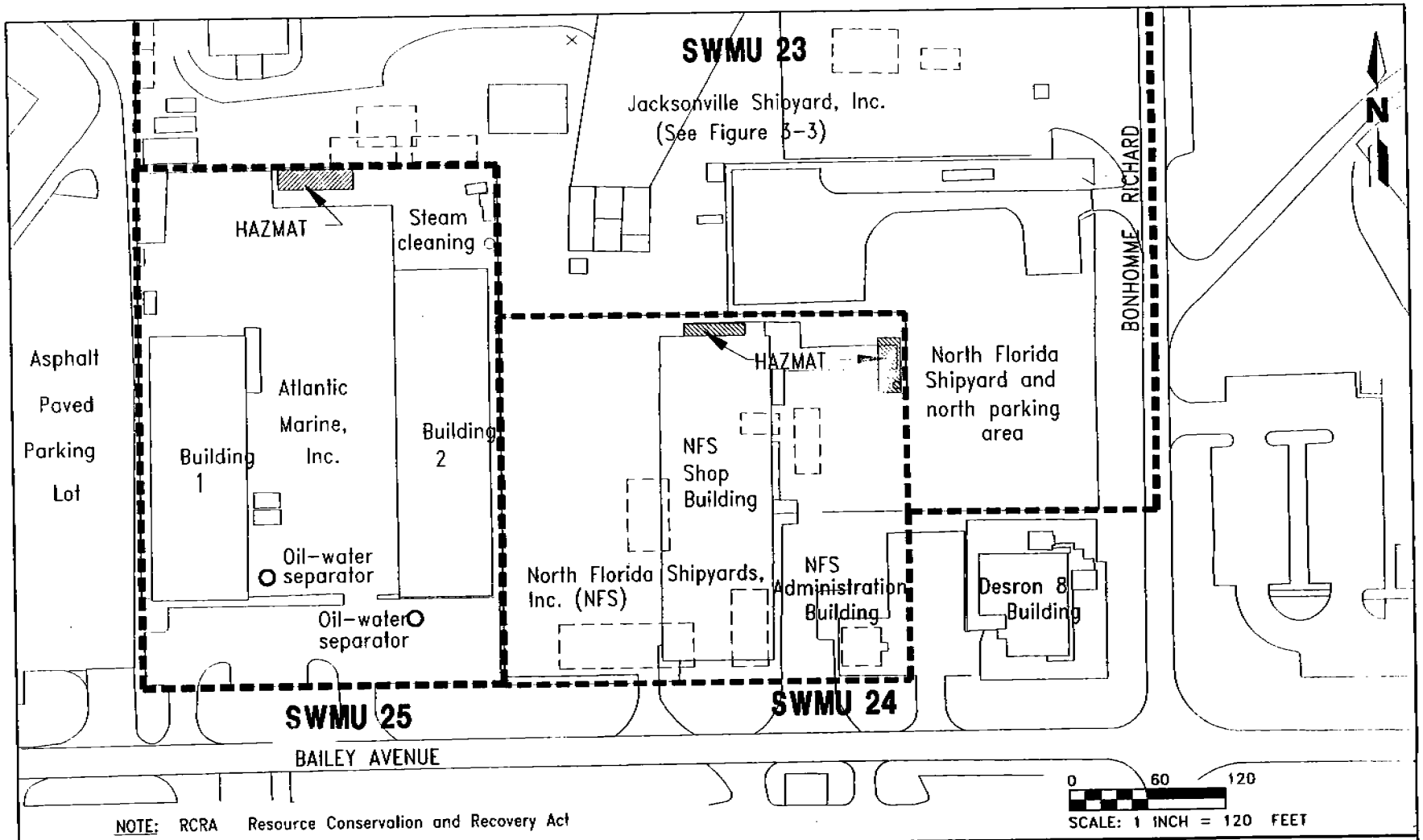
Currently, NFSI has a hazardous waste storage shed located along the central part of the fence to the north of the NFSI Administration Building. The shed has a concrete floor and a berm (curb) to contain accidental spills.

Aerial photographs were reviewed to identify other possible areas that may be of potential concern at SWMU 24. (U.S. Department of Agriculture, 1952; 1960; 1969; 1970; 1972; 1975; 1977; 1980; 1982; 1983; and 1989). Interpretation of an aerial photograph dated 1977 suggests that a berm structure was formerly located to the south of the NFSI's southern parking lot. The berm structure was likely the backstop for the former NAVSTA Mayport small-arms range (Figure 4-5). Another berm or trench also was interpreted to exist in the northwestern part of the NFSI site to the west of the NFSI shop building. An aerial photograph dated 1982 suggests that five buildings were removed prior to the construction of NFSI's shop building (Figure 4-4).

SWMU 25, AMI. The AMI area encompasses approximately 1½ acres and is located on the southern boundary of JSI and the western boundary of NFSI (Figure 1-2). AMI is a commercial shipyard company that conducts maintenance and repair of Navy ships under contract to the SUPSHIPs. The property where AMI is located is owned by NAVSTA Mayport and leased to AMI for use in carrying out maintenance and repair operations. AMI has been in this location since approximately 1980. Activities conducted at AMI are similar to those conducted at NFSI and JSI.

The RFA report (A.T. Kearney, Inc., 1989) indicated that during the VSI, a build-up of abrasive blasting media, Black Beauty™, was noted on the asphalt in the northeastern corner of the AMI site. However, the exact area of the build-up of Black Beauty™ was not depicted in the RFA report. Additionally, stained soil was noted at the location of AMI's hazardous waste and waste oil accumulation area (A.T. Kearney, Inc., 1989). Spent solvents, paint wastes, and used or contaminated oil products were stored on an asphalt-covered area (accumulation area north of the AMI buildings), where access was restricted with a chain-link fence (A.T. Kearney, Inc., 1989).

Currently, AMI stores drummed paints and solvent material in a shed located along the northern property fence line, in the same area as the 90-day hazardous waste accumulation area. A below grade trench drain and aboveground tank, which collects steam cleaning waste, are located at the northeastern corner of the AMI site.



NOTE: RCRA Resource Conservation and Recovery Act

LEGEND

- Buildings that have been removed
- SWMU Solid waste management unit
- O/W Oil-water separator
- Possible drum storage area
- Bldg. Building

MAYPORT\SWMU14\NAB-NP\03-05-96

FIGURE 4-4
SWMU 24, NORTH FLORIDA SHIPYARD, INC., AND SWMU 25, ATLANTIC MARINE, INC.

RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

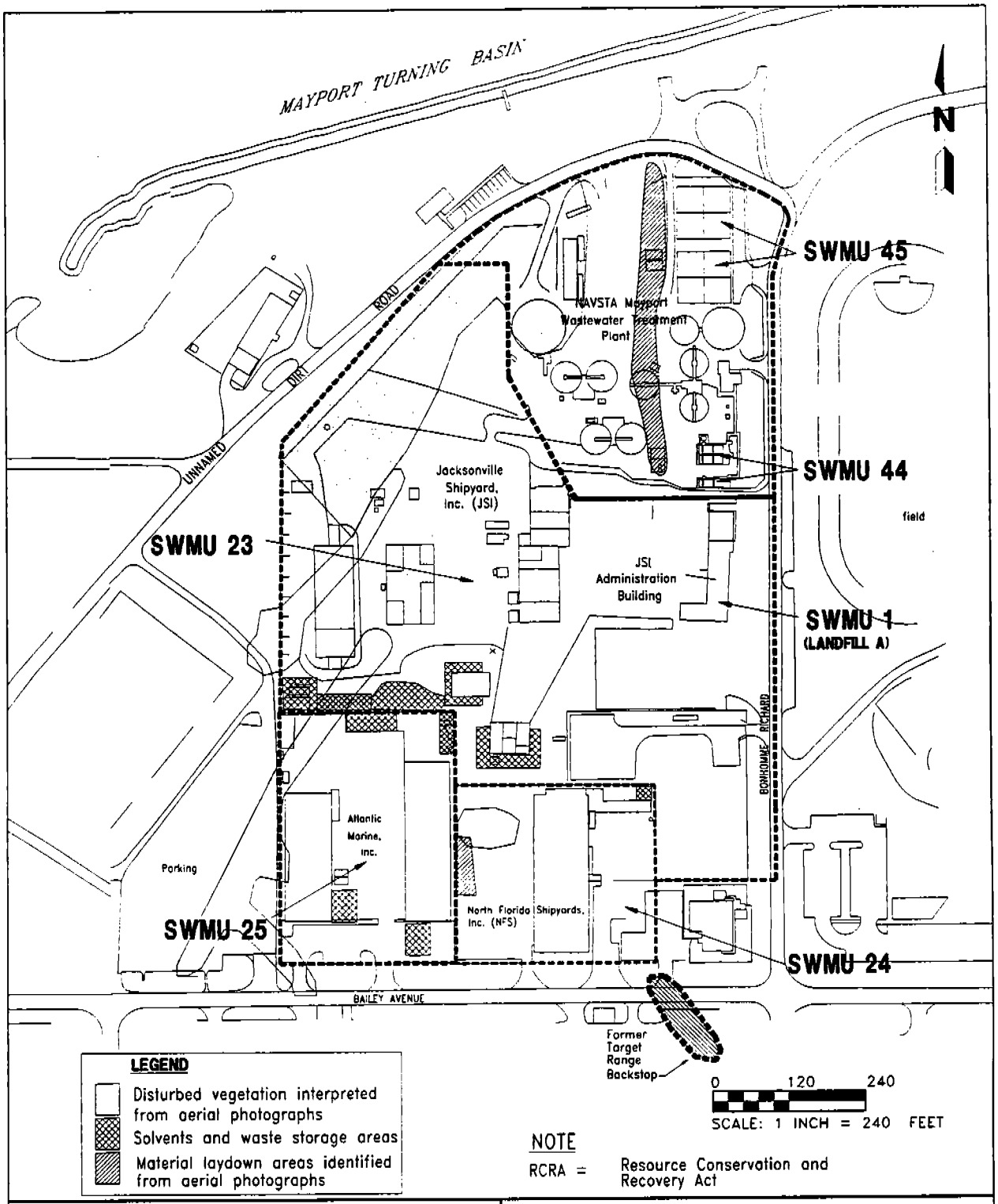


FIGURE 4-5
SWMUs 1, 23, 24, 25, 44, and 45, AREAS OF POTENTIAL CONTAMINATION

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RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

Two oil-water separators are also present at the AMI site; however, neither is currently being used. Both oil-water separators are connected from the two buildings onsite by underground pipes to underground sumps and waste oil accumulation tanks.

A review of aerial photographs dated from the mid 1960s to late 1970s suggests the occurrence of extensive areas of disturbed vegetation and soil in the southwestern parts of the AMI site next to the site's western boundary (Figure 4-5). The disturbed area includes the paved parking lot adjacent to the western property boundary of AMI. Some of the disturbed areas are likely from vehicular traffic associated with using a dirt road that was located in the southwestern corner of the AMI site. It could not be confirmed from the review of the aerial photographs, but this area may have been used as either a laydown yard or possibly a landfill.

SWMU 44, Wastewater Treatment Facility Clarifiers 1, 2, and 3. Wastewater treatment facility clarifiers 1 and 2 were constructed in 1962, and clarifier 3 was added in the 1970s as part of the NAVSTA Mayport FOWTP. The clarifiers are located east of and within 500 feet of Mayport Turning Basin, along the northern boundary of JSI (Figure 1-2). The clarifiers are aboveground, square concrete tanks each having a nominal capacity of approximately 40,500 gallons (Figure 4-6).

The RFA report indicated that during the VSI in 1989, clarifiers 1, 2, and 3 were reported to have oily stains on the outside of the tanks. The staining was reported to be along the location of small hairline fractures. Based on the appearance of the clarifiers, A.T. Kearney concluded that some oily material may have been released around each clarifier.

Beginning in 1987, the clarifiers were used to contain and remove floating free-phase oil from firefighting training wastes from the FTC and effluent from these tanks was discharged into the FOWTP influent stream (A.T. Kearney, Inc., 1989). The floating free-phase oil was manually skimmed from the surface and transported by gravity flow into one of the Group IV waste oil storage tanks (SWMU 51) (A.T. Kearney, Inc., 1989).

Currently, the clarifiers are being used for temporary storage of firefighting training waste liquids from the FTC. The firefighting training wastes are stored in the clarifiers prior to treatment at the Oily Waste Treatment Plant (OWTP) (Group II, SWMU 9). Effluent from the OWTP is returned to the FOWTP.

SWMU 45, Wastewater Treatment Facility Sludge Drying Beds. The NAVSTA Mayport wastewater treatment facility was expanded in 1972 to include a secondary treatment facility using an activated sludge system and two sludge drying beds, each divided into four cells (Figure 4-6). The sludge beds, each composed of four cells, have an area of approximately 14,000 square feet. The RFA report indicated that the sludge drying beds are constructed with concrete curbs and sand bottoms and were reported to have received digested sludge from aerobic digesters 1 and 2 (Figure 4-7) (A.T. Kearney, Inc., 1989). During sludge drying, the effluent that passed through the sand bottom was collected by an underdrain system, which flowed to the influent pumping station (A.T. Kearney, Inc., 1989). However, NAVSTA Mayport personnel at the FOWTP indicate that the underdrain system does not exist. Between 1972 and 1985, the sludge drying beds were cleaned once every quarter, with the dewatered sludge discarded in the onsite

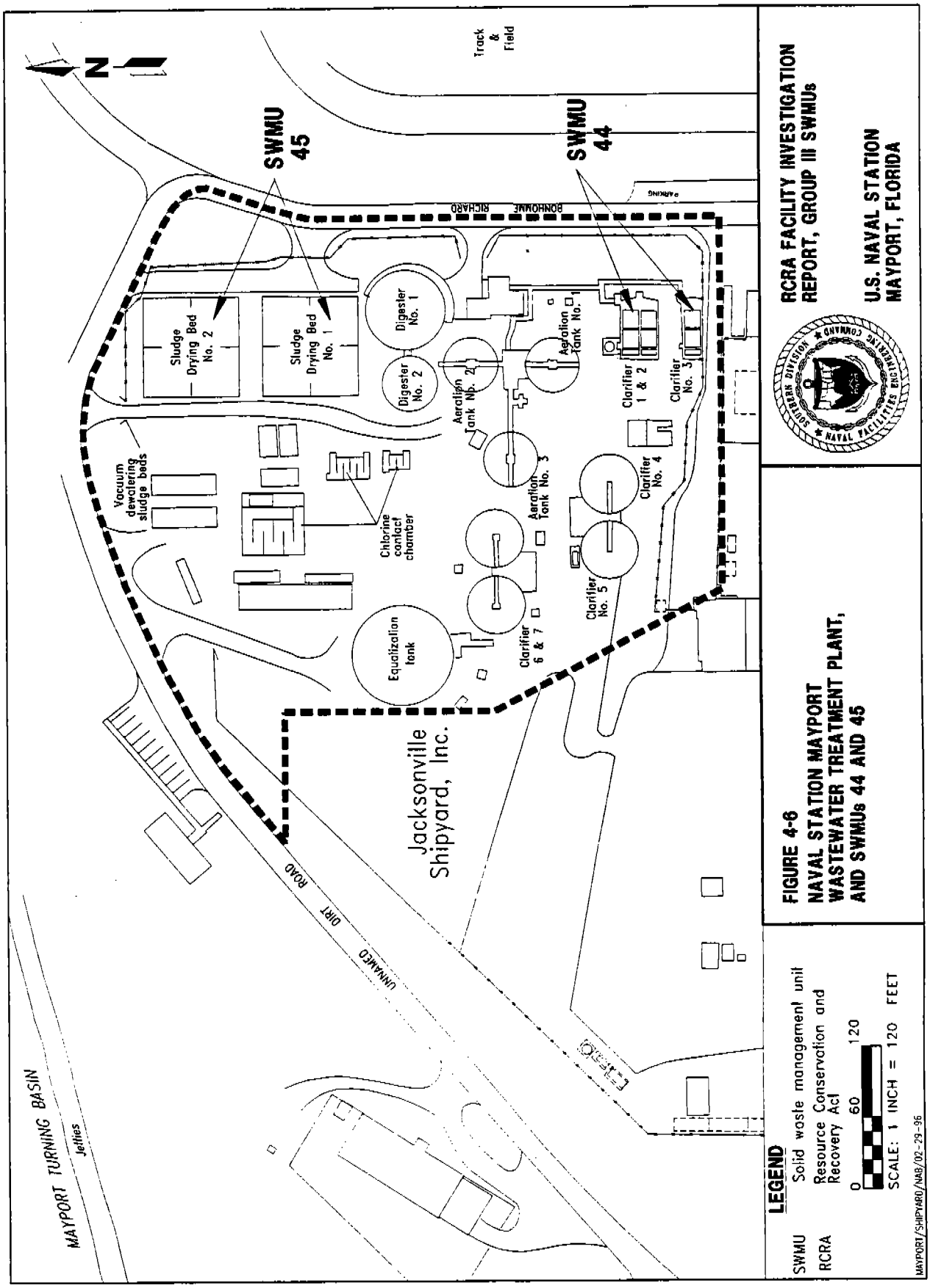
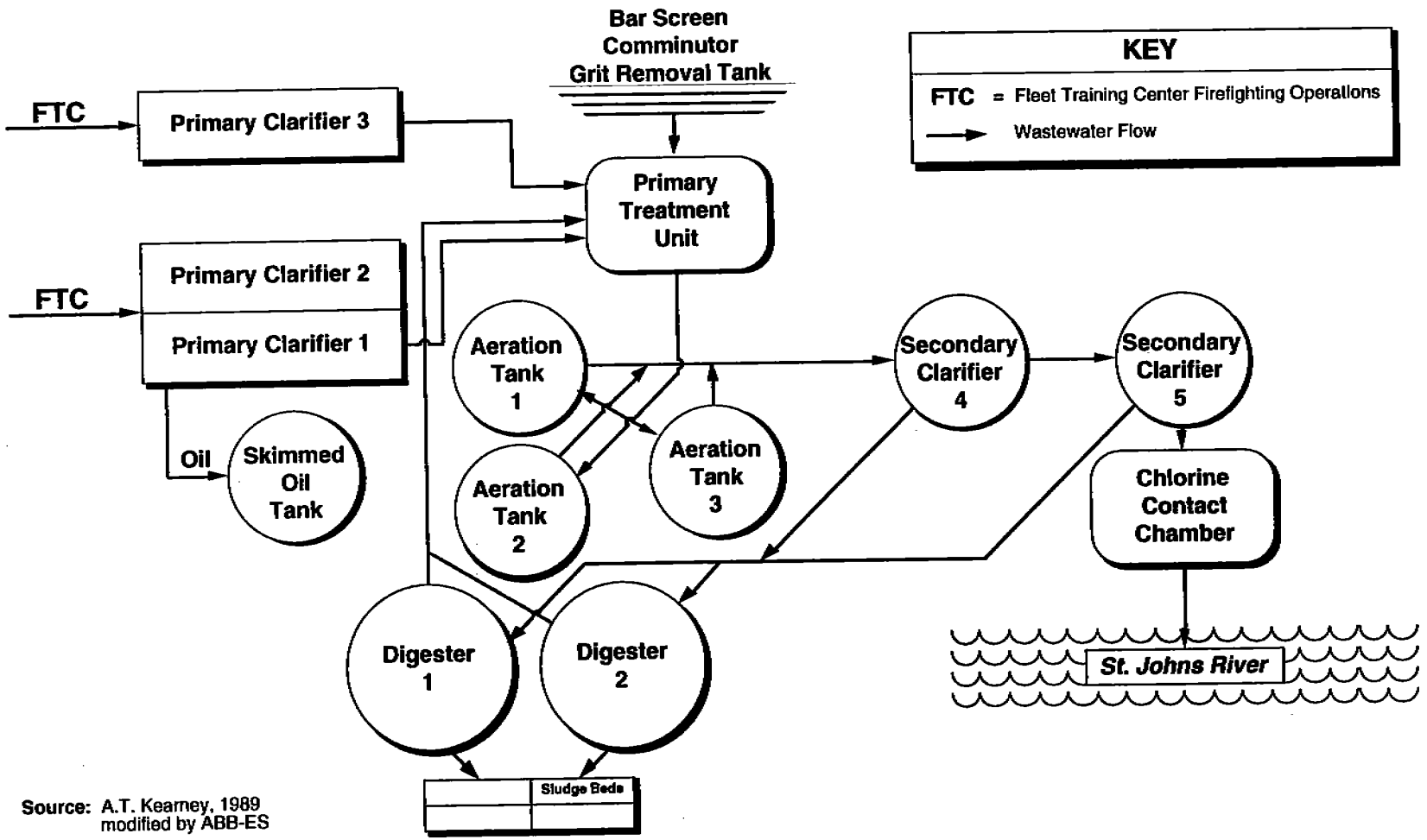


FIGURE 4-6
NAVAL STATION MAYPORT WASTEWATER TREATMENT PLANT, AND SWMUs 44 AND 45



Source: A.T. Kearney, 1989
modified by ABB-ES

NOTES:
RCRA = Resource Conservation and Recovery Act

FIGURE 4-7
WASTEWATER TREATMENT FACILITY
PROCESS FLOW DIAGRAM

RCRA FACILITY INVESTIGATION
REPORT, GROUP III SWMUs

U.S. NAVAL STATION
MAYPORT, FLORIDA

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landfills (Group I, SWMUs 2 through 5) (A.T. Kearney, Inc., 1989). The sludge drying beds were replaced in 1985 with a vacuum dewatering filter press. The dried material was taken offsite for disposal (Figure 4-6). The sludge drying beds have not been used for dewatering since 1985; however, when dumpsters at NAVSTA Mayport's FOWTP have been full, the sludge beds have been used as a temporary holding area until removal could be arranged.

4.1.1 Previous Investigations This subsection summarizes the previous investigations conducted at each SWMU.

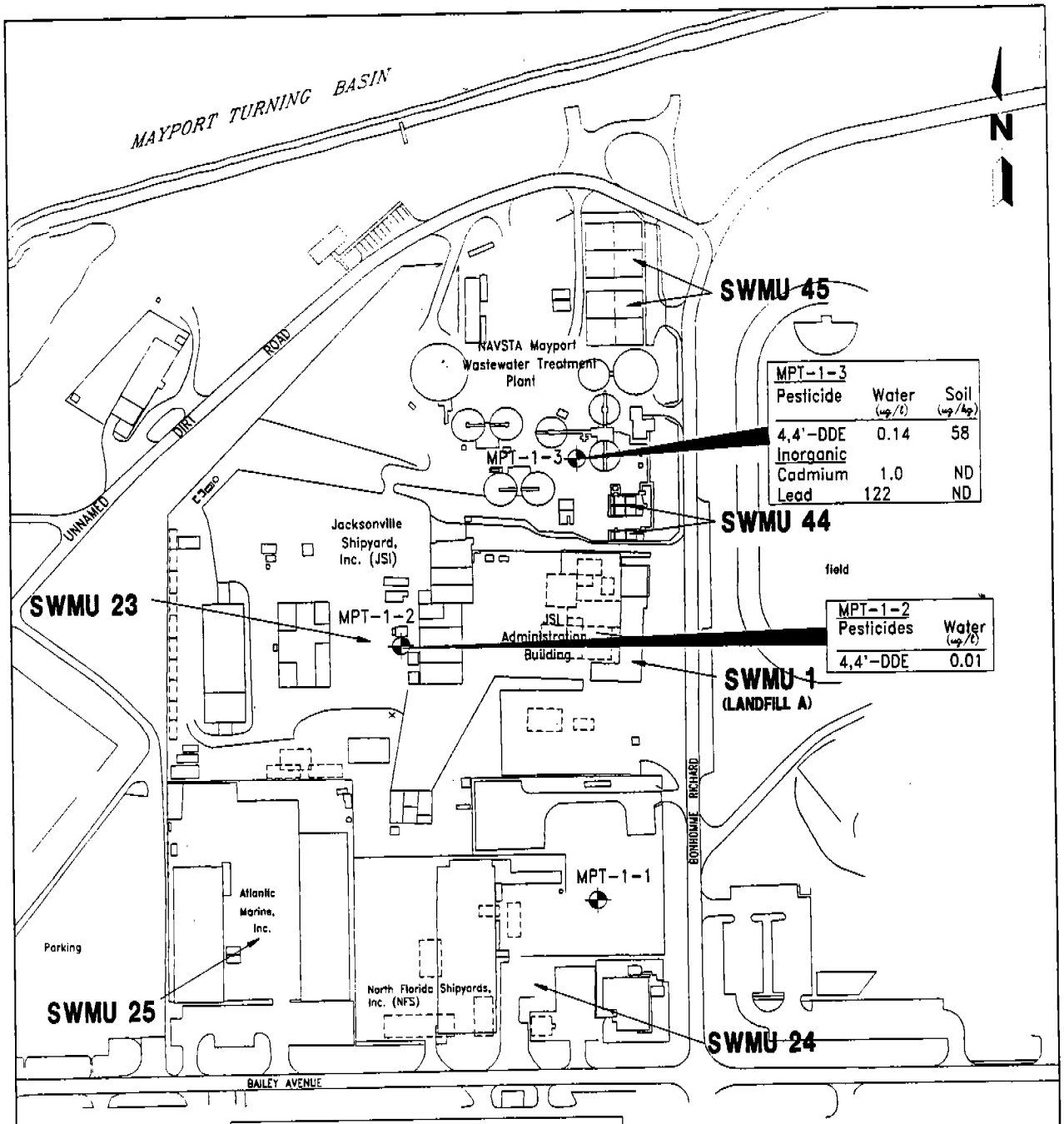
During the ESI in 1988, three monitoring wells were installed around the perimeter of SWMU 1 (Landfill A) to collect the following: information on the subsurface lithology, information on the hydraulic properties of the surficial aquifer, and soil and groundwater samples for laboratory analyses. The soil samples were collected immediately above the saturated zone and the groundwater samples were collected from wells screened across the water table (E.C. Jordan, 1988).

Three monitoring wells (MPT-1-MW01S, MPT-1-MW02S, and MPT-1-MW03S) were installed in the vicinity of SWMU 1 (Figure 4-8) during the ESI (E.C. Jordan, 1988). Soil and groundwater samples were collected from the location of each of the monitoring wells and analyzed for priority pollutants. 4,4'-dichlorodiphenyl-dichloroethene (DDE) was detected in the groundwater sample from monitoring well MPT-1-MW02S at a concentration of 0.01 micrograms per liter ($\mu g/\ell$) and in both the soil and groundwater sample from monitoring well MPT-1-MW03S at concentrations of 58 micrograms per kilogram ($\mu g/kg$) and 0.14 $\mu g/\ell$, respectively. Lead was detected at a concentration of 122 $\mu g/\ell$ in the groundwater sample from monitoring well MPT-1-MW03S.

The ESI report indicated that the shallow surface soil consists mainly of fine-grained quartz sands. A thin clay layer (less than 1 foot thick) was found at the location of each boring at the approximate depths of 7 to 10 feet bls. The ESI report also indicated that the clay layer appeared to slope downward toward the St. Johns River (E.C. Jordan, 1988). Below this clay layer were fine-grained quartz sands to the explored depths of 17 feet bls (E.C. Jordan, 1988). Groundwater level measurements collected on October 8, 1987, during the ESI, suggest an average horizontal hydraulic gradient of 0.004 foot per foot (ft/ft) across the site (E.C. Jordan, 1988). The direction of groundwater flow was determined to be toward the north in the direction of the St. Johns River, which is located approximately 400 feet from the northern boundary of SWMU 1.

Because of plans to renovate the JSI Administration Building for occupancy by the NAVSTA Mayport Public Works Department (the renovations are currently completed), a special-purpose investigation was conducted in 1993 in the vicinity of the JSI Administration Building. The special-purpose investigation included collecting surface and subsurface soil samples (ABB-ES, 1994c). Analytical results from the soil samples were used to assess whether or not chemicals present in surface and subsurface soil may present a long-term health threat to the NAVSTA Mayport employees who will work in the JSI Administration Building or to construction workers onsite during remodeling of the JSI Administration Building.

The special-purpose investigation, which included two surface soil sampling events, was performed at SWMU 1 on July 7 and 8, 1993, and December 1 and 2, 1993. The first sampling event consisted of collecting composite surface soil



LEGEND

SWMU	Solid waste management unit
⊕	Monitoring well location
(ug/l)	Micrograms per liter
(ug/kg)	Micrograms per kilogram
ND	None detected
4,4'-DDE	4,4'-Dichlorophenyl dichchloroethylene

0 120 240

SCALE: 1 INCH = 240 FEET

NOTE:
RCRA = Resource Conservation and Recovery Act

FIGURE 4-8
EXPANDED SITE INVESTIGATION, SWMU 1 LANDFILL

RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

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samples from the following JSI areas: Administration Building and adjacent grounds, parking lot south of the Administration Building, shop and warehouse area west of the Administration Building, and a grassy area west of the FOWTP. In addition, surface and subsurface soil samples were collected from around the JSI Administration Building. The soil samples were analyzed for a selected subset of 40 CFR, Part 264, Appendix IX, groundwater monitoring list parameters (USEPA, 1986a). Figure 4-9 illustrates the sampling locations and Tables 4-1 and 4-2 present the concentrations of target analytes detected in surface and subsurface soil samples, respectively.

Because the highest detected concentrations of lead and mercury could potentially present an unacceptable exposure risk to a construction worker at the JSI Administration Building site, a second sampling event was conducted. The objective of the second sampling event was to assess whether or not the observed concentrations of lead and mercury represented an isolated occurrence or were indicative of a larger contaminated area (ABB-ES, 1994c). Figure 4-10 illustrates the location of the soil samples collected during the second sampling event and Table 4-3 presents the concentrations of detected target analytes (ABB-ES, 1994c). The analytical results from the second sampling event suggest that the highest detected concentrations of lead and mercury were isolated occurrences.

The analytical results for the special-purpose investigation have not been validated and are, therefore, subject to qualification (ABB-ES, 1994c).

4.1.2 Group III RFI Field Activities Group III RFI field activities were conducted at the Shipyard Area (SWMUs 1, 23, 24, 25, 44, and 45) from March through October 1995. Chapter 2.0 provides an overview of the analytical program for the Group III SWMUs. Sampling procedures, background sampling information, and other stationwide sampling information is provided in the NAVSTA Mayport GIR (ABB-ES, 1995a).

Field activities conducted at the Shipyard Area included the following:

- conducting a geophysical survey;
- collecting surface soil, subsurface soil, and sludge samples;
- groundwater screening (TerraProbe℠);
- installing monitoring wells; and
- collecting groundwater samples.

The Shipyard Area contains several potential sources of contamination. The SWMUs within the Shipyard Area share a similar hydrogeologic setting and similar functions as the base's industrial area. The six SWMUs were grouped to facilitate a comprehensive investigative approach consisting of the collection of environmental samples at locations where potential contaminants may emanate from multiple sources with overlapping contaminant plumes. Potential contaminants from these SWMUs include petroleum fuels and oils, PCBs, chlorinated solvents, non-chlorinated solvents, paint wastes, and metals. Figures 4-1 and 4-3 through 4-6 illustrate the locations of potential sources of contamination at the Shipyard Area SWMUs (SWMUs 1, 23, 24, 25, 44, and 45).

Group III field investigative activities included a geophysical survey, a groundwater screening program, a surface and subsurface soil sampling program, and monitoring well installation and groundwater sampling program.

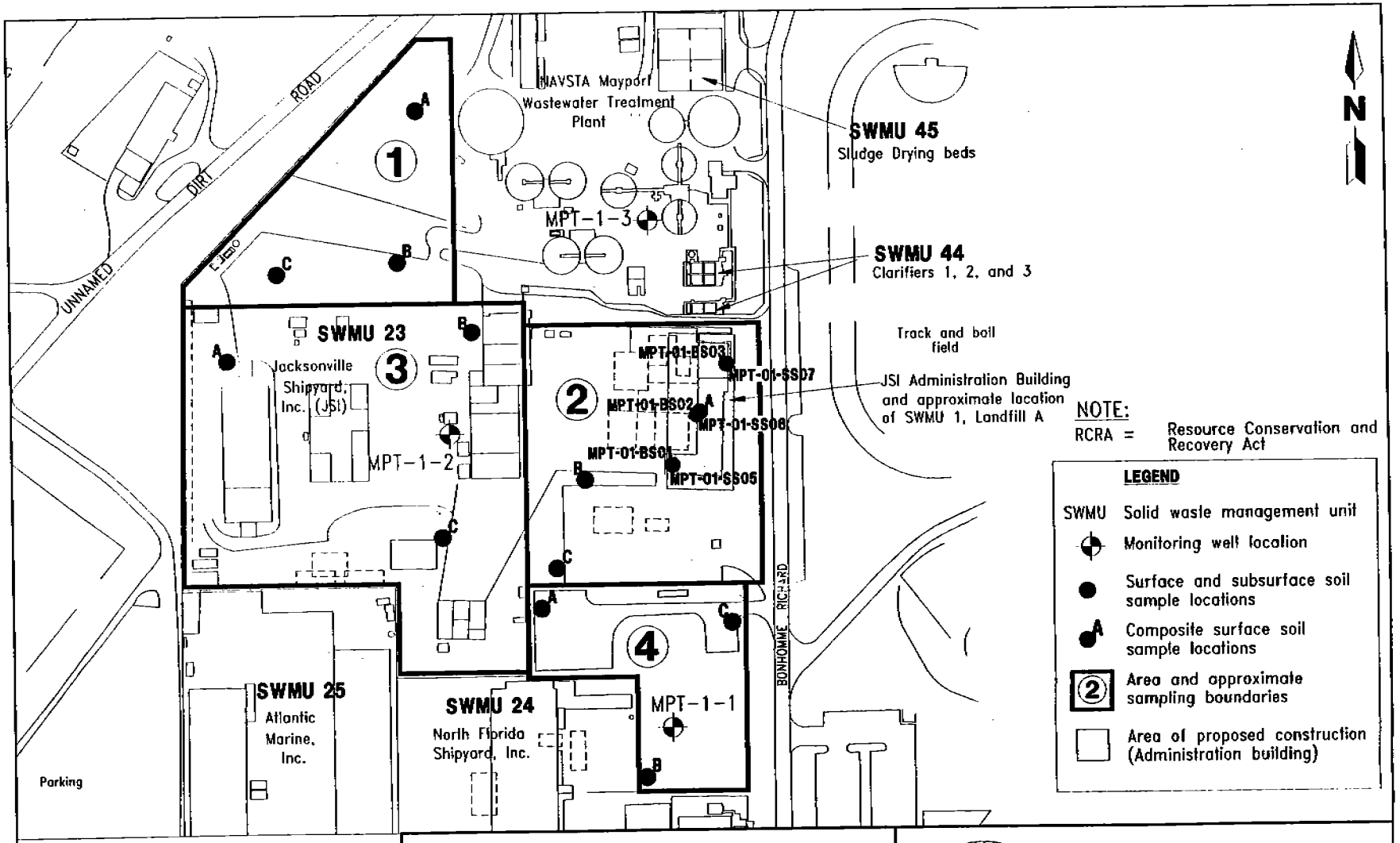

FIGURE 4-9
FORMER JACKSONVILLE SHIPYARD ADMINISTRATION BUILDING AND SURROUNDING AREA

RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

Table 4-1
Analytical Results for Surface Soil Samples, July 1993, Jacksonville Shipyard Administration Building Area

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

CAS RN	Analyte	Unit	MPT-1-SS01	MPT-1-SS02	MPT-1-SS03	MPT-1-SS04	MPT-1-SS05	MPT-1-SS06	MPT-1-SS07
Semivolatiles									
84-74-2	Di-n-butylphthalate	µg/kg	340 U	340 U	340 U	340 U	170 BJ	170 BJ	240 BJ
205-99-2	Benzo(b)fluoranthene	µg/kg	37 J	94 J	340 U	340 U	350 U	360 U	340 U
207-08-9	Benzo(k)fluoranthene	µg/kg	340 U	78 J	340 U	340 U	350 U	360 U	340 U
218-01-9	Chrysene	µg/kg	340 U	73 J	340 U	340 U	350 U	360 U	340 U
206-44-0	Fluoranthene	µg/kg	64 J	170 J	340 U	340 U	350 U	360 U	340 U
85-01-8	Phenanthrene	µg/kg	340 U	54 J	340 U	340 U	350 U	360 U	340 U
129-00-0	Pyrene	µg/kg	53 J	130 J	340 U	340 U	350 U	360 U	340 U
Pesticides									
12672-29-6	Aroclor-1248	µg/kg	1,500 P	34 U	34 U	34 U	34 U	85 U	88 U
11096-82-5	Aroclor-1260	µg/kg	140 U	34 U	34 U	34 U	34 U	150 P	200
Metals									
7440-38-2	Arsenic	mg/kg	1.4 B	3.0	1.8 B	0.6 U	1.2 B	1.7 B	2.0 B
7440-39-3	Barium	mg/kg	5.1 B	381	24.9 B	6.5 B	4.4 B	31.6 B	12.0 B
7440-43-9	Cadmium	mg/kg	0.70 U	0.72 B	0.70 U	0.70 U	0.71 U	1.3	1.4
7440-47-3	Chromium	mg/kg	5.7	27.4	11.8	4.9	4.4	26.9	16.3
7440-92-1	Lead	mg/kg	9.4	80.7	66.0	8.6	39.4	90.0	110.0
7440-97-6	Mercury	mg/kg	0.02 U	0.05	0.04 B	0.02 U	0.02 U	0.06	525.0
7440-49-2	Selenium	mg/kg	0.81 B	0.44 B	0.34 U	0.34 U	0.61 B	0.34 U	0.36 U
7440-22-4	Silver	mg/kg	0.87 U	0.89 U	0.86 U	0.86 U	0.88 U	1.0 B	1.4 B

Notes: These data have not been validated.
All analytes were collected from 0- to 1-foot below land surface.

RCRA = Resource Conservation and Recovery Act.
SWMUs = solid waste management units.
CAS RN = chemical abstract service registry number.
µg/kg = micrograms per kilogram.
U = not detected at concentrations greater than the contract required quantitation limit.
BJ = target analyte detected in associated quality control sample, therefore, the concentration is estimated.
J = estimated value that is less than the contract required quantitation limit and greater than the instrument detection limit.
mg/kg = milligrams per kilogram.
B = inorganic analytical result is less than the contract required detection limit and greater than the instrument detection limit.
P = the percent difference between the analytical results for two separate gas chromatograph columns was greater than 20 percent on pesticides and polychlorinated biphenyl analysis.

Table 4-2
Analytical Results for Subsurface Soil Samples, July 1993, Jacksonville Shipyard Administration Building Area

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

CAS RN	Analyte	Unit	MPT-1-BS01	MPT-1-BS02	MPT-1-BS03	MPT-1-BS03DUP
67-64-1	Acetone	µg/kg	11 U	6 BJ	9 BJ	8 BJ
84-74-2	Di-n-butylphthalate	µg/kg	160 BJ	220 BJ	290 BJ	300 BJ
7440-38-2	Arsenic	mg/kg	1.0 B	1.5 B	1.3 B	0.88 B
7440-39-3	Barium	mg/kg	5.0 B	9.6 B	4.9 B	6.8 B
7440-43-9	Cadmium	mg/kg	0.72 U	0.73 U	0.71 U	0.71 U
7440-47-3	Chromium	mg/kg	2.2	14.6	2.4	4.7
7440-92-1	Lead	mg/kg	0.73 U	16.8	12.2	8.7
7440-97-6	Mercury	mg/kg	0.02 U	0.02 U	0.33	0.29
7440-49-2	Selenium	mg/kg	0.35 U	0.36 U	0.58 B	0.65 B
7440-22-4	Silver	mg/kg	0.89 U	0.91 U	0.88 U	0.87 U

Notes: These data have not been validated.
All analytes were collected from 3- to 4- foot below land surface.

RCRA = Resource Conservation and Recovery Act.
SWMUs = solid waste management units.
CAS RN = chemical abstract service registry number.
DUP = duplicate.
µg/kg = microgram per kilogram.
U = not detected at concentration greater than the contract required quantitation limit.
BJ = target analyte detected in associated quality control sample, therefore, the concentration is estimated.
mg/kg = milligram per kilogram.
B = inorganic analytical result is less than the contract required detection limit and greater than the instrument detection limit.

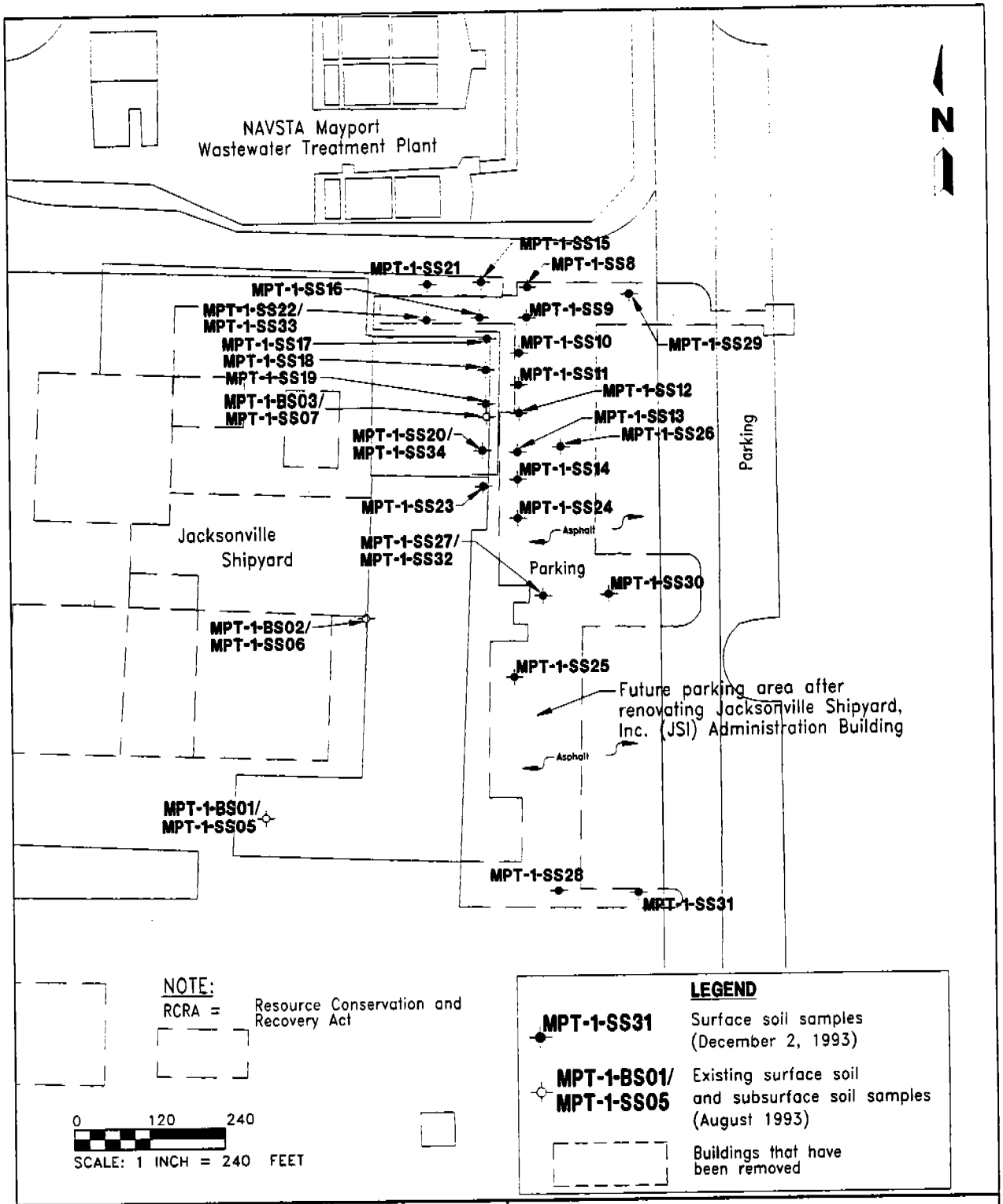

FIGURE 4-10
SURFACE AND SUBSURFACE SOIL SAMPLING LOCATIONS

RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

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Table 4-3
Analytical Results for Surface Soil Samples, December 1993, Jacksonville Shipyard Administration Building Area

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

Sample Location	CAS RN and Analyte						
	7440-92-1 Lead (mg/kg)	7440-97-6 Mercury (mg/kg)	11096-82-5 Aroclor-1260 (µg/kg)	12672-29-6 Aroclor-1248 (µg/kg)	57-4-9 Chlordane (µg/kg)	72-55-9 4,4'-DDE (µg/kg)	50-29-3 4,4'-DDT (µg/kg)
MPT-01-SS8	55.8	0.09 B	16 J	--	--	8.0	3.1
MPT-01-SS9	17.5	0.08 B	17 J	--	--	1.7	--
MPT-01-SS10	16.3	3.8	49	--	9.6	3.1	1.2 J
MPT-01-SS11	34.8	0.19	79	--	5.3 J	3.2	1.3
MPT-01-SS12	339.0	0.34	33	--	--	2.9	1.4
MPT-01-SS13	12.6	0.12	40	--	--	2.3	1.5
MPT-01-SS14	3.7	--	--	--	--	--	--
MPT-01-SS15	88.9	0.11	96	--	20	2.9	--
MPT-01-SS16	57.9	0.82	72	--	--	0.99 J	--
MPT-01-SS17	4.5	0.07 B	--	--	12	--	--
MPT-01-SS18	7.2	0.21	22	--	20	0.82	--
MPT-01-SS19	6.5	0.09 B	--	--	6.3 J	--	--
MPT-01-SS20	33.5	0.68	65	--	--	--	--
MPT-01-SS21	28.6	0.09	75	--	--	1.4	2.8
MPT-01-SS22	12.2	0.09 B	--	540	--	--	--
MPT-01-SS23	80.4	0.32	210	--	33 J	5.7	--
MPT-01-SS24	9.9	0.1	17 J	--	--	1.9	--
MPT-01-SS25	46.2	0.07 B	25	--	--	--	--
MPT-01-SS26	165	0.08 B	32 J	--	--	18	5.7
MPT-01-SS27	16.9	0.1 B	--	--	--	9.9	2.0 J
MPT-01-SS28	10.7	0.09	--	--	--	0.75	--
MPT-01-SS29	3	--	--	--	--	--	--
MPT-01-SS30	13.4	--	32 J	--	--	21.0	12
MPT-01-SS31	3.2	--	--	--	--	--	--
MPT-01-SS32	17.8	0.22	11 J	--	--	9.8	3.0
MPT-01-SS33	11.6	0.08 B	--	260	--	--	--
MPT-01-SS34	29.1	0.55	57	--	--	--	--

Notes: These data have not been validated.
All analytes were collected from 0 to 1 foot below land surface.
RCRA = Resource Conservation and Recovery Act.
SWMUs = solid waste management units.
CAS RN = chemical abstract service registry number.
mg/kg = milligrams per kilogram.
µg/kg = micrograms per kilogram.
4,4'-DDE = dichlorodiphenyldichloroethene.
4,4'-DDT = dichlorodiphenyltrichloroethane.
B = inorganic analytical result is less than the contract required detection limit and greater than the instrument detection limit.
J = estimated value that is less than the contract required quantitation limit and greater than the instrument detection limit.
-- = analyte not detected at concentrations greater than the contract required quantitation limit.

The field activities and laboratory methods used for analyzing the environmental samples collected at the Shipyard Area are discussed below.

Geophysical Survey. A geophysical survey was conducted in open areas where landfilled materials were suspected to be present in and around SWMU 1 (Figure 4-11). The purpose of the geophysical survey was to assess subsurface conditions, identify areas where buried materials may exist and to delineate the boundaries of Landfill A, if possible. Information gathered during the geophysical survey was also used in the design of a monitoring well network. The three geophysical survey methods employed included magnetometry (with vertical gradient capability), terrain conductivity instrumentation, and ground penetrating radar. The survey was conducted in March and April 1995.

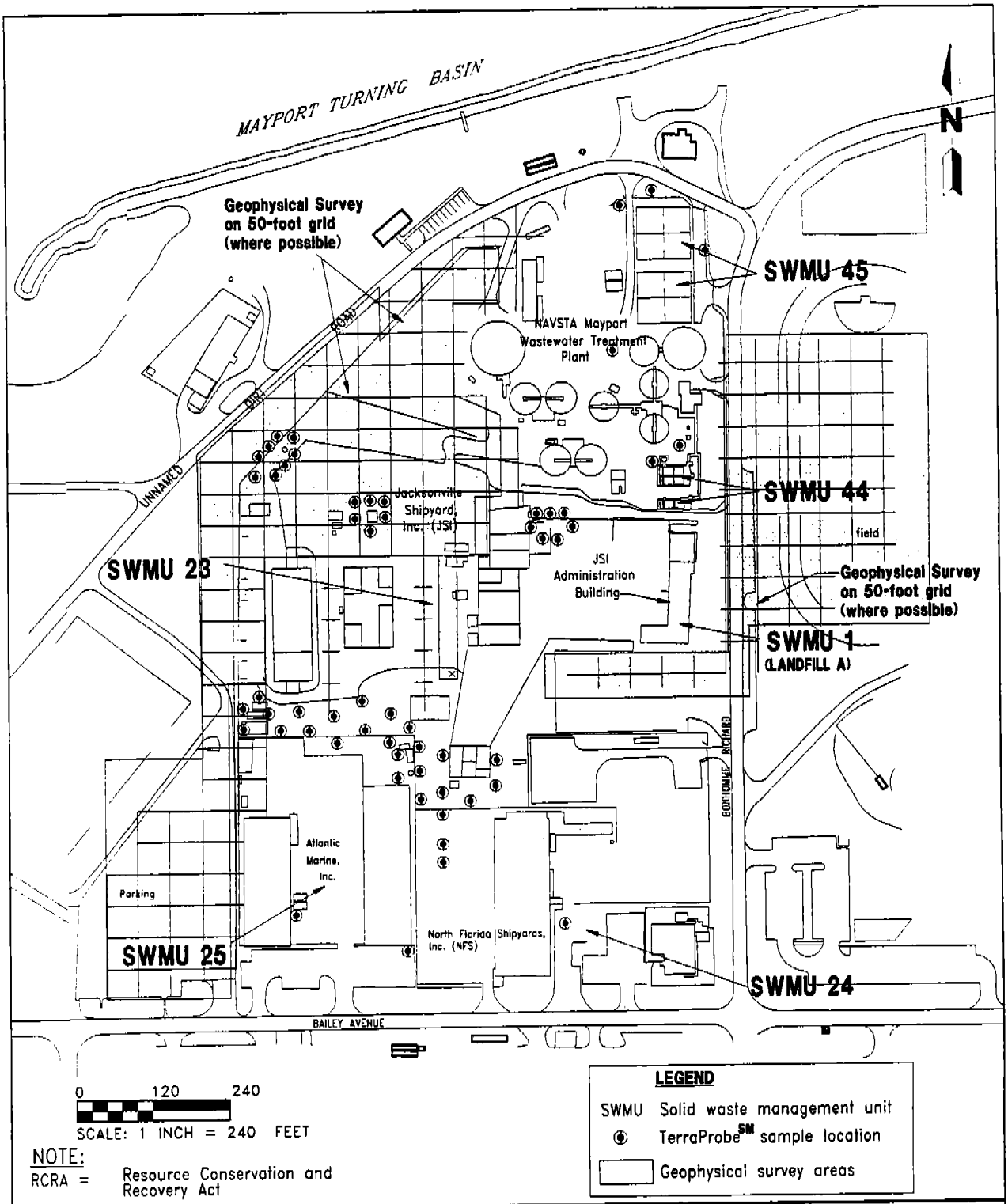
A grid with 20-foot spacing was surveyed in open spaces adjacent to the JSI Administration Building, the western part of the JSI, the western part of the FOWTP, an open area to the east of AMI, and the parking lot area next to SWMU 25 (Figure 4-11). Geophysical measurements were collected from each intersecting node. A more detailed description of the techniques employed and the results of the geophysical survey are presented in Appendix C.

Groundwater Field Screening Program. A groundwater field screening program was conducted using a direct-push technology (TerraProbe℠) to collect groundwater field-screening samples in areas that once were used to store petroleum fuels and/or solvents. The groundwater field-screening program was an iterative process designed to assess whether or not petroleum-related or solvent contamination is present and to delineate any contamination that is found. The groundwater field screening program was also used to assist in determining the location of Group III groundwater monitoring wells. Based on the results of the field screening program, confirmatory (groundwater) samples were collected to assess the nature and extent of contaminants, human health and ecological risk, and to provide fundamental engineering properties data to support development of potential corrective measures. A total of 63 TerraProbe℠ soundings were conducted in the Shipyard Area to collect the groundwater field screening samples (Plate 2).

Groundwater samples were collected using the TerraProbe℠ system to drive a threaded 1-inch OD hollow steel rod assembly attached to a threaded 1-inch OD hollow steel perforated screen to the proper sampling depth at each sampling location. A peristaltic pump was used to collect the groundwater sample, which was immediately containerized for transport to either the onsite screening laboratory or the offsite laboratory for confirmatory analyses.

Analyses of groundwater field screening samples was conducted using a field GC with 10 percent laboratory confirmation by USEPA Methods 8010 and 8020. The DQO for the groundwater field screening sample level accuracy is NEESA Level E (USEPA DQO Level 1). This DQO was selected because the purpose of this screening program was to assist in locating monitoring wells from which confirmatory groundwater samples were collected.

Sludge Sampling. Sixteen composited sludge/soil (mostly composed of sand and gravel) samples and two duplicates were collected from SWMU 45, FOWTP Sludge Drying Beds (Plate 3). Two composite samples were collected from each of the four quadrants of the two sludge drying beds; one sample from each of two



NOTE:
RCRA = Resource Conservation and Recovery Act

FIGURE 4-11
PROPOSED GEOPHYSICAL SURVEY GRID AND TERRAPROBE℠ SAMPLING LOCATIONS

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distinct depth intervals. The first composite sample depth interval was from the surface of the sludge drying bed to a depth of 1 foot; the second composite sample depth interval was from 1 to 2 feet bls. In each quadrant of the sludge drying bed, five individual samples from the same depth interval were composited into a single sample. The five individual samples were collected and arranged in a pattern similar to the five side of a die cube: one in the center of each quadrant and one sample near each of the four corners of the quadrant. Where possible, sludge sampling locations were biased to worst case location (e.g., stained areas, low areas where ponding occurs, etc.).

Sludge samples were collected using a decontaminated stainless-steel hand auger, a stainless steel spoon, and a glass (pyrex) bowl. The aliquot for analysis of VOCs was transferred directly to a sample container with a Teflon™ lid to reduce the potential for volatilization. The sludge/soil remaining in the stainless-steel hand auger or split spoon was transferred to the glass bowl using the stainless-steel spoon. Aliquots of the sample for analysis of SVOCs, pesticides, PCBs, and inorganics were then homogenized and transferred to appropriate sample containers. Samples were placed in a cooler, refrigerated with ice, and sent overnight under chain-of-custody protocol to an offsite laboratory for analysis by USEPA SW-846 Methods.

Sludge samples submitted for laboratory analysis were analyzed for target analytes (VOCs, SVOCs, pesticides, PCBs, metals and cyanide) selected from both the Groundwater Monitoring List contained in 40 CFR 264, Appendix IX, and USEPA's CLP TCL and TAL.

Surface and Subsurface Soil Sampling. The purpose of surface and subsurface soil samples was to assess whether or not there has been a contaminant release from SWMUs 1, 23, 24, 25, 44, and 45, and the former Target Range Area (Plate 3). Seventy-four surface soil samples and 11 duplicates along with 21 subsurface soil samples and 1 duplicate were collected from locations that were once used as laydown yards for storage of hazardous materials, or as sand blasting or painting areas. Surface and subsurface soil samples were also collected from seven boring locations at the former JSI Administration Building and from each monitoring well or well cluster located in and adjacent to the Shipyard area SWMUs (Plate 3).

The soil samples were collected at the following intervals: land surface to a depth of 1-foot bls (surface soil) and a 1-foot interval immediately above the water table (subsurface soil) which ranged from 5 to 9 feet bls depending on the depth to the water table at the boring location. Surface soil samples and subsurface soil samples from sampling intervals between 1 to 4 feet bls were collected using a decontaminated stainless-steel hand auger. Subsurface soil samples from sampling intervals below 4 feet bls were collected using a decontaminated stainless-steel split-spoon sampler.

For both sampling techniques, the aliquot for analysis of VOCs was transferred, using a stainless-steel spoon, directly to a sample container with a Teflon™ lid to reduce the potential for volatilization. Soil remaining in the stainless-steel hand auger or split-spoon sampler was transferred to a glass bowl (Pyrex®) using the stainless-steel spoon. Aliquots of the sample for analysis of SVOCs, pesticides, PCBs, and inorganics were then homogenized and transferred to appropriate sample containers. Samples were placed in a cooler, refrigerated with ice, and sent overnight under chain-of-custody protocol to an offsite laboratory for analysis by USEPA SW-846 Methods.

The soil samples submitted for laboratory analysis were analyzed for target analytes (VOCs, SVOCs, pesticides, PCBs, metals and cyanide) selected from both the Groundwater Monitoring List contained in 40 CFR 264, Appendix IX, and USEPA's CLP TCL and TAL parameters.

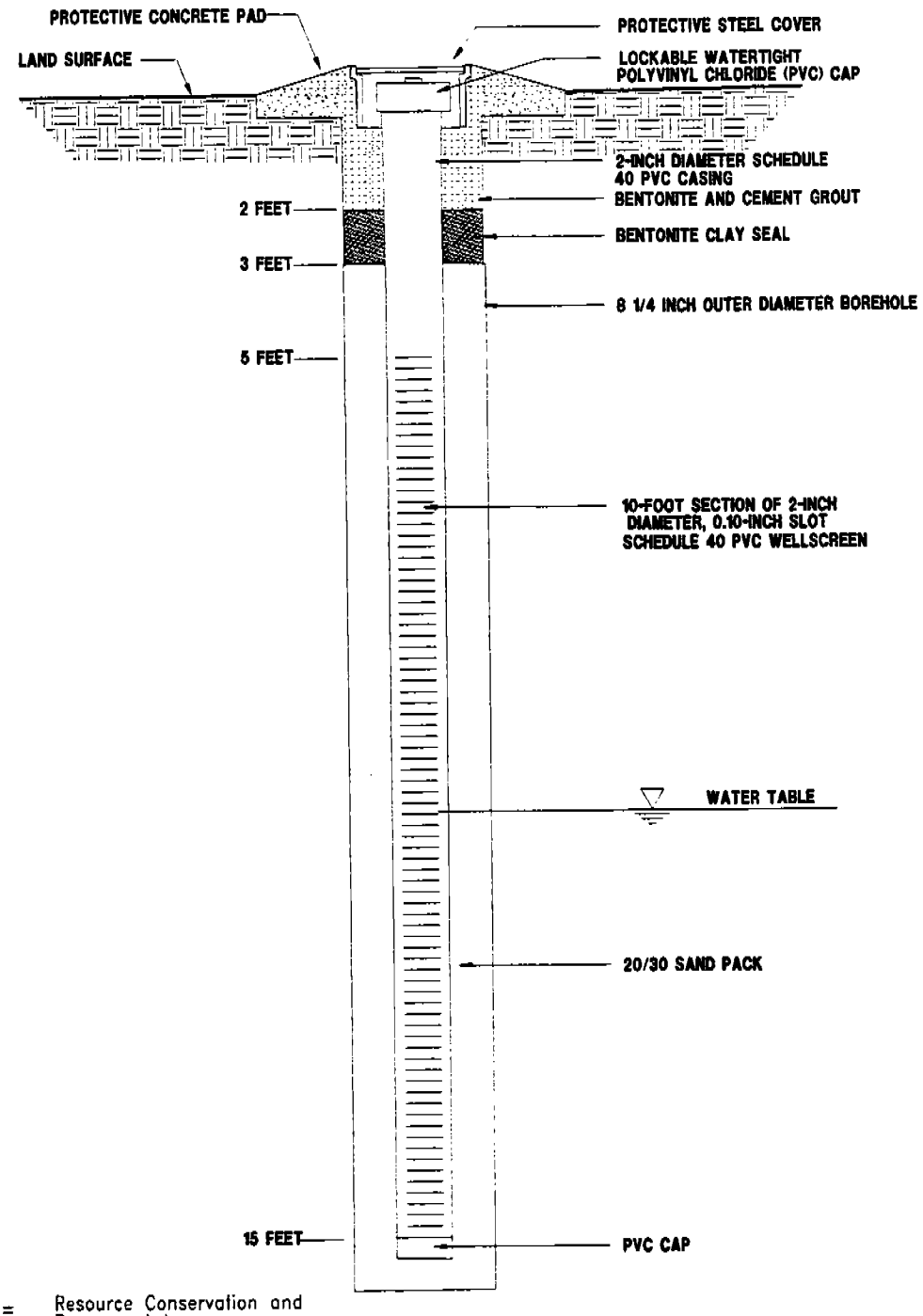
In addition, five subsurface soil samples collected during the drilling of monitoring wells were submitted to a geotechnical laboratory for analyses of general physical and chemical properties. These soil samples were collected at locations selected in the field to assess the variability of soil physical properties in the vicinity of the Shipyard Area. The physical and chemical properties include bulk density, CEC, TOC, soil pH, particle-size distribution, and moisture content. Properties of porosity and soil sorptive capacity were derived from these basic physical and chemical properties. These parameters also will provide fundamental engineering data to support development of potential corrective measures. Results of the geotechnical analyses were discussed previously in Chapter 3.0, Subsection 3.2.5.

Groundwater Monitoring Wells Installation. Twelve shallow-zone (surficial aquifer-screened across the water table), four intermediate-zone (screened ranges from 30 to 44 feet bls) and four deep-zone (Hawthorn Group-screened ranges from 58 to 70 feet bls) monitoring wells were installed during the Group III RFI field activities at the locations shown on Plate 2. Twelve of the monitoring wells were installed in four clusters consisting of a shallow zone, intermediate zone, and deep zone monitoring well. The deep aquifer-zone monitoring well at each cluster was drilled and installed first. Typical construction diagrams for shallow, intermediate, and deep zone monitoring wells are provided on Figures 4-12, 4-13, and 4-14, respectively.

Continuous split-spoon samples were collected from the land surface to the borehole termination depth at the location of the deepest monitoring well installed in a cluster. Continuous split-spoon sampling was conducted to provide a sampling interval to sufficiently identify lithologic conditions in the Shipyard Area and identify low permeability zones (confining layers) within the surficial aquifer, if present. Boring logs for all monitoring wells installed during the Group III field investigation are presented in Appendix A of the NAVSTA Mayport GIR (ABB-ES, 1995a).

Groundwater Sampling Program. Twenty-four groundwater samples and four duplicates were collected from existing and newly installed monitoring wells in the vicinity of the Shipyard Area (SWMUs 1, 23, 24, 25, 44, and 45) (Plate 2). The groundwater sampling program also included the background well cluster consisting of three wells: a shallow (MPT-B-MW01S), an intermediate (MPT-B-MW01I), and a Hawthorn Group or deep well (MPT-B-MW01D), installed near Lake Wonderwood. These background well locations do not appear on Plate 2, as Lake Wonderwood is approximately 1,600 feet southeast of the Shipyard Area. The location of these and other background monitoring wells for NAVSTA Mayport are provided in Plate 1 of the NAVSTA Mayport GIR (ABB-ES, 1995a).

Groundwater sampling was accomplished as described in Paragraph 2.1.4.2 of the NAVSTA Mayport GIR (ABB-ES, 1995a). The sampling procedure was a modification of previous sampling methods; however, it closely resembled the low-flow (less than 1 liter per minute) method used by USEPA (USEPA, 1996). Prior to groundwater sample collection, the monitoring well was purged from approximately



NOTE:
RCRA = Resource Conservation and Recovery Act

NOT TO SCALE

FIGURE 4-12
TYPICAL MONITORING WELL CONSTRUCTION DIAGRAM, SHALLOW ZONE, SURFICIAL AQUIFER

RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

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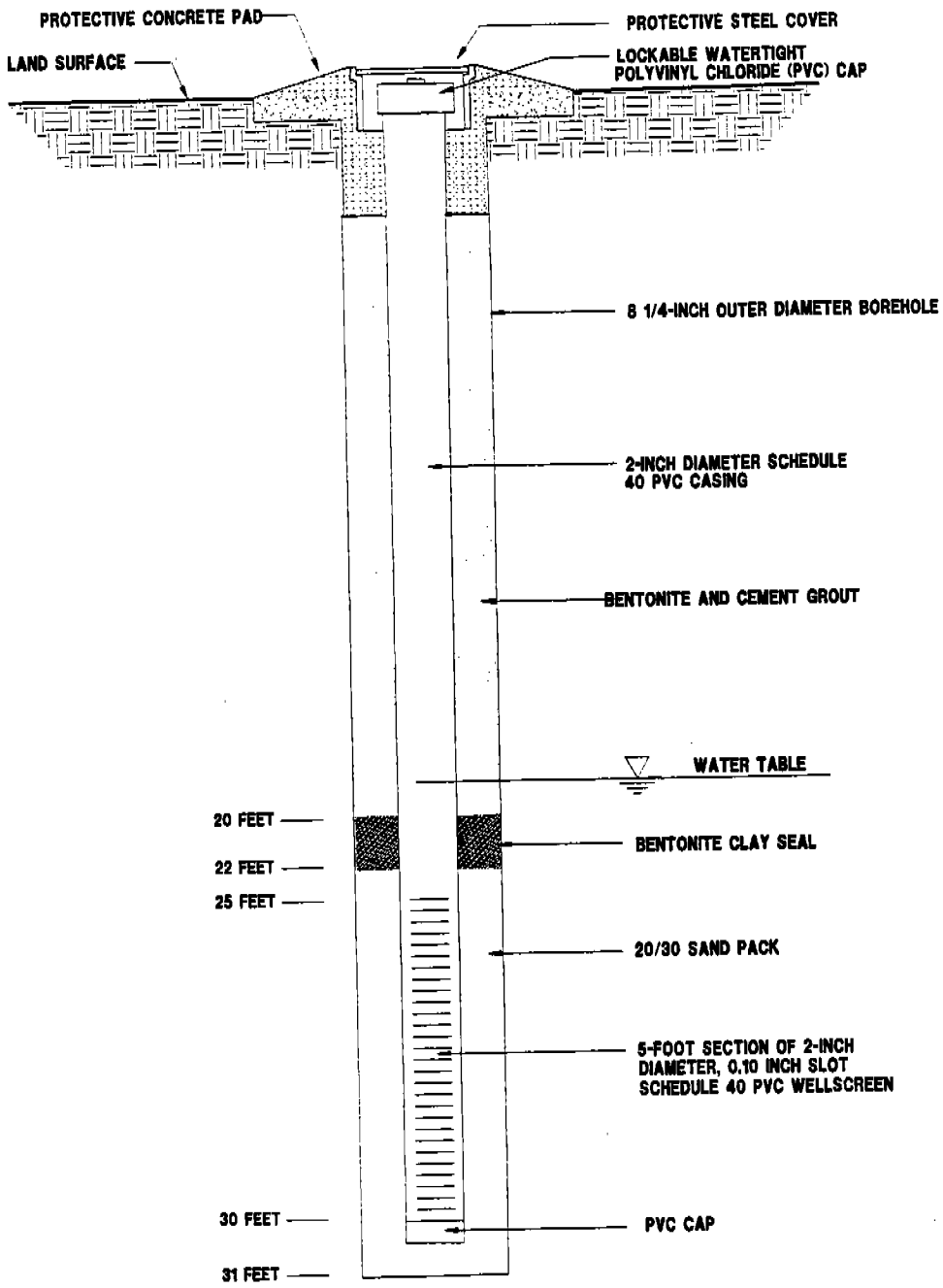


NOTE:
RCRA = Resource Conservation and Recovery Act

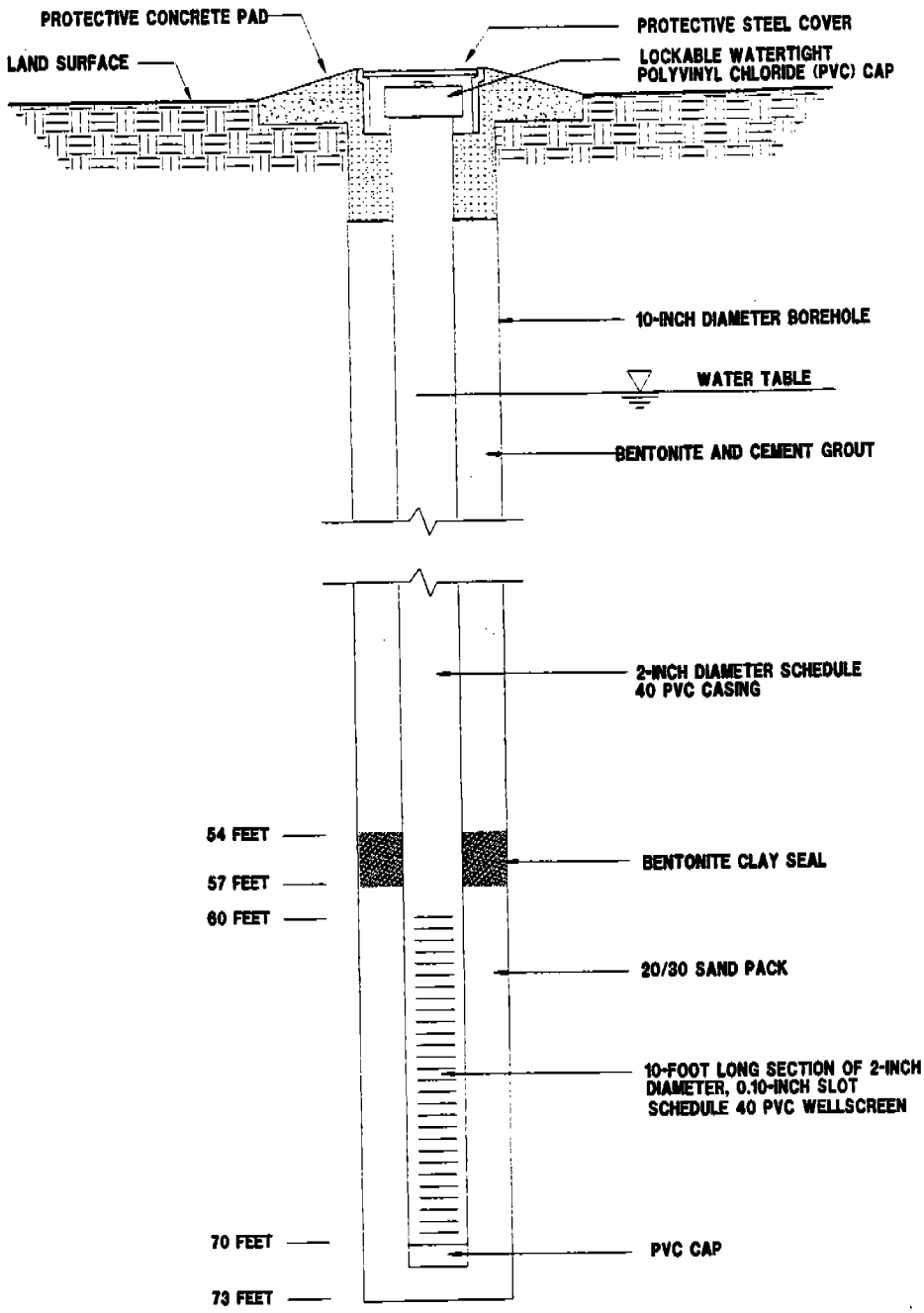
NOT TO SCALE

FIGURE 4-13
TYPICAL MONITORING WELL CONSTRUCTION DIAGRAM, INTERMEDIATE ZONE, SURFICIAL AQUIFER

RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

MAYPORT/MAYWELL/NAB/02-29-96



NOTE:
RCRA = Resource Conservation and Recovery Act

NOT TO SCALE

FIGURE 4-14
TYPICAL MONITORING WELL CONSTRUCTION DIAGRAM, DEEP ZONE, SURFICIAL AQUIFER, OR HAWTHORN FORMATION

RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

MAYPORT/MAYWELL/MAB/02-29-96

the middle of the screened interval using a peristaltic pump to remove stagnant water without causing the resuspension of silts and clays. Temperature, pH, conductivity, salinity, dissolved oxygen, oxidation potential, and turbidity were measured during purging to ensure good conductance between the well and the surrounding matrix. The monitoring well was purged until temperature, pH, and conductivity, salinity, dissolved oxygen, oxidation potential stabilized and a minimum of three well volumes of water had been removed. Purging also continued until a turbidity of 5 nephelometric turbidity units (NTUs) or less was achieved.

The groundwater samples were collected using a peristaltic pump and disposable Teflon™ tubing. The samples were collected before the material came in contact with the pump. The samples were collected by pumping water at less than one liter per minute from the middle of the well screen interval. Samples for inorganics, SVOCs, pesticides, and PCBs were collected first. VOCs were collected last with the sampler, preventing agitation of the water in the monitoring well by slowly pulling the Teflon™ tubing out of the well and carefully transferring the contents of the tube into a VOC vial with a Teflon™ septa cap for shipment to the offsite laboratory. Groundwater samples were placed in a cooler, refrigerated with ice, and sent overnight under chain-of-custody protocol to an offsite laboratory for analysis.

Environmental Sample Laboratory Analyses. Groundwater field screening samples (NEESA Level E, USEPA Level I DQO) were analyzed in the field using a portable GC and 10 percent were submitted to a laboratory for analyses using USEPA Methods 8010, 8020 and 8015 (Modified). Surface and subsurface soil, sludge, and groundwater samples collected at the Shipyard Area (SWMUs 1, 23, 24, 25, 44, and 45) were analyzed for target analytes selected from both the Groundwater Monitoring List (contained in 40 CFR 264, Appendix IX) and USEPA's CLP TCL and TAL parameters. The analytical data package for these samples was NEESA Level C for aqueous and nonaqueous matrices for VOCs, SVOCs, pesticides, and PCBs.

Field QA/QC samples also were collected during sampling activities at the Shipyard Area and were analyzed for the same parameters as the corresponding environmental samples. QA/QC requirements are presented in detail in the NAVSTA Mayport RFI Workplan, Appendix A, Volume II (ABB-ES, 1991).

4.2 FINDINGS. The subsections below present the findings from the geophysical survey and the nature and distribution of target analytes detected in surface soil, subsurface soil, sludge ,and groundwater samples. The data are described as previously presented based on the following rationale: SWMUs 1, 23, 24, 25, 44, and 45 are potential sources of contamination and thus, the SWMUs may have released contamination to the underlying subsurface soils; surface soil data are presented and discussed first, followed by findings for the subsurface soil, and then SWMU 45 sludge data; groundwater is discussed last to assess whether or not target analytes have migrated beyond the boundaries of the industrial Shipyard Area.

4.2.1 Geophysical Survey The geophysical survey was conducted to assess areas of potential concern that were noted in aerial photographs from 1952 to 1989 and, if possible, confirm the location of SWMU 1 (Figure 4-11). The areas of concern were based on the appearance of possible disturbed vegetation or soil. A technical memorandum presenting the results of the Geophysical Survey is provided in Appendix C.

Interference from cultural features, metal buildings, and aboveground and below ground utilities significantly interfered with the geophysical instrumentation and limited the effectiveness of the geophysical survey, in particular the magnetometer survey. However, geophysical anomalies were detected that could not be readily explained by cultural interferences. The anomalies were investigated with ground-penetrating radar. The anomalies were interpreted to be related to buried utilities and not landfilled materials. Based on this interpretation, the geophysical survey data was not used to locate soil borings or monitoring wells.

4.2.2 Surface Soil Assessment The surface soil analytical results are described as a group for the Shipyard Area, SWMUs 1, 23, 24, 25, 44, and 45. Seventy-four surface soil samples and 10 duplicates were collected from the Shipyard Area (Plate 3). Tables 4-4 and 4-5 present concentrations of the chemicals detected in the surface soil samples, and Table 4-6 lists statistics for each analyte detected. Table 4-7 compares detected concentrations of target analytes with background screening values and benchmarks. Surface soil analytical results are compared to background screening values for surface soils (ABB-ES, 1995a) and residential-use benchmark values from USEPA Region III RBCs (USEPA, 1995a) and Florida soil cleanup goals (FDEP, 1995a; 1995b; and 1996).

4.2.2.1 **Organics** Target analytes detected in the surface soil samples consist of 8 VOCs, 24 SVOCs, 14 pesticides, and 2 PCBs (Table 4-4). None of the VOCs were detected at concentrations that exceed benchmarks; however, 5 SVOCs, 2 pesticides, and 2 PCBs were detected at concentrations that exceed benchmarks (Table 4-7).

The SVOCs and pesticides were detected at concentrations that exceed residential criteria for the USEPA Region III RBCs and the FDEP soil cleanup goals. The PCBs were detected at concentrations that exceed only the USEPA Region III RBCs. Three of the organic target analytes, two SVOCs (benzo(a)pyrene, dibenz(a,h)anthracene) and one pesticide (dieldrin), were also detected at concentrations that exceed their respective industrial values for FDEP soil cleanup criteria. The criteria are 500 μg/kg for the SVOCs and 300 μg/kg for the pesticide. Industrial values are not shown on Table 4-7.

The SVOCs, pesticides, and PCBs that exceeded the residential and/or industrial benchmarks were detected at various locations in the Shipyard Area and likely represent "hot spots." The following is a description of the sample locations where target analytes were detected at concentrations that exceed the benchmarks.

Former Target Range. The duplicate of surface soil sample MPT-TR-SS01 contained four SVOCs at concentrations exceeding the residential benchmarks (Tables 4-4 and 4-7). The sample was collected at the approximate location of the northern end of the former target range backstop. It should be noted that the polynuclear aromatic hydrocarbons (PAHs) were detected in a sample designated as a duplicate sample but not the corresponding environmental sample. This suggests either poor mixing of the sample in the field and/or that the PAHs were not homogeneous in the soil at the sampling location. Additionally, it should be noted that benzo(a)pyrene and dibenz(a,h)anthracene were detected at concentrations that exceed their FDEP industrial soil cleanup goal.

Table 4-4
Organic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	R9861	R9861	R9861	R9861	R9861	R9861	R9861	R9861
Sample Location:	MPT-1-SB01	MPT-1-SB01	MPT-1-SB02	MPT-1-SB03	MPT-1-SB04	MPT-1-SB05	MPT-1-SB06	MPT-1-SB07
Sample Number:	01S00101	01S00101DUP	01S00201*	01S00301	01S00401	01S00501	01S00601	01S00701
Date Sampled:	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95
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
Volatiles (µg/kg)								
Carbon disulfide	--	1 J	--	--	--	--	--	2 J
2-Butanone	--	--	--	--	4 J	--	--	--
Benzene	--	--	--	--	1 J	--	--	--
Toluene	--	--	--	--	1 J	--	--	--
Ethylbenzene	--	--	--	--	--	--	--	--
Xylenes (total)	--	3 J	--	--	2 J	--	--	2 J
Trichlorofluoromethane	--	--	--	--	--	--	--	--
Isobutyl alcohol	--	--	--	--	--	--	--	--
Semivolatiles (µg/kg)								
Benzoic acid	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--	--
2-Methylnaphthalene	--	--	--	--	--	--	--	--
Dimethylphthalate	--	--	--	--	--	--	--	--
Acenaphthene	--	--	--	--	--	--	--	--
Dibenzofuran	--	--	--	--	--	--	--	--
Fluorene	--	--	--	--	--	--	--	--
Phenanthrene	--	--	400 J	--	--	--	--	--
Anthracene	--	--	--	--	--	--	--	--
Di-n-Butylphthalate	--	--	--	--	--	--	--	--
Fluoranthene	--	--	390 J	--	--	--	--	--
Pyrene	--	--	250 J	--	--	--	--	--
Butylbenzylphthalate	--	--	--	--	--	--	--	--
Benzo(a)anthracene	--	--	100 J	--	--	--	--	--
Chrysene	--	--	130 J	--	--	--	--	--
bis(2-Ethylhexyl) phthalate	--	--	--	--	--	--	--	--
Di-n-octylphthalate	--	--	--	--	--	--	--	--

See notes at end of table.

Table 4-4 (Continued)
Organic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	R9861	R9861	R9861	R9861	R9861	R9861	R9861	R9861
Sample Location:	MPT-1-SB01	MPT-1-SB01	MPT-1-SB02	MPT-1-SB03	MPT-1-SB04	MPT-1-SB05	MPT-1-SB06	MPT-1-SB07
Sample Number:	01S00101	01S00101DUP	01S00201*	01S00301	01S00401	01S00501	01S00601	01S00701
Date Sampled:	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95
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
Semivolatiles(µg/kg)								
Benzo(b)fluoranthene	--	--	120 J	--	--	--	--	--
Benzo(k)fluoranthene	--	--	130 J	--	--	--	--	--
Benzo(a)pyrene	--	--	96 J	--	--	--	--	--
Indeno (1,2,3-cd) pyrene	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	--	--	--	--	--	--	--	--
Acetophenone	--	--	--	--	--	--	--	--
Pesticides/PCBs(µg/kg)								
beta-BHC	--	--	--	--	--	--	--	--
Aldrin	--	--	--	--	--	--	--	--
Heptachlor epoxide	--	--	--	--	--	--	--	--
Dieldrin	--	--	--	--	--	--	--	--
4,4'-DDE	1.9 J	1.9 J	--	1.9	2.3 J	0.93 J	0.98 J	--
Endrin	--	--	--	--	--	--	--	--
Endosulfan II	--	--	--	--	--	--	--	--
4,4'-DDD	--	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	1.5	2.6 J	4.6 J	--	--
Methoxychlor	--	--	--	--	--	--	--	--
Endrin aldehyde	--	--	--	--	--	--	--	--
Endrin ketone	--	--	--	--	--	--	--	--
Chlordane	--	--	--	--	--	--	--	--
Isodrin	--	--	--	--	--	--	--	--
Aroclor-1254	--	--	--	--	--	--	--	--
Aroclor-1260	100 J	150	--	--	55 J	84 J	32 J	--

See notes at end of table.

Table 4-4 (Continued)
Organic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	R9861	R9743	R9743	R9743	R9743	R9743	R9743	R9743
Sample Location:	MPT-23-SS07	MPT-23-SS08	MPT-23-SS08	MPT-23-SS09	MPT-23-SS10	MPT-23-SS11	MPT-23-SS12	MPT-23-SS13
Sample Number:	23S00701	23S00801	23S00801DUP	23S00901	23S01001	23S01101	23S01201	23S01301
Date Sampled:	05-APR-95	05-APR-95	05-APR-95	05-APR-95	05-APR-95	07-APR-95	07-APR-95	07-APR-95
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
Volatiles (µg/kg)								
Carbon disulfide	--	--	--	--	--	--	--	--
2-Butanone	--	--	--	--	--	--	--	--
Benzene	--	--	--	--	--	--	--	--
Toluene	--	--	--	--	--	2 J	--	--
Ethylbenzene	--	--	--	--	--	--	--	--
Xylenes (total)	--	--	--	--	--	--	--	--
Trichlorofluoromethane	--	--	--	--	--	--	--	--
Isobutyl alcohol	--	--	--	--	--	--	--	--
Semivolatiles (µg/kg)								
Benzoic acid	--	--	--	--	--	--	--	--
Naphthalene	--		--	--	--	--	880	--
2-Methylnaphthalene	--	--	--	--	--	--	--	--
Dimethylphthalate	--	--	--	--	--	--	--	--
Acenaphthene	--	--	--	--	--	--	--	--
Dibenzofuran	--	--	--	--	--	--	--	--
Fluorene	--	--	--	--	--	--	--	--
Phenanthrene	--	--	--	--	--	--	--	--
Anthracene	--	--	--	--	--	--	--	--
Di-n-Butylphthalate	--	--	--	--	--	--	--	--
Fluoranthene	130 J	--	--	--	--	--	--	210 J
Pyrene	200 J	--	--	--	--	--	--	240 J
Butylbenzylphthalate	--	--	--	--	--	--	--	--
Benzo(a)anthracene	90 J	--	--	--	--	--	--	160 J
Chrysene	130 J	--	--	--	--	--	--	220 J
bis(2-Ethylhexyl) phthalate	--	--	--	--	--	--	--	--
Di-n-octylphthalate	--	--	--	--	--	--	--	--

See notes at end of table.

Table 4-4 (Continued)
Organic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	R9861	R9743	R9743	R9743	R9743	R9743	R9743	R9743
Sample Location:	MPT-23-SS07	MPT-23-SS08	MPT-23-SS08	MPT-23-SS09	MPT-23-SS10	MPT-23-SS11	MPT-23-SS12	MPT-23-SS13
Sample Number:	23S00701	23S00801	23S00801DUP	23S00901	23S01001	23S01101	23S01201	23S01301
Date Sampled:	05-APR-95	05-APR-95	05-APR-95	05-APR-95	05-APR-95	07-APR-95	07-APR-95	07-APR-95
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
Semivolatiles (µg/kg)								
Benzo(b)fluoranthene	110 J	--	--	--	--	--	--	240 J
Benzo(k)fluoranthene	130 J	--	--	--	--	--	--	220 J
Benzo(a)pyrene	94 J	--	--	--	--	--	--	160 J
Indeno (1,2,3-cd) pyrene	--	--	--	--	--	--	--	130 J
Dibenz(a,h)anthracene	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	--	--	--	--	--	--	--	190 J
Acetophenone	--	--	--	--	--	--	--	--
Pesticides/PCBs (µg/kg)								
beta-BHC	--	--	--	--	--	--	--	--
Aldrin	--	--	--	--	--	--	--	--
Heptachlor epoxide	--	--	--	--	--	--	--	--
Dieldrin	--	--	--	--	--	--	--	--
4,4'-DDE	--	1.8 J	1.9 J	--	--	1.2	--	2.2
Endrin	--	--	--	--	--	--	--	--
Endosulfan II	--	--	--	--	--	--	--	--
4,4'-DDD	--	--	--	--	--	--	--	--
4,4'-DDT	--	2.2	2.6 J	--	--	3.8	--	--
Methoxychlor	190 J	--	--	4.8	--	2.9	--	--
Endrin aldehyde	--	--	--	--	--	--	--	--
Endrin ketone	22 J	--	--	--	--	--	--	--
Chlordane	--	--	--	--	--	--	--	--
Isodrin	--	--	--	--	--	--	--	--
Aroclor-1254	--	--	--	--	130	--	70	--
Aroclor-1260	--	--	--	--	--	--	--	--

See notes at end of table.

Table 4-4 (Continued)
Organic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	R9743	R9743	R9743	R9743	M8775	M8775	M8780	M8780
Sample Location:	MPT-23-SS14	MPT-23-SS15	MPT-23-SS16	MPT-23-SS18	MPT-23-SS19	MPT-23-SS20	MPT-23-SS21	MPT-23-SS22
Sample Number:	23S01401	23S01501	23S01601	23S01801	23S01901	23S02001	23S02101	23S02201
Date Sampled:	07-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95	08-APR-95	08-APR-95
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
Volatiles (µg/kg)								
Carbon disulfide	--	--	--	2 J	--	--	--	--
2-Butanone	--	--	--	--	--	--	--	--
Benzene	--	--	--	--	--	--	--	--
Toluene	2 J	--	4 J	--	1 J	--	6	7
Ethylbenzene	--	--	--	--	--	--	--	--
Xylenes (total)	--	--	--	--	1 J	2 J	8	12
Trichlorofluoromethane	--	--	--	--	--	--	--	--
Isobutyl alcohol	--	--	--	--	--	--	--	--
Semivolatiles (µg/kg)								
Benzoic acid	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--	24 J
2-Methylnaphthalene	--	--	--	--	--	--	--	--
Dimethylphthalate	--	--	--	--	--	--	--	--
Acenaphthene	--	--	--	--	--	--	--	--
Dibenzofuran	--	--	--	--	--	--	--	--
Fluorene	--	--	--	--	--	--	--	--
Phenanthrene	96 J	--	--	--	--	--	--	--
Anthracene	--	--	--	--	--	--	--	--
Di-n-Butylphthalate	--	79 J	200 J	--	30 J	44 J	--	20 J
Fluoranthene	330 J	--	--	--	--	29 J	--	--
Pyrene	520 J	--	--	--	--	21 J	20 J	--
Butylbenzylphthalate	--	--	--	--	--	--	--	--
Benzo(a)anthracene	330 J	--	--	--	--	--	--	--
Chrysene	440 J	--	--	--	--	21 J	34 J	--
bis(2-Ethylhexyl) phthalate	--	--	--	--	26 J	150 J	--	--
Di-n-octylphthalate	--	--	--	--	--	--	--	--

See notes at end of table.

Table 4-4 (Continued)
Organic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	R9743	R9743	R9743	R9743	M8775	M8775	M8780	M8780
Sample Location:	MPT-23-SS14	MPT-23-SS15	MPT-23-SS16	MPT-23-SS18	MPT-23-SS19	MPT-23-SS20	MPT-23-SS21	MPT-23-SS22
Sample Number:	23S01401	23S01501	23S01601	23S01801	23S01901	23S02001	23S02101	23S02201
Date Sampled:	07-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95	08-APR-95	08-APR-95
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
Semivolatiles (µg/kg)								
Benzo(b)fluoranthene	450 J	--	--	--	--	24 J	--	--
Benzo(k)fluoranthene	500 J	--	--	--	--	27 J	--	--
Benzo(a)pyrene	430 J	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	270 J	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	96 J	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	340 J	--	--	--	--	--	--	--
Acetophenone	--	--	--	--	--	--	--	--
Pesticides/PCBs (µg/kg)								
beta-BHC	--	--	--	--	--	--	--	--
Aldrin	--	--	--	--	--	--	--	--
Heptachlor epoxide	--	--	--	--	--	--	--	--
Dieldrin	--	--	--	--	--	--	--	--
4,4'-DDE	1.2	1.3 J	8.3	--	--	--	--	--
Endrin	--	--	--	--	--	--	--	--
Endosulfan II	12	--	--	--	--	--	--	--
4,4'-DDD	--	--	--	--	--	--	--	--
4,4'-DDT	--	2	28	--	--	--	--	--
Methoxychlor	--	--	--	--	--	--	--	--
Endrin aldehyde	--	--	--	--	--	--	--	--
Endrin ketone	--	--	--	--	--	--	--	--
Chlordane	--	--	--	--	--	--	--	--
Isodrin	--	--	--	--	--	--	--	--
Aroclor-1254	--	--	--	--	--	--	--	--
Aroclor-1260	--	--	380	--	26	46 J	--	--

See notes at end of table.

Table 4-4 (Continued)
Organic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	M8780	M8775	M8775	M8775	M8775	M8775	M8994	M8994
Sample Location:	MPT-23-SS23	MPT-23-SS24	MPT-23-SS25	MPT-23-SS26	MPT-23-SS27	MPT-23-SS28	MPT-23-MW07S	MPT-23-MW07S
Sample Number:	23S02301	23S02401	23S02501	23S02601	23S02701	23S02801	23S02901	23S02901DUP
Date Sampled:	08-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95	20-MAY-95	20-MAY-95
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
Volatiles (µg/kg)								
Carbon disulfide	4 J	--	1 J	--	--	--	--	--
2-Butanone	--	--	--	--	--	--	--	--
Benzene	--	--	--	--	--	--	--	--
Toluene	13	--	2 J	--	--	--	--	--
Ethylbenzene	--	--	--	--	--	--	--	--
Xylenes (total)	2 J	--	6	2 J	2 J	2 J	--	--
Trichlorofluoromethane	--	--	--	--	--	--	--	--
Isobutyl alcohol	--	--	--	--	--	--	--	--
Semivolatiles (µg/kg)								
Benzoic acid	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--	--
2-Methylnaphthalene	--	--	--	--	--	--	--	--
Dimethylphthalate	--	--	--	--	--	--	--	--
Acenaphthene	--	--	--	--	--	--	--	--
Dibenzofuran	--	--	--	--	--	--	--	--
Fluorene	--	--	--	--	--	--	--	--
Phenanthrene	--	--	--	32 J	--	--	--	--
Anthracene	--	--	--	--	--	--	--	--
Di-n-Butylphthalate	--	41 J	29 J	19 J	38 J	--	--	--
Fluoranthene	42 J	--	28 J	140 J	--	--	--	--
Pyrene	62 J	--	28 J	130 J	--	--	--	--
Butylbenzylphthalate	--	--	--	--	--	--	--	--
Benzo(a)anthracene	54 J	--	--	100 J	--	--	--	--
Chrysene	80 J	--	21 J	150 J	--	--	--	--
bis(2-Ethylhexyl) phthalate	--	62 J	41 J	91 J	35 J	34 J	--	--
Di-n-octylphthalate	--	--	--	--	--	--	--	--

See notes at end of table.

Table 4-4 (Continued)
Organic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	M8780	M8775	M8775	M8775	M8775	M8775	M8994	M8994
Sample Location:	MPT-23-SS23	MPT-23-SS24	MPT-23-SS25	MPT-23-SS26	MPT-23-SS27	MPT-23-SS28	MPT-23-MW07S	MPT-23-MW07S
Sample Number:	23S02301	23S02401	23S02501	23S02601	23S02701	23S02801	23S02901	23S02901DUP
Date Sampled:	08-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95	20-MAY-95	20-MAY-95
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
Semivolatiles (µg/kg)								
Benzo(b)fluoranthene	65 J	--	22 J	170 J	--	--	--	--
Benzo(k)fluoranthene	69 J	19 J	35 J	270 J	24 J	--	--	--
Benzo(a)pyrene	74 J	--	24 J	190 J	--	--	--	--
Indeno (1,2,3-cd) pyrene	47 J	--	26 J	180 J	--	--	--	--
Dibenz(a,h)anthracene	--	--	--	69 J	--	--	--	--
Benzo(g,h,i)perylene	55 J	--	43 J	260 J	--	--	--	--
Acetophenone	--	--	28 J	--	--	--	--	--
Pesticides/PCBs (µg/kg)								
beta-BHC	--	--	--	--	--	--	--	--
Aldrin	--	--	--	--	--	--	--	--
Heptachlor epoxide	--	--	--	--	--	--	--	--
Dieldrin	--	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--	--
Endrin	--	--	--	--	--	--	--	--
Endosulfan II	--	--	--	--	--	--	--	--
4,4'-DDD	--	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--	--
Methoxychlor	--	--	--	--	--	--	--	--
Endrin aldehyde	--	--	--	--	--	--	--	--
Endrin ketone	--	--	--	--	--	--	--	--
Chlordane	--	29 J	--	--	--	--	--	--
Isodrin	--	--	--	--	--	--	--	--
Aroclor-1254	220 J	--	--	--	--	--	280 J	390 J
Aroclor-1260	--	--	--	--	--	--	100	140

See notes at end of table.

Table 4-4 (Continued)
Organic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	M8780	M8780	M8780	M8780	M8780	M8780	M8867	M8985
Sample Location:	MPT-24-SS01	MPT-24-SS02	MPT-24-SS03	MPT-24-SS04	MPT-24-SS04	MPT-24-SS05	MPT-24-SS06	MPT-24-MW01S
Sample Number:	24S00101	24S00201	24S00301	24S00401	24S00401DUP	24S00501	24S00601	24S00701
Date Sampled:	08-APR-95	08-APR-95	08-APR-95	08-APR-95	08-APR-95	08-APR-95	24-APR-95	19-MAY-95
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
Volatiles (µg/kg)								
Carbon disulfide	2 J	3 J	2 J	--	1 J	1 J	--	--
2-Butanone	--	--	--	--	--	--	--	--
Benzene	--	--	--	--	--	--	--	--
Toluene	--	--	3 J	--	1 J	--	--	--
Ethylbenzene	--	--	--	--	--	--	--	--
Xylenes (total)	3 J	--	6	3 J	6	3 J	4 J	--
Trichlorofluoromethane	--	--	--	--	--	--	--	--
Isobutyl alcohol	--	--	--	--	--	--	--	--
Semivolatiles (µg/kg)								
Benzoic acid	--	--	--	62 J	--	--	--	--
Naphthalene	--	--	25 J	--	--	--	--	--
2-Methylnaphthalene	--	--	22 J	--	--	--	--	--
Dimethylphthalate	--	--	--	--	--	--	--	--
Acenaphthene	--	--	--	--	--	--	--	--
Dibenzofuran	--	--	--	--	--	--	--	--
Fluorene	--	--	--	--	--	--	--	--
Phenanthrene	--	120 J	--	45 J	120 J	42 J	--	760 J
Anthracene	--	36 J	--	--	19 J	--	--	180 J
Di-n-Butylphthalate	19 J	--	100 J	39 J	66 J	39 J	--	--
Fluoranthene	--	430	--	100 J	190 J	130 J	150 J	1,000 J
Pyrene	--	390 J	--	140 J	200 J	120 J	130 J	870 J
Butylbenzylphthalate	--	--	--	--	--	--	--	--
Benzo(a)anthracene	--	230 J	--	91 J	110 J	50 J	--	600 J
Chrysene	--	250 J	--	130 J	170 J	97 J	140 J	720 J
bis(2-Ethylhexyl) phthalate	--	--	--	--	--	--	--	640 J
Di-n-octylphthalate	--	--	--	--	--	--	--	--

See notes at end of table.

Table 4-4 (Continued)
Organic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	M8780	M8780	M8780	M8780	M8780	M8780	M8867	M8985
Sample Location:	MPT-24-SS01	MPT-24-SS02	MPT-24-SS03	MPT-24-SS04	MPT-24-SS04	MPT-24-SS05	MPT-24-SS06	MPT-24-MW01S
Sample Number:	24S00101	24S00201	24S00301	24S00401	24S00401DUP	24S00501	24S00601	24S00701
Date Sampled:	08-APR-95	08-APR-95	08-APR-95	08-APR-95	08-APR-95	08-APR-95	24-APR-95	19-MAY-95
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
Semivolatiles (µg/kg)								
Benzo(b)fluoranthene	--	190 J	--	96 J	140 J	78 J	130 J	570 J
Benzo(k)fluoranthene	--	200 J	--	85 J	150 J	140 J	140 J	560 J
Benzo(a)pyrene	--	190 J	--	83 J	130 J	76 J	120 J	500 J
Indeno (1,2,3-cd) pyrene	--	150 J	--	66 J	99 J	43 J	100 J	410 J
Dibenz(a,h)anthracene	--	54 J	--	40 J	48 J	--	--	270 J
Benzo(g,h,i)perylene	--	160 J	--	82 J	120 J	37 J	130 J	400 J
Acetophenone	--	--	--	--	--	--	--	--
Pesticides/PCs (µg/kg)								
beta-BHC	--	--	--	--	--	--	--	--
Aldrin	--	1.1	--	--	--	--	--	--
Heptachlor epoxide	--	--	--	--	--	--	--	--
Dieldrin	--	3.4	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	6.3 J	--	--
Endrin	--	--	--	--	--	--	--	--
Endosulfan II	--	--	--	--	--	--	--	--
4,4'-DDD	--	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--	--
Methoxychlor	--	--	--	--	--	--	--	--
Endrin aldehyde	--	--	--	--	--	--	--	--
Endrin ketone	--	--	--	--	--	--	--	--
Chlordane	72	--	--	--	--	23	--	480
Isodrin	--	--	--	--	--	--	--	--
Aroclor-1254	--	--	--	--	--	--	--	--
Aroclor-1260	140	--	--	--	--	--	--	--

See notes at end of table.

Table 4-4 (Continued)
Organic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	M8985	M8793	M8793	M8793	M8793	M8793	M8793	M8793
Sample Location:	MPT-24-MW01S	MPT-25-SS01	MPT-25-SS02	MPT-25-SS03	MPT-25-SS04	MPT-25-SS04	MPT-25-SS05	MPT-25-SS06
Sample Number:	24S00701DUP	25S00101	25S00201	25S00301	25S00401	25S00401DUP	25S00501	25S00601
Date Sampled:	19-MAY-95	10-APR-95	10-APR-95	10-APR-95	10-APR-95	10-APR-95	10-APR-95	10-APR-95
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
Volatiles (µg/kg)								
Carbon disulfide	--	1 J	--	1 J	2 J	1 J	--	--
2-Butanone	--	--	4 J	--	6 J	7 J	10 J	--
Benzene	--	--	--	--	--	--	--	--
Toluene	--	2 J	1 J	22	14	2 J	1 J	--
Ethylbenzene	--	--	--	13	6 J	--	--	--
Xylenes (total)	--	2 J	5 J	81	43	4 J	2 J	1 J
Trichlorofluoromethane	--	--	--	--	--	--	--	--
Isobutyl alcohol	--	--	--	--	--	--	--	--
Semivolatiles (µg/kg)								
Benzoic acid	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--	--
2-Methylnaphthalene	--	--	--	--	--	--	--	--
Dimethylphthalate	--	--	--	--	--	--	--	--
Acenaphthene	--	--	--	--	--	--	--	--
Dibenzofuran	--	--	--	--	--	--	--	--
Fluorene	--	--	--	--	--	--	--	--
Phenanthrene	650 J	--	--	--	--	--	--	--
Anthracene	--	--	--	--	--	--	--	--
Di-n-Butylphthalate	--	66 J	130 J	--	--	--	--	--
Fluoranthene	1,200 J	--	--	--	--	--	--	--
Pyrene	1,000 J	--	--	--	--	--	--	--
Butylbenzylphthalate	--	--	--	--	--	--	--	--
Benzo(a)anthracene	580 J	--	--	--	--	--	--	--
Chrysene	640 J	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate	670 J	--	--	79 J	--	--	120 J	--
Di-n-octylphthalate	--	--	--	--	--	--	400 J	--

See notes at end of table.

Table 4-4 (Continued)
Organic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	M8985	M8793	M8793	M8793	M8793	M8793	M8793	M8793
Sample Location:	MPT-24-MW01S	MPT-25-SS01	MPT-25-SS02	MPT-25-SS03	MPT-25-SS04	MPT-25-SS04	MPT-25-SS05	MPT-25-SS06
Sample Number:	24S00701DUP	25S00101	25S00201	25S00301	25S00401	25S00401DUP	25S00501	25S00601
Date Sampled:	19-MAY-95	10-APR-95	10-APR-95	10-APR-95	10-APR-95	10-APR-95	10-APR-95	10-APR-95
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
Semivolatiles (µg/kg)								
Benzo(b)fluoranthene	520 J	--	--	--	--	--	--	--
Benzo(k)fluoranthene	570 J	--	--	--	--	--	--	--
Benzo(a)pyrene	510 J	--	--	--	--	--	--	--
Indeno (1,2,3-cd) pyrene	350 J	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	330 J	--	--	--	--	--	--	--
Acetophenone	--	--	--	--	--	--	--	--
Pesticides/PCBs (µg/kg)								
beta-BHC	--	--	--	--	--	--	--	--
Aldrin	--	--	--	--	0.81 J	1.6	2.7	--
Heptachlor epoxide	--	--	--	--	--	--	--	--
Dieldrin	--	--	--	6.2	--	--	--	2.3 J
4,4'-DDE	--	--	--	--	--	--	--	--
Endrin	--	--	--	--	--	--	--	--
Endosulfan II	--	--	--	--	--	--	--	--
4,4'-DDD	--	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--	--
Methoxychlor	--	--	--	--	--	--	--	--
Endrin aldehyde	--	--	--	--	--	--	--	--
Endrin ketone	--	--	--	--	--	--	--	--
Chlordane	270	24	--	--	--	15	--	24 J
Isodrin	--	--	--	--	--	--	--	--
Aroclor-1254	--	--	--	--	--	--	--	--
Aroclor-1260	--	--	--	--	--	--	--	--

See notes at end of table.

Table 4-4 (Continued)
Organic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	M8793	M8793	M8793	R9738	R9738	R9738	R9738	R9738
Sample Location:	MPT-25-SS07	MPT-25-SS08	MPT-25-SS09	MPT-44-SS01	MPT-44-SS01	MPT-44-SS02	MPT-44-SS03	MPT-44-SS04
Sample Number:	25S00701	25S00801	25S00901	44S00101	44S00101DUP	44S00201	44S00301	44S00401
Date Sampled:	10-APR-95	10-APR-95	10-APR-95	05-APR-95	05-APR-95	05-APR-95	05-APR-95	05-APR-95
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
Volatiles (µg/kg)								
Carbon disulfide	1 J	3 J	4 J	--	--	--	--	--
2-Butanone	--	4 J	--	--	--	--	--	--
Benzene	--	--	--	--	--	--	--	--
Toluene	2 J	8	4 J	--	--	--	--	--
Ethylbenzene	--	--	--	--	--	--	--	--
Xylenes (total)	5 J	18	4 J	--	--	--	--	--
Trichlorofluoromethane	--	--	--	2 J	2 J	--	--	2 J
Isobutyl alcohol	--	--	--	--	91 J	--	--	--
Semivolatiles (µg/kg)								
Benzoic acid	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	93 J	--	--	--
2-Methylnaphthalene	--	--	--	240 J	340 J	--	--	--
Dimethylphthalate	--	--	--	--	--	--	--	--
Acenaphthene	--	--	--	--	--	--	--	--
Dibenzofuran	--	--	--	--	--	--	--	--
Fluorene	--	--	--	--	130 J	--	--	--
Phenanthrene	--	--	--	750	1,100	--	--	--
Anthracene	--	--	--	300 J	270 J	--	--	--
Di-n-Butylphthalate	--	--	--	--	--	--	--	--
Fluoranthene	--	--	--	1,400	1,300	--	--	--
Pyrene	--	--	--	1,300	1,300	--	--	--
Butylbenzylphthalate	--	--	--	--	--	--	--	--
Benzo(a)anthracene	--	--	--	630 J	520 J	--	--	--
Chrysene	--	--	--	670 J	590 J	--	--	--
bis(2-Ethylhexyl) phthalate	27 J	63 J	--	--	--	--	--	--
Di-n-octylphthalate	--	--	--	--	--	--	--	--

See notes at end of table.

Table 4-4 (Continued)
Organic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	M8793	M8793	M8793	R9738	R9738	R9738	R9738	R9738
Sample Location:	MPT-25-SS07	MPT-25-SS08	MPT-25-SS09	MPT-44-SS01	MPT-44-SS01	MPT-44-SS02	MPT-44-SS03	MPT-44-SS04
Sample Number:	25S00701	25S00801	25S00901	44S00101	44S00101DUP	44S00201	44S00301	44S00401
Date Sampled:	10-APR-95	10-APR-95	10-APR-95	05-APR-95	05-APR-95	05-APR-95	05-APR-95	05-APR-95
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
Semivolatiles (µg/kg)								
Benzo(b)fluoranthene	--	--	--	700 J	500 J	--	--	--
Benzo(k)fluoranthene	--	--	--	680 J	640 J	--	--	--
Benzo(a)pyrene	--	--	--	440 J	350 J	--	--	--
Indeno (1,2,3-cd) pyrene	--	--	--	240 J	170 J	--	--	--
Dibenz(a,h)anthracene	--	--	--	100 J	--	--	--	--
Benzo(g,h,i)perylene	--	--	--	320 J	240 J	--	--	--
Acetophenone	--	--	--	--	--	--	--	--
Pesticides/PCBs (µg/kg)								
beta-BHC	--	--	--	--	--	--	--	--
Aldrin	--	--	--	--	--	--	--	--
Heptachlor epoxide	--	--	1.6	24 J	4.2 J	--	--	--
Dieldrin	2,200	4.5 J	--	--	--	--	1.1 J	1.6 J
4,4'-DDE	--	2.5	--	--	--	--	--	2.5
Endrin	--	--	--	40 J	--	--	--	--
Endosulfan II	--	--	--	--	--	--	--	--
4,4'-DDD	--	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	59 J**	65	2.2	--	--
Methoxychlor	--	--	--	--	29 J	--	--	--
Endrin aldehyde	--	--	--	63	--	--	--	--
Endrin ketone	--	--	--	--	14 J	--	--	1.7 J
Chlordane	--	--	38	--	--	--	--	--
Isodrin	--	--	--	--	--	0.87	--	--
Aroclor-1254	--	--	--	--	--	--	--	--
Aroclor-1260	--	--	--	--	--	--	--	--

See notes at end of table.

Table 4-4 (Continued)
Organic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	R9738	R9738	R9738	R9738	R9955	R9712	R9712	R9712
Sample Location:	MPT-44-SS06	MPT-44-SS07	MPT-44-SS08	MPT-44-SS09	MPT-44-MW03S	MPT-45-SS01	MPT-45-SS01	MPT-45-SS02
Sample Number:	44S00601	44S00701	44S00801	44S00901	44S01001	45S00101	45S00101DUP	45S00201
Date Sampled:	05-APR-95	05-APR-95	05-APR-95	05-APR-95	24-MAY-95	29-MAR-95	29-MAR-95	29-MAR-95
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
Volatiles (µg/kg)								
Carbon disulfide	--	--	--	--	--	--	--	--
2-Butanone	--	--	--	--	--	--	--	--
Benzene	--	--	--	--	--	--	--	--
Toluene	--	--	--	--	--	--	--	--
Ethylbenzene	--	--	--	--	--	--	--	--
Xylenes (total)	--	--	--	--	1 J	--	--	--
Trichlorofluoromethane	--	--	--	--	--	--	--	--
Isobutyl alcohol	--	--	--	--	--	--	--	--
Semivolatiles (µg/kg)								
Benzoic acid	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	40 J	--
2-Methylnaphthalene	--	--	--	--	--	--	36 J	--
Dimethylphthalate	--	92 J	--	--	--	--	--	--
Acenaphthene	--	--	--	--	--	110 J	140 J	--
Dibenzofuran	--	--	--	--	--	--	140 J	--
Fluorene	--	--	--	--	--	--	250 J	--
Phenanthrene	--	--	130 J	--	--	730	1,300	--
Anthracene	100 J	--	--	--	--	260 J	190 J	--
Di-n-Butylphthalate	--	--	83 J	--	--	2,300	440	--
Fluoranthene	--	220 J	240 J	--	--	1,100	1,100	--
Pyrene	--	200 J	160 J	75 J	--	910	670	--
Butylbenzylphthalate	--	--	--	--	--	--	88 J	--
Benzo(a)anthracene	--	140 J	140 J	--	--	600	420	--
Chrysene	--	150 J	150 J	--	--	690	520	--
bis(2-Ethylhexyl) phthalate	--	--	--	--	--	350	700	--
Di-n-octylphthalate	--	--	--	--	--	--	--	--

See notes at end of table.

Table 4-4 (Continued)
Organic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	R9738	R9738	R9738	R9738	R9955	R9712	R9712	R9712
Sample Location:	MPT-44-SS06	MPT-44-SS07	MPT-44-SS08	MPT-44-SS09	MPT-44-MW03S	MPT-45-SS01	MPT-45-SS01	MPT-45-SS02
Sample Number:	44S00601	44S00701	44S00801	44S00901	44S01001	45S00101	45S00101DUP	45S00201
Date Sampled:	05-APR-95	05-APR-95	05-APR-95	05-APR-95	24-MAY-95	29-MAR-95	29-MAR-95	29-MAR-95
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
Semivolatiles (µg/kg)								
Benzo(b)fluoranthene	--	240 J	150 J	--	--	470	330 J	--
Benzo(k)fluoranthene	--	230 J	120 J	--	--	560	430	--
Benzo(a)pyrene	--	170 J	--	--	--	460	270 J	--
Indeno (1,2,3-cd) pyrene	--	120 J	--	--	--	230 J	140 J	--
Dibenz(a,h)anthracene	--	--	--	--	--	130 J	87 J	--
Benzo(g,h,i)perylene	--	170 J	--	--	--	230 J	150 J	--
Acetophenone	--	--	--	--	--	--	--	--
Pesticides/PCBs (µg/kg)								
beta-BHC	--	--	--	--	--	--	--	--
Aldrin	--	--	--	--	--	--	--	--
Heptachlor epoxide	--	--	--	--	--	--	--	--
Dieldrin	--	--	3.3	--	--	1	--	--
4,4'-DDE	--	--	2 J	2.5	2.1	11	9.3	9
Endrin	--	--	--	--	--	--	--	--
Endosulfan II	--	--	--	--	--	--	--	--
4,4'-DDD	--	--	--	--	7.5	--	1.4	--
4,4'-DDT	3.5 J	1.5 J	2.7	--	--	5	4.7	5
Methoxychlor	--	--	--	--	--	--	--	--
Endrin aldehyde	--	--	--	--	--	--	--	--
Endrin ketone	1.5	--	--	--	--	--	--	--
Chlordane	--	--	--	--	--	--	--	--
Isodrin	0.76	--	--	--	--	--	--	--
Aroclor-1254	--	--	--	--	--	--	--	--
Aroclor-1260	--	--	--	--	--	--	--	--

See notes at end of table.

Table 4-4 (Continued)
Organic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	R9712	R9712	R9712	R9712	M8994	R9955	RA082	RA082
Sample Location:	MPT-45-SS03	MPT-45-SS04	MPT-45-SS06	MPT-45-SS07	MPT-45-MW01D	MPT-45-MW02S	MPT-TR-SS02	MPT-TR-SS02
Sample Number:	45S00301	45S00401	45S00601	45S00701	45S00801	45S01001	TRS00101DUP	TRS00201
Date Sampled:	29-MAR-95	29-MAR-95	29-MAR-95	29-MAR-95	21-MAY-95	24-MAY-95	27-JUN-95	27-JUN-95
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
Volatiles (µg/kg)								
Carbon disulfide	--	--	--	--	--	2 J	--	--
2-Butanone	--	--	--	--	--	--	--	--
Benzene	--	--	--	--	--	--	--	--
Toluene	--	--	--	--	--	--	--	--
Ethylbenzene	--	--	--	--	--	--	--	--
Xylenes (total)	--	--	--	--	--	2 J	--	--
Trichlorofluoromethane	--	--	--	--	--	--	--	--
Isobutyl alcohol	--	--	--	--	--	--	--	--
Semivolatiles (µg/kg)								
Benzoic acid	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--	--
2-Methylnaphthalene	--	--	--	--	--	--	--	--
Dimethylphthalate	--	--	--	--	--	--	--	--
Acenaphthene	--	--	--	--	--	--	330 J	--
Dibenzofuran	--	--	--	--	--	--	85 J	--
Fluorene	--	--	--	--	--	--	540 J	--
Phenanthrene	--	110 J	--	--	--	170 J	3,800	--
Anthracene	--	--	--	--	--	--	740	--
Di-n-Butylphthalate	--	400	48 J	--	--	470 J	--	--
Fluoranthene	45 J	150 J	--	100 J	41 J	420 J	10,000	--
Pyrene	41 J	130 J	--	83 J	36 J	410 J	7,600	--
Butylbenzylphthalate	--	--	72 J	--	--	--	--	--
Benzo(a)anthracene	--	77 J	--	71 J	--	200 J	--	--
Chrysene	35 J	110 J	--	80 J	--	260 J	4,600	--
bis(2-Ethylhexyl) phthalate	--	65 J	360 J	52 J	--	--	--	--
Di-n-octylphthalate	--	--	--	--	--	--	--	--

See notes at end of table.

Table 4-4 (Continued)
Organic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	R9712	R9712	R9712	R9712	M8994	R9955	RA082	RA082
Sample Location:	MPT-45-SS03	MPT-45-SS04	MPT-45-SS06	MPT-45-SS07	MPT-45-MW01D	MPT-45-MW02S	MPT-TR-SS01	MPT-TR-SS02
Sample Number:	45S00301	45S00401	45S00601	45S00701	45S00801	45S01001	TRS00101DUP	TRS00201
Date Sampled:	29-MAR-95	29-MAR-95	29-MAR-95	29-MAR-95	21-MAY-95	24-MAY-95	27-JUN-95	27-JUN-95
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
Semivolatiles (µg/kg)								
Benzo(b)fluoranthene	--	130 J	--	75 J	--	310 J	4,300	
Benzo(k)fluoranthene	--	100 J	--	65 J	--	320 J	4,200	
Benzo(a)pyrene	--	85 J	--	60 J	--	250 J	1,700	
Indeno (1,2,3-cd) pyrene	--	55 J	--	39 J	--	--	920	
Dibenz(a,h)anthracene	--	--	--	--	--	--	1,800	
Benzo(g,h,i)perylene	--	58 J	--	42 J	--	--	--	
Acetophenone	--	--	--	--	--	--	--	
Pesticides/PCBs (µg/kg)								
beta-BHC	--	--	--	--	--	2.6 J	--	--
Aldrin	--	--	--	--	--	--	--	--
Heptachlor epoxide	--	--	1.1 J	--	--	--	--	--
Dieldrin	--	1.2	25	--	--	3.9 J	11 J	--
4,4'-DDE	12	5.7	--	--	--	1.8 J	1.4 J	--
Endrin	--	--	--	--	--	--	--	--
Endosulfan II	--	3.3	--	--	--	--	--	--
4,4'-DDD	--	--	--	--	--	--	--	--
4,4'-DDT	5.7 J	4.3	--	--	--	2.5 J	--	--
Methoxychlor	14 J	--	--	--	--	--	--	--
Endrin aldehyde	--	--	--	--	--	--	--	--
Endrin ketone	1.8 J	--	--	--	--	--	--	--
Chlordane	--	--	540	--	--	120 J	1,100	--
Isodrin	--	--	--	--	--	--	--	--
Aroclor-1254	--	--	--	--	--	--	--	--
Aroclor-1260	--	--	320 J	--	--	--	--	--

See notes at end of table.

Table 4-4 (Continued)
Organic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
DUP = duplicate.
* = 01S00201 was reextracted and reanalyzed. The reanalysis was recommended for use by the data validators. The original analysis was rejected because of extremely low acid fraction surrogate recoveries.
ft bls = feet below land surface.
µg/kg = microgram per kilogram.
-- = concentration of analyte, if present, was less than the detection limit.
J = estimated value.
PCBs = polychlorinated biphenyls.
4,4'-DDE = dichlorodiphenyldichloroethene.
4,4'-DDD = dichlorodiphenyldichloroethane.
4,4'-DDT = dichlorodiphenyltrichloroethane.
** = 4,4'-DDT was reported from a diluted reanalysis. The original result was above the linear range of the calibration curve.

Table 4-5
Inorganic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	R9861	R9861	R9861	R9861	R9861	R9861	R9861	R9861
Sample Location:	MPT-1-SB01	MPT-1-SB01	MPT-1-SB02	MPT-1-SB03	MPT-1-SB04	MPT-1-SB05	MPT-1-SB06	MPT-1-SB07
Sample Number:	01S00101	01S00101Dup	01S00201	01S00301	01S00401	01S00501	01S00601	01S00701
Date Sampled:	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95
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
Inorganics (mg/kg)								
Antimony	3.2 J	4.5 J	1.2 J	3.5 J	2.3 J	.03 J	.02 J	--
Arsenic	1.5 J	1.1 J	.94 J	.96 J	3.4	.87 J	1 J	.92 J
Barium	7.4 J	7.5 J	4.4 J	9.7 J	23 J	11.7 J	7.2 J	13.7 J
Beryllium	.12 J	.08 J	.08 J	--	.65 J	.07 J	.17 J	.13 J
Cadmium	.37 J	.38 J	--	--	1 J	.68 J	--	.3 J
Chromium	9.5	9.6	3.9	2.6	11	6.4	2.4	7.8
Cobalt	--	.97 J	.71 J	--	3.8 J	1.2 J	--	--
Copper	24.2	28.1	--	9.4	84.3	18.3	--	--
Lead	33.7	24.3	4.6	24.1	37.3	86.8	11.6	1.9 J
Mercury	.1	.06 J	--	.04 J	.06 J	.4	.11	.04 J
Nickel	6.8 J	9.4	1.7 J	2.2 J	12.2	5.5 J	3 J	3.1 J
Selenium	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--
Vanadium	12	10.3 J	4.3 J	5.1 J	6.6 J	9.6 J	7.6 J	7 J
Zinc	77.2 J	98.9 J	16.6 J	46.1 J	575 J	169 J	28.6 J	10.5 J
Cyanide	.46 J	.15 J	.12 J	.18 J	.18 J	.15 J	.11 J	.09 J

See notes at end of table.

Table 4-5 (Continued)
Inorganic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	M8994	R9743	R9743	R7943	R9743	R9743	R9743	R9743
Sample Number:	MPT-1-MW01D	MPT-23-SS01	MPT-23-SS02	MPT-23-SS03	MPT-23-SS04	MPT-23-SS05	MPT-23-SS06	MPT-23-SS07
Sample Location:	01S00801	23S00101	23S00201	23S00303	23S00401	23S00501	23S00601	23S00701
Date Sampled:	21-MAY-95	05-APR-95	05-APR-95	05-APR-95	05-APR-95	05-APR-95	05-APR-95	05-APR-95
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
Inorganics (mg/kg)								
Antimony	0.77 J	--	--	--	--	--	--	--
Arsenic	0.33 J	0.75 J	1 J	0.7 J	1.1 J	1.3 J	1 J	7.2 J
Barium	3 J	4.2 J	5.8 J	6.6 J	8.1 J	6.7 J	4.1 J	97.6
Beryllium	0.06 J	0.08 J	0.1 J	0.08 J	0.09 J	0.05 J	0.05 J	0.43 J
Cadmium	--	--	0.33 J	--	0.28 J	--	--	--
Chromium	2.5	0.56 J	3.3 J	3 J	4.5 J	1.2 J	1.2 J	8.3 J
Cobalt	--	--	0.78 J	--	--	--	--	1.9 J
Copper	2.2 J	--	--	12.2 J	--	--	--	25.4 J
Lead	4.5	2.4 J	9.5	4 J	16 J	3 J	2.2 J	32.3 J
Mercury	--	--	--	--	--	--	--	--
Nickel	--	1.5 J	1.2 J	5.4 J	3 J	--	--	6 J
Selenium	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	0.14 J
Tin	--	--	--	--	2.2 J	--	--	--
Vanadium	2.6 J	3.4 J	3.6 J	2.7 J	4.5 J	2.9 J	2.6 J	12.5
Zinc	11.7	5.7 J	20.2 J	44 J	45.8 J	12 J	12.2 J	53.9 J
Cyanide	--	0.13 J	0.28 J	0.07 J	0.1 J	0.13 J	0.1 J	0.11 J

See notes at end of table.

Table 4-5 (Continued)
Inorganic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	R9743	R9743	R9743	R9743	R9743	R9743	R9743	R9743
Sample Location:	MPT-23-SS08	MPT-23-SS08	MPT-23-SS09	MPT-23-SS10	MPT-23-SS11	MPT-23-SS12	MPT-23-SS13	MPT-23-SS14
Sample Number:	23S00801	23S00801DUP	23S00901	23S01001	23S01101	23S01201	23S01301	23S01401
Date Sampled:	05-APR-95	05-APR-95	05-APR-95	05-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95
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
Inorganics (mg/kg)								
Antimony	--	--	--	14.8 J	--	1.9 J	1.5 J	--
Arsenic	4.5 J	6.9 J	1.1 J	1.8 J	0.79 J	1.3 J	13.9 J	7.7 J
Barium	79.6	78.8	12.2 J	24 J	8.4 J	11.1 J	107	90.7
Beryllium	0.29 J	0.44 J	0.1 J	0.18 J	0.05 J	0.08 J	0.51 J	0.64 J
Cadmium	3 J	2.9 J	0.53 J	1.2 J	0.45 J	0.52 J	1.4 J	0.75 J
Chromium	10.9 J	12.1 J	6.1 J	18.2 J	4.3 J	12.4 J	38.6 J	16.3 J
Cobalt	1.9 J	1.6 J	--	1.2 J	--	--	--	--
Copper	39.4 J	40.5 J	13 J	28.5 J	3.1 J	20.5 J	456 J	38.9 J
Lead	28.9 J	90.5 J	48.4 J	225 J	7.9 J	116 J	82.9 J	37.3 J
Mercury	--	--	0.14	--	--	--	0.04 J	--
Nickel	7.1 J	13.3	3.4 J	8.7	2.1 J	6.4 J	81.3	12.2
Selenium	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--
Thallium	0.14 J	0.19 J	--	--	--	--	--	--
Tin	--	2.6 J	--	3.3 J	--	--	31.9	3.2 J
Vanadium	11.4 J	12.7	4.5 J	7.3 J	4.9 J	4.9 J	16.4	17.9
Zinc	62.3 J	115 J	87.8 J	307 J	17.8 J	254 J	161 J	55.9 J
Cyanide	0.22 J	0.15 J	0.14 J	0.07 J	0.07 J	0.1 J	0.21 J	0.16 J

See notes at end of table.

Table 4-5 (Continued)
Inorganic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	R9743	R9743	R9743	R9743	R9743	M8775	M8775	M8780
Sample Location:	MPT-23-SS15	MPT-23-SS16	MPT-23-SS17	MPT-23-SS17	MPT-23-SS18	MPT-23-SS19	MPT-23-SS20	MPT-23-SS21
Sample Number:	23S01501	23S01601	23S01701	23S01701DUP	23S01801	23S01901	23S02001	23S02101
Date Sampled:	07-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95	08-APR-95
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
Inorganics (mg/kg)								
Antimony	2.4 J	2.6 J	--	--	1.2 J	0.73 J	6.9 J	--
Arsenic	1.7 J	1.4 J	0.97 J	1.1 J	0.42 J	0.35 J	3.2	--
Barium	27.9 J	9.9 J	15.3 J	12.8 J	17.4 J	14.2 J	13.9 J	3 J
Beryllium	0.2 J	0.17 J	0.19 J	0.15 J	0.16 J	0.06 J	0.1 J	0.08 J
Cadmium	1.1 J	0.43 J	--	0.34 J	0.62 J	1.3	6.3	--
Chromium	12.2 J	22.3 J	4.8 J	5.7 J	9.3 J	8.2	9.4	10.2
Cobalt	--	--	--	--	--	--	2.6 J	--
Copper	22 J	51.2 J	11.4 J	12.1 J	24.3 J	40.4	2,930	3.1 J
Lead	79.8 J	44.4 J	11.2 J	13.1 J	10.5 J	47	831	7.3
Mercury	--	--	--	--	--	0.27	0.09	--
Nickel	5.1 J	40.7	2.2 J	3.9 J	2.6 J	9.7	55.6	1.7 J
Selenium	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	5.2	--
Thallium	--	0.14 J	--	--	--	--	--	--
Tin	3 J	2.7 J	--	--	3.2 J	10 J	196	--
Vanadium	6.9 J	10.2 J	4.4 J	3.8 J	10.8 J	3.1 J	4.9	7.4
Zinc	354 J	95.6 J	47.1 J	62.1 J	32.7 J	124	5,910	9
Cyanide	0.11 J	0.11 J	--	--	--	--	--	--

See notes at end of table.

Table 4-5 (Continued)
Inorganic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	M8780	M8780	M8775	M8775	M8775	M8775	M8775	M8775
Sample Location:	MPT-23-SS22	MPT-23-SS23	MPT-23-SS24	MPT-23-SS25	MPT-23-SS26	MPT-23-SS27	MPT-23-SS27	MPT-23-SS28
Sample Number:	23S02201	23S02301	23S02401	23S02501	23S02601	23S02701	23S02701DUP	23S02801
Date Sampled:	08-APR-95	08-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95	07-APR-95
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
Inorganics (mg/kg)								
Antimony	--	--	3.2 J	--	1 J	0.76 J	--	0.99 J
Arsenic	1.7 J	2.5	0.88 J	0.2 J	0.74 J	0.67 J	0.67 J	1.1 J
Barium	8 J	28 J	126	15.3 J	60.4	9.8 J	9.4 J	14 J
Beryllium	0.11 J	0.14 J	1.9	0.14 J	0.88 J	0.19 J	0.2 J	0.24 J
Cadmium	--	2.6	1.5	--	--	--	--	--
Chromium	10	30	28.3	10.9	31.2	7.7	7.9	12.8
Cobalt	--	1.2 J	8.4 J	--	5.1 J	--	--	1.4 J
Copper	2.3 J	236	52.5	15.6	46.3	6.7	4.3 J	10.3
Lead	4.5	136	41.8	16.9	91.9	27.4	17.5	39.6
Mercury	--	0.08	--	--	--	--	--	--
Nickel	2.7 J	37.6	19.3	1.9 J	22.8	2.2 J	4.3 J	9.9
Selenium	--	--	--	--	--	--	--	--
Silver	--	1.5 J	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--
Tin	--	7.9 J	4.5 J	2.4 J	3.6 J	2.5 J	2.3 J	--
Vanadium	11.8	13.2	23.4	4 J	10.7	4.5	5.4	7.1
Zinc	7.3	815	301	91.2	1,080	85.2	92.8	108
Cyanide	--	--	--	--	--	--	--	--

See notes at end of table.

Table 4-5 (Continued)
Inorganic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	M8994	M8994	M8780	M8780	M8780	M8780	M8780	M8780
Sample Location:	MPT-23-MW07S	MPT-23-MW07S	MPT-24-SS01	MPT-24-SS02	MPT-24-SS03	MPT-24-SS04	MPT-24-SS04	MPT-24-SS05
Sample Number:	23S02901	23S02901DUP	24S00101	24S00201	24S00301	24S00401	24S00401DUP	24S00501
Date Sampled:	20-MAY-95	20-MAY-95	08-APR-95	08-APR-95	08-APR-95	08-APR-95	08-APR-95	08-APR-95
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
Inorganics (mg/kg)								
Antimony	6.2	4.9	--	--	--	11.3 J	6.2 J	--
Arsenic	1.1 J	1.8 J	--	1.7 J	--	2 J	2 J	--
Barium	14 J	16.1 J	24.6 J	13.5 J	11 J	17.3 J	42.7	9.8 J
Beryllium	0.34 J	0.43 J	0.47 J	0.12 J	0.13 J	0.14 J	0.21 J	0.11 J
Cadmium	1.1	0.87 J	--	--	--	--	--	--
Chromium	40.4	44	9.4	5.1	4.9	4.4	7.4	9.2
Cobalt	2.3 J	2.8 J	1.8 J	--	--	--	1.2 J	--
Copper	25.4	22.6	63.7	12.1	6.5	78.2	138	28.9
Lead	216	204	34.2	44.5	18	29.3	34.9	19.6
Mercury	--	0.1 J	--	--	--	--	--	--
Nickel	6.5 J	8.5	9.1	2 J	2.3 J	2.1 J	4.2 J	3 J
Selenium	0.41 J	0.38 J	--	--	--	--	--	--
Silver	--	--	--	--	--	0.58 J	0.79 J	--
Thallium	--	--	--	--	--	--	--	--
Tin	--	19.5	13	2.2 J	3.8 J	6.4 J	12.1	1.9 J
Vanadium	10.3 J	11.9	7.9	4 J	5.4	7.4	9.7	5.4
Zinc	445	442	173	58.5	34.5	51.8	117	53.7
Cyanide	--	--	--	1.1 J	--	--	--	--

See notes at end of table.

Table 4-5 (Continued)
Inorganic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	M8867	M8985	M8985	M8793	M8793	M8793	M8793	M8793
Sample Location:	MPT-24-SS06	MPT-24-MW01S	MPT-24-MW01S	MPT-25-SS01	MPT-25-SS02	MPT-25-SS03	MPT-25-SS04	MPT-25-SS04
Sample Number:	24S00601	24S00701	24S00701DUP	25S00101	25S00201	25S00301	25S00401	25S00401DUP
Date Sampled:	24-APR-95	19-MAY-95	19-MAY-95	10-APR-95	10-APR-95	10-APR-95	10-APR-95	10-APR-95
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
Inorganics (mg/kg)								
Antimony	--	--	1.3	0.95 J	--	--	--	--
Arsenic	0.69 J	2.7	2.8	0.96 J	0.93 J	0.79 J	0.53 J	1.1 J
Barium	13 J	95.8	120	14.9 J	19.8 J	8.6 J	6.9 J	10.8 J
Beryllium	0.06 J	1.2	1.3	0.18 J	0.3 J	0.13 J	0.08 J	0.16 J
Cadmium	--	0.93 J	1 J	--	--	--	--	--
Chromium	3.6	37.4	44.1	9.9 J	16 J	5.5 J	3.9 J	3.9 J
Cobalt	--	14	16	1.6 J	--	1.2 J	--	--
Copper	8.2	411	449	23.9 J	10.4 J	7.6 J	8.1 J	10.8 J
Lead	16.6	109	93.1	39.2 J	17.6 J	6.6 J	9.6 J	9.4 J
Mercury	--	0.24 J	0.1 J	--	--	--	--	--
Nickel	--	18.1	20.4	4 J	12.1 J	2.8 J	2.2 J	2.5 J
Selenium	--	0.54 J	0.67 J	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--
Tin	2.6 J	9.2 J	9.6 J	4.3 J	--	--	--	2.4 J
Vanadium	2.6 J	19.6	22.6	4.3 J	16.6 J	5.9 J	3.1 J	4.1 J
Zinc	35.7	1,450	1,430	428 J	63.4 J	25.9 J	21.8 J	33.1 J
Cyanide	--	--	--	--	--	0.13 J	--	1.1 J

See notes at end of table.

Table 4-5 (Continued)
Inorganic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	M8793	M8793	M8793	M8793	M8793	R9738	R9738	R9738
Sample Location:	MPT-25-SS05	MPT-25-SS06	MPT-25-SS07	MPT-25-SS08	MPT-25-SS09	MPT-44-SS01	MPT-44-SS01	MPT-44-SS02
Sample Number:	25S00501	25S00601	25S00701	25S00801	25S00901	44S00101	44S00101DUP	44S00201
Date Sampled:	10-APR-95	10-APR-95	10-APR-95	10-APR-95	10-APR-95	05-APR-95	05-APR-95	05-APR-95
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
Inorganics (mg/kg)								
Antimony	--	0.77 J	--	0.46 J	--	2.5 J	2.8 J	1.9 J
Arsenic	0.6 J	0.61 J	1.3 J	0.75 J	0.92 J	1.3 J	1.4 J	1 J
Barium	14.1 J	9.6 J	9 J	15.9 J	10.5 J	97.2	35.1 J	9.2 J
Beryllium	0.26 J	0.09 J	0.1 J	--	0.1 J	0.11 J	0.08 J	0.11 J
Cadmium	--	--	--	--	--	1.5	1.4	0.7 J
Chromium	11 J	4.7 J	4.1 J	14.2 J	6.6 J	21.8	27.7	9.9
Cobalt	1.4 J	--	--	--	--	--	--	--
Copper	34.4 J	10.1 J	7.2 J	16.9 J	4.1 J	242	292	34.4
Lead	9.8 J	5.6 J	5.8 J	9.5 J	5.9 J	61.6	66.6	59.7
Mercury	--	--	--	--	--	7.9	5.9	0.08
Nickel	4.3 J	--	1.9 J	--	2.6 J	11	11.7	2.7 J
Selenium	0.27 J	--	--	--	--	--	--	--
Silver	--	--	--	5.8 J	--	23.9 J	21.7 J	--
Thallium	--	--	--	--	--	--	--	--
Tin	5.8 J	2.4 J	3 J	--	1.7 J	11.9 J	11.7 J	--
Vanadium	8 J	4.8 J	3.8 J	13.9 J	10.4 J	9 J	8.9 J	4.7 J
Zinc	86.6 J	19 J	24.7 J	31 J	35.3 J	396	386	136
Cyanide	--	--	--	--	--	0.11 J	0.25 J	0.07 J

See notes at end of table.

Table 4-5 (Continued)
Inorganic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	R9738	R9738	R9738	R9738	R9738	R9738	R9738	R9955
Sample Location:	MPT-44-SS03	MPT-44-SS04	MPT-44-SS05	MPT-44-SS06	MPT-44-SS07	MPT-44-SS08	MPT-44-SS09	MPT-44-MW03S
Sample Number:	44S00301	44S00401	44S00501	44S00601	44S00701	44S00801	44S00901	44S01001
Date Sampled:	05-APR-95	05-APR-95	05-APR-95	05-APR-95	05-APR-95	05-APR-95	05-APR-95	24-MAY-95
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
Inorganics (mg/kg)								
Antimony	1.1 J	--	--	1.9 J	1.7 J	2.6 J	--	--
Arsenic	0.68 J	0.8 J	0.7 J	0.61 J	0.79 J	1 J	1.1 J	0.65 J
Barium	11 J	9.1 J	5.8 J	7.8 J	12.5 J	29.1 J	8 J	11.9 J
Beryllium	0.07 J	0.08 J	0.07 J	0.06 J	0.11 J	0.11 J	0.17 J	0.09 J
Cadmium	0.52 J	--	--	0.39 J	0.47 J	0.73 J	2.2	0.44 J
Chromium	5	3.4	2.9	23.6	7.4	8.7	5	2.8
Cobalt	--	--	--	--	--	--	--	0.9 J
Copper	29.8	16.4	10	17.1	26.4	193	13.2	218
Lead	26.7	20.1	13	23.7	60.6	38.4	25.6	5.9
Mercury	0.16	0.12	--	0.07	0.25	0.39	--	0.04 J
Nickel	3.6 J	3.1 J	1.7 J	2.8 J	3.8 J	11.5	2.2 J	45
Selenium	--	--	--	--	--	--	--	--
Silver	0.86 J	0.51 J	--	--	1 J	2.6 J	--	--
Thallium	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	5 J
Vanadium	3.5 J	8.5 J	3.8 J	5.8 J	5.7 J	8.4 J	5.9 J	3 J
Zinc	85.2	59.6	36.1	107	98.1	129	983	79.9
Cyanide	0.1 J	0.21 J	0.07 J	0.2 J	0.17 J	0.21 J	0.07 J	0.09 J

See notes at end of table.

Table 4-5 (Continued)
Inorganic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	R9712	R9712	R9712	R9712	R9712	R9712	R9712
Sample Number:	MPT-45-SS01	MPT-45-SS01	MPT-45-SS02	MPT-45-SS03	MPT-45-SS04	MPT-45-SS05	MPT-45-SS06
Sample Location:	45S00101	45S00101DUP	45S00201	45S00301	45S00401	45S00501	45S00601
Date Sampled:	29-MAR-95	29-MAR-95	29-MAR-95	29-MAR-95	29-MAR-95	29-MAR-95	29-MAR-95
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
Inorganics (mg/kg)							
Antimony	--	--	--	--	5.9 J	--	--
Arsenic	0.97 J	0.85 J	1.2 J	1.5 J	2 J	0.28 J	0.99 J
Barium	34.3 J	36.6 J	9.1 J	10.3 J	23.4 J	4.3 J	79.2
Beryllium	0.07 J	0.07 J	0.14 J	0.07 J	0.24 J	0.07 J	0.12 J
Cadmium	1 J	1 J	--	--	0.93 J	--	2.1
Chromium	8	6.7	7.5	3.8	7.4	4	13.5
Cobalt	1.2 J	1.2 J	1 J	0.9 J	1.4 J	0.61 J	1.5 J
Copper	727	777	17.9	28.4	128	5.3	397
Lead	17.9	20.3	23.1	19.6	54.6	3.3	59
Mercury	0.49	0.51	0.1	0.13	0.37	0.05 J	2
Nickel	41.4	38.7	7.5 J	4 J	15.2	1.5 J	20.9
Selenium	--	--	--	--	--	--	0.58 J
Silver	1.3 J	2.1	--	--	1.2 J	--	19.3
Thallium	--	--	--	--	--	0.15 J	--
Tin	5.7 J	9.2 J	--	4.4 J	5.7 J	--	32.6
Vanadium	4.4 J	4.5 J	10.3 J	12	17.7	3.8 J	5 J
Zinc	131	151	45	71.1	177	4.7	277
Cyanide	0.12 J	0.18 J	0.12 J	0.05 J	0.15 J	0.06 J	0.2 J

See notes at end of table.

Table 4-5 (Continued)
Inorganic Analytes Detected in Surface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	R9712	M8994	R9955	RA082	RA082	RA082
Sample Location:	MPT-45-SS07	MPT-45-MW01D	MPT-45-MW02S	MPT-TR-SS01	MPT-TR-SS01	MPT-TR-SS02
Sample Number:	45S00701	45S00801	45S01001	TRS00101	TRS00101DUP	TRS00201
Date Sampled:	29-MAR-95	21-MAY-95	24-MAY-95	27-JUN-95	27-JUN-95	27-JUN-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Inorganics (mg/kg)						
Antimony	--	0.75 J	2.6 J	--	--	--
Arsenic	1.7 J	0.62 J	1.5 J	0.75 J	0.54 J	0.51 J
Barium	13.1 J	5.4 J	56.7	4.7 J	4.7 J	5.4 J
Beryllium	0.11 J	0.07 J	0.18 J	0.08 J	0.08 J	--
Cadmium	--	--	1.6	--	--	--
Chromium	3.7	3.1	19.5	0.71 J	1.4 J	1.7 J
Cobalt	--	--	1.4 J	0.72 J	--	--
Copper	53.6	5.4	337	--	1.8 J	3.2 J
Lead	5.9	5.4	67	4.0	3.7 J	3.8
Mercury	0.09	--	0.41	--	--	--
Nickel	4 J	3 J	16.4	--		--
Selenium	0.14 J	--	0.27 J	--	--	--
Silver	0.85 J	--	5.8	--	--	--
Thallium	0.12 J	--	0.13 J	--	--	--
Tin	3.3 J	--	18	--	--	--
Vanadium	3.8 J	4.1 J	6.9 J	2.7 J	3.2 J	1.5 J
Zinc	25.4	23.8	258	4.9	6.6	7.1
Cyanide	0.15 J	--	0.12 J	0.1 J	--	0.14 J

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
ft bls = feet below land surface.
DUP = duplicate.
mg/kg = milligram per kilogram.
-- = concentration of analyte, if present, was less than the detection limit.
J = estimated value.

Table 4-6
Summary of Analytes Detected in Surface Soil Samples at Shipyard Area SWMUs 1, 23, 24, 25, 44, and 45

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

Analyte	Frequency of Detection[1]	Minimum Concentration	Maximum Concentration	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration
Volatiles (µg/kg)						
2-Butanone	5/72	4	10	6	10 - 13	25S00501
Benzene	1/74	1	1	1	5 - 7	01S00401
Carbon disulfide	17/74	1	4	2	5 - 7	23S02301
Ethylbenzene	2/74	[2]4.5	13	9	5 - 7	25S00301
Isobutyl alcohol	1/39	91	91	91	210 - 270	44S00101D
Toluene	19/74	1	22	5	5 - 7	25S00301
Trichlorofluoromethane	2/74	[2]2	[2]2	2	5 - 7	44S00101
Xylenes (total)	28/74	1	81	7	5 - 6	25S00301
Semivolatiles (µg/kg)						
2-Methylnaphthalene	3/74	22	[2]290	139	340 - 1,900	44S00101D
Acenaphthene	2/74	[2]125	[2]337.5	231	340 - 1,900	TRS00101D
Acetophenone	1/74	28	28	28	340 - 1,900	23S02501
Anthracene	7/74	36	[2]542.5	261	340 - 1,900	TRS00101D
Benzo(a)anthracene	18/74	50	[2]2,272.5	322	340 - 1,900	TRS00101D
Benzo(a)pyrene	19/74	24	[2]2,272.5	298	340 - 1,900	TRS00101D
Benzo(b)fluoranthene	21/74	22	[2]2,572.5	321	340 - 1,900	TRS00101D
Benzo(g,h,i)perylene	16/74	37	[2]1,072.5	218	340 - 1,900	TRS00101D
Benzo(k)fluoranthene	23/74	19	[2]2,322.5	303	340 - 1,900	TRS00101D
Benzoic acid	1/74	[2]481	[2]481	481	1,600 - 9,400	24S00401
Dibenz(a,h)anthracene	8/74	[2]44	[2]632.5	228	340 - 1,900	TRS00101D
Butylbenzylphthalate	2/74	72	[2]131.5	102	340 - 1,900	45S00101D
Chrysene	23/74	21	[2]2,472.5	306	340 - 1,900	TRS00101D
Di-n-butylphthalate	20/74	19	[2]1,370	167	340 - 1,900	45S00101
Di-n-octylphthalate	1/74	400	400	400	340 - 1,800	25S00501

See notes at end of table.

Table 4-6 (Continued)
Summary of Analytes Detected in Surface Soil Samples at Shipyard Area SWMUs 1, 23, 24, 25, 44, and 45

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

Analyte	Frequency of Detection[1]	Minimum Concentration	Maximum Concentration	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration
Semivolatiles (µg/kg) (Continued)						
Dibenzofuran	2/74	[2]157.5	[2]215	186	340 - 1,900	45S00101D
Dimethylphthalate	1/74	92	92	92	340 - 1,900	44S00701
Fluoranthene	23/74	28	[2]5,172.5	526	340 - 1,900	TRS00101D
Fluorene	3/74	[2]212.5	[2]292.5	251	340 - 1,900	45S00101D
Indeno (1,2,3-cd) pyrene	16/74	26	[2]1,022.5	190	340 - 1,900	TRS00101D
Naphthalene	5/74	24	880	253	340 - 1,900	23S01201
Phenanthrene	13/74	32	[2]2,072.5	454	340 - 1,900	TRS00101D
Pyrene	25/74	20	[2]3,972.5	417	340 - 1,900	TRS00101D
bis(2-Ethylhexyl)phthalate	16/74	26	[2]655	154	340 - 1,800	45S00101D
Pesticides/PCBs (µg/kg)						
4,4'-DDD	2/74	[2]1.05	7.5	4.3	1.3 - 140	44S01001
4,4'-DDE	23/74	0.93	12	3.98	0.68 - 73	45S00301
4,4'-DDT	17/74	1.5	[2]62	8.2	1.3 - 140	44S00101D
Aldrin	3/74	1.1	2.7	1.67	0.68 - 73	25S00501
Aroclor-1254	4/74	70	[2]335	189	16 - 1,800	23S02901D
Aroclor-1260	10/74	26	380	133	16 - 1,800	23S01601
Chlordane	11/74	[2]11.5	1,100	214	6.8 - 730	TRS00201
Dieldrin	12/74	[2]0.6775	2,200	187.8	0.68 - 7.3	25S00701
Endosulfan II	2/74	3.3	12	7.7	1.3 - 140	23S01401
Endrin	2/74	1.4	[2]20.35	10.9	1.3 - 140	44S00101
Endrin aldehyde	1/74	[2]31.85	[2]31.85	32	1.3 - 140	44S00101
Endrin ketone	5/74	1.5	22	6.9	1.3 - 140	23S00701
Heptachlor epoxide	3/74	1.1	[2]14.1	5.6	0.68 - 73	44S00101
Isodrin	2/74	0.76	0.87	0.82	0.68 - 73	44S00201
Methoxychlor	5/74	2.9	190	45.4	2.7 - 290	23S00701
beta-BHC	1/74	2.6	2.6	2.6	1.3 - 140	45S01001

See notes at end of table.

Table 4-6 (Continued)
Summary of Analytes Detected in Surface Soil Samples at Shipyard Area SWMUs 1, 23, 24, 25, 44, and 45

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

Analyte	Frequency of Detection[1]	Minimum Concentration	Maximum Concentration	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration
Inorganics (mg/kg)						
Antimony	34/68	0.02	14.8	2.58	0.01 - 5.8	23S01001
Arsenic	70/74	0.2	13.9	1.54	0.17 - 0.76	23S01301
Barium	74/74	3	126	22.4	N/A	23S02401
Beryllium	71/74	0.05	1.9	0.21	0.06 - 0.29	23S02401
Cadmium	35/74	[2]0.24	6.3	1.12	0.25 - 5.5	23S02001
Chromium	74/74	0.56	[2]42.2	10.09	N/A	24S00701D
Cobalt	29/74	[2]0.5225	[2]15	2.22	0.55 - 10.4	24S00701D
Copper	66/74	[2]1.15	2,930	115	3.3 - 10.2	23S02001
Cyanide	46/74	0.05	1.1	0.17	0.05 - 0.165	24S00201
Lead	74/74	1.9	831	46.2	N/A	23S02001
Mercury	29/74	0.04	[2]6.9	0.46	0.03 - 0.07	44S00101
Nickel	66/74	1.2	81.3	10.1	1.1 - 11.2	23S01301
Selenium	6/74	0.14	[2]0.605	0.38	0.1 - 0.575	24S00701D
Silver	14/74	0.51	[2]22.8	4.99	0.29 - 5	44S00101
Thallium	6/74	0.12	[2]0.165	0.14	0.12 - 0.48	23S00801D
Tin	37/74	[2]1.675	196	11.8	1.7 - 16.8	23S02001
Vanadium	74/74	1.5	23.4	7.4	N/A	23S02401
Zinc	74/74	4.7	5,910	235	N/A	23S02001

[1] Frequency of detection is the number of samples in which the analyte was detected, divided by the total number of samples analyzed (excluding rejected samples).
[2] Indicates the value is the average of a sample concentration and its duplicate. For nondetected values, 1/2 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: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
µg/kg = micrograms per kilogram.
mg/kg = milligram per kilogram.
PCBs = polychlorinated biphenyls.
4,4'-DDT = dichlorodiphenyltrichloroethane.
4,4'-DDE = dichlorodiphenyldichloroethene.
4,4'-DDD = dichlorodiphenyldichloroethane.
N/A - not applicable.
DUP = duplicate.

Table 4-7
Comparison of Concentrations Detected in Surface Soil Samples at Shipyard Area SWMUs 1, 23, 24, 25, 44, and 45 to Background Screening and Benchmark Concentrations

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

Analyte	Maximum Concentration	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
Volatiles (µg/kg)							
2-Butanone	10	NSC	N/A	2,200,000	0/72	4,700,000	0/72
Benzene	1	NSC	N/A	1,400	0/74	22,000	0/74
Carbon disulfide	4	NSC	N/A	5,200	0/74	780,000	0/74
Ethylbenzene	13	NSC	N/A	1,400,000	0/74	780,000	0/74
Isobutyl alcohol	91	NSC	N/A	NSC	N/A	2,300,000	0/39
Toluene	22	NSC	N/A	520,000	0/74	1,600,000	0/74
Trichlorofluoromethane	[1]2	NSC	N/A	6,600	0/74	2,300,000	0/74
Xylenes (total)	81	NSC	N/A	13,000,000	0/74	16,000,000	0/74
Semivolatiles (µg/kg)							
2-Methylnaphthalene	[1]290	NSC	N/A	960,000	0/74	310,000	0/74
Acenaphthene	[1]337.5	NSC	N/A	2,800,000	0/74	470,000	0/74
Acetophenone	28	NSC	N/A	NSC	N/A	780,000	0/74
Anthracene	[1]542.5	NSC	N/A	20,000,000	0/74	2,300,000	0/74
Benzo(a)anthracene	[1]2,272.5	NSC	N/A	1,400	1/74	880	1/74
Benzo(a)pyrene	[1]2,272.5	NSC	N/A	100	12/74	88	14/74
Benzo(b)fluoranthene	[1]2,572.5	NSC	N/A	1,400	1/74	880	1/74
Benzo(g,h,i)perylene	[1]1,072.5	NSC	N/A	14,000	0/74	NSC	N/A
Benzo(k)fluoranthene	[1]2,322.5	NSC	N/A	14,000	0/74	8,800	0/74
Benzoic acid	[1]481	NSC	N/A	130,000,000	0/74	31,000,000	0/74
Butylbenzylphthalate	[1]131.5	NSC	N/A	15,000,000	0/74	1,600,000	0/74
Chrysene	[1]2,472.5	NSC	N/A	140,000	0/74	88,000	0/74
Dibenz(a,h)anthracene	[1]632.5	NSC	N/A	100	4/74	88	3/74

See notes at end of table.

Table 4-7 (Continued)
Comparison of Concentrations Detected in Surface Soil Samples at Shipyard Area SWMUs 1, 23, 24, 25, 44, and 45 to Background Screening and Benchmark Concentrations

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

Analyte	Maximum Concentration	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
Semivolatiles µg/kg (Continued)							
Di-n-butylphthalate	[1]1,370	NSC	N/A	7,300,000	0/74	780,000	0/74
Di-n-octylphthalate	400	NSC	N/A	1,500,000	0/74	160,000	0/74
Dibenzofuran	[1]215	NSC	N/A	240,000	0/74	31,000	0/74
Dimethylphthalate	92	NSC	N/A	630,000,000	0/74	78,000,000	0/74
Fluoranthene	[1]5,172.5	NSC	N/A	2,900,000	0/74	310,000	0/74
Fluorene	[1]292.5	NSC	N/A	2,400,000	0/74	310,000	0/74
Indeno (1,2,3-cd) pyrene	[1]1,022.5	NSC	N/A	1,400	1/74	880	1/74
Naphthalene	880	NSC	N/A	1,300,000	0/74	310,000	0/74
Phenanthrene	[1]2,072.5	NSC	N/A	1,700,000	0/74	NSC	N/A
Pyrene	[1]3,972.5	NSC	N/A	2,200,000	0/74	230,000	0/74
bis(2-Ethylhexyl) phthalate	[1]655	NSC	N/A	48,000	0/74	46,000	0/74
Pesticides/PCBs (µg/kg)							
4,4'-DDD	7.5	NSC	N/A	4,500	0/74	2,700	0/74
4,4'-DDE	12	2.3	10/74	3,000	0/74	1,900	0/74
4,4'-DDT	[1]62	NSC	N/A	3,100	0/74	1,900	0/74
Aldrin	2.7	NSC	N/A	60	0/74	38	0/74
Aroclor-1254	[1]335	NSC	N/A	900	0/74	160	2/74
Aroclor-1260	380	NSC	N/A	900	0/74	83	6/74
Chlordane	1,100	NSC	N/A	800	1/74	490	2/74
Dieldrin	2,200	NSC	N/A	70	1/74	40	1/74
Endosulfan II	12	NSC	N/A	390,000	0/74	47,000	0/74
Endrin	[1]20.35	NSC	N/A	23,000	0/74	2,300	0/74
Endrin aldehyde	[1]31.85	NSC	N/A	23,000	0/74	NSC	N/A

See notes at end of table.

Table 4-7 (Continued)
Comparison of Concentrations Detected in Surface Soil Samples at Shipyard Area SWMUs 1, 23, 24, 25, 44, and 45 to Background Screening and Benchmark Concentrations

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

Analyte	Maximum Concentration	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
Pesticides/PCBs (µg/kg) (Continued)							
Endrin ketone	22	NSC	N/A	NSC	N/A	NSC	N/A
Heptachlor epoxide	[1]14.1	NSC	N/A	100	0/74	70	0/74
Isodrin	0.87	NSC	N/A	NSC	N/A	NSC	N/A
Methoxychlor	190	NSC	N/A	380,000	0/74	39,000	0/74
beta-BHC	2.6	NSC	N/A	600	0/74	350	0/74
Inorganics (mg/kg)							
Antimony	14.8	NSC	N/A	26	0/68	3.1	8/68
Arsenic	13.9	NSC	N/A	[5]0.8	54/74	0.37	66/74
Barium	126	5.6	65/74	5,200	0/74	550	0/74
Beryllium	1.9	0.16	24/74	0.2	15/74	0.15	26/74
Cadmium	6.3	2	5/74	37	0/74	3.9	1/74
Chromium	[1]42.2	2.6	66/74	290	0/74	39	2/74
Cobalt	[1]15	NSC	N/A	4,700	0/74	470	0/74
Copper	2,930	2.2	64/74	[6]2,900	1/74	290	7/74
Cyanide	1.1	NSC	N/A	1,600	0/74	160	0/74
Lead	831	NSC	N/A	500	1/74	400	1/74
Mercury	[1]6.9	NSC	N/A	23	0/74	2.3	1/74
Nickel	81.3	NSC	N/A	1,500	0/74	160	0/74
Selenium	[1]0.605	1.36	0/74	390	0/74	39	0/74
Silver	[1]22.8	NSC	N/A	390	0/74	39	0/74
Thallium	[1]0.165	1.8	0/74	NSC	N/A	0.63	0/74
Tin	196	NSC	N/A	44,000	0/74	4,700	0/74
Vanadium	23.4	4	56/74	490	0/74	55	0/74
Zinc	5,910	2.6	74/74	23,000	0/74	2,300	1/74

See notes at end of table.

Table 4-7 (Continued)
Comparison of Concentrations Detected in Surface Soil Samples at Shipyard Area SWMUs 1, 23, 24, 25, 44, and 45 to Background Screening and Benchmark Concentrations

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

[1] Indicates the value is the average of the detected concentrations in a sample and its duplicate. For nondetected values, 1/2 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] Soil Cleanup Goals for Florida, September 29, 1995 (residential for surface soil).
[4] The value is from U.S. Environmental Protection Agency Region III Risk-based Concentrations tables dated February 9, 1995. Concentrations for noncarcinogenic risks are adjusted to a Hazard Index of 0.1.
[5] Soil Cleanup Goals for Florida, January 19, 1996 (residential for surface soil).
[6] Soil Cleanup Goals for the Military Sites, April 5, 1996 (residential for surface soil).

Notes: RCRA = Resource Conservation and Recovery Act.
SWMUs = solid waste management units.
μg/kg = micrograms per kilogram.
NSC = no screening concentration.
N/A = not applicable.
PCBs = polychlorinated biphenyls.
4,4'-DDD = dichlorodiphenyldichloroethane.
4,4'-DDE = dichlorodiphenyldichloroethene.
4,4'-DDT = dichlorodiphenyltrichloroethane.
mg/kg = milligrams per kilogram.

Two other samples (MPT-24-SS05 and MPT-24-SS06) located in the vicinity of the target range backstop (Plate 3) also contained PAHs but at concentrations that were less than the residential benchmarks. The samples were located in a sandy area adjacent to a paved road and an area where vehicles are routinely parked.

The pesticide chlordane was detected at concentrations exceeding the residential benchmark in soil samples collected from the approximate location of the southern end of the former target backstop (MPT-TR-SS02) and approximately 60 feet east of the north end of the backstop (MPT-24-SS06). The samples were located in grassy areas adjacent to buildings (Plate 3). Chlordane was formerly used as a termatocide.

SWMU 1 and SWMU 23. The SVOC benzo(a)pyrene was detected at concentrations exceeding the residential benchmark in surface soil samples MPT-23-SS07, MPT-23-SS13, and MPT-23-SS14, and dibenz(a,h)anthracene was detected at a concentration exceeding the residential benchmark at sample location MPT-23-SS14. These samples were located at the northern and southern ends of buildings that were formerly a machine shop (Buildings 54 and 55, Figure 4-2). Benzo(a)pyrene was also detected at concentrations exceeding the residential benchmark in surface soil sample MPT-23-SS26 located at the southern boundary with SWMU 24. Buildings to the north of this sampling location were formerly used for paint and flammable storage (Buildings 21 and 22, Figure 4-2). Benzo(a)pyrene and dibenz(a,h)anthracene were not detected at concentrations exceeding their respective industrial soil cleanup goal.

PCBs (Aroclor-1254 and -1260) were detected at concentrations exceeding the USEPA Region III benchmark in the following locations: in two surface soil samples (MPT-23-SS23 and MPT-1-SB05) collected at the northern entrance road to SWMU 23, which borders the northern boundary of SWMU 1; in the northern part of SWMU 1 (MPT-1-SB01); in the southeast part of SWMU 23 (MPT-23-MW07S); and the southwest part of SWMU 23 (MPT-23-SS16). A transformer(s) was formerly located in SWMU 23 at Building 26 (Figure 4-11). The PCBs were not detected at concentrations that exceed the FDEP residential soil cleanup goal.

SWMU 24. Two SVOCs (benzo(a)pyrene and dibenz(a,h)anthracene) and one PCB compound (Aroclor-1260) were detected at concentrations exceeding the residential benchmarks in surface soil samples at SWMU 24. The sampling locations where benzo(a)pyrene was detected at concentrations exceeding the residential benchmarks were at the northwest boundary (MPT-24-SS02), the northeast boundary (MPT-24-SS04), and approximately 120 feet east of the southeastern boundary (MPT-24-SS06). Surface soil sample MPT-24-SS02 was in close proximity to sample MPT-23-SS26 from SWMU 23, and MPT-24-SS06 was in close proximity to sample MPT-TR-SS01 from the former target range backstop (Plate 3).

Dibenz(a,h)anthracene was detected at concentrations exceeding the residential benchmark at sampling location MPT-24-MW01S. Benzo(a)pyrene was also detected at this sampling location at a concentration that exceeded the FDEP industrial soil cleanup goal.

The PCB (Aroclor-1260) was detected in a sample, MPT-24-SS01, at the western site boundary (Plate 3). The PCB exceeded the USEPA Region III benchmark but not the FDEP residential soil cleanup goal.

SWMU 25. The pesticide, dieldrin, was detected in surface soil sample MPT-25-SS07 in the southern part of the SWMU at a concentration that exceeded the FDEP industrial soil cleanup goal. Dieldrin was detected in three other samples (MPT-25-SS03, MPT-25-SS06, and MPT-25-SS08) at concentrations less than the USEPA Region III and FDEP residential benchmarks.

SWMU 44. Two SVOCs were detected at concentrations exceeding the USEPA Region III and FDEP residential benchmarks in surface soil samples collected at SWMU 44. One sample, MPT-44-SS01, was located at the east side of the northern clarifier, and the other, MPT-44-SS07, was located 80 feet to the northwest of the northern clarifier. Benzo(a)pyrene and dibenz(a,h)anthracene were detected at concentrations exceeding their respective residential benchmarks in sample MPT-44-SS01, and only benzo(a)pyrene was detected at a concentration exceeding the residential benchmark in sample MPT-44-SS07.

SWMU 45. Two SVOCs, a pesticide and a PCB, were detected at concentrations that exceed the residential benchmarks in surface soil samples collected at SWMU 45. The SVOCs, benzo(a)pyrene and dibenz(a,h)anthracene, were detected at concentrations that exceeded USEPA Region III RBCs and FDEP soil cleanup goals in a surface soil sample (MPT-45-SS01) located between the two sludge drying beds. Benzo(a)pyrene was also detected at concentrations exceeding the residential benchmark in the surface soil sample collected at monitoring well location MPT-45-MW02S, approximately 40 feet north of the sludge drying beds (Plate 3). Benzo(a)pyrene and dibenz(a,h)anthracene were not detected in these two samples at concentrations that exceed their respective FDEP industrial soil cleanup goal.

A pesticide (chlordane) and PCB (Aroclor-1260) were detected at concentrations exceeding the USEPA Region III RBCs in a sample (MPT-45-SS06) collected at the northern end of the northernmost sludge drying bed. The FDEP residential and industrial soil cleanup goals were not exceeded.

4.2.2.2 **Inorganics** Eighteen inorganic analytes were detected in surface soil samples (Table 4-5). Antimony, arsenic, cobalt, cyanide, lead, mercury, nickel, silver, and tin were detected in the environmental samples collected from the Shipyard Area, but not in the background surface soil samples. Seven other inorganic analytes (barium, beryllium, cadmium, chromium, copper, vanadium, and zinc) were detected at concentrations that exceed background screening concentrations (Table 4-7).

Nine of the inorganic analytes (antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, and zinc) were detected at concentrations that exceed either the USEPA Region III RBC or FDEP Soil Cleanup Goal benchmarks (Table 4-7). Five of the inorganic analytes (antimony, cadmium, chromium, mercury, and zinc) exceeded the USEPA Region III RBC but not their respective FDEP soil cleanup goals.

Arsenic and beryllium were detected at a higher frequency of occurrence at concentrations exceeding the benchmarks relative to the other inorganic analytes. Arsenic was detected at concentrations exceeding the USEPA Region III RBC and FDEP soil cleanup goal in the majority of the soil samples collected at the Shipyard Area. The highest concentrations of arsenic, which also exceed the FDEP industrial soil cleanup goal of 3.7 mg/kg, were detected at sampling locations in SWMUs 1 and 23. The following describes the locations where surface soil samples contained arsenic at concentrations that approach or exceed the FDEP

industrial soil cleanup goal (3.0 mg/kg) and are possible source areas for the chemical:

- Sampling locations MPT-1-SB01, MPT-1-SB04, and MPT-1-SB06 were located at SWMU 1, Landfill A and near the former location of a fabrication shop that was located west of the JSI administration building (Figure 4-2 and Plate 3). Antimony was detected at sampling location MPT-1-SB01, and beryllium was detected at sampling locations MPT-1-SB04 and MPT-1-SB06 at concentrations exceeding their respective residential goals for USEPA Region III RBCs, but not the FDEP soil cleanup goals. Arsenic was detected at concentrations exceeding its residential goal for the USEPA Region III RBC and FDEP soil cleanup goal at soil borings MPT-1-SB01 through MPT-1-SB07. Arsenic was not detected in surface soil samples from these borings at concentrations that exceed the FDEP industrial soil cleanup goal.

- Sampling locations MPT-23-SS07, MPT-23-SS08, MPT-23-SS13 and MPT-23-SS14 at SWMU 23 (Plate 3) were collected at the location of buildings that formerly contained machine shops (Buildings 54 and 55, Figure 4-11). In addition, copper was detected at sampling location MPT-23-SS13 at concentrations that exceeded the USEPA Region III RBC.

- Sampling location MPT-23-SS20 at SWMU 23 (Plate 3) was collected near the location of buildings that formerly contained electrical and machine shops (Buildings 13, 14, 15, and 40, Figure 4-2). This sample also contained copper and lead at concentrations that exceeded their respective FDEP residential soil cleanup goals 2,900 and 500 mg/kg. In addition, zinc and antimony were detected at concentrations that exceed the USEPA Region III RBCs.

Beryllium was detected at concentrations exceeding the benchmarks at a lower frequency of occurrence than arsenic. Beryllium also was detected at sampling locations in SWMUs 23 and 24 at concentrations that exceed the FDEP industrial soil cleanup goal (1.0 mg/kg). The following describes the locations where surface soil samples contained beryllium at concentrations that exceeded the FDEP industrial soil cleanup goal and possible source areas for the chemical:

- Sampling location MPT-23-SS24 at SWMU 23 (Plate 3) was located to the south of areas formerly used for abrasive blasting and painting operations (Buildings 57 and 21, Figure 4-2).

- Sampling location MPT-24-MW01S at SWMU 24 (Plate 3) was collected near the location of an area used for storage of solvents.

In general, the inorganic analytes that exceed the residential and or industrial human health-based benchmarks were detected at various locations in the Shipyard Area and likely represent hot spots. Furthermore, 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 or not the concentrations of arsenic and beryllium, which were detected at a higher frequency of occurrence relative to the other analytes, are related to a release at the Shipyard Area, or are residual concentrations from the dredge material.

4.2.3 **Subsurface Soil Assessment** The subsurface soil analytical results are described as a group, the Shipyard Area, SWMUs 1, 23, 24, 25, 44, and 45. Twenty-one subsurface soil samples and one duplicate were collected from the Shipyard Area (Plate 3). Tables 4-8 and 4-9 present concentrations of the chemicals detected in the subsurface soil samples, and Table 4-10 lists statistics for each analyte detected. Table 4-11 compares detected concentrations of target analytes with background screening values and benchmarks. Subsurface soil analytical results are compared to background screening values for subsurface soil (ABB-ES, 1995a) and residential use benchmarks values from USEPA Region III risk-based concentrations (USEPA, 1995a) and industrial worker concentrations for Florida soil cleanup goals (FDEP, 1995a; 1995b; and 1996).

4.2.3.1 **Organics** Target analytes detected in the subsurface soil samples consist of three VOCs, one SVOC, and two pesticides (Table 4-8). None of the organics were detected at concentrations that exceed benchmarks (Table 4-11).

4.2.3.2 **Inorganics** Sixteen inorganic analytes were detected in subsurface soil samples (Table 4-9). Ten inorganic analytes (arsenic, barium, beryllium, chromium, copper, lead, mercury, tin, vanadium, and zinc) were detected at concentrations that exceed background screening concentrations (Table 4-11). Antimony, cadmium, nickel, and selenium were detected in the environmental samples collected from the Shipyard Area, but not in the subsurface background samples. None of the inorganic analytes were detected at concentrations that exceed benchmark concentrations (Table 4-11).

4.2.4 **SWMU 45 Sludge Assessment** Sixteen sludge samples and two duplicates were collected from SWMU 45 (Plate 3). Tables 4-12 and 4-13 present concentrations of the chemicals detected in the sludge samples, and Table 4-14 lists statistics for each analyte detected. Table 4-15 compares detected concentrations of target analytes with background screening values and benchmarks. Composite sludge sample analytical results are compared to background screening values for subsurface soils (ABB-ES, 1995a) and residential use benchmarks values from USEPA Region III risk-based concentrations (USEPA, 1995a) and Florida soil cleanup goals (FDEP, 1995a; 1995b; and 1996).

4.2.4.1 **Organics** Target analytes detected in the sludge samples consist of 3 VOCs, 16 SVOCs, and 7 pesticides (Table 4-12). PCBs were not detected in the sludge samples. None of the VOCs or pesticides were detected at concentrations that exceed benchmarks. Only one SVOC, benzo(a)pyrene, was detected at concentrations that exceed residential human health-based benchmarks (Table 4-15). Benzo(a)pyrene was detected in samples collected from 0 to 1 foot bls at concentrations exceeding the USEPA Region III RBC in two samples (MPT-45-SL01 and MPT-45-SL02) and the FDEP residential soil cleanup goal in one sample, MPT-45-SL02. This frequency of occurrence for benzo(a)pyrene, exceeding the FDEP residential soil cleanup goal, is based on an average concentration for sludge sample MPT-45-SL01 which has a corresponding duplicate. The sample designated as 45L001001 contained benzo(a)pyrene at 100 μg/kg. It also should be noted that the concentrations detected for benzo(a)pyrene did not exceed the FDEP industrial soil cleanup goal of 500 μg/kg, and that benzo(a)pyrene was not detected in the samples collected at 1 to 2 feet bls.

4.2.4.2 **Inorganics** Seventeen inorganic analytes were detected in sludge samples (Table 4-13). Four inorganic analytes (barium, chromium, copper, and zinc) were detected at concentrations that exceed background screening concen-

Table 4-8
Organic Analytes Detected in Subsurface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	M8994	M8994	M8985	R9955
Sample Location:	MPT-1-MW01D	MPT-23-MW01S	MPT-24-MW01S	MPT-44-MW03S
Sample Number:	01B00807	23B02807	24B00707	44B01006
Date Sampled:	21-MAY-95	20-MAY-95	19-MAY-95	24-MAY-95
Sample Depth (ft bls):	6 to 7	6 to 7	6 to 7	5 to 6
Volatiles (µg/kg)				
Carbon disulfide	--	--	--	2 J
2-Butanone	--	--	--	--
Xylenes (total)	--	--	--	1 J
Semivolatiles (µg/kg)				
bis(2-Ethylhexyl)phthalate	52 J	45 J	60 J	--
Pesticides/PCB (µg/kg)				
4,4'-DDE	--	--	--	--
Chlordane	--	--	8.8 J	--

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
ft bls = feet below land surface.
µg/kg = microgram per kilogram.
-- = concentration of analyte, if present, was less than the detection limit.
J = estimated value.
PCB = polychlorinated biphenyls.
4,4'-DDE = dichlorodiphenyldichloroethene.

Table 4-9
Inorganic Analytes Detected in Subsurface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	R9861	R9861	R9861	R9861	R9861	R9861	R9861	R9861
Sample Location:	MPT-1-SB01	MPT-1-SB02	MPT-1-SB03	MPT-1-SB04	MPT-1-SB05	MPT-1-SB06	MPT-1-SB06	MPT-1-SB07
Sample Number:	01B00109	01B00208	01B00308	01B00409	01B00508	01B00608	01B00608DUP	01B00708
Date Sampled:	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95	03-MAY-95
Sample Depth (ft bls):	8 to 9	7 to 8	7 to 8	8 to 9	7 to 8	7 to 8	7 to 8	7 to 8
Inorganics (mg/kg)								
Antimony	--	--	--	--	0.01 J	--	--	--
Arsenic	1.3 J	0.52 J	0.51 J	0.59 J	0.93 J	0.56 J	0.59 J	0.76 J
Barium	3.9 J	2.3 J	3.9 J	2.4 J	7.7 J	3.9 J	3 J	3.5 J
Beryllium	0.1 J	0.07 J	--	--	0.12 J	--	--	0.09 J
Cadmium	--	--	--	--	--	--	--	--
Chromium	2.6	1.7 J	1.1 J	2 J	1.7 J	2 J	1.5 J	1.8 J
Cobalt	--	--	--	--	--	--	--	0.66 J
Copper	--	--	--	--	--	--	--	--
Lead	0.65 J	0.61 J	0.19 J	1 J	16.2	0.54 J	0.43 J	0.34 J
Mercury	--	--	--	--	0.07	0.04 J	--	0.03 J
Nickel	1.5 J	--	--	--	12.1	--	--	--
Selenium	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--
Vanadium	4.2 J	1.7 J	1.6 J	1.2 J	11.2	2 J	2.1 J	2.2 J
Zinc	3.7 J	--	--	5.7 J	59.1 J	--	--	--
Cyanide	0.09 J	0.15 J	0.12 J	0.09 J	0.12 J	0.12 J	0.09 J	0.08 J

See notes at end of table.

Table 4-9 (Continued)
Inorganic Analytes Detected in Subsurface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	M8994	M8985	M8985	M8985	M8994	M8994	M8994
Sample Location:	MPT-1-MW01D	MPT-23-MW05S	MPT-23-MW04S	MPT-23-MW03S	MPT-23-MW06S	MPT-23-MW02S	MPT-23-MW01S
Sample Number:	01B00807	23B00105	23B00406	23B01606	23B02108	23B02407	23B02807
Date Sampled:	21-MAY-95	19-MAY-95	19-MAY-95	19-MAY-95	20-MAY-95	20-MAY-95	20-MAY-95
Sample Depth (ft bls):	6 to 7	4 to 5	5 to 6	5 to 6	7 to 8	6 to 7	6 to 7
Inorganics (mg/kg)							
Antimony	0.63 J	0.55 J	0.48 J	--	0.55 J	--	--
Arsenic	0.59 J	0.74 J	0.5 J	0.57 J	0.6 J	0.62 J	1.2 J
Barium	3.2 J	3.2 J	3.4 J	2.7 J	2.2 J	3.1 J	3 J
Beryllium	--	--	0.04 J	--	0.06 J	0.06 J	0.03 J
Cadmium	--	--	--	0.82 J	--	--	0.68 J
Chromium	1.3 J	2.3 J	3.1	2.3	2 J	2.9	3.4
Cobalt	--	--	--	--	--	--	--
Copper	1.9 J	3.7 J	1.3 J	2.9 J	0.49 J	2.8 J	0.82 J
Lead	1.4	1.7	1.2	1.2	1.8	1.8	1.2
Mercury	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	1.7 J
Selenium	0.29 J	0.41 J	0.49 J	0.54 J	--	0.49 J	0.57 J
Tin	--	--	--	--	--	--	--
Vanadium	0.86 J	2.2 J	2 J	1.3 J	1.4 J	1.3 J	1.6 J
Zinc	34	24.1	8.2	9.3	6.9	14.6	36.5
Cyanide	--	--	--	--	--	--	--

See notes at end of table.

Table 4-9 (Continued)
Inorganic Analytes Detected in Subsurface Soil Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	M8994	M8985	M8985	M8994	R9955	R8994	R9955
Sample Location:	MPT-23-MW07S	MPT-24-MW01S	MPT-44-MW01S	MPT-44-MW02S	MPT-44-MW03S	MPT-45-MW01D	MPT-45-MW02S
Sample Numbers:	23B02908	24B00707	44B00107	44B00908	44B01006	45B00805	45B01005
Date Sampled:	20-MAY-95	19-MAY-95	19-MAY-95	20-MAY-95	24-MAY-95	21-MAY-95	24-MAY-95
Sample Depth (ft bls):	7 to 8	6 to 7	6 to 7	7 to 8	5 to 6	4 to 5	4 to 5
Inorganics (mg/kg)							
Antimony	0.63 J	0.59 J	0.87 J	2.2	--	--	--
Arsenic	0.26 J	0.74 J	0.66 J	0.74 J	0.6 J	0.77 J	0.7 J
Barium	2.1 J	1.7 J	2.7 J	5 J	3.2 J	7.3 J	4.7 J
Beryllium	--	0.22 J	--	--	0.09 J	0.15 J	0.12 J
Cadmium	--	--	--	--	--	0.84 J	--
Chromium	2.9	3.2	2 J	2.8	--	5.3	2.9
Cobalt	--	--	--	--	--	--	--
Copper	0.99 J	22.5	9.1	10.6	--	4.2 J	4.9 J
Lead	1.3	16.9	1.3	42.4	0.69	2.3	1.5
Mercury	--	--	--	--	--	--	--
Nickel	--	3.9 J	2.3 J	2.4 J	--	2.5 J	--
Selenium	--	0.44 J	0.57 J	--	--	--	--
Tin	--	62	--	--	--	3.3 J	--
Vanadium	1 J	1.7 J	3.5 J	1.9 J	1.7 J	5.8 J	2 J
Zinc	10.5	56.6	36.6	17.3	--	23.4	5.2
Cyanide	--	--	--	--	--	--	0.09 J

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
ft bls = feet below land surface.
mg/kg = milligram per kilogram.
-- = concentration of analyte, if present, was less than the detection limit.
J = estimated value.

Table 4-10
Summary of Analytes Detected in Subsurface Soil at Shipyard Area SWMUs 1, 23, 24, 25, 44, and 45

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

Analyte	Frequency of Detection[1]	Minimum Detected Concentration	Maximum Detected Concentration	Mean of Detected Concentrations[3]	Range of Instrument Reporting Limits	Sample with Maximum Concentration
Volatiles (µg/kg)						
2-Butanone	1/21	2	2	2	10 - 12	01B00308
Carbon disulfide	3/21	[2]1.5	2	2	5 - 6	01B00508
Xylenes (total)	4/21	1	4	2	5 - 6	01B00508
Semivolatiles (µg/kg)						
bis(2-Ethylhexyl) phthalate	3/21	45	60	52	350 - 800	24B00707
Pesticides/PCBs (µg/kg)						
4,4'-DDE	1/21	3.3	3.3	3.3	0.71 - 0.85	01B00508
Chlordane	1/21	8.8	8.8	8.8	7.1 - 8.5	24B00707
Inorganics (mg/kg)						
Antimony	9/21	0.01	2.2	0.72	0.01 - 1.2	44B00908
Arsenic	21/21	0.26	1.3	0.69	N/A	01B00109
Barium	21/21	2.1	7.7	3.7	N/A	01B00508
Beryllium	12/21	0.03	0.22	0.1	0.04 - 0.07	24B00707
Cadmium	3/21	0.68	0.84	0.78	0.25 - 0.74	45B00805
Chromium	20/21	1.1	5.3	2.5	1 - 1	45B00805
Cobalt	1/21	0.66	0.66	0.66	0.65 - 0.94	01B00708
Copper	13/21	0.49	22.5	5.09	1.48 - 6.1	24B00707
Cyanide	8/21	0.08	0.15	0.11	0.05 - 0.13	01B00208
Lead	21/21	0.19	42.4	4.58	N/A	44B00908
Mercury	3/21	[2]0.0275	0.07	0.04	0.03 - 0.08	01B00508
Nickel	7/21	1.5	12.1	3.8	1.2 - 1.8	01B00508
Selenium	8/21	0.29	0.57	0.47	0.11 - 0.6	23B02807

See notes at end of table.

Table 4-10 (Continued)
Summary of Analytes Detected in Subsurface Soil at Shipyard Area SWMUs 1, 23, 24, 25, 44, and 45

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

Analyte	Frequency of Detection[1]	Minimum Detected Concentration	Maximum Detected Concentration	Mean of Detected Concentrations[3]	Range of Instrument Reporting Limits	Sample with Maximum Concentration
Inorganics (mg/kg) (Continued)						
Tin	2/21	3.3	62	32.7	1.9 - 5.6	24B00707
Vanadium	21/21	0.86	11.2	2.5	N/A	01B00508
Zinc	16/21	3.7	59.1	22	2.5 - 2.8	01B00508

[1] Frequency of detection is the number of samples in which the analyte was detected, divided by the total number of samples analyzed (excluding rejected samples).
[2] An asterisk indicates the value is the average of a sample concentration and its duplicate. For nondetected values, 1/2 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: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
μg/kg = micrograms per kilogram.
PCBs = polychlorinated biphenyls.
4,4'-DDE = dichlorodiphenyldichloroethene.
mg/kg = milligram per kilogram.
NA = not applicable.

Table 4-11
Comparison of Analytes Detected in Shipyard Area SWMUs 1, 23, 24, 25, 44, and 45 to Subsurface Soil Background Screening and Benchmark Concentrations

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

Analyte	Maximum Concentration	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
Volatiles (µg/kg)							
2-Butanone	2	NSC	N/A	15,000,000	0/21	50,000,000	0/21
Carbon disulfide	2	NSC	N/A	34,000	0/21	10,000,000	0/21
Xylenes (total)	4	NSC	N/A	92,000,000	0/21	50,000,000	0/21
Semivolatiles (µg/kg)							
bis(2-Ethylhexyl) phthalate	60	NSC	N/A	110,000	0/21	205,000	0/21
Pesticides/PCBs (µg/kg)							
4,4'-DDE	3.3	3.5	0/21	11,000	0/21	8,500	0/21
Chlordane	8.8	NSC	N/A	3,000	0/21	2,200	0/21
Inorganics (mg/kg)							
Antimony	2.2	NSC	N/A	220	0/21	41	0/21
Arsenic	1.3	0.9	3/21	[5]3.7	0/21	1.65	0/21
Barium	7.7	7.2	2/21	84,000	0/21	7,000	0/21
Beryllium	0.22	0.14	2/21	1	0/21	0.65	0/21
Cadmium	0.84	NSC	N/A	600	0/21	50	0/21
Chromium	5.3	3.4	1/21	430	0/21	500	0/21
Cobalt	0.66	1.04	0/21	110,000	0/21	6,000	0/21
Copper	22.5	3.6	6/21	[6]7,200	0/21	3,800	0/21
Cyanide	0.15	0.66	0/21	40,000	0/21	2,050	0/21

See notes at end of table

Table 4-11 (Continued)
Comparison of Analytes Detected in Shipyard Area SWMUs 1, 23, 24, 25, 44, and 45 to Subsurface Soil Background Screening and Benchmark Concentrations

RCRA Facility Investigation, Group III 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
Inorganics (mg/kg) (Continued)							
Lead	42.4	2.8	3/21	1,000	0/21	400	0/21
Mercury	0.07	0.06	1/21	480	0/21	30.5	0/21
Nickel	12.1	NSC	N/A	26,000	0/21	2,050	0/21
Selenium	0.57	NSC	N/A	9,900	0/21	500	0/21
Tin	62	5.4	1/21	670,000	0/21	50,000	0/21
Vanadium	11.2	3.2	4/21	4,800	0/21	700	0/21
Zinc	59.1	4.8	15/21	560,000	0/21	30,500	0/21

[1] Indicates the value is the average of the detected concentrations in a sample and its duplicate. For nondetected values, 1/2 the contract-required quantitation limits/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] Soil Cleanup Goals for Florida, September 29, 1995 (industrial for subsurface soils).
[4] The value is from U.S. Environmental Protection Agency Region III Risk-based Concentrations tables dated February 9, 1995. Concentrations for non-carcinogenic risks are adjusted to a Hazard Index of 0.1.
[5] Soil Cleanup Goals for Florida, January 19, 1996 (industrial for subsurface soil).
[6] Soil Cleanup Goals for the military sites, April 5, 1995 (industrial for subsurface soil).

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
µg/kg = micrograms per kilogram.
NSC - no screening concentration.
N/A - not applicable.
PCBs = polychlorinated biphenyls.
4,4'-DDE = dichlorodiphenyldichloroethene.
mg/kg = milligram per kilogram.

Table 4-12
Organic Analytes Detected in Sludge Samples at SWMU 45

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

Analytical Batch Number:	R9703	R9703	R9703	R9703	R9703	R9703	R9703
Sample Location:	MPT-45-SL01	MPT-45-SL01	MPT-45-SL01	MPT-45-SL02	MPT-45-SL02	MPT-45-SL04	MPT-45-SL05
Sample Number:	45L00101	45L00101DUP	45L00102	45L00201	45L00202	45L00401	45L00501
Date Collected:	28-MAR-95	28-MAR-95	28-MAR-95	28-MAR-95	28-MAR-95	28-MAR-95	28-MAR-95
Sample Depth (ft bls):	0 to 1	0 to 1	1 to 2	0 to 1	1 to 2	0 to 1	0 to 1
Volatiles (µg/kg)							
Carbon disulfide	--	--	1 J	--	--	--	--
Xylenes (total)	3 J	1 J	--	--	2 J	1 J	--
Trichlorofluoromethane	--	--	--	--	--	--	5 J
Semivolatiles (µg/kg)							
Phenol	--	--	--	--	--	--	340 J
Benzyl Alcohol	--	--	--	--	--	--	300 J
Phenanthrene	81 J	89 J	--	130 J	--	--	--
Anthracene	--	--	--	--	--	--	--
Di-n-Butylphthalate	160 J	91 J	--	230 J	--	--	1,500
Fluoranthene	180 J	150 J	--	340 J	--	--	--
Pyrene	170 J	150 J	--	320 J	--	--	--
Butylbenzylphthalate	--	--	--	--	--	--	110 J
Benzo(a)anthracene	120 J	98 J	--	260 J	--	--	--
Chrysene	140 J	130 J	--	280 J	--	--	--
bis(2-Ethylhexyl) phthalate	--	--	--	--	--	--	2,800
Benzo(b)fluoranthene	92 J	120 J	--	290 J	--	--	--
Benzo(k)fluoranthene	150 J	130 J	--	330 J	--	--	--
Benzo(a)pyrene	100 J	99 J	--	250 J	--	--	--
Indeno (1,2,3-cd) pyrene	79 J	84 J	--	180 J	--	--	--
Benzo(g,h,i)perylene	96 J	110 J	--	190 J	--	--	--
Pesticides/PCBs (µg/kg)							
Aldrin	--	--	--	--	--	--	--
Dieldrin	--	0.79 J	--	0.8	--	--	3.8 J
4,4'-DDE	--	--	--	--	--	--	--
4,4'-DDD	--	1.4 J	--	--	--	--	--
Endrin	--	--	--	--	--	--	--
Endrin ketone	--	--	--	--	--	--	--
Isodrin	--	--	--	0.74 J	--	--	1.2 J

See notes at end of table.

Table 4-12 (Continued)
Organic Analytes Detected in Sludge Samples at SWMU 45

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

Analytical Batch Number:	R9703	R9703	R9703	R9703	R9703	R9703	R9703
Sample Location:	MPT-45-SL05	MPT-45-SL06	MPT-45-SL06	MPT-45-SL07	MPT-45-SL07	MPT-45-SL08	MPT-45-SL08
Sample Number:	45L00502	45L00601	45L00602	45L00701	45L00702	45L00801	45L00802
Date Sampled:	28-MAR-95	28-MAR-95	28-MAR-95	28-MAR-95	28-MAR-95	28-MAR-95	28-MAR-95
Sample Depth (ft bls):	1 to 2	0 to 1	1 to 2	0 to 1	1 to 2	0 to 1	1 to 2
Volatiles (µg/kg)							
Carbon disulfide	--	--	--	--	--	--	--
Xylenes (total)	--	--	--	3 J	--	--	1 J
Trichlorofluoromethane	--	--	--	--	--	--	--
Semivolatiles (µg/kg)							
Phenol	--	--	--	--	--	220 J	--
Benzyl Alcohol	--	--	--	210 J	--	--	--
Phenanthrene	--	--	--	--	--	--	--
Anthracene	--	91 J	--	--	--	--	--
Di-n-Butylphthalate	670 J	890 J	930 J	260 J	320 J	170 J	73 J
Fluoranthene	--	--	--	--	--	--	--
Pyrene	--	--	--	--	--	--	--
Butylbenzylphthalate	--	--	120 J	--	--	--	--
Benzo(a)anthracene	--	--	--	--	--	--	--
Chrysene	--	--	--	--	--	--	--
bis(2-Ethylhexyl) phthalate	--	--	--	--	--	--	--
Benzo(b)fluoranthene	--	--	--	--	--	--	--
Benzo(k)fluoranthene	--	--	--	--	--	--	--
Benzo(a)pyrene	--	--	--	--	--	--	--
Indeno (1,2,3-cd) pyrene	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	--	--	--	--	--	--	--

See notes at end of table.

Table 4-12 (Continued)
Organic Analytes Detected in Sludge Samples at SWMU 45

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

Analytical Batch Number:	R9703	R9703	R9703	R9703	R9703	R9703	R9703
Sample Location:	MPT-45-SL05	MPT-45-SL06	MPT-45-SL06	MPT-45-SL07	MPT-45-SL07	MPT-45-SL08	MPT-45-SL08
Sample Number:	45L00502	45L00601	45L00602	45L00701	45L00702	45L00801	45L00802
Date Sampled:	28-MAR-95	28-MAR-95	28-MAR-95	28-MAR-95	28-MAR-95	28-MAR-95	28-MAR-95
Sample Depth (ft bls):	1 to 2	0 to 1	1 to 2	0 to 1	1 to 2	0 to 1	1 to 2
Pesticides/PCBs (µg/kg)							
Aldrin	--	2.6 J	--	--	--	--	--
Dieldrin	1.5 J	3.7 J	2 J	1.5 J	1 J	0.92 J	--
4,4'-DDE	--	--	1.2 J	0.78 J	--	--	--
4,4'-DDD	--	--	--	--	--	--	--
Endrin	--	--	1.5 J	--	--	--	--
Endrin ketone	--	1.7 J	1.8 J	--	--	--	--
Isodrin	--	--	--	--	--	--	--

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
DUP = duplicate.
ft bls = feet below land surface.
µg/kg = microgram per kilogram.
-- = concentration of analyte, if present, was less than the detection limit.
J = estimated value.
PCB = polychlorinated biphenyls.
4,4'-DDE = dichlorodiphenyldichloroethene.
4,4'-DDD = dichlorodiphenyldichloroethane.

Table 4-13
Inorganic Analytes Detected in Sludge Samples at SWMU 45

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

Analytical Batch Number:	R9703	R9703	R9703	R9703	R9703	R9703
Sample Location:	MPT-45-SL01	MPT-45-SL01	MPT-45-SL01	MPT-45-SL01	MPT-45-SL02	MPT-45-SL02
Sample Number:	45L00101	45L00101DUP	45L00102	45L00102DUP	45L00201	45L00202
Date Sampled:	28-MAR-95	28-MAR-95	28-MAR-95	28-MAR-95	28-MAR-95	28-MAR-95
Sampled Depth (ft bls):	0 to 1	0 to 1	1 to 2	1 to 2	0 to 1	1 to 2
Inorganics (mg/kg)						
Antimony	--	1.6 J	--	--	--	--
Arsenic	0.5 J	0.46 J	0.83 J	0.7 J	0.31 J	0.95 J
Barium	14.5 J	28.3 J	8.8 J	8.4 J	10.9 J	6.5 J
Beryllium	--	--	0.05 J	--	--	--
Cadmium	0.57 J	0.63 J	0.52 J	0.64 J	0.41 J	0.29 J
Chromium	3.2	4.2	1.9 J	2.1	2.5	1.4 J
Cobalt	--	--	--	--	--	--
Copper	297	443	116	106	117	53.3
Lead	9.8 J	8.3 J	3.7 J	3.3 J	7.8 J	8.2 J
Mercury	0.19	0.22	0.05 J	0.04 J	0.09	0.08
Nickel	11.7	13.8	12	11.5	6 J	5 J
Selenium	--	0.14 J	--	--	--	--
Silver	1.1 J	1.5 J	--	--	0.79 J	--
Tin	6.1 J	10.3 J	4.1 J	2.5 J	4.8 J	3.1 J
Vanadium	1.2 J	1.2 J	1.7 J	1.9 J	0.82 J	1.4 J
Zinc	58.2	80.6	89.8	72.9	35.5	19.3
Cyanide	0.21 J	0.5 J	0.18 J	0.4 J	0.21 J	0.18 J

Notes: See notes at end of table.

Table 4-13 (Continued)
Inorganic Analytes Detected in Sludge Samples at SWMU 45

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

Analytical Batch Number:	R9703	R9703	R9703	R9703	R9703	R9703
Sample Location:	MPT-45-SL03	MPT-45-SL03	MPT-45-SL04	MPT-45-SL04	MPT-45-SL05	MPT-45-SL05
Sample Number:	45L00301	45L00302	45L00401	45L00402	45L00501	45L00502
Date Sampled:	28-MAR-95	28-MAR-95	28-MAR-95	28-MAR-95	28-MAR-95	28-MAR-95
Sampled Depth (ft bls):	0 to 1	1 to 2	0 to 1	1 to 2	0 to 1	1 to 2
Inorganics (mg/kg)						
Antimony	2 J	--	--	--	5 J	2.4 J
Arsenic	0.53 J	0.99 J	0.51 J	0.43 J	1.2 J	0.77 J
Barium	20.7 J	11.9 J	13.7 J	11.9 J	118	54.2
Beryllium	--	--	0.05 J	--	--	--
Cadmium	0.47 J	0.44 J	0.4 J	--	1.9	1.1 J
Chromium	2.5	2.3	2.5	4.8	16.5	6.8
Cobalt	--	--	--	--	--	--
Copper	190	115	101	70.4	939	422
Lead	9 J	7.1 J	5.6 J	3.6 J	27.4 J	19.1 J
Mercury	0.22	0.12	0.14	0.08	1.1	0.64
Nickel	11	9.2	7 J	5.6 J	41.6	20.1
Selenium	--	--	--	--	0.92 J	0.5 J
Silver	1.9 J	1.1 J	1.9 J	0.85	6.3	3.3
Tin	4.9 J	4.2 J	4.5 J	--	25.3	13.5 J
Vanadium	0.94 J	1.7 J	0.95 J	0.84 J	1.7 J	3 J
Zinc	73.9	51.9	46.9	38.1	372	173
Cyanide	0.21 J	0.24 J	0.4 J	0.14 J	0.66 J	0.45 J

See notes at end of table.

Table 4-13 (Continued)
Inorganic Analytes Detected in Sludge Samples at the SWMU 45

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

Analytical Batch Number:	R9703	R9703	R9703	R9703	R9703	R9703
Sample Location:	MPT-45-SL06	MPT-45-SL06	MPT-45-SL07	MPT-45-SL07	MPT-45-SL08	MPT-45-SL08
Sample Number:	45L00601	45L00602	45L00701	45L00702	45L00801	45L00802
Date Collected:	28-MAR-95	28-MAR-95	28-MAR-95	28-MAR-95	28-MAR-95	28-MAR-95
Sample Depth (ft bls):	0 to 1	1 to 2	0 to 1	1 to 2	0 to 1	1 to 2
Inorganics (mg/kg)						
Antimony	4.7 J	3.4 J	1.5 J	--	--	--
Arsenic	0.78 J	0.6 J	0.47 J	0.58 J	0.34 J	--
Barium	67.3	51.8	28 J	20.3 J	19.5 J	8.1 J
Beryllium	--	--	--	--	--	--
Cadmium	1.3	1.1 J	0.54 J	0.46 J	0.36 J	--
Chromium	8.3	6.9	4	3.2	2.7	1.3 J
Cobalt	--	--	--	--	0.62 J	--
Copper	540	435	223	163	139	65.4
Lead	26.2 J	25.2 J	9.2 J	6.7 J	6.6 J	2.7 J
Mercury	0.8	0.44	0.2	0.2	0.11	0.07
Nickel	21.8	16.1	10.5	7.6 J	7.3 J	3.7 J
Selenium	0.71 J	0.46 J	0.23 J	0.18 J	0.21 J	--
Silver	4.8	3.9	1.7 J	1.3 J	0.93 J	--
Tin	14.7 J	12.4 J	6.9 J	5 J	4.2 J	3.1 J
Vanadium	1.6 J	0.89 J	0.8 J	0.99 J	1.1 J	0.6 J
Zinc	198	161	86.7	64.6	63.1	28.9
Cyanide	0.29 J	0.45 J	0.41 J	0.28 J	0.19 J	0.12 J

Notes: SWMU = solid waste management unit
RCRA = Resource Conservation and Recovery Act
DUP = duplicate sample
ft bls = feet below land surface.
mg/kg = milligrams per kilogram
-- = concentration of analyte, if present, was less than the detection limit.
J = estimated value

Table 4-14
Summary of Analytes Detected in Sludge Samples at SWMU 45

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

Analyte	Frequency of Detection[1]	Minimum Detected Concentration	Maximum Detected Concentration	Mean of Detected Concentrations[3]	Range of Instrument Reporting Limits	Sample with Maximum Concentration
Volatiles (µg/kg)						
Carbon disulfide	1/16	[2]1.75	[2]1.75	2	5 - 7	45L00102
Trichlorofluoromethane	1/16	5	5	5	5 - 6	45L00501
Xylenes (total)	5/16	1	3	2	5 - 7	45L00701
Semivolatiles (µg/kg)						
Anthracene	1/16	91	91	91	670 - 970	45L00601
Benzo(a)anthracene	2/16	[2]109	260	185	670 - 970	45L00201
Benzo(a)pyrene	2/16	[2]99.5	250	175	670 - 970	45L00201
Benzo(b)fluoranthene	2/16	[2]106	290	198	670 - 970	45L00201
Benzo(g,h,i)perylene	2/16	[2]103	190	147	670 - 970	45L00201
Benzo(k)fluoranthene	2/16	[2]140	330	235	670 - 970	45L00201
Benzyl alcohol	2/16	210	300	255	670 - 820	45L00501
Butylbenzylphthalate	2/16	110	120	115	670 - 820	45L00602
Chrysene	2/16	[2]135	280	208	670 - 970	45L00201
Di-n-butylphthalate	10/16	73	1,500	517	670 - 690	45L00501
Fluoranthene	2/16	[2]165	340	253	670 - 970	45L00201
Indeno (1,2,3-cd) pyrene	2/16	[2]81.5	180	131	670 - 970	45L00201
Phenanthrene	2/16	[2]85	130	108	670 - 970	45L00201
Phenol	2/16	220	340	280	670 - 820	45L00501
Pyrene	2/16	[2]160	320	240	670 - 970	45L00201
bis(2-Ethylhexyl) phthalate	1/16	2,800	2,800	2,800	670 - 1,000	45L00501
Pesticides/PCBs (µg/kg)						
4,4'-DDD	1/16	[2]1.05	[2]1.05	1	1.3 - 1.9	45L00101D
4,4'-DDE	2/16	0.78	1.2	0.99	0.68 - 0.99	45L00602
Aldrin	1/16	2.6	2.6	2.6	0.68 - 0.99	45L00601

See notes at end of table.

Table 4-14 (Continued)
Summary of Analytes Detected in Sludge Samples at SWMU 45

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

Analyte	Frequency of Detection[1]	Minimum Detected Concentration[2]	Maximum Detected Concentration[2]	Mean of Detected Concentrations[3]	Range of Instrument Reporting Limits	Sample with Maximum Concentration
Pesticides (µg/kg) (Continued)						
Dieldrin	9/16	[2]0.57	3.8	1.75	0.68 - 0.71	45L00501
Endrin	1/16	1.5	1.5	1.5	1.3 - 1.9	45L00602
Endrin ketone	2/16	1.7	1.8	1.8	1.3 - 1.9	45L00602
Isodrin	2/16	0.74	1.2	0.97	0.68 - 0.84	45L00501
Inorganics (mg/kg)						
Antimony	7/16	[2]1.05	5	2.9	1 - 1.1	45L00501
Arsenic	15/16	0.31	1.2	0.65	0.14 - 0.14	45L00501
Barium	16/16	6.5	118	29.6	N/A	45L00501
Beryllium	2/16	[2]0.035	0.05	0.04	0.04 - 0.06	45L00401
Cadmium	14/16	0.29	1.9	0.71	0.26 - 0.27	45L00501
Chromium	16/16	1.3	16.5	4.5	N/A	45L00501
Cobalt	1/16	0.62	0.62	0.62	0.55 - 0.8	45L00801
Copper	16/16	53.3	939	253.4	N/A	45L00501
Cyanide	16/16	0.12	0.66	0.3	N/A	45L00501
Lead	16/16	2.7	27.4	11.1	N/A	45L00501
Mercury	16/16	[2]0.045	1.1	0.28	N/A	45L00501
Nickel	16/16	3.7	41.6	12.3	N/A	45L00501
Selenium	8/16	[2]0.1025	0.92	0.41	0.12 - 0.13	45L00501
Silver	13/16	0.79	6.3	2.31	0.47 - 0.48	45L00501
Tin	15/16	3.1	25.3	7.9	2 - 2	45L00501
Vanadium	16/16	0.6	3	1.27	N/A	45L00502
Zinc	16/16	19.3	372	97.7	N/A	45L00501

See notes at end of table.

Table 4-14 (Continued)
Summary of Analytes Detected in Sludge Samples at SWMU 45

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

Analyte	Frequency of Detection[1]	Minimum Detected Concentration[2]	Maximum Detected Concentration[2]	Mean of Detected Concentrations[3]	Range of Instrument Reporting Limits	Sample with Maximum Concentration

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed (excluding rejected samples).
[2] Indicates the value is the average of the detected concentrations in a sample and its duplicate. For nondetected values, 1/2 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: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
µg/kg = micrograms per kilogram.
PCBs = polychlorinated biphenyls.
4,4'-DDD = dichlorodiphenyldichloroethane.
4,4'-DDE = dichlorodiphenyldichloroethene.
mg/kg = milligram per kilogram.
N/A = not applicable.

Table 4-15
Comparison of Analytes Detected in Sludge Samples at SWMU 45 to Background Screening and Benchmark Concentrations

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

Analyte	Maximum Concentration	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
Volatiles (µg/kg)							
Carbon disulfide	[1]1.75	NSC	N/A	5,200	0/16	780,000	0/16
Trichlorofluoromethane	5	NSC	N/A	6,600	0/16	2,300,000	0/16
Xylenes (total)	3	NSC	N/A	13,000,000	0/16	16,000,000	0/16
Semivolatiles (µg/kg)							
Anthracene	91	NSC	N/A	20,000,000	0/16	2,300,000	0/16
Benzo(a)anthracene	260	NSC	N/A	1,400	0/16	880	0/16
Benzo(a)pyrene	250	NSC	N/A	100	1/16	88	2/16
Benzo(b)fluoranthene	290	NSC	N/A	1,400	0/16	880	0/16
Benzo(g,h,i)perylene	190	NSC	N/A	14,000	0/16	NSC	N/A
Benzo(k)fluoranthene	330	NSC	N/A	14,000	0/16	8,800	0/16
Benzyl alcohol	300	NSC	N/A	NSC	N/A	NSC	N/A
Butylbenzylphthalate	120	NSC	N/A	15,000,000	0/16	1,600,000	0/16
Chrysene	280	NSC	N/A	140,000	0/16	88,000	0/16
Di-n-butylphthalate	1,500	NSC	N/A	7,300,000	0/16	780,000	0/16
Fluoranthene	340	NSC	N/A	2,900,000	0/16	310,000	0/16
Indeno (1,2,3-cd) pyrene	180	NSC	N/A	1,400	0/16	880	0/16
Phenanthrene	130	NSC	N/A	1,700,000	0/16	NSC	N/A
Phenol	340	NSC	N/A	NSC	N/A	NSC	N/A
Pyrene	320	NSC	N/A	2,200,000	0/16	230,000	0/16
bis(2-Ethylhexyl) phthalate	2,800	NSC	N/A	48,000	0/16	46,000	0/16

See notes at end of table

Table 4-15 (Continued)
Comparison of Analytes Detected in SWMU 45 Sludges to Background Screening and Benchmark Concentrations

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

Analyte	Maximum Concentration	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
Pesticides/PCBs (µg/kg)							
4,4'-DDD	[1]1.05	NSC	N/A	4,500	0/16	2,700	0/16
4,4'-DDE	1.2	2.3	0/16	3,000	0/16	1,900	0/16
Aldrin	2.6	NSC	N/A	60	0/16	38	0/16
Dieldrin	3.8	NSC	N/A	70	0/16	40	0/16
Endrin	1.5	NSC	N/A	23,000	0/16	2,300	0/16
Endrin ketone	1.8	NSC	N/A	NSC	N/A	NSC	N/A
Isodrin	1.2	NSC	N/A	NSC	N/A	NSC	N/A
Inorganics mg/kg							
Antimony	5	NSC	N/A	26	0/16	3.1	3/16
Arsenic	1.2	NSC	N/A	[5]0.8	6/16	0.37	13/16
Barium	118	5.6	16/16	5,200	0/16	550	0/16
Beryllium	0.05	0.16	0/16	0.2	0/16	0.15	0/16
Cadmium	1.9	2	0/16	37	0/16	3.9	0/16
Chromium	16.5	2.6	9/16	290	0/16	39	0/16
Cobalt	0.62	NSC	N/A	4,700	0/16	470	0/16
Copper	939	2.2	16/16	[6]2,900	0/16	290	5/16
Cyanide	0.66	NSC	N/A	1,600	0/16	160	0/16
Lead	27.4	NSC	N/A	500	0/16	400	0/16
Mercury	1.1	NSC	N/A	23	0/16	2.3	0/16
Nickel	41.6	NSC	N/A	1,500	0/16	160	0/16
Selenium	0.92	1.36	0/16	390	0/16	39	0/16
Silver	6.3	NSC	N/A	390	0/16	39	0/16

See notes at end of table.

Table 4-15 (Continued)
Comparison of Analytes Detected in SWMU 45 Sludges to Background Screening and Benchmark Concentrations

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

Analyte	Maximum Concentration	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
Inorganics mg/kg (Continued)							
Tin	25.3	NSC	N/A	44,000	0/16	4,700	0/16
Vanadium	3	4	0/16	490	0/16	55	0/16
Zinc	372	2.6	16/16	23,000	0/16	2,300	0/16

[1] Indicates the value is the average of the detected concentrations in a sample and its duplicate. For nondetected values, 1/2 the contract-required quantitation limits/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] Soil Cleanup Goals for Florida, September 29, 1995 (residential for sludge.)
[4] The value is from U.S. Environmental Protection Agency Region III Risk-based Concentrations tables dated February 9, 1995. Concentrations for non-carcinogenic risks are adjusted to a Hazard Index of 0.1.
[5] Soil Cleanup Goals for Florida, January 1996 (residential for sludge).
[6] Soil Cleanup Goals for the Military Sites, April 5, 1995 (residential for sludge)

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
µg/kg = micrograms per kilogram.
NSC - no screening concentration.
N/A = not applicable.
PCBs = polychlorinated biphenyls.
4,4'-DDD = dichlorodiphenyldichloroethane.
4,4'-DDE = dichlorodiphenyldichloroethene.
mg/kg = milligram per kilogram.

trations (Table 4-15). Antimony, arsenic, cobalt, cyanide, lead, mercury, nickel, silver, and tin were detected in the sludge samples collected from SWMU 45, but not in the background subsurface soil samples.

Three of the inorganic analytes (antimony, arsenic, and copper) were detected at concentrations that exceed benchmark concentrations (Table 4-15). Antimony and copper exceeded the USEPA Region II RBCs but not the FDEP residential soil cleanup goal. The sludge samples contained arsenic at concentrations exceeding the FDEP residential soil cleanup goal in 6 of 16 samples, but the FDEP industrial soil cleanup goal of 3.7 mg/kg was not exceeded.

4.2.5 Groundwater Assessment The paragraphs below present results of the field screening and groundwater sampling assessment activities for groundwater beneath the Shipyard Area SWMUs.

4.2.5.1 **Groundwater Field Screening Results** Sixty-three groundwater field screening samples were collected using a TerraProbe℠ from locations in the vicinity of the Shipyard Area (Plate 2). Sample collection methodology is described in Subsection 4.1.2 of this report and the NAVSTA Mayport GIR (ABB-ES, 1995a). Samples were analyzed in the field using a portable gas chromatograph, and the results were used to select locations for monitoring wells installed in the Shipyard Area. Ten percent of the field screening samples were sent to an offsite laboratory for confirmatory analyses by USEPA Methods 8010 and 8020. The groundwater field screening results are provided in Appendix A. Analytical results for the confirmatory samples are presented in Table 4-16.

The groundwater field screening results suggest the presence of the chlorinated compounds, 1,1-dichloroethene, tetrachloroethene, and trichloroethene. Organic analytes detected in the confirmatory groundwater field screening samples collected from the Shipyard Area consist of one halogenated volatile, tetrachloroethene and two volatile aromatics, toluene and methyl tert-butyl ether (MTBE) (Table 4-16).

4.2.5.2 **Groundwater Samples from Monitoring Wells** Twenty-four groundwater samples and four duplicates were collected from the 24 (16 shallow, 4 intermediate, and 4 deep zone) monitoring wells and piezometers in the vicinity of the Shipyard Area (Plates 1 and 2). The analytical results were compared to State of Florida Groundwater Guidance Concentrations (FDEP, 1994), Federal MCLs (USEPA, 1994b), and USEPA Region III RBCs (USEPA, 1995a).

Tables 4-17 and 4-18 present concentrations of analytes detected in each groundwater sample, and Table 4-19 presents statistics for each analyte detected. Table 4-20 compares detected concentrations with benchmarks. The segments below discuss analytical results for water quality indicator parameters, and for organic and inorganic analytes that exceed benchmarks.

Groundwater Quality. Analytical results for the water quality indicator parameters are provided in Appendix A. Total dissolved solids (TDS) ranged from 218 to 19,300 milligrams per liter (mg/ℓ); the secondary water quality standard for TDS is 500 mg/ℓ (FAC 62-520). A maximum value of 10,000 mg/ℓ is criterion used to classify groundwater in an aquifer as a Class G-I or G-II drinking water supply. The TDS results span the range of values used to classify water as fresh (0 to 1,000 mgℓ/ℓ), brackish (1,000 to 10,000 mgℓ/ℓ), and saline (10,000 to 100,000 mgℓ/ℓ). TDS measured in groundwater samples collected from monitoring

Table 4-16
Organic Analytes Detected in TerraProbe℠ Screening Samples at SWMUs 1 and 23

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

Analytical Batch Number:	R9757	R9757	R9757
Sample Location:	MPT-1-Q07	MPT-23-Q04	MPT-23-Q16
Sample Number:	01Q007	23Q004	23Q016
Date Sampled:	10-APR-95	10-APR-95	10-APR-95
Halogenated Volatiles (μg/ℓ)			
Tetrachloroethene	–	–	1.4
Aromatics (μg/ℓ)			
Toluene	–	0.53	0.65
Methyl tert butyl ether	1.2	–	–

Notes: ℠ = Service Mark.
SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
μg/ℓ = microgram per kilogram.
– = concentration of analyte, if present, was less than the detection limit.

Table 4-17
Organic Analytes Detected in Groundwater Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	R9994	R9989	R9989	R9989	RA061
Sample Location:	MPT-1-MW03S	MPT-23-MW01S	MPT-23-MW02S	MPT-23-MW03S	MPT-23-MW05I
Sample Number:	01G00301	23G00101DUP	23G00201	23G00301	23G00502
Date Sampled:	06-JUN-95	04-JUN-95	05-JUN-95	05-JUN-95	19-JUN-95
Volatiles (µg/ℓ)					
1,1-Dichloroethane	--	--	7	--	--
1,1-Dichloroethene	--	--	2 J	--	--
1,2-Dichloroethene (total)	--	--	--	--	5
Trichlorofluoromethane	--	1 J	--	--	--
Semivolatiles (µg/ℓ)					
Di-n-Butylphthalate	--	--	--	--	--
bis(2-Ethylhexyl)phthalate	2 J	--	5 J	4 J	--

See notes at end of table.

Table 4-17 (Continued)
Organic Analytes Detected in Groundwater Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	R9989	R9994	RA061	R9994
Sample Location:	MPT-23-MW06S	MPT-24-MW01S	MPT-45-MW01I	MPT-45-MW02S
Sample Number:	23G00601	24G00101	45G00102DUP	45G00201
Date Sampled:	05-JUN-95	07-JUN-95	19-JUN-95	08-JUN-95
Volatiles (μg/ℓ)				
1,1-Dichloroethane	8	--	--	--
1,1-Dichloroethene	5	--	--	--
1,2-Dichloroethene (total)	1 J	--	--	--
Trichlorofluoromethane	--	--	--	--
Semivolatiles (μg/ℓ)				
Di-n-Butylphthalate	--	--	1 J	--
bis(2-Ethylhexyl)phthalate	--	5 J	--	3 J

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
DUP = duplicate.
μg/ℓ = microgram per liter.
-- = concentration of analyte, if present, was less than the detection limit.
J = estimated value.

Table 4-18
Inorganic Analytes Detected in Groundwater Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	R9994	RA061	RA061	R9994	R9994	R9989	R9989	R9989
Sample Location:	MPT-1-MW01S	MPT-1-MW01I	MPT-1-MW01D	MPT-1-MW02S	MPT-1-MW03S	MPT-23-MW01S	MPT-23-MW01S	MPT-23-MW02S
Sample Number:	01G00101	01G00102	01G00103	01G00201	01G00301	23G00101	23G00101DUP	23G00201
Date Sampled:	07-JUN-95	21-JUN-95	21-JUN-95	06-JUN-95	06-JUN-95	04-JUN-95	04-JUN-95	05-JUN-95
Inorganics (µg/ℓ)								
Antimony	--	--	--	10.6 J	28.3 J	--	--	--
Arsenic	5.7 J	0.7 J	57	7.7 J	1.9 J	--	--	--
Barium	1.3 J	1.5 J	48 J	1.9 J	71.9 J	4.2 J	4 J	3.7 J
Calcium	62,400	62,000	158,000	56,900	154,000	92,000	92,400	116,000
Chromium	--	--	--	1.8 J	--	--	--	--
Copper	--	--	--	--	108	--	--	--
Iron	75.9 J	51.9 J	3,930	--	--	--	--	603
Lead	0.5 J	--	7 J	--	4.6	--	--	--
Magnesium	2,530 J	10,300	422,000	6,810	17,500	4,580 J	4,600 J	8,280
Manganese	3.4 J	5.5 J	150	4.8 J	131	23.7	22.6	149
Mercury	--	--	--	--	0.15 J	--	--	--
Nickel	--	--	--	--	10 J	--	--	--
Selenium	--	--	5.6 J	--	--	0.98 J	0.71 J	--
Silver	--	--	1.4 J	--	--	--	--	--
Sodium	5,320	13,400	3,630,000	6,490	16,200	8,590	8,600	37,200
Vanadium	5.7 J	--	17 J	8.5 J	33.6 J	7.8 J	7.3 J	3.5 J
Zinc	--	--	--	--	180	--	--	--
Cyanide	1.6 J	--	--	--	--	--	1.7 J	--

See notes at end of table.

Table 4-18 (Continued)
Inorganic Analytes Detected in Groundwater Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	R9989	R9994	R9994	R9994	RA061	RA061	R9989
Sample Location:	MPT-23-MW03S	MPT-23-MW04S	MPT-23-MW04S	MPT-23-MW05S	MPT-23-MW05I	MPT-23-MW05D	MPT-23-MW06S
Sample Number:	23G00301	23G00401	23G00401DUP	23G00501	23G00502	23G00503	23G00601
Date Sampled:	05-JUN-95	06-JUN-95	06-JUN-95	07-JUN-95	19-JUN-95	20-JUN-95	05-JUN-95
Inorganics (µg/ℓ)							
Antimony	--	--	--	--	--	--	--
Arsenic	--	4.5 J	3.7 J	2 J	--	102	--
Barium	4.5 J	2.8 J	3.3 J	13.7 J	10.3 J	67.3 J	5 J
Calcium	67,000	68,300	70,100	106,000	58,700	236,000	100,000
Chromium	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--
Iron	55.9 J	--	--	--	894	8,410	--
Lead	--	0.8 J	--	--	--	8 J	--
Magnesium	3,120 J	4,440 J	4,670 J	7,030	72,000	614,000	11,500
Manganese	34	29.3	31.7	35.8	199	200	79
Mercury	--	--	--	--	--	--	--
Nickel	--	--	--	7.4 J	--	8.4 J	--
Selenium	--	0.91 J	--	--	--	--	--
Silver	--	--	--	--	--	--	--
Sodium	9,700	10,200	10,700	42,000	346,000	4,900,000	24,600
Vanadium	4.7 J	3.8 J	3.4 J	53.5	2.4 J	4.8 J	4.7 J
Zinc	--	--	--	--	--	--	--
Cyanide	--	--	--	--	--	3.3 J	--

See notes at end of table.

Table 4-18 (Continued)
Inorganic Analytes Detected in Groundwater Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	R9989	R9994	R9994	RA061	RA061	R9994	R9994
Sample Location:	MPT-23-MW07S	MPT-24-MW01S	MPT-44-MW01S	MPT-44-MW01I	MPT-44-MW01D	MPT-44-MW02S	MPT-44-MW03S
Sample Number:	23G00701	24G00101	44G00101	44G00102	44G00103	44G00201	44G00301
Date Sampled:	03-JUN-95	07-JUN-95	07-JUN-95	21-JUN-95	20-JUN-95	6-JUN-95	7-JUN-95
Inorganics (µg/ℓ)							
Antimony	--	--	7.9 J	--	--	50.2 J	--
Arsenic	5.3 J	3.4 J	5.4 J	--	80.5	1.9 J	3.1 J
Barium	4.2 J	3.3 J	11.4 J	9.5 J	54.8 J	6.2 J	13.8 J
Calcium	118,000	95,700	94,400	49,900	124,000	107,000	94,700
Chromium	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--
Iron	111	81.8 J	230	536	3,170	174	--
Lead	--	--	--	--	7 J	2.2 J	--
Magnesium	8,750	4,640 J	7,570	27,600	308,000	13,900	9,100
Manganese	72.5	114	117	73.6	701	158	66.2
Mercury	--	--	--	--	--	--	--
Nickel	--	--	6.4 J	--	--	--	--
Selenium	1.6 J	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--
Sodium	18,400	19,400	12,900	218,000	3,100,000	15,700	8,420
Vanadium	10.5 J	4 J	3 J	4.7 J	15.8 J	57	5.4 J
Zinc	--	--	--	--	--	--	--
Cyanide	--	--	--	--	7.7 J	--	--

See notes at end of table.

Table 4-18 (Continued)
Inorganic Analytes Detected in Groundwater Samples at SWMUs 1, 23, 24, 25, 44, and 45

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

Analytical Batch Number:	R9994	RA061	RA061	RA061	R9994	R9994
Location Number:	MPT-1-P01S	MPT-45-MW01I	MPT-45-MW01I	MPT-45-MW01D	MPT-45-MW02S	MPT-45-MW02S
Sample Number:	45G00101	45G00102	45G00102DUP	45G00103	45G00201	45G00201DUP
Date Collected:	08-JUN-95	19-JUN-95	19-JUN-95	19-JUN-95	08-JUN-95	08-JUN-95
Inorganics (μg/ℓ)						
Antimony	--	--	--	--	8.7 J	8.3 J
Arsenic	4.5 J	--	--	65.5	2.2 J	2.2 J
Barium	3.1 J	5.5 J	5.2 J	73.5 J	6.6 J	6.4 J
Calcium	88,800	24,700	24,200	254,000	95,100	95,300
Chromium	2.8 J	--	1.9 J	--	--	--
Copper	--	--	--	--	4.9 J	4.2 J
Iron	--	136	140	9,040	--	--
Lead	--	--	--	7 J	--	--
Magnesium	10,400	37,600	36,300	680,000	16,600	16,800
Manganese	25.8	25.6	24.6	182	43.7	44.2
Mercury	--	--	--	--	--	--
Nickel	7 J	--	--	--	10.3 J	6.6 J
Selenium	--	0.6 J	--	--	--	--
Silver	--	--	--	--	--	--
Sodium	24,600	63,300	60,100	5,370,000	57,000	57,400
Vanadium	7.1 J	4.2 J	4 J	7.8 J	7.9 J	7.6 J
Zinc	--	--	--	--	--	--
Cyanide	--	2.1 J	2.1 J	5.8 J	1.6 J	1.6 J

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
DUP = duplicate.
μg/ℓ = microgram per liter.
-- = concentration of analyte, if present, was less than the detection limit.
J = estimated value.

Table 4-19
Summary of Analytes Detected in Groundwater Samples at Shipyard Area SWMUs 1, 23, 24, 25, 44, and 45

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

Analyte	Frequency of Detection[1]	Minimum Detected Concentration	Maximum Detected Concentration	Mean of Detected Concentrations[3]	Range of Instrument Reporting Limits	Sample with Maximum Concentration
Volatiles (µg/ℓ)						
1,1-Dichloroethane	2/24	7	8	8	5 - 5	23G00601
1,1-Dichloroethene	2/24	2	5	4	5 - 5	23G00601
1,2-Dichloroethene (total)	2/24	1	5	3	5 - 5	23G00502
Trichlorofluoromethane	1/24	[2]1.75	[2]1.75	2	5 - 5	23G00101D
Semivolatiles (µg/ℓ)						
Di-n-butylphthalate	1/24	[2]3	[2]3	3	10 - 10	45G00102D
bis(2-Ethylhexyl) phthalate	5/24	2	5	4	10 - 10	23G00201
Inorganics (µg/ℓ)						
Antimony	5/19	7.9	50.2	21.1	5 - 5	44G00201
Arsenic	17/24	0.7	102	20.8	0.6 - 5	23G00503
Barium	24/24	1.3	73.5	17.8	N/A	45G00103
Calcium	24/24	[2]24,450	254,000	103,523	N/A	45G00103
Chromium	3/24	[2]1.375	2.8	2	1.7 - 1.7	45G00101
Copper	2/24	[2]4.55	108	56.3	1 - 1.25	01G00301
Cyanide	7/24	[2]1.225	7.7	3.3	1.5 - 1.5	44G00103
Iron	15/24	51.9	9,040	1,833.4	10.9 - 23.3	45G00103
Lead	8/24	0.5	8	4.6	0.4 - 1	23G00503
Magnesium	24/24	2,530	680,000	96,159	N/A	45G00103
Manganese	24/24	3.4	701	109.3	N/A	44G00103
Mercury	1/24	0.15	0.15	0.15	0.1 - 0.1	01G00301
Nickel	6/24	6.4	10	7.9	5.7 - 5.7	45G00201
Selenium	5/24	[2]0.425	5.6	1.81	0.5 - 25	01G00103
Silver	1/24	1.4	1.4	1.4	1.4 - 1.7	01G00103
Sodium	24/24	5,320	5,370,000	748,178	N/A	45G00103
Vanadium	23/24	2.4	57	12	1.2 - 1.2	44G00201
Zinc	1/24	180	180	180	3.3 - 6.7	01G00301

See notes at end of table.

Table 4-19 (Continued)
Summary of Analytes Detected in Groundwater Samples at Shipyard Area SWMUs 1, 23, 24, 25, 44, and 45

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

Analyte	Frequency of Detection[1]	Minimum Detected Concentration	Maximum Detected Concentration	Mean of Detected Concentrations[3]	Range of Instrument Reporting Limits	Sample with Maximum Concentration
Water Quality Criteria (mg/ℓ)						
Alkalinity (reported as $CaCO_3$)	24/24	145	584	302	N/A	23G00502
Ammonia (reported as nitrogen)	9/24	0.5	17.7	5.7	0.3 - 1.5	23G00502
Chloride	24/24	10.2	10,500	1,289.5	N/A	45G00103
Hardness (reported as $CaCO_3$)	24/24	163	4,760	799	N/A	23G00503
Nitrate/Nitrite (reported as nitrogen)	23/24	0.13	6.49	1.24	0.1 - 0.1	45G00201
Phosphorous-Total (reported as phoshorous)	19/24	0.1	2.99	0.64	0.1 - 0.1	44G00102
Sulfate	23/24	12.1	1,410	201.9	10 - 10	45G00103
Sulfide	3/24	1.2	2.8	2.1	1 - 1	45G00102
Total Dissolved Solids	24/24	218	19,300	2,710	N/A	45G00103
Total Kjeldahl Nitrogen	18/24	0.3	18.1	3.4	0.3 - 1.5	23G00502
Total organic carbon	22/22	2.1	23.3	9.3	N/A	01G00301
Color (alpha units)	22/24	5	300	62	5 - 5	45G00103
pH (standard units)	24/24	7.1	7.9	7.48	N/A	01G00102

[1] Frequency of detection is the number of samples in which the analyte was detected, divided by the total number of samples analyzed (excluding rejected samples).
[2] Indicates the value is the average of a sample concentration and its duplicate. For nondetected values, 1/2 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: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
μg/ℓ = micrograms per liter.
N/A - not applicable.
mg/ℓ = milligram per liter.
$CaCO_3$ = calcium carbonate.

Table 4-20
Comparison of Concentrations Detected in Groundwater Samples at Shipyard Area SWMUs 1, 23, 24, 25, 44, and 45 to Background Screening and Benchmark Concentrations

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

Analyte	Maximum Concentration	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
Volatiles (µg/ℓ)							
1,1-Dichloroethane	8	NSC	N/A	700	0/24	81	0/24
1,1-Dichloroethene	5	NSC	N/A	7	0/24	0.044	2/24
1,2-Dichloroethene (total)	5	NSC	N/A	70	0/24	5.5	0/24
Trichlorofluoromethane	[1]1.75	NSC	N/A	2,100	0/24	130	0/24
Semivolatiles (µg/ℓ)							
Di-n-butylphthalate	[1]3	NSC	N/A	700	0/24	370	0/24
bis(2-Ethylhexyl) phthalate	5	NSC	N/A	6	0/24	4.8	2/24
Pesticides/PCBs (µg/ℓ)							
No analytes detected							
Inorganics (mg/kg)							
Antimony	50.2	NSC	N/A	6	5/19	1.5	5/19
Arsenic	102	8.6	4/24	50	4/24	0.038	17/24
Barium	73.5	39.6	5/24	2,000	0/24	260	0/24
Calcium	254,000	220,462	2/24	NSC	N/A	1,055,398	0/24
Chromium	2.8	10.4	0/24	100	0/24	18	0/24
Copper	108	2.8	2/24	1,000	0/24	140	0/24
Cyanide	7.7	1.9	4/24	200	0/24	73	0/24
Iron	9,040	1,404	4/24	300	7/24	13,267	0/24
Lead	8	3.6	5/24	15	0/24	15	0/24
Magnesium	680,000	186,914	4/24	NSC	N/A	118,807	4/24
Manganese	701	198.6	3/24	50	14/24	18	21/24
Mercury	0.15	0.16	0/24	2	0/24	1.1	0/24
Nickel	10	NSC	N/A	100	0/24	73	0/24

See notes at end of table.

Table 4-20 (Continued)
Comparison of Concentrations Detected in Groundwater Samples at Shipyard Area SWMUs 1, 23, 24, 25, 44, and 45 to Background Screening and Benchmark Concentrations

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

Analyte	Maximum Concentration	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
Inorganics (mg/kg) (Continued)							
Selenium	5.6	9.2	0/24	50	0/24	18	0/24
Silver	1.4	7.4	0/24	100	0/24	18	0/24
Sodium	5,370,000	1,397,710	4/24	160,000	6/24	396,022	4/24
Vanadium	57	9.4	6/24	49	2/24	26	3/24
Zinc	180	40	1/24	5,000	0/24	1,100	0/24

[1] Indicates the value is the average of the detected concentrations in a sample and its duplicate. For nondetected values, 1/2 the contract-required quantitation limits/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 value is from Florida Guidance Concentrations dated June 1994.
[4] The value is from U.S. Environmental Protection Agency Region III Risk-based Concentrations dated February 9, 1995. Concentrations are based on a 1x10-6 cancer risk or an adjusted Hazard Index (non-carcinogenic risks) to 0.1.

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

wells screened in the shallow, intermediate, and deep zone of the surficial aquifer exceed the secondary standard for TDS and the criterion used to classify the groundwater as a G-I or G-II drinking water supply. Concentrations of chloride detected in the groundwater samples ranged from 10.2 to 9,240 mg/ℓ; the secondary water quality standard for chloride is 250 mg/ℓ (FAC 62-520 Groundwater Classes, Standards and Exemptions). Chloride measured in groundwater samples collected from monitoring wells screened in the shallow, intermediate, and deep zone of the surficial aquifer exceeded this standard.

Color measured in the groundwater samples ranged from 5 to 250 American Public Health Association (APHA) units. The standard for color is 15 APHA units, which was exceeded in groundwater samples collected from monitoring wells in the shallow, intermediate, and deep zones of the surficial aquifer.

Sulfate, a common form of sulfur found in oxygenated systems, ranged from 12.1 to 1,180 mg/ℓ; the water quality standard for sulfate is 250 mg/ℓ (FAC 62-520). In general, the concentrations of sulfate measured in groundwater samples collected from the surficial aquifer monitoring wells in the deep zone were higher than the concentrations measured in groundwater samples collected from the shallow zone; however, samples from both zones contained sulfate in excess of the standard.

Sulfide, a common form of sulfur reduced under anaerobic conditions, was measured at 1.2 to 2.8 mg/ℓ; currently, there are no standards under FAC 62-520 for this parameter. Hardness was measured at 163 to 4,760 mg/ℓ, which suggests that the water is very hard (greater than 180 mg/ℓ; [Durfor and Becker, 1964]). A summary of nutrients (ammonia-N [ammonia as nitrogen], nitrate/nitrite, phosphorous-P, and total Kjeldahl nitrogen) measured in the groundwater samples is provided in Appendix A.

Results of the water quality indicator parameters suggest that groundwater in the vicinity of the Shipyard Area do not meet the criteria of a Class G-I or G-II drinking water supply. A more appropriate designation for the surficial aquifer beneath the Shipyard Area would be Class G-III.

Organics Organic analytes detected in groundwater samples collected from the Shipyard Area consist of four VOCs and two SVOCs (Table 4-17). Pesticides and PCBs were not detected in the groundwater samples. One VOC (1,1-dichloroethene) and one SVOC (bis(2-ethylhexyl)phthalate) were detected at concentrations that exceed benchmarks (Table 4-20).

1,1-Dichloroethene was detected at concentrations that exceed the USEPA Region III RBC benchmark (0.044 μg/ℓ) at two monitoring well locations, MPT-23-MW02S and MPT-23-MW06S. The detected concentrations did not exceed the Florida Groundwater Guidance Concentration of 7 μg/ℓ (FDEP, 1994).

The groundwater sample from monitoring well MPT-23-MW02S also contained concentrations of 1,1-dichloroethane. and the groundwater sample from monitoring well MPT-23-MW06S also contained concentrations of 1,1-dichloroethane, and 1,2-dichloroethene (total). The detected concentrations did not exceed either of the two benchmarks.

Bis(2-ethylhexyl)phthalate was detected in five groundwater samples collected from monitoring wells screened in the shallow zone of the surficial aquifer.

Bis(2-ethylhexyl)phthalate was detected at concentrations that exceed the USEPA Region III RBC benchmark at two monitoring well locations, MPT-23-MW02S and MPT-24-MW01S.

There does not appear to be a discernable areal and numerical distribution for the organic target analytes, nor does there appear to have been significant release of volatile or semivolatile organic compounds to the environment based on comparison of the analytical results with Florida Groundwater Guidance Concentrations. A specific source area for these chemicals was not identified.

It also should be noted that only one VOC, 1,2-dichloroethene (total), was detected in monitoring well MPT-23-MW05I, screened in the intermediate zone of the surficial aquifer. The concentration detected did not exceed the benchmark screening values. The groundwater samples from the other intermediate and deep monitoring wells hydraulically downgradient from the Shipyard SWMUs did not contain detectable concentrations of VOCs.

There was not a good correlation between the groundwater field screening samples and the groundwater samples collected from monitoring wells. This may be a result of the length of the intake for the TerraProbe℠ sampler (2-feet) and the length of the monitoring well screen (10-feet). The groundwater sample collected with the TerraProbe℠ sampler may represent a strata or aquifer zone where contaminants are present at higher concentrations, whereas a monitoring well with a longer intake interval may provide a sample that represents a composite over a larger area (Pohlmann and Alduino, 1992).

Inorganics Eighteen target inorganic analytes were detected in the groundwater samples collected from monitoring wells in the vicinity of the Shipyard Area (Table 4-18). Twelve target analytes (arsenic, barium, calcium, copper, cyanide, iron, lead, magnesium, manganese, sodium, vanadium, and zinc) were detected in groundwater samples at concentrations that exceed background screening values (Table 4-20). Antimony and nickel were detected in environmental samples but not in the background groundwater samples.

Seven inorganic analytes (antimony, arsenic, iron, magnesium, manganese, sodium, and vanadium) were detected at concentrations that exceed benchmarks concentrations (Table 4-20). The Florida Groundwater Guidance Concentrations for antimony, arsenic, sodium, and vanadium are primary standards under FAC 62-520 whereas the Florida Groundwater Guidance Concentrations for iron and manganese are secondary standards. Currently, a promulgated primary or secondary standard has not been established for magnesium.

Essential nutrient screening concentrations for groundwater were established for iron (13,267 $\mu g/\ell$), magnesium 118,807 $\mu g/\ell$), and sodium (396,022 $\mu g/\ell$) in the NAVSTA Mayport General Information Report (ABB-ES, 1995a). Iron was detected at concentrations that were less than its essential nutrient screening concentration. Magnesium was detected in groundwater samples collected from monitoring wells screened in the intermediate and deep zones of the surficial aquifer and three water table zone monitoring wells (MPT-1-MW03S, MPT-44MW02S and MPT-45-MW02S) at concentrations that exceed its essential nutrient screening concentration. Sodium was detected in groundwater samples collected from monitoring wells screened in the deep zone of the surficial aquifer at concentrations that exceed its essential nutrient screening concentration.

Antimony was detected in five groundwater samples collected from monitoring wells (MPT-1-MW02S, MPT-1-MW03S, MPT-44-MW01S, MPT-44-MW02S, and MPT-45-MW02S) screened in the water table zone of the surficial aquifer. The concentrations detected exceed Florida Groundwater Guidance Concentrations.

Arsenic was detected in four samples from monitoring wells screened in the deep zone of the surficial aquifer at concentrations that exceed the Florida Groundwater Guidance Concentration.

Manganese was detected in groundwater samples collected from monitoring wells screened in the intermediate and deep zones of the surficial aquifer and nine water table zone monitoring wells at concentrations that exceed its Florida Groundwater Guidance Concentration.

Vanadium was detected in groundwater samples from two monitoring wells (MPT-23-MW05S and MPT-44-MW02S) screened in the water table zone of the surficial aquifer at concentrations that exceed the Florida Groundwater Guidance Concentrations.

Concentrations of copper, lead and nickel detected in groundwater samples collected from monitoring wells installed in the water table zone did not exceed either USEPA Region III RBC or Florida Groundwater Guidance Concentrations. However, the distribution of their highest detected concentrations is similar to antimony and vanadium in monitoring wells MPT-1-MW02S, MPT-1-MW03S, MPT-23-MW06S MPT-23-MW05S, MPT-44-MW01S, MPT-44-MW02S MPT-44-MW03S, and MPT-45-MW02S. The occurrence of antimony, vanadium, copper, lead and nickel and possibly manganese and arsenic in the water table zone of the surficial aquifer tend to occur in areas that are hydraulically downgradient from the areas where they were detected in surface soil samples at concentrations that exceeded the FDEP industrial soil cleanup goals. This distribution suggests that a release to the environment has occurred.

The concentrations of arsenic, iron, magnesium, and sodium detected in groundwater samples from monitoring wells screened in the deep zone of the surficial aquifer are likely naturally occurring. This is based on groundwater in the surficial aquifer beneath NAVSTA Mayport becoming more saline with depth (Franks, 1980).

4.3 Human Health Risk Assessment for the Shipyard Area, SWMUs 1, 23, 24, 25, 44, and 45. SWMUs 23, 24, 25, 44, and 45 are located adjacent to SWMU 1, Landfill A, and share similar topographic and hydrogeologic settings, and have similar contaminants. Therefore, SWMUs 1, 23, 24, 25, 44, and 45, collectively called the Shipyard Area in this section, were evaluated together. Industrial (e.g., waste oils, paints, solvents) and sanitary wastes were disposed of at SWMU 1 (Landfill A), the former location of which is thought to be under and around the existing JSI Administration Building. JSI has gone out of business and currently their area of the station is not being used for repair activities. Additionally, the JSI Administration Building is currently being renovated and is to be used as office space. SWMU 23 encompasses most of the JSI Shipyard Area. Possible contaminants at SWMU 23 include fuels and oils, metals, and solvents. The NFSI, SWMU 24 and AMI, SWMU 25 are commercial shipyard companies that may have contaminants similar to those at SWMU 23. SWMU 44 is the FOWTP clarifiers 1 and 2; possible contaminants include oily material from firefighter training

activities. SWMU 45 is the FOWTP Sludge Drying Beds, where possible contaminants include metals and/or hydrocarbon related chemicals.

The location, physical description, and history (including past and current land use) associated with the Shipyard Area are described in further detail in Section 4.1. Surface soil, subsurface soil, sludge, and groundwater samples were collected during the Group III RFI field activities (Subsection 4.1.2). After evaluation and management of the environmental data collected at the Shipyard Area (Chapter 2.0), human health chemicals of potential concern (HHCPCs) were selected and the potential human health risks associated with each medium at the Shipyard Area were characterized.

The methodology for the human health risk assessment is described in Volume I, Section 2.5 of the NAVSTA Mayport GIR (ABB-ES, 1995a).

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 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 NAVSTA Mayport GIR (ABB-ES, 1995a).

4.3.1.1 **Surface Soil** During the Group III RFI field activities, 8 surface soil samples and 1 duplicate were collected from SWMU 1, 29 surface soil samples and 4 duplicates were collected from SWMU 23, 7 surface soil samples and 2 duplicates were collected from SWMU 24, 9 surface soil samples and 1 duplicate were collected from SWMU 25, 9 surface soil samples and 1 duplicate were collected from SWMU 44, 10 surface soil samples and 1 duplicate were collected from SWMU 45, and 2 samples and 1 duplicate were collected from the target range. Data from SWMUs 1, 23, 24, 25, 44, 45, and the target range were evaluated together.

Surface soil sampling locations that were evaluated in the human health risk assessment (HHRA) include MPT-1-SB01 through MPT-1-SB08, MPT-23-SS01 through MPT-23-SS28, MPT-24-SS01 through MPT-24-SS06, MPT-25-SS01 through MPT-25-SS09, MPT-44-SS01 through MPT-44-SS09, MPT-45-SS01 through MPT-45-SS07, MPT-TR-SS01, and MPT-TR-SS02 (Plate 3). The evaluation of surface soil also included samples from monitoring well locations MPT-1-MW01D, MPT-23-MW07s, MPT-24-MW01S, MPT-44-MW03S, MPT-45-MW01D, and MPT-45-MW02S. Eleven duplicates from sampling locations, MPT-1-SB01, MPT-23-SS08, MPT-23-SS17, MPT-23-SS27, MPT-23-MW07S, MPT-24-SS04, MPT-24-MW07S, MPT-25-SS04, MPT-44-SS01, MPT-45-SS01, and MPT-TR-SS01 were also evaluated (Plate 3).

Surface soil data for 2-butanone were rejected for the following sample locations: MPT-TR-SS01 and its duplicate, and MPT-TR-SS02. Surface soil data for antimony were rejected for the following sample locations: MPT-25-SS02, MPT-25-SS03, MPT-25-SS04 and its duplicate, MPT-25-SS05, MPT-25-SS07, and MPT-25-SS09. Surface soil data for isobutyl alcohol were rejected for the following sample locations: MPT-23-SS01 through MPT-23-SS18, including a duplicate from MPT-23-SS08, MPT-44-SS01 through MPT-44-SS09, MPT-45-SS01 through MPT-45-SS07, including a duplicate from MPT-45-SS01, MPT-TR-SS01 and its duplicate, and MPT-TR-SS02. The rejection of these data are not likely to have a significant effect

on the findings and conclusion of this risk assessment. A summary of validation of the analytical data is presented in the PARCC report provided in Appendix B.

Table 4-21 presents the analytes detected in and the HHCPCs selected for surface soil at the Shipyard Area. Seven SVOCs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene); two PCBs (Aroclor-1254 and Aroclor-1260); two pesticides (chlordane and dieldrin); and nine inorganic compounds (antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, and zinc) were selected as HHCPCs.

4.3.1.2 **Subsurface Soil** During the Group III RFI field activities, eight subsurface soil samples and one duplicate were collected from SWMU 1; seven subsurface soil samples were collected from SWMU 23; one subsurface soil sample was collected from SWMU 24; three subsurface soil samples were collected from SWMU 44; and two subsurface soil samples were collected from SWMU 45. Data from SWMUs 1, 23, 24, 44, and 45 were evaluated together.

Subsurface soil sampling locations that were evaluated in the HHRA include MPT-1-SB01 through MPT-1-SB07, including a duplicate from MPT-1-SB06 (Plate 3). The evaluation of subsurface soil samples also included samples from monitoring well locations MPT-1-MW01D, MPT-23-MW01S through MPT-23-MW07S, MPT-24-MW01S, MPT-44-MW01S through MPT-44-MW03S, MPT-45-MW01D, and MPT-45-MW02S (Plate 3).

Table 4-22 presents the analytes detected in subsurface soil. No HHCPCs were selected for subsurface soil.

4.3.1.3 **Sludge** During the Group III RFI field activities, eight composite sludge samples were collected from SWMU 45 at zero to 1 foot bls and eight composite sludge samples were collected at 1 to 2 feet bls. Analytical data from both depths were evaluated together. Sludge sample locations that were evaluated in the HHRA include MPT-45-SL01 through MPT-45-SL08 [two depths were sampled at each location] and two duplicates [one at each depth] were collected at MPT-45-SL01 (Plate 3).

Table 4-23 presents the analytes detected in and the HHCPCs selected for sludge at SWMU 45. Six SVOCs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene); one pesticide (endrin ketone); and three inorganic compounds (antimony, arsenic, and copper) were selected as HHCPCs. Endrin ketone was retained as an HHCPC because neither a risk-based screening value nor a Florida Clean-up Goal was available for this substance. Inclusion of endrin ketone as an HHCPC does not suggest that it substantially contributes to potential risks associated with exposure to sludge.

4.3.1.4 **Groundwater** During the Group III RFI field activities, five unfiltered groundwater samples were collected from SWMU 1, nine unfiltered groundwater samples and two duplicates were collected from SWMU 23, one unfiltered groundwater sample was collected from SWMU 24, five unfiltered groundwater samples were collected from SWMU 44, and four unfiltered groundwater samples and two duplicates were collected from SWMU 45. Groundwater samples were collected using the low-flow method. Data from SWMUs 1, 23, 24, 44, and 45 were evaluated together.

Table 4-21
Selection of Human Health Chemicals of Potential Concern
Surface Soil at the Shipyard Area

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

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	Mean of Detected Concentrations[3]	Background Screening Concentration[4]	Risk-Based Screening Concentration[5]	Florida Leaching Value[6]	Florida Soil Cleanup Goal[7]	Selected as HHCPC? (Yes/No)
Volatiles (µg/kg)									
2-Butanone	5/72	10 - 13	4 - 10	5.7	NA	4,700,000	NG	2,200,000	No[S]
Benzene	1/74	5 - 7	1	1	NA	22,000	NG	1,400	No[S]
Carbon disulfide	17/74	5 - 7	1 - 4	2	NA	780,000	NG	5,200	No[S]
Ethylbenzene	2/74	5 - 7	[2]4.5 -13	8.8	NA	780,000	NG	1,400,000	No[S]
Isobutyl alcohol	1/39	210 - 270	91	91	NA	2,300,000	NG	NS	No[S]
Toluene	19/74	5 - 7	1 - 22	4.8	NA	1,600,000	NG	520,000	No[S]
Trichlorofluoromethane	2/74	5 - 7	[2]2-[2]2	2	NA	2,300,000	400,000	6,600	No[S]
Xylenes (total)	28/74	5 - 7	1 - 81	7.5	NA	16,000,000	NG	13,000,000	No[S]
Semivolatiles (µg/kg)									
2-Methylnaphthalene	3/74	340 - 1,900	22 - [2]290	139	NA	310,000	NG	960,000	No[S]
Acenaphthene	2/74	340 - 1,900	[2]125 - [2]337.5	231	NA	470,000	NG	2,800,000	No[S]
Acetophenone	1/74	340 - 1,900	28	28	NA	780,000	NG	NSC	No[S]
Anthracene	7/74	340 - 1,900	36 - [2]542.5	261	NA	2,300,000	NG	20,000,000	No[S]
Benzo(a)anthracene	18/74	340 - 1,900	50 - [2]2,272.5	322	NA	880	NG	1,400	Yes
Benzo(a)pyrene	19/74	340 - 1,900	24 - [2]2,272.5	298	NA	88	NG	100	Yes
Benzo(b)fluoranthene	21/74	340 - 1,900	22 - [2]2,572.5	321	NA	880	NG	1,400	Yes
Benzo(g,h,i)perylene	16/74	340 - 1,900	37 - [2]1,072.5	218	NA	NSC	NG	14,000	No[S]
Benzo(k)fluoranthene	23/74	340 - 1,900	19 - [2]2,322.5	303	NA	8,800	NG	14,000	Yes[C]
Benzoic acid	1/74	1,600 - 9,400	[2]481	481	NA	31,000,000	NG	130,000,000	No[S]
Butylbenzylphthalate	2/74	340 - 1,900	72 - [2]131.5	102	NA	1,600,000	NG	15,000,000	No[S]
Chrysene	23/74	340 - 1,900	21 - [2]2,472.5	306	NA	88,000	NG	140,000	Yes[C]
Dibenz(a,h)anthracene	8/74	340 - 1,900	[2]44 - [2]632.5	228	NA	88	NG	100	Yes
Di-n-butylphthalate	20/74	340 - 1,900	19 - [2]1,370	167	NA	780,000	23,000	7,300,000	No[S]

See notes at end of table.

Table 4-21 (Continued)
Selection of Human Health Chemicals of Potential Concern
Surface Soil at the Shipyard Area

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

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	Mean of Detected Concentrations[3]	Background Screening Concentration[4]	Risk-Based Screening Concentration[5]	Florida Leaching Value[6]	Florida Soil Cleanup Goal[7]	Selected as HHCPC? (Yes/No)
Di-n-octylphthalate	1/74	340 - 1,900	400	400	NA	160,000	NG	1,500,000	No[S]
Dibenzofuran	2/74	340 - 1,900	[2]157.5 - [2]215	186	NA	31,000	NG	240,000	No[S]
Dimethylphthalate	1/74	340 - 1,900	92	92	NA	78,000,000	NG	630,000,000	No[S]
Fluoranthene	23/74	340 - 1,900	28 - [2]5,172.5	526	NA	310,000	NG	2,900,000	No[S]
Fluorene	3/74	340 - 1,900	[2]212.5 - [2]292.5	251	NA	310,000	NG	2,400,000	No[S]
Indeno(1,2,3-cd)pyrene	16/74	340 - 1,900	26 - [2]1,022.5	190	NA	880	NG	1,400	Yes[C]
Naphthalene	5/74	340 - 1,900	24 - 880	253	NA	310,000	NG	1,800,000	No[S]
Phenanthrene	13/74	340 - 1,900	32 - [2]2,072.5	454	NA	NSC	NG	1,700,000	No[S]
Pyrene	25/74	340 - 1,900	20 - [2]3,972.5	417	NA	230,000	NG	2,200,000	No[S]
bis(2-Ethylhexyl)phthalate	16/74	340 - 1,900	[2]26 - 655	154	NA	46,000	11,000	48,000	No[S]
Pesticides/PCBs (µg/kg)									
4,4'-DDD	2/74	1.3 - 140	[2]1.05 - 7.5	4.3	NA	2,700	NG	4,500	No[S]
4,4'-DDE	23/74	0.68 - 73	0.93 - 12	4	NA	1,900	NG	3,000	No[S]
4,4'-DDT	17/74	1.3 - 140	1.5 - [2]62	8.2	NA	1,900	NG	3,100	No[S]
Aldrin	3/74	0.68 - 73	1.1 - 2.7	1.7	NA	38	NG	60	No[S]
Aroclor-1254	4/74	16 - 1,800	70 - [2]335	189	NA	160	NG	900	Yes
Aroclor-1260	10/74	16 - 1,800	26 - 380	133	NA	83	NG	900	Yes
Chlordane	11/74	6.8 - 730	[2]11.5 - 1,100	214	NA	490	NG	800	Yes
Dieldrin	12/74	0.68 - 73	[2]0.6775 - 2,200	188	NA	40	NG	70	Yes
Endosulfan II	2/74	1.3 - 140	3.3 - 12	7.7	NA	47,000	NG	390,000	No[S]
Endrin	2/74	1.3 - 140	1.4 - [2]20.35	10.9	NA	2,300	NG	23,000	No[S]
Endrin aldehyde	1/74	1.3 - 140	[2]31.85	31.9	NA	NSC	NG	23,000	No[S]
Endrin ketone	5/74	1.3 - 140	1.5 - 22	6.9	NA	2,300[9]	NG	23,000[9]	No[S]
Heptachlor epoxide	3/74	0.68 - 73	1.1 - [2]14.1	5.6	NA	70	NG	100	No[S]
Isodrin	2/74	0.68 - 73	0.76 - 0.87	0.82	NA	38[9]	NG	60[9]	No[S]

See notes at end of table.

Table 4-21 (Continued)
Selection of Human Health Chemicals of Potential Concern
Surface Soil at the Shipyard Area

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

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	Mean of Detected Concentrations[3]	Background Screening Concentration[4]	Risk-Based Screening Concentration[5]	Florida Leaching Value[6]	Florida Soil Cleanup Goal[7]	Selected as HHCPC? (Yes/No)
Pesticides/PCBs (µg/kg) (Continued)									
Methoxychlor	5/74	2.7 - 290	2.9 - 190	45.4	NA	39,000	NG	380,000	No[8]
beta-BHC	1/74	1.3 - 140	2.6	2.6	NA	350	NG	600	No[8]
Inorganics (mg/kg)									
Antimony	34/68	0.01 - 25	0.02 - 14.8	2.6	ND	3.1	NC	26	Yes
Arsenic	70/74	0.16 - 0.76	0.2 - 13.9	1.5	ND	0.37	NC	[11]0.8	Yes
Barium	74/74	0.08 - 1.2	3 - 126	22.4	5.6	550	NC	5,200	No[8]
Beryllium	71/74	0.03 - 0.29	0.05 - 1.9	0.21	0.16	0.15	NC	0.2	Yes
Cadmium	35/74	0.25 - 5.5	[2]0.24 - 6.3	1.1	2	3.9	NC	37	Yes
Chromium	74/74	0.35 - 5.2	0.56 - [2]42.2	10.1	2.6	39	NC	290	Yes
Cobalt	29/74	0.55 - 10.4	[2]0.5225 - [2]15	2.2	ND	470	NC	4,700	No[8]
Copper	66/74	0.21 - 10.2	[2]1.15 - 2,930	115	2.2	290	NC	[12]2,900	Yes
Cyanide	46/74	0.05 - 1.5	0.05 - 1.1	0.17	ND	160	NC	1,600	No[8]
Lead	74/74	0.26 - 28.1	1.9 - 831	46.2	ND	400	NC	500	Yes
Mercury	29/74	0.03 - 0.55	0.04 - 26.9	0.46	ND	2.3	NC	23	Yes
Nickel	66/74	1.1 - 11.2	1.2 - 81.3	10.1	ND	160	NC	1,500	No[8]
Selenium	6/74	0.1 - 0.6	0.14 - [2]0.605	0.38	1.36	39	NC	390	No[8,9]
Silver	14/74	0.29 - 5.1	0.51 - [2]22.8	5	ND	39	NC	390	No[8]
Thallium	6/74	0.12 - 0.6	0.12 - [2]0.165	0.14	1.8	0.63[10]	NC	NSC	No[8,9]
Tin	37/74	1.6 - 16.8	[2]1.675 - 196	11.8	ND	4,700	NC	44,000	No[8]
Vanadium	74/74	0.25 - 4	1.5 - 23.4	7.4	4	55	NC	490	No[8]
Zinc	74/74	0.13 - 1.4	4.7 - 5,910	235	2.6	2,300	NC	23,000	Yes

See notes at end of table.

Table 4-21 (Continued)
Selection of Human Health Chemicals of Potential Concern
Surface Soil at the Shipyard Area

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

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed. Samples were analyzed from the following locations: MPT-1-SB01 through MPT-1-SB08, MPT-23-SS01 through MPT-23-SS28, MPT-24-SS01 through MPT-24-SS06, MPT-25-SS01 through MPT-25-SS09, MPT-44-SS01 through MPT-44-SS09, MPT-45-SS01 through MPT-45-SS07, MPT-TR-SS01, MPT-TR-SS02, MPT-1-MW01D, MPT-23-MW07S, MPT-24-MW01S, MPT-44-MW03S, MPT-45-MW-01D, MPT-45-MW02S, and 11 duplicates from locations MPT-1-SS01, MPT-23-SS08, MPT-23-SS17, MPT-23-SS27, MPT-23-MW07S, MPT-24-SS04, MPT-24-MW07S, MPT-25-SS04, MPT-44-SS01, MPT-45-SS01, and MPT-TR-SS01.
[2] Indicates the value is the average of the detected concentration in a sample and its duplicate. For non-detect values, one-half of the contract-required quantitation limit or contract-required detection limit 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.
[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-1-1 of Appendix D-1 to the RCRA Facility Investigation General Information Report (GIR) (ABB-ES, 1995a).
[5] The risk-based screening concentrations (RBC) are identified in Table D-1-4 of Appendix D to the GIR (ABB-ES, 1995a).
[6] The Florida leaching values (September 29, 1995) are identified in Appendix D-6 to this report.
[7] The Florida soil cleanup goals (September 29, 1995) are identified in Appendix D-6 to this report.
[8] The RBC for endrin was used as a surrogate value.
[9] The RBC for aldrin was used as a surrogate value.
[10] The lowest RBC for thallium compounds was used as a surrogate value.
[11] Soil Cleanup Goal for Florida, January 16, 1996 (residential for surface soil).
[12] Soil Cleanup Goal for the Military Sites, April 5, 1995 (residential for surface soil).

Notes: HHRA = human health risk assessment.
RCRA = Resource Conservation and Recovery Act.
SWMUs = solid waste management units.
HHCPC = human health chemical of potential concern.
μg/kg = micrograms per kilogram.
NA = not applicable.
NG = not detected in groundwater.
S = The maximum detected concentration did not exceed the risk-based screening concentration, the Florida leaching value, or the Florida soil clean-up goal; therefore, this analyte will not be evaluated in the HHRA.
C = This analyte is a member of a chemical class that contains HHCPCs; therefore, this analyte is retained as an HHCPC.
NSC = no screening concentration.
PCBs = polychlorinated biphenyls.
4,4'-DDD = dichlorodiphenyldichloroethane.
4,4'-DDE = dichlorodiphenyldichloroethene.
4,4'-DDT = dichlorodiphenyltrichloroethane.
mg/kg = milligrams per kilogram.
ND = not detected in any background samples.
NC = not calculated.
B = The maximum detected concentration did not exceed the background screening concentration; therefore, the analyte will not be evaluated in the HHRA.

Table 4-22
Selection of Human Health Chemicals of Potential Concern
Subsurface Soil at the Shipyard Area

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

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	Mean of Detected Concentrations[3]	Background Screening Concentration[4]	Risk-Based Screening Concentration[5]	Florida Leaching Value[6]	Florida Soil Cleanup Goal[7]	Selected as HHCPC? (Yes/No)
Volatiles (µg/kg)									
2-Butanone	1/21	10 - 12	2	2	NA	50,000,000	NG	1,500,000	No[S]
Carbon disulfide	3/21	5 - 6	[2]1.5 - 2	1.8	NA	10,000,000	NG	3,400	No[S]
Xylenes (total)	4/21	5 - 6	1 - 4	2	NA	50,000,000	NG	9,200,000	No[S]
Semivolatiles (µg/kg)									
bis(2-Ethylhexyl)phthalate	3/21	350 - 800	45 - 60	52.3	NA	205,000	11,000	110,000	No[S]
Pesticides/PCBs (µg/kg)									
4,4'-DDE	1/21	0.71 - 0.85	3.3	3.3	NA	8,500	NG	11,000	No[S]
Chlordane	1/21	7.1 - 8.5	8.8	8.8	NA	2,200	NG	3,000	No[S]
Inorganics (mg/kg)									
Antimony	9/21	0.01 - 5	0.01 - 2.2	0.72	ND	41	NC	22	No[S]
Arsenic	21/21	0.16 - 0.69	0.26 - 1.3	0.69	0.9	1.65	NC	[8]3.7	No[S]
Barium	21/21	0.08 - 0.26	2.1 - 7.7	3.7	7.2	7,000	NC	8,400	No[S]
Beryllium	12/21	0.03 - 0.07	0.03 - 0.22	0.1	0.14	0.65	NC	1.0	No[S]
Cadmium	3/21	0.25 - 0.74	0.68 - 0.84	0.78	ND	50	NC	60	No[S]
Chromium	20/21	0.36 - 1.5	1.1 - 5.3	2.5	3.4	500	NC	43	No[S]
Cobalt	1/21	0.65 - 0.94	0.66	0.66	1.04	6,000	NC	11,000	No[S,B]
Copper	13/21	0.23 - 6.1	0.49 - 22.5	5.1	3.6	3,800	NC	7,200	No[S]
Cyanide	8/21	0.05 - 1	0.08 - 0.15	0.11	0.66	2,050	NC	4,000	No[S,B]
Lead	21/21	0.26 - 2	0.19 - 42.4	4.6	2.8	400	NC	1,000	No[S]
Mercury	3/21	0.03 - 0.1	[2]0.0275 - 0.07	0.04	0.06	30.5	NC	48	No[S]
Nickel	7/21	1.2 - 1.8	1.5 - 12.1	3.8	ND	2,050	NC	2,600	No[S]
Selenium	8/21	0.11 - 0.6	0.29 - 0.57	0.47	ND	500	NC	990	No[S]

See notes at the end of table.

Table 4-22 (Continued)
Selection of Human Health Chemicals of Potential Concern
Subsurface Soil at the Shipyard Area

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

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	Mean of Detected Concentrations[3]	Background Screening Concentration[4]	Risk-Based Screening Concentration[5]	Florida Leaching Value[6]	Florida Soil Cleanup Goal[7]	Selected as HHCPC? (Yes/No)
Inorganics (mg/kg) (Continued)									
Tin	2/21	1.9 - 5.6	3.3 - 62	32.7	5.4	50,000	NC	67,000	No[5]
Vanadium	21/21	0.25 - 0.51	0.86 - 11.2	2.5	3.2	700	NC	480	No[5]
Zinc	16/21	0.29 - 2.8	3.7 - 59.1	22	4.8	30,500	NC	56,000	No[5]

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed. Samples were analyzed from the following locations: MPT-1-SB01 through MPT-1-SB07, MPT-1-MW01D, MPT-23-MW01S through MPT-23-MW07S, MPT-24-MW01S, MPT-44-MW01S through MPT-44-MW03S, MPT-45-MW01D, MPT-45-MW02S, and a duplicate from location MPT-1-SB06.
[2] Indicates the value is the average of the detected concentration in a sample and its duplicate. For non-detect values, one-half of the contract-required quantitation limit or contract-required detection limit 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.
[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-1-1 of Appendix D-1 to the RCRA Facility Investigation General Information Report ABB Environmental Services, Inc. (ABB-ES, 1995a).
[5] The risk-based screening concentrations are identified in Table D-1-2 of Appendix D to the GIR.
[6] The Florida leaching values (September 29, 1995) are identified in Table D-1-4 of Appendix D to the GIR.
[7] The Florida soil cleanup goals (September 29, 1995) are identified in Table D-1-4 of Appendix D to the GIR.
[8] Soil Cleanup Goals for Florida, January 19, 1996 (industrial for subsurface soil).

Notes: RCRA = Resource Conservation and Recovery Act.
SWMUs = solid waste management units.
HHCPC = human health chemical of potential concern.
µg/kg = micrograms per kilogram.
NA = not applicable.
S = The maximum detected concentration did not exceed the risk-based screening concentration, the Florida leaching value, or the Florida soil clean-up goal; therefore, this analyte will not be evaluated in the HHRA.
PCBs = polychlorinated biphenyls.
NG = not detected in groundwater.
4,4'-DDE = dichlorodiphenyldichloroethene.
mg/kg = milligrams per kilogram.
ND = not detected in any background samples.
NC = not calculated.
B = The maximum detected concentration did not exceed the background screening concentration; therefore, the analyte will not be evaluated in the HHRA.
HHRA = human health risk assessment.

Table 4-23
Selection of Human Health Chemicals of Potential Concern
Sludge at SWMU 45

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

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	Mean of Detected Concentrations[3]	Background Screening Concentration[4]	Risk-Based Screening Concentration[5]	Florida Cleanup Goal[6]	Selected as HHCPC? (Yes/No)
Volatiles (µg/kg)								
Carbon disulfide	1/16	5 - 7	[2]1.75	1.8	NA	780,000	5,200	No[S]
Trichlorofluoromethane	1/16	5 - 7	5	5	NA	2,300,000	6,600	No[S]
Xylenes (total)	5/16	5 - 7	1 - 3	1.8	NA	16,000,000	13,000,000	No[S]
Semivolatiles (µg/kg)								
Anthracene	1/16	670 - 970	91	91	NA	2,300,000	20,000,000	No[S]
Benzo(a)anthracene	2/16	670 - 970	[2]109 - 260	185	NA	880	1,400	Yes[C]
Benzo(a)pyrene	2/16	670 - 970	[2]99.5 - 250	175	NA	88	100	Yes
Benzo(b)fluoranthene	2/16	670 - 970	[2]106 - 290	198	NA	880	1,400	Yes[C]
Benzo(g,h,i)perylene	2/16	670 - 970	[2]103 - 190	147	NA	NSC	14,000	No[S]
Benzo(k)fluoranthene	2/16	670 - 970	[2]140 - 330	235	NA	8,800	14,000	Yes[C]
Benzyl alcohol	2/16	670 - 970	210 - 300	255	NA	2,300,000	23,000,000	No[S]
Butylbenzylphthalate	2/16	670 - 970	110 - 120	115	NA	1,600,000	15,000,000	No[S]
Chrysene	2/16	670 - 970	[2]135 - 280	208	NA	88,000	140,000	Yes[C]
Di-n-butylphthalate	10/16	670 - 970	73 - 1,500	517	NA	780,000	7,300,000	No[S]
Fluoranthene	2/16	670 - 970	[2]165 - 340	253	NA	310,000	2,900,000	No[S]
Indeno(1,2,3-cd)pyrene	2/16	670 - 970	[2]81.5 - 180	131	NA	880	1,400	Yes[C]
Phenanthrene	2/16	670 - 970	[2]85 - 130	108	NA	NSC	1,700,000	No[S]
Phenol	2/16	670 - 970	220 - 340	280	NA	4,700,000	34,000,000	No[S]
Pyrene	2/16	670 - 970	[2]160 - 320	240	NA	230,000	2,200,000	No[S]
bis(2-Ethylhexyl)phthalate	1/16	670 - 1,000	2,800	2,800	NA	46,000	48,000	No[S]
Pesticides/PCBs (µg/kg)								
4,4'-DDD	1/16	1.3 - 1.9	[2]1.05	1	NA	2,700	4,500	No[S]
4,4'-DDE	2/16	0.68 - 0.99	0.78 - 1.2	0.99	NA	1,900	3,000	No[S]

See notes at end of table.

Table 4-23 (Continued)
Selection of Human Health Chemicals of Potential Concern
Sludge at SWMU 45

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

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	Mean of Detected Concentrations[3]	Background Screening Concentration[4]	Risk-Based Screening Concentration[5]	Florida Cleanup Goal[6]	Selected as HHCPC? (Yes/No)
Pesticides/PCBs (µg/kg) (Continued)								
Aldrin	1/16	0.68 - 0.99	2.6	2.6	NA	38	60	No[S]
Dieldrin	9/16	0.68 - 0.99	[2]0.57 - 3.8	1.8	NA	40	70	No[S]
Endrin	1/16	1.3 - 1.9	1.5	1.5	NA	2,300	23,000	No[S]
Endrin ketone	2/16	1.3 - 1.9	1.7 - 1.8	1.8	NA	NSC	NS	Yes
Isodrin	2/16	0.68 - 0.99	0.74 - 1.2	0.97	NA	[7]38	[7]60	No
Inorganics (mg/kg)								
Antimony	7/16	1 - 5	[2]1.05 - 5	2.9	ND	3.1	26	Yes
Arsenic	15/16	0.14 - 0.7	0.31 - 1.2	0.65	ND	0.37	[8]0.8	Yes
Barium	16/16	0.08 - 0.12	6.5 - 118	29.6	5.6	550	5,200	No[S]
Beryllium	2/16	0.04 - 0.06	[2]0.035 - 0.05	0.04	0.16	0.15	0.2	No[S,B]
Cadmium	14/16	0.26 - 0.38	0.29 - 1.9	0.71	2	3.9	37	No[S,B]
Chromium	16/16	0.43 - 0.62	1.3 - 16.5	4.5	2.6	39	290	No[S]
Cobalt	1/16	0.55 - 0.8	0.62	0.62	ND	470	4,700	No[S]
Copper	16/16	0.3 - 0.44	53.3 - 939	253	2.2	290	[9]2,900	Yes
Cyanide	16/16	1	0.12 - 0.66	0.3	ND	160	1,600	No[S]
Lead	16/16	0.5 - 2.5	2.7 - 27.4	11.1	ND	400	500	No[S]
Mercury	16/16	0.1	[2]0.045 - 1.1	0.28	ND	2.3	23	No[S]
Nickel	16/16	1.1 - 1.5	3.7 - 41.6	12.3	ND	160	1,500	No[S]
Selenium	8/16	0.12 - 0.6	[2]0.1025 - 0.92	0.41	1.36	39	390	No[S,B]
Silver	13/16	0.47 - 0.68	0.79 - 6.3	2.3	ND	39	390	No[S]

See notes at end of table.

Table 4-23 (Continued)
Selection of Human Health Chemicals of Potential Concern
Sludge at SWMU 45

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

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	Mean of Detected Concentrations[3]	Background Screening Concentration[4]	Risk-Based Screening Concentration[5]	Florida Cleanup Goal[6]	Selected as HHCPC? (Yes/No)
Inorganics (mg/kg) (Continued)								
Tin	15/16	2 - 2.9	3.1 - 25.3	7.9	ND	4,700	44,000	No[S]
Vanadium	16/16	0.3 - 0.44	0.6 - 3	1.3	4	55	490	No[S,B]
Zinc	16/16	0.24 - 0.35	19.3 - 372	97.7	2.6	2,300	23,000	No[S]

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed. Samples were analyzed from the following locations: MPT-45-SL01 through MPT-45-SL08 (two depths were sampled at each location) and two duplicates from MPT-45-SL01.
[2] Indicates the value is the average of the detected concentration in a sample and its duplicate. For non-detect values, one-half of the contract-required quantitation limit or 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-1-1 of Appendix D-1 to the Naval Station Mayport General Information Report (GIR) ABB Environmental Services, Inc. (ABB-ES, 1995a) .
[5] The risk-based screening concentrations are identified in Table D-1-4 of Appendix D to the GIR.
[6] The Florida soil clean-up goals (September 29, 1995) are identified in Table D-1-4 of Appendix D to the GIR.
[7] The risk-based concentration for aldrin was used as a surrogate value.
[8] Soil Cleanup Goals for Florida, January 19, 1996 (residential for sludge).
[9] Soil Cleanup Goals for the Military Sites, April 5, 1995 (residential for surface soil).

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
HHCPC = human health chemical of potential concern.
µg/kg = micrograms per kilogram.
NA = not applicable.
S = The maximum detected concentration does not exceed the risk-based screening concentration or the Florida soil clean-up goal; therefore, this analyte will not be evaluated in the HHRA.
C = This analyte is a member of a chemical class that contains HHCPCs; therefore, this analyte is retained as an HHCPC.
NSC = no screening concentration.
PCBs = polychlorinated biphenyls.
4,4'-DDD = dichlorodiphenyldichloroethane.
4,4'-DDE = dichlorodiphenyldichloroethene.
NS = no standard or guideline available.
mg/kg = milligrams per kilogram.
B = The maximum detected concentration does not exceed the background screening concentration; therefore, the analyte will not be evaluated in the HHRA.
ND = not detected in any background samples.
HHRA = human health risk assessment.

Groundwater sampling locations that were evaluated in the HHRA include MPT-1-MW01S, MPT-1-MW01I, MPT-1-MW01D, MPT-1-MW02S, MPT-1-MW03S, MPT-23-MW01S through MPT-23-MW05S, MPT-23-MW05I, MPT-23-MW05D, MPT-23-MW06S, MPT-23-MW07S, MPT-24-MW01S, MPT-44-MW01S, MPT-44MW01I, MPT-44-MW01D, MPT-44-MW02S, MPT-44-MW03S, MPT-1-P01S, MPT-45-MW01I, MPT-45-MW01D, MPT-45-MW02S, and four duplicates from locations MPT-23-MW01S, MPT-23-MW04S, MPT-45-MW01I, and MPT-45-MW02S (Plates 1 and 2).

Groundwater data for antimony were rejected for the following sample locations: MPT-23-MW01S and the duplicate, MPT-23-MW02S, MPT-23-MW03S, MPT-23-MW06S, and MPT-23-MW07S (Please refer to Subsection 2.2.2). The analytical results were qualified because the percent recovery of spiked compounds in MS samples was less than 30 percent. Non-detect values for these samples were rejected. The rejection of this data, assuming that they are not false negative values, should not have an adverse impact on conclusions and recommendations contained in this report.

Table 4-24 presents the analytes detected in and the HHCPCs selected for unfiltered groundwater associated with the Shipyard Area. One VOC (1,1,-dichloroethene), one SVOC (bis(2-ethylhexyl)phthalate), and seven inorganic compounds (antimony, arsenic, iron, magnesium, manganese, sodium, and vanadium) were selected as HHCPCs.

4.3.2 **Exposure Assessment** Medium-specific receptors and exposure scenarios are identified in Paragraphs 4.3.2.1 through 4.3.2.4 for current and future land use. The information is also summarized in Table 4-25 and on Figure 4-15. Receptor-specific exposure parameters for each exposure scenario are presented in Appendix D-3 to the NAVSTA Mayport GIR (ABB-ES, 1995a). The risk calculation spreadsheets in Appendix D-2 to this report also contain the exposure parameters for each exposure scenario.

Although permission is required to obtain access to NAVSTA Mayport, the Shipyard Area and the surrounding area are accessible to Navy personnel and their adult and child dependents.

4.3.2.1 **Surface Soil** Currently, adult and adolescent trespassers, site maintenance workers, and occupational workers could be exposed to contaminants in surface soil. In addition, ongoing construction in the Shipyard Area could result in exposure of excavation workers to surface soil contaminants. Therefore, exposure of these receptors (i.e., ingestion, dermal contact, and inhalation of particulates) is evaluated in the HHRA. No humans currently reside at the Shipyard Area; however, the Shipyard Area could at some time be developed for residential use. Therefore, exposure of future residents to contaminants in surface soil is also evaluated in the HHRA.

4.3.2.2 **Subsurface Soil** Exposure of an excavation worker (i.e., ingestion, dermal contact, and inhalation of particulates) is evaluated at sites where ongoing or future construction could result in their exposure to contaminants in subsurface soil.

4.3.2.3 **Sludge** Exposure to the dried sludge would be similar to exposure to surface soil. Currently, adult and adolescent trespassers, occupational workers, site maintenance workers, and excavation workers could be exposed under current site usage to sludge at SWMU 45; therefore, exposure of these receptors is

Table 4-24
Selection of Human Health Chemicals of Potential Concern
Unfiltered Groundwater Associated with the Shipyard Area

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

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	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)
Volatiles (µg/ℓ)									
1,1-Dichloroethane	2/24	5	7 - 8	7.5	NA	81	NS	700	No[S]
1,1-Dichloroethene	2/24	5	2 - 5	3.5	NA	0.044	7	7	Yes
1,2-Dichloroethene (total)	2/24	5	1 - 5	3	NA	5.5	70	70	No[S]
Trichlorofluoromethane	1/24	5	[2]1.75	1.8	NA	130	NS	2,100	No[S]
Semivolatiles (µg/ℓ)									
Di-n-butylphthalate	1/24	10	[2]3	3	NA	370	NS	700	No[S]
bis(2-Ethylhexyl)phthalate	5/24	10	2 - 5	4	NA	4.8	6	6	Yes
Inorganics (µg/ℓ)									
Antimony	5/19	5	7.9 - 50.2	21.1	ND	1.5	6	6	Yes
Arsenic	17/24	0.6 - 5	0.7 - 102	20.8	8.6	0.038	50	50	Yes
Barium	24/24	1.1	1.3 - 73.5	17.8	39.6	260	2,000	2,000	No[S]
Calcium	24/24	34.8	[2]24,450 - 254,000	103,523	220,462	1,055,398	NS	NS	No[S]
Chromium	3/24	1.7	[2]1.375 - 2.8	2	10.4	18	100	NS	No[S,B]
Copper	2/24	1 - 1.25	[2]4.55 - 108	56.3	2.8	140	1,300	1,000	No[S,B]
Cyanide	7/24	1.5 - 1.5	[2]1.225 - 7.7	3.3	1.9	73	200	200	No[S]
Iron	15/24	1.9 - 23.3	51.9 - 9,040	1,833	1,404	13,267	NS	300	Yes
Lead	8/24	0.4 - 4	0.5 - 8	4.6	3.6	15	15	15	No[S,B]
Magnesium	24/24	19.8	2,530 - 680,000	96,159	186,914	118,807	NS	NS	Yes
Manganese	24/24	0.5	3.4 - 701	109	198.6	18	NS	50	Yes
Mercury	1/24	0.1	0.15	0.15	0.16	1.1	2	2	No[S,B]
Nickel	6/24	5.7	6.4 - 10	7.9	ND	73	100	100	No[S]
Selenium	5/24	0.5 - 25	[2]0.425 - 5.6	1.8	9.2	18	50	50	No[S,B]

See notes at end of table.

Table 4-24 (Continued)
Selection of Human Health Chemicals of Potential Concern
Unfiltered Groundwater Associated with the Shipyard Area

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

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	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)
Inorganics (μg/ℓ) (Continued)									
Silver	1/24	1.4 - 1.7	1.4	1.4	7.4	18	NS	100	No[5,8]
Sodium	24/24	19.5 - 390	5,320 - 5,370,000	748,178	1,397,710	396,022	NS	160,000	Yes
Vanadium	23/24	1.2	2.4 - 57	12	9.4	26	NS	49	Yes
Zinc	1/24	2.1 - 6.7	180 - 180	180	40	1,100	NS	5,000	No[5,8]

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed. Samples were analyzed from the following locations: MPT-1-MW01S, MPT-1-MW01I, MPT-1-MW01D, MPT-01-MW02S, MPT-01-MW03S, MPT-23-MW01S through MPT-23-MW05S, MPT-23-MW05I, MPT-23-MW05D, MPT-23-MW06S, MPT-23-MW07S, MPT-24-MW01S, MPT-44-MW01S, MPT-44-MW01I, MPT-44-MW01D, MPT-44-MW02S, MPT-44-MW03S, MPT-1-P01S, MPT-45-MW01I, MPT-45-MW01D, MPT-45-MW02S, and four duplicates from MPT-23-MW01S, MPT-23-MW04S, MPT-45-MW01I, and MPT-45-MW02S.
[2] Indicates the value is the average of the detected concentration in a sample and its duplicate. For non-detect values, one-half of the contract-required quantitation limit or 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-1-6 of Appendix D-1 to the general information report (GIR) ABB Environmental Services, Inc. (ABB-ES, 1995a).
[5] The risk-based screening concentrations are identified in Table D-1-5 of Appendix D to the GIR.
[6] The Federal maximum contaminants levels (MCLs) (November 1994) are identified in Table D-1-5 of Appendix D-1 to the GIR.
[7] The Florida guidance concentrations (June 1994) are identified in Table D-1-5 of Appendix D-1 to the GIR.

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
HHCPC = human health chemical of potential concern.
μg/ℓ = micrograms per liter.
NA = not applicable.
NS = no standard or guideline available.
S = The maximum detected concentration did not exceed the risk-based screening concentration, the Florida leaching value, or the Florida soil clean-up goal; therefore, this analyte will not be evaluated in the HHRA.
ND = not detected in any background samples.
B = The maximum detected concentration did not exceed the background screening concentration; therefore, the analyte will not be evaluated in the HHRA.
HHRA = human health risk assessment.

Table 4-25
Summary of Potential Exposure Pathways
Shipyard Area (SWMUs 1, 23, 24, 25, 44 and 45)

RCRA Facility Investigation, Group III 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 Yes	No humans currently reside at the Shipyard Area. Adolescents and adults may be exposed to contaminants in the surface soil while trespassing. Both occupational workers and site maintenance workers may be exposed to contaminants in surface soil. Excavation workers may be exposed to contaminants in surface soil during ongoing construction activities at the Shipyard Area.
Subsurface Soil	Dermal contact with soil, ingestion of soil, and inhalation of fugitive dust.	Excavation worker (adult)	No	No HHCPCs were identified in subsurface soil.
Sludge (SWMU 45)	Dermal contact with dried sludge, ingestion of dried sludge, 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 Yes	No humans currently reside at the Shipyard Area. Adolescents and adults may be exposed to contaminants in the sludge while trespassing. Both occupational workers and site maintenance workers may be exposed to contaminants in sludge. Excavation workers may be exposed to contaminants in sludge during ongoing construction activities at the Shipyard Area.
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 No No	If the Shipyard Area is developed for residential use, child and adult residents could be exposed to contaminants in surface soil. Future industrial use, though unlikely, may result in occupational exposures. Site maintenance workers could be exposed to contaminants in surface soil during everyday activities. Excavation workers could be exposed to contaminants in surface soil during construction or utility work. However, occupational worker, site worker, and excavation worker exposure scenarios are evaluated under current land use.
Subsurface Soil	Dermal contact with soil, ingestion of soil, and inhalation of fugitive dust.	Excavation worker (adult)	No	Excavation workers could be exposed to contaminants in subsurface soil during construction or utility work. However, excavation worker exposure scenarios are evaluated under current land use.

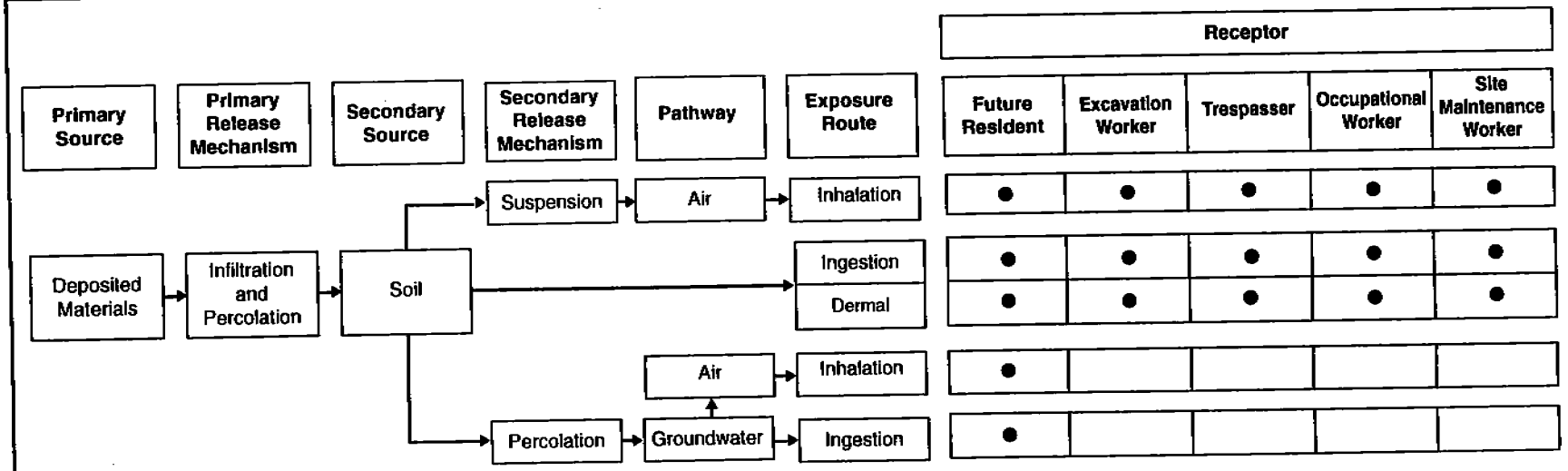
See notes at end of table.

Table 4-25 (Continued)
Summary of Potential Exposure Pathways
Shipyard Area (SWMUs 1, 23, 24, 25, 44 and 45)

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

Medium of Exposure	Route of Exposure	Potentially Exposed Population	Selected for Evaluation?	Reason for Selection or Exclusion
Sludge (SWMU 45)	Dermal contact with dried sludge, ingestion of dried sludge, and inhalation of fugitive dust.	Resident (child and adult) Trespasser (adolescent and adult) Occupational worker (adult) Site maintenance worker (adult) Excavation worker (adult)	No No No No No	Remediation or removal of sludge is planned in the near future.
Groundwater: Surficial Aquifer	Ingestion of groundwater as drinking water and inhalation of volatiles while showering	Resident (adult)	Yes	If the Shipyard Area is developed for residential use, drinking water wells in the surficial aquifer could be influenced by contaminants in the groundwater associated with the Shipyard Area. Therefore, residents could be exposed to contaminants in the surficial aquifer.

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
HHCPC = human health chemical of potential concern.



NOTES:
RCRA = Resource Conservation Recovery Act
SWMU = Solid waste management unit

FIGURE 4-15
COMPLETE EXPOSURE PATHWAYS FOR HUMAN RECEPTORS, SHIPYARD AREA (SWMUs 1, 23, 24, 25, 44, AND 45)

RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

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evaluated in the HHRA. Future exposure to sludge by residential, site maintenance, and excavation workers at SWMU 45 is not evaluated in the HHRA because removal of the sludge drying beds is being planned by the Navy Public Works Center, Jacksonville, Florida.

4.3.2.4 **Groundwater** Currently, humans do not reside at the Shipyard Area and groundwater is not used for any potable or non-potable purpose. However, if the Shipyard Area is developed for residential use, drinking water wells screened in the surficial aquifer could be influenced by groundwater associated with the Shipyard Area. Therefore, future domestic use of the surficial aquifer (adult ingestion and inhalation of volatiles while showering) is evaluated in the HHRA.

4.3.2.5 **Exposure Point Concentrations** Exposure point concentrations (EPCs) for surface soil, sludge, and groundwater were determined according to procedures outlined in Subsection 2.5.6 of the NAVSTA Mayport GIR (ABB-ES, 1995a). The EPCs for analytes selected as HHCPCs for surface soil, sludge, and groundwater are presented in Tables 4-26, 4-27, and 4-28, respectively. HHCPCs were not selected for subsurface soil during the screening evaluation, therefore, EPCs were not determined for this media. The exposure intakes of HHCPCs for the receptors that were evaluated are also presented in the risk calculation spreadsheets in Appendix D-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 discussed in Subsection 2.5.8 of the NAVSTA Mayport GIR (ABB-ES, 1995a). Appendix D-4 to the NAVSTA Mayport GIR (ABB-ES, 1995a) and Appendix D-5 to this report contain brief toxicity summaries for the HHCPCs. Appendix D-1 to this report contains dose-response information for the HHCPCs. Dose-response values current as of November 1995 for Integrated Risk Information System (IRIS) and May 1995 for Health Effects Assessment Summary Tables (HEAST) have been used in this HHRA. This information was 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). 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 NAVSTA Mayport GIR (ABB-ES, 1995a). Figure 4-16 summarizes the cancer risks associated with current land use and Figure 4-17 presents an HI summary for current land use at the Shipyard Area. Figure 4-18 summarizes the cancer risks associated with future land use and Figure 4-19 presents an HI summary for future land use at the Shipyard Area. Risk estimates for potential exposures to surface soil, sludge, and groundwater under current and future land-use scenarios are discussed in Paragraphs 4.3.4.1, 4.3.4.2, and 4.3.4.3, respectively. Table 4-29 presents a summary of the risk estimates. The risk characterization results are presented in Tables D-2-1 through D-2-27 in Appendix D-2 to this report. HHCPCs were not selected for subsurface soil during the screening evaluation, therefore, a risk characterization was not conducted for this media.

4.3.4.1 **Surface Soil** The risk characterization results for surface soil exposure scenarios are shown in Tables D-2-1 through D-2-10 and D-2-21 through

Table 4-26
Exposure Point Concentrations for Human Health Chemicals of Potential Concern Surface Soil at the Shipyard Area

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

Chemical	Frequency of Detection[1]	Maximum Detected Concentration	95% UCL[2]	Exposure Point Concentration[3]
Semivolatiles (µg/kg)				
Benzo(a)anthracene	18/74	2,273	388	388
Benzo(a)pyrene	19/74	2,273	380	380
Benzo(b)fluoranthene	21/74	2,573	399	399
Benzo(k)fluoranthene	23/74	2,323	403	403
Chrysene	23/74	2,473	412	412
Dibenz(a,h)anthracene	8/74	633	376	376
Indeno(1,2,3-cd)pyrene	16/74	1,023	372	372
Pesticides/PCBs (µg/kg)				
Aroclor-1254	4/74	335	29.7	29.7
Aroclor-1260	10/74	380	41.7	41.7
Chlordane	11/74	1,100	26.8	26.8
Dieldrin	12/74	2,200	2.6	2.6
Inorganics (mg/kg)				
Antimony	34/68	14.8	3.2	3.2
Arsenic	70/74	13.9	1.7	1.7
Beryllium	71/74	1.9	0.22	0.22
Cadmium	35/74	6.3	0.85	0.85
Chromium	74/74	42.2	12.9	12.9
Copper	66/74	2,930	130	130
Lead	74/74	831	62.8	62.8
Mercury	29/74	6.9	0.14	0.14
Zinc	74/74	5,910	302	302

[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 (U.S. Environmental Protection Agency, 1991b).
[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 nine 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.
% = percent.
UCL = upper confidence limit.
µg/kg = microgram per kilogram.
PCB = polychlorinated biphenyls.
mg/kg = milligram per kilogram.

Table 4-27
Exposure Point Concentrations for Human Health Chemicals of Potential Concern Sludge Associated with SWMU 45

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

Chemical	Frequency of Detection[1]	Maximum Detected Concentration	95% UCL[2]	Exposure Point Concentration[3]
Semivolatiles (µg/kg)				
Benzo(a)anthracene	2/16	260	407	260
Benzo(a)pyrene	2/16	250	412	250
Benzo(b)fluoranthene	2/16	290	407	290
Benzo(k)fluoranthene	2/16	330	399	330
Chrysene	2/16	280	395	280
Indeno(1,2,3-cd)pyrene	2/16	180	428	180
Pesticides/PCBs (µg/kg)				
Endrin ketone	2/16	1.8	0.97	0.97
Inorganics (mg/kg)				
Antimony	7/16	5	2.7	2.7
Arsenic	15/16	1.2	0.96	0.96
Copper	16/16	939	428	428

[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 (U.S. Environmental Protection Agency, 1991b).
[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 nine 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.
% = percent.
UCL = upper confidence limit.
µg/kg = microgram per kilogram.
PCB = polychlorinated biphenyls.

Table 4-28
Exposure Point Concentrations for Human Health Chemicals of Potential Concern Unfiltered Groundwater Associated with the Shipyard Area

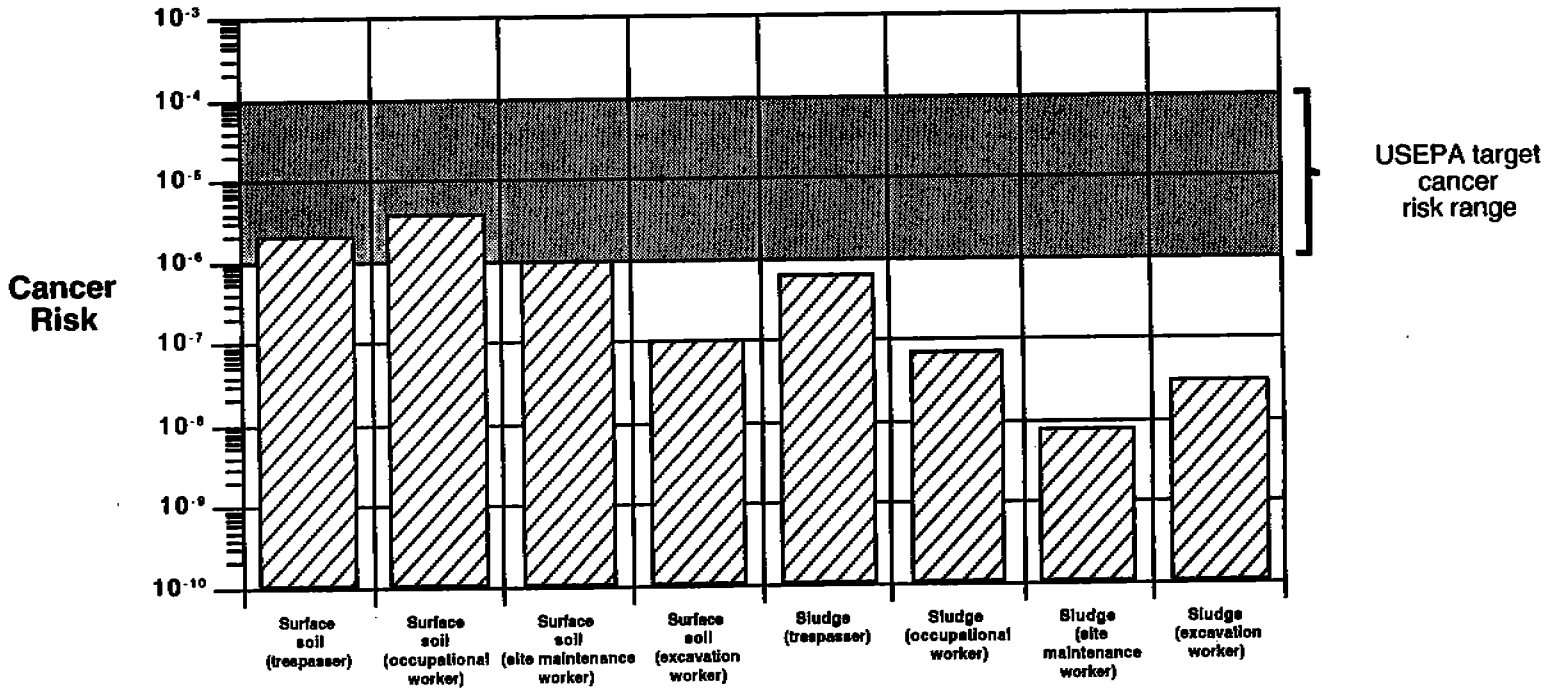
RCRA Facility Investigation, Group III SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Frequency of Detection[1]	Maximum Detected Concentration	95% UCL[2]	Exposure Point Concentration[3]
Volatiles (µg/ℓ)				
1,1-Dichloroethene	2/24	5	2.7	2.7
Semivolatiles (µg/ℓ)				
bis(2-Ethylhexyl)phthalate	5/24	5	5.1	5
Inorganics (µg/ℓ)				
Antimony	5/19	50.2	10.7	10.7
Arsenic	17/24	102	47	47
Iron	15/24	9,040	19,732	9,040
Magnesium	24/24	680,000	250,196	250,196
Manganese	24/24	701	290	290
Sodium	24/24	5,370,000	4,828,276	4,828,276
Vanadium	23/24	[illegible]	18.5	18.5

[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 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 (U.S. Environmental Protection Agency, 1991b).
[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 nine 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.
% = percent.
UCL = upper confidence limit.
µg/kg = microgram per kilogram.

Cancer Risk Summary, Current Land Use



NOTES:
RCRA = Resource Conservation and Recovery Act
USEPA = United States Environmental Protection Agency
SWMU = Solid waste management unit

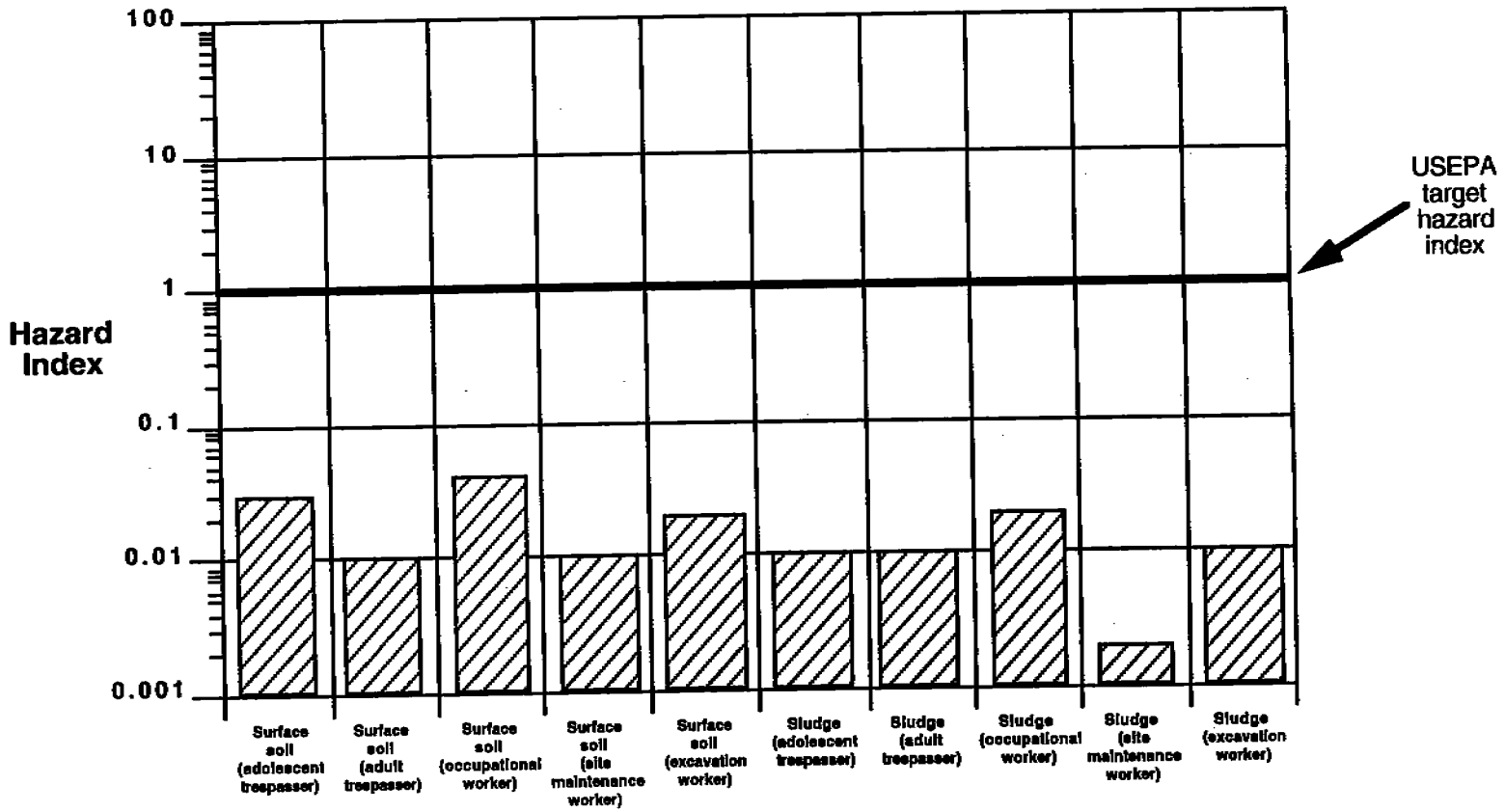
FIGURE 4-16
CANCER RISK SUMMARY, CURRENT LAND USE
SHIPYARD AREA (SWMUs 1, 23, 24, 25, 44, AND 45)

RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

8534-09 FIG 4-16 021596MAW

Hazard Index Summary, Current Land Use



NOTES:
RCRA = Resource Conservation and Recovery Act
USEPA = United States Environmental Protection Agency
SWMU = Solid waste management unit

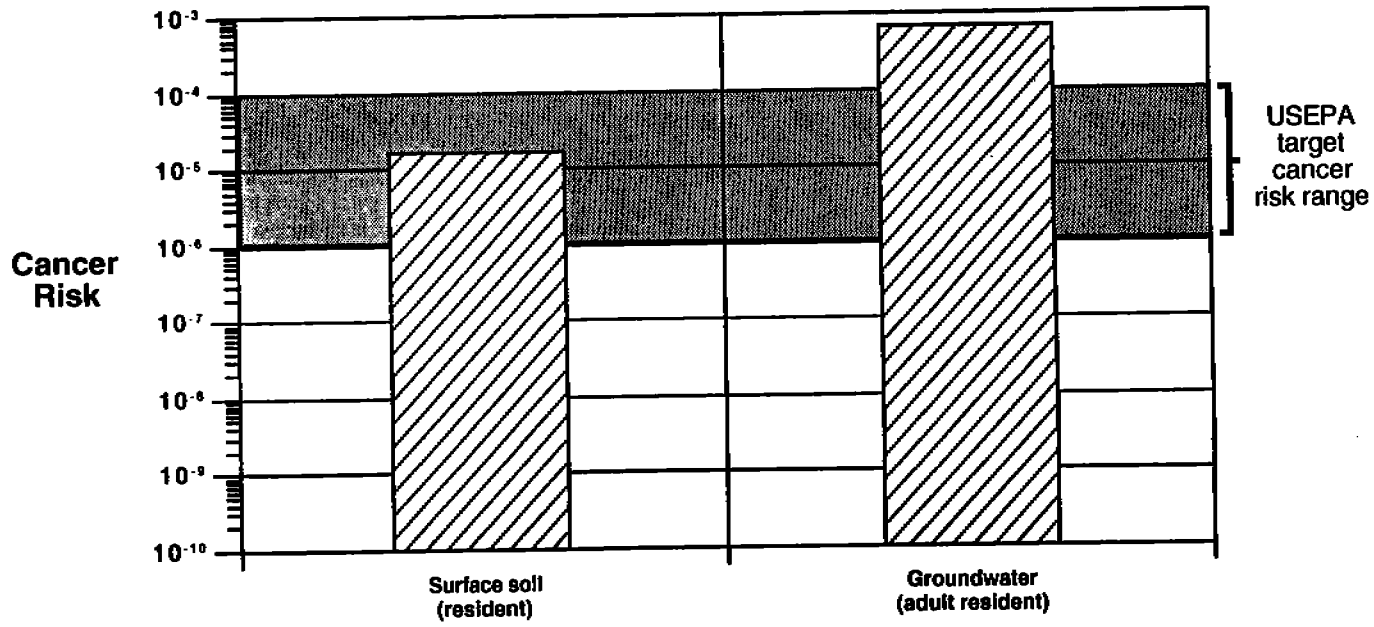
FIGURE 4-17
HAZARD INDEX SUMMARY,
CURRENT LAND USE
SHIPYARD AREA (SWMUs 1, 23, 24, 25, 44, AND 45)

RCRA FACILITY INVESTIGATION
REPORT, GROUP III SWMUs

U.S. NAVAL STATION
MAYPORT, FLORIDA

8534-09 FIG 4-17 021596MAW

Cancer Risk Summary, Future Land Use



NOTES:
RCRA = Resource Conservation and Recovery Act
USEPA = United States Environmental Protection Agency
SWMU = Solid waste management unit

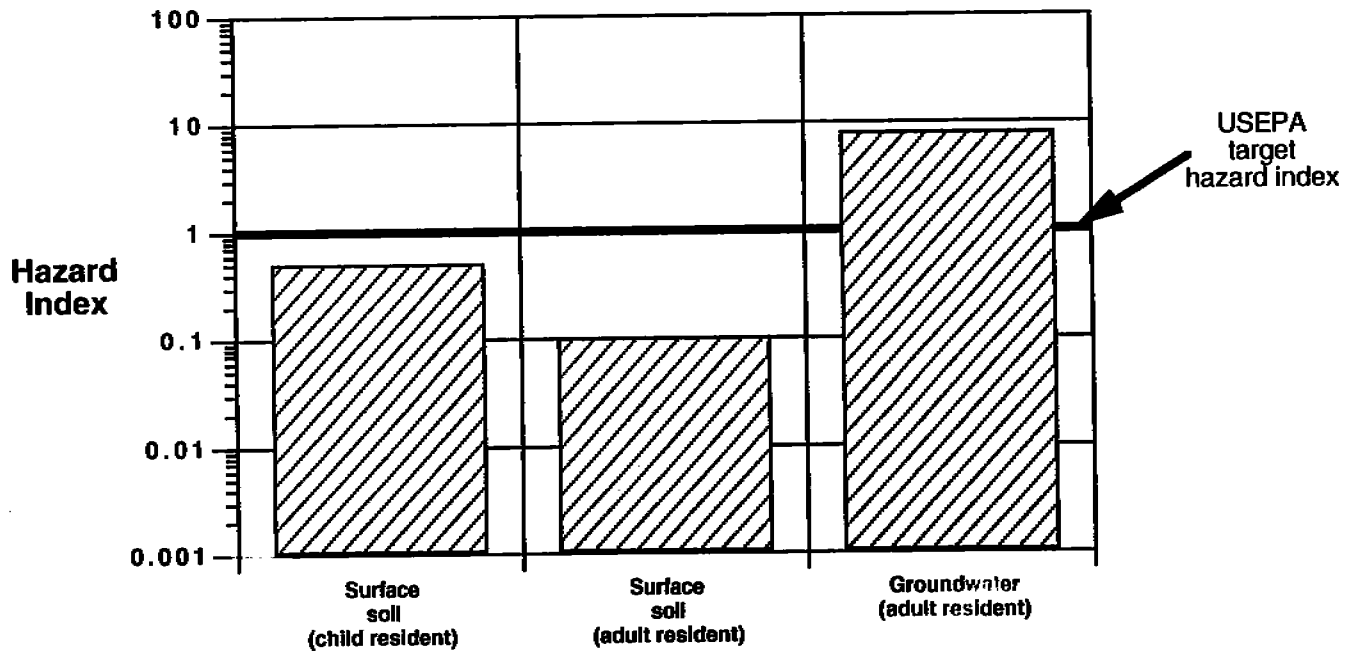
FIGURE 4-18
CANCER RISK SUMMARY,
FUTURE LAND USE
SHIPYARD AREA (SWMUs 1, 23, 24, 25, 44, AND 45)

RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

U.S. NAVAL STATION
MAYPORT, FLORIDA

8534-09 TKB FIG 4-18 021596 MAW

Hazard Index Summary, Future Land Use



NOTES:
RCRA = Resource Conservation and Recovery Act
USEPA = United States Environmental Protection Agency
SWMU = Solid waste management unit

FIGURE 4-19
HAZARD INDEX SUMMARY,
FUTURE LAND USE
SHIPYARD AREA (SWMUs 1, 23, 24, 25, 44, AND 45)

RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

U.S. NAVAL STATION
MAYPORT, FLORIDA

8534-09 TKB FIG 4-19 021596MAW

Table 4-29
Risk Summary for the Shipyard Area (SWMUs 1, 23, 24, 25, 44, and 45)

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

Land Use	Exposure Route	Hazard Index	Excess Lifetime Cancer Risk
Current Land Use			
Surface Soil			
Adolescent trespasser	Incidental ingestion	0.007	5×10^{-7}
	Dermal contact	0.02	5×10^{-7}
	Inhalation of particulates	NC[1]	3×10^{-9}
	Total adolescent trespasser:	0.03	1×10^{-6}
Adult trespasser	Incidental ingestion	0.004	5×10^{-7}
	Dermal contact	0.01	6×10^{-7}
	Inhalation of particulates	NC[1]	3×10^{-9}
	Total adult trespasser:	0.01	1×10^{-6}
	Total trespasser:	NC	2×10^{-6}
Occupational worker	Incidental ingestion	0.01	2×10^{-6}
	Dermal contact	0.03	2×10^{-6}
	Inhalation of particulates	NC[1]	1×10^{-7}
	Total occupational worker:	0.04	4×10^{-6}
Site maintenance worker	Incidental ingestion	0.003	5×10^{-7}
	Dermal contact	0.009	5×10^{-7}
	Inhalation of particulates	NC[1]	1×10^{-8}
	Total site maintenance worker:	0.01	1×10^{-6}
Excavation worker	Incidental ingestion	0.01	8×10^{-8}
	Dermal contact	0.008	2×10^{-8}
	Inhalation of particulates	NC[1]	6×10^{-10}
	Total excavation worker:	0.02	1×10^{-7}
Sludge (SWMU 45)			
Adolescent trespasser	Incidental ingestion	0.003	2×10^{-7}
	Dermal contact	0.009	6×10^{-8}
	Inhalation of particulates	NC[1]	2×10^{-9}
	Total adolescent trespasser:	0.01	3×10^{-7}
Adult trespasser	Incidental ingestion	0.002	2×10^{-7}
	Dermal contact	0.007	8×10^{-8}
	Inhalation of particulates	NC[1]	2×10^{-9}
	Total adult trespasser:	0.01	3×10^{-7}
	Total trespasser:	NC	6×10^{-7}
Occupational worker	Incidental ingestion	0.005	7×10^{-7}
	Dermal contact	0.02	2×10^{-7}
	Inhalation of particulates	NC[1]	7×10^{-8}
	Total occupational worker:	0.02	1×10^{-6}

See notes at end of table.

Table 4-29 (Continued)
Risk Summary for the Shipyard Area (SWMUs 1, 23, 24, 25, 44, and 45)

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

Land Use	Exposure Route	Hazard Index	Excess Lifetime Cancer Risk
Site maintenance worker	Incidental ingestion	0.001	2×10^{-7}
	Dermal contact	0.005	7×10^{-8}
	Inhalation of particulates	NC[1]	8×10^{-9}
	Total site maintenance worker:	0.006	3×10^{-7}
Excavation worker	Incidental ingestion	0.006	3×10^{-8}
	Dermal contact	0.005	3×10^{-9}
	Inhalation of particulates	NC[1]	3×10^{-10}
	Total excavation worker:	0.01	3×10^{-8}
Future Land Use			
Surface Soil			
Child resident	Incidental ingestion	0.3	1×10^{-5}
	Dermal contact	0.2	2×10^{-6}
	Inhalation of particulates	NC[1]	2×10^{-7}
	Total child resident:	0.5	1×10^{-5}
Adult resident	Incidental ingestion	0.03	5×10^{-6}
	Dermal contact	0.1	6×10^{-6}
	Inhalation of particulates	NC[1]	2×10^{-7}
	Total adult resident:	0.1	1×10^{-5}
	Total resident:	NC	2×10^{-5}
Groundwater			
Adult resident	Ingestion of groundwater as drinking water	8	8×10^{-4}
	Inhalation of volatiles while showering	NC[1]	2×10^{-6}
	Total adult resident:	8	8×10^{-4}

[1] A hazard index could not be calculated for inhalation exposures because neither inhalation reference doses nor reference concentrations were available for the HHCPCs.

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
NC = not calculated.
HHCPC = human health chemical of potential concern.

D-2-24 in Appendix D-2 to this report. The cancer risk associated with current land use including surface soil ingestion, dermal contact, and fugitive dust inhalation is $2x10^{-6}$ for the trespasser, $4x10^{-6}$ for the occupational worker, $1x10^{-6}$ for the site maintenance worker, and $1x10^{-7}$ for the excavation worker.

The cancer risk for a hypothetical future land use is $2x10^{-5}$ for the resident. None of the ELCRs exceeds USEPA's target cancer risk range. The total cancer risks to the resident (ingestion, dermal contact, and inhalation) associated with benzo(a)pyrene ($5.5x10^{-6}$), dibenz(a,h)anthracene ($5.4x10^{-6}$), arsenic ($4.5x10^{-6}$), and beryllium ($5x10^{-6}$) exceed FDEP's target cancer risk of $1x10^{-6}$. Therefore, remedial goal options (RGOs) are presented for surface soil in Subsection 4.3.6.

The noncancer risks associated with surface soil ingestion, dermal contact, and inhalation of fugitive dust for current and future land use (adolescent trespasser, adult trespasser, occupational worker, site maintenance worker, excavation worker, child resident, and adult resident) are all below USEPA's and FDEP's target HI of one.

4.3.4.2 **Sludge** The risk characterization results for sludge exposure scenarios are shown in Tables D-2-11 through D-2-20 in Appendix D-2 to this report. The cancer risk associated with current land use for sludge ingestion, dermal contact, and fugitive dust inhalation is $6x10^{-7}$ for the trespasser, $1x10^{-6}$ for the occupational worker, $3x10^{-7}$ for the site maintenance worker, and $3x10^{-8}$ for the excavation worker. None of these ELCRs exceeds USEPA's target cancer risk range. In addition, none of the total cancer risks for any of the HHCPCs exceeds FDEP's target cancer risk of $1x10^{-6}$.

The noncancer risks for sludge ingestion, dermal contact, and fugitive dust inhalation for current land use (adolescent trespasser, adult trespasser, occupational worker, site maintenance worker, and excavation worker) are all below USEPA's and FDEP's target HI of 1.

RGOs are presented in Subsection 4.3.6 for chemicals in sludge that exceed Florida soil clean-up standards.

4.3.4.3 **Groundwater** The risk characterization results for the groundwater exposure scenario are shown in Table D-2-25 through D-2-27 in Appendix D-2 to this report. There is no exposure to groundwater from the surficial aquifer beneath the Shipyard Area under current land use.

The cancer risk associated with hypothetical future ingestion of unfiltered groundwater as drinking water and inhalation of volatiles while showering is $8x10^{-4}$ for the adult resident. Arsenic ($8.3x10^{-4}$) and 1,1-dichloroethene ($2.1x10^{-5}$) are the major contributors to this ELCR, which exceeds USEPA's target cancer risk range. In addition, the total cancer risks associated with 1,1-dichloroethene and arsenic exceed FDEP's target cancer risk of $1x10^{-6}$. Therefore, RGOs for groundwater are presented in Subsection 4.3.6.

The HI for groundwater ingestion is 8 for the adult resident. This HI exceeds USEPA's and FDEP's target HI of 1. The risk drivers are arsenic (hazard quotient [HQ] = 2.3) and manganese (HQ = 1.6). Therefore, RGOs for groundwater are presented in Subsection 4.3.6.

It should be noted that the cancer risk and HQ associated with arsenic at its background screening concentration (8.6 $\mu g/\ell$) are $1x10^{-4}$ and 0.8, respectively (future resident ingestion of groundwater). The HQ associated with manganese at its background screening concentration (198.6 $\mu g/\ell$) is 1.1 (future resident ingestion of groundwater).

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 NAVSTA Mayport GIR (ABB-ES, 1995a). Site-specific uncertainties that are important for the interpretation of the calculated risk estimates for surface soil, subsurface soil, sludge, and groundwater at the Shipyard Area are discussed below.

- The risks associated with ingestion of groundwater are probably overestimated because the water quality indicator parameters suggest that groundwater in the vicinity of the Group III SWMUs does not meet the criteria for a Class G-I or G-II drinking water supply (Subsection 4.2.4).

- Exposure point concentrations were calculated from groundwater samples collected from various monitoring wells located in the vicinity of the Shipyard Area. Therefore, the exposure point concentrations may overestimate the risk because not all analytes were detected at either the 95 percent upper confidence limit or maximum detected concentration in a single well.

- The lack of oral reference doses (RfDs) for carcinogenic polynuclear aromatic hydrocarbons (PAHs) is a source of uncertainty. This probably resulted in underestimates of the HIs associated with exposure to surface soil and sludge at the Shipyard Area. However, cancer is considered a more sensitive endpoint and oral and dermal cancer slope factors (CSFs) are available for carcinogenic PAHs.

- There is uncertainty associated with the sampling location MPT-24-SS06 where the maximum concentrations for the PAHs were detected. The sample was collected at an approximate location of the northern end of the former target range backstop. The samples was located in a sandy area adjacent to a paved road and an area where vehicles are commonly parked. Five PAHs were detected in the sample designated as the duplicate to surface soil sample MPT-24-SS06, but were not detected in the sample designated as the environmental sample.

- The lack of inhalation RfDs for the HHCPCs in surface soil and sludge is another source of uncertainty which probably resulted in underestimates of the HIs associated with exposure to surface soil and sludge at the Shipyard Area. Furthermore, no reference concentration was available for 1,1-dichloroethene, which probably resulted in an underestimate of the HI associated with exposure to groundwater at the Shipyard Area.

- Some uncertainty is associated with the representativeness of the groundwater data collected to complete the risk evaluation at the Shipyard Area. Generally, because the low-flow method was used,

turbidity in the unfiltered groundwater samples was minimal. However, the possibility exists that analytical data from some of the unfiltered samples may falsely indicate higher concentrations for inorganic concentrations as a result of suspended solids.

- The arsenic CSF is a source of uncertainty in the HHRA for the Shipyard Area SWMUs. Concentrations of arsenic tend to be present in surface soil and groundwater samples collected at NAVSTA Mayport at concentrations that suggest it is potentially a significant contributor to excess lifetime cancer risk. 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 $\mu g/\ell$). 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 non-linear dose-response curve (Goyer, 1991). In the Tseng et al. study, the normal detoxification pathways were probably overwhelmed (saturated); this, coupled with an underestimate of exposure, may have resulted in an overestimate of cancer risk. Therefore, cancer risk for the Shipyard Area may be overestimated. Based on the uncertainties associated with the arsenic CSF, risk management guidance (USEPA, 1988c) suggests that cancer risk may in be up to 10-fold lower than predicted.

- 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.

4.3.6 Remedial Goal Options RGOs are presented in tables for potential media cleanup levels, as required by USEPA Region IV and FDEP guidance. RGOs are a ratio of a chemical's site-specific risk for aggregate residential exposure (child and adult receptors) for a media pathway (i.e., incidental ingestion, dermal contact, and inhalation of particulates) and the chemical's exposure point concentration at designated excess lifetime cancer risk levels of $1x10^{-4}$, $1x10^{-5}$, and $1x10^{-6}$ and hazard quotients of 0.1, 1, and 3 (USEPA, 1995b). The future residential scenario is used for RGOs because it represents the most restrictive site usage.

Potential media cleanup levels have been identified for HHCPCs whose EPCs exceed Federal standards or State standards and guidance values, or that have associated cancer risks greater than $1x10^{-6}$ or HQs greater than 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 Corrective Measures Study (CMS) and within the CMS itself. Background screening concentrations and CRDLs/CRQLs are also included to provide perspective.

4.3.6.1 **Surface Soil** Potential medium cleanup levels have been identified for the future resident under the assumption that the Shipyard Area will be developed for residential use. It is unlikely that the Shipyard Area will be developed for residential use in the future; therefore, RGOs based on future residential use may be inappropriate. Where RGOs exceed maximum detected concentrations no action is necessary to achieve a risk level of $1x10^{-6}$ under current and future industrial land use. Table 4-30 presents RGOs for a hypothetical future resident exposure to surface soil (i.e., ingestion, dermal contact, and inhalation) at the Shipyard Area. The total cancer risks to the hypothetical future residential exposure is associated with benzo(a)pyrene, dibenz(a,h)anthracene, arsenic, and beryllium exceed $1x10^{-6}$. EPCs for benzo(a)pyrene, dibenz(a,h)anthracene, arsenic, and beryllium exceeded their respective Florida Soil Cleanup Goals (residential scenario).

The inclusion of arsenic and beryllium in the RGO table is not intended to be a statement that remediation of these chemicals is necessary. Arsenic was detected in 16 of 70 surface soil samples at concentrations less than the Florida Soil Clean-up Goal (0.7 mg/kg). The RGO for arsenic is less than the Florida Soil Clean-up Goal and CRDL/CRQL, which suggests that remediation to the RGO may not be required or confirmable using current analytical technologies. Beryllium was detected in 56 of 71 surface soil samples at concentrations less than the Florida Soil Clean-up Goal (0.26 mg/kg). The RGO for beryllium is less than the Florida Soil Clean-up Goal and CRDL/CRQL, which suggest that remediation to the RGO may not be required or confirmable using current analytical technologies.

4.3.6.2 **Sludge** None of the ELCRs or HIs associated with exposure to sludge exceeds the USEPA target cancer risk range or target HI. Furthermore, none of the total cancer risks or HIs associated with individual chemicals exceeds FDEP's target cancer risk of $1x10^{-6}$ or target HI of 1. However, the EPCs of benzo(a)pyrene and arsenic exceed their corresponding Florida soil cleanup goals (residential scenario). Therefore, RGOs for these chemicals are presented in Table 4-31.

4.3.6.3 **Groundwater** Potential medium cleanup levels have been identified for the hypothetical future resident under the assumption that the Shipyard Area will be developed for residential use. However, it is unlikely that the Shipyard Area will be developed for residential use in the future; therefore, RGOs based on future residential use may be inappropriate. Table 4-32 presents RGOs for future resident exposure to contaminants in unfiltered groundwater (ingestion as drinking water and inhalation of volatiles) at the Shipyard Area. The total cancer risks to the adult resident associated with 1,1-dichloroethene and arsenic exceed $1x10^{-6}$. The HI associated with groundwater exceeds the USEPA target HI of 1; therefore, RGOs are presented for the HHCPCs (antimony, arsenic, iron, and manganese) whose total HQs for the adult resident exceed 0.1. The EPCs of antimony, iron, manganese, and sodium exceed their Florida Groundwater Guidance Concentrations.

1,1-Dichloroethene was detected in groundwater samples at concentrations less than the Federal maximum contaminant level (MCL) and the Florida Guidance Concentration. In addition, the RGOs for 1,1-dichloroethene are less than the CRDL/CRQL; therefore, remediation of 1,1-dichloroethene may not be required or technically feasible and confirmed using current analytical technologies. There

Table 4-30
Summary of Remedial Goal Options for the Shipyard Area
Surface Soil, Future Land Use

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

Chemical	Range of Detected Concentrations	Exposure Point Concentration[1]	Excess Lifetime Cancer Risk Range[2]			Hazard Quotient Risk Range[3]			Florida Soil Cleanup Goal[4]	Florida Leaching Value[5]	Background Screening Concentration	CRDL-/CRQL
			10^{-4}	10^{-5}	10^{-6}	0.1	1	10				
Surface Soil (µg/kg)												
Future Land Use, Resident												
Benzo(a)pyrene	24 - 2,272.5	380	NR	NR	69	NA	NA	NA	100	NG	NA	200
Dibenz(a,h)anthracene	44 - 632.5	376	NR	NR	69	NA	NA	NA	100	NG	NA	200
Arsenic	200 - 13,900	1,700	NR	NR	380	NA	NA	NA	700	NC	ND	2,000
Beryllium	50 - 1,900	220	NR	NR	40	NA	NA	NA	200	NC	160	1,000

[1] Exposure point concentrations (EPCs) for surface soil are presented in Table 4-26
[2] NA in these columns indicates that the chemical is not associated with a cancer risk greater than 1×10^{-6}.
[3] NA in these columns indicates that the chemical is not associated with a hazard index greater than 1.
[4] The Florida soil cleanup goals (September 29, 1995) are identified in Appendix D-6 to this report.
[5] The Florida Leaching Values (September 29, 1995) are identified in Appendix D-6 to this report.
[6] Background screening concentrations are presented in Table D-1-1 of Appendix D-1 to the RCRA Facility Investigation General Information Report.

Notes: RCRA = Resource Conservation and Recovery Act.
SWMU = solid waste management unit.
CRDL = contract-required detection limit.
CRQL = contract-required quantitation limit.
µg/kg = micrograms per kilogram.
NR = the remedial goal option exceeds the EPC; no action is necessary to achieve this risk level.
NG = not detected in groundwater.
NA = not applicable.
NC = not calculated.
ND = not detected in any background samples.

Table 4-31
Summary of Remedial Goal Options for the Shipyard Area
Sludge, Current Land Use

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

Chemical	Range of Detected Concentrations	Exposure Point Concentration[1]	Excess Lifetime Cancer Risk Range[2]			Hazard Quotient Risk Range[3]			Florida Soil Cleanup Goals[4]	Background Screening Concentration[5]	CRDL/-CRQL
			10^{-4}	10^{-5}	10^{-6}	0.1	1	10			
Sludge (µg/kg)											
Current Land Use											
Benzo(a)pyrene	99.5 - 250	250	NA	NA	NA	NA	NA	NA	100	NA	200
Arsenic	310 - 1,200	960	NA	NA	NA	NA	NA	NA	700	ND	2,000

[1] Exposure point concentrations for sludge are presented in Table 4-27.
[2] NA in these columns indicates that the chemical is not associated with a cancer risk greater than 1×10^{-6}.
[3] NA in these columns indicates that the chemical is not associated with a hazard index greater than 1.
[4] The Florida soil cleanup goals (September 29, 1995) are identified in Appendix D-6 to this report.
[5] Background screening concentrations for surface soil are presented in Table D-1-1 of Appendix D-1 to the RCRA Facility Investigation General Information Report.

Notes: RCRA = Resource Conservation and Recovery Act.
SWMUs = solid waste management units.
µg/kg = micrograms per kilogram.
CRDL = contract-required detection limit.
CRQL = contract-required quantitation limit.
NA = not applicable.
ND = not detected in any background samples.

Table 4-32
Summary of Remedial Goal Options for the Shipyard Area
Unfiltered Groundwater, Future Land Use

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

Chemical	Range of Detected Concentrations	Exposure Point Concentration[1]	Excess Lifetime Cancer Risk Range[2]			Hazard Quotient Risk Range[3]			Federal MCL[4]	Florida Guidance Concentration[5]	Background Screening Concentration	CRDL/ CRQL
			10^{-4}	10^{-5}	10^{-6}	0.1	1	10				
Groundwater (μg/ℓ)												
Future Land Use, Adult Resident												
1,1-Dichloroethene	2 - 5	2.7	NR	1.3	0.13	NA	NA	NA	7	7	NA	10
Antimony	7.9 - 50.2	10.7	NA	NA	NA	1.5	NR	NR	6	6	ND	60
Arsenic	0.7 - 102	47	5.7	0.57	0.06	1.1	10.9	NR	50	50	8.6	10
Iron	51.9 - 9,040	9,040	NA	NA	NA	1,089	NR	NR	NS	300	1,404	100
Manganese	3.4 - 701	290	NA	NA	NA	18.1	181	NR	NS	50	198.6	15
Sodium	5,320 - 5,370,000	4,828,276	NA	NA	NA	NA	NA	NA	NS	160,000	1,397,710	5,000

[1] Exposure point concentrations (EPCs) for groundwater are presented in Table 4-28.
[2] NA in these columns indicates that the chemical is not associated with a cancer risk greater than 1×10^{-6}.
[3] NA in these columns indicates that the chemical is not associated with a hazard index greater than 1.
[4] The Federal MCLs (May 1995) are identified in Table D-1-3 of Appendix D to the Resource Conservation and Recovery Act (RCRA) facility investigation (RFI) General Information Report (GIR).
[5] The Florida Guidance Concentrations (June 1994) are identified in Table D-1-3 of Appendix D to the (RFI) GIR.

Notes: RCRA = Resource Conservation and Recovery Act.
SWMUs = solid waste management units.
MCL = maximum contaminant level.
CRDL = contract-required detection limit micrograms per liter.
CRQL = contract-required quantitation limits.
μg/ℓ = micrograms per liter.
NR = the remedial goal option exceeds the EPC; no action is necessary to achieve this risk level.
NA = not applicable.
ND = not detected.
NS = no standard or guideline available.

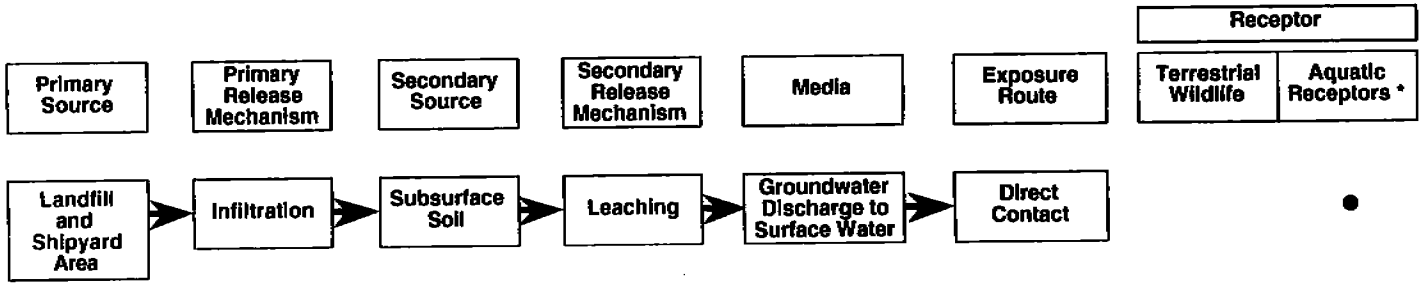
does not appear to be a numerical pattern for the distribution of organic compounds in groundwater samples collected from the surficial aquifer (Subsection 4.2.5).

Inclusion of antimony, arsenic, and manganese in the RGO table is not intended to be a statement that remediation of these chemicals is necessary. The RGO for antimony is less than the Federal MCL and Florida Guidance Concentration, as well as the CRDL/CRQL. Thus, remediation to the RGO for antimony may not be required or confirmable using current analytical technologies. Arsenic was detected in 13 of 17 groundwater samples at concentrations less than the Federal and State drinking water standard of 50 $\mu g/\ell$. The RGOs for arsenic are all below the Federal MCL, Florida Guidance Concentration, and the background screening concentration. In addition, all but one of the RGOs for arsenic are less than the CRDL/CRQL. Therefore, remediation to the RGOs for arsenic may not be required or confirmable using current analytical techniques.

Manganese was detected in 10 of 24 groundwater samples at concentrations less than the Florida Guidance Concentration of 50 $\mu g/\ell$. The RGO associated with an HQ of 0.1 for manganese is less than the Florida Guidance Concentration, which suggests that remediation to this RGO may not be required. The distribution of inorganic analytes detected in groundwater samples collected from the surficial aquifer appears to be random (Subsection 4.2.5).

4.4 ECOLOGICAL ASSESSMENT FOR THE SHIPYARD AREA (SWMUs 1, 23, 24, 25, 44, and 45). The subsections below describe the results of the ecological risk assessment (ERA) for the Shipyard Area (SWMUs 1, 23, 24, 25, 44, and 45). Anecdotal evidence suggests SWMU 1, Landfill A, was located approximately 600 feet to the south of the entrance to the Mayport Turning Basin. Results from surface geophysics, soil borings, and laboratory analysis of environmental samples do not confirm the existence of Landfill A at this location. SWMU 23 (JSI) and the two SWMUs at the domestic Wastewater Treatment Plant (FOWTP) (SWMU 44, Wastewater Treatment Facility Clarifiers 1 and 2, and SWMU 45, Wastewater Treatment Facility Sludge Drying Beds) occupy part of what was previously believed to be Landfill A. SWMU 24 (NFSI) and SWMU 25 (AMI) have been added because of their proximity to SWMU 1 and the similarity of ship repair activities among SWMUs 23, 24, and 25. The ERA for SWMU 1 and the adjacent SWMUs will be conducted as a single comprehensive effort. These SWMUs are collectively referred to as the Shipyard Area. The ERA was completed according to the methodology described in Section 2.4 of the GIR (ABB-ES, 1995a), including selection of 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 evaluated in the assessment are summarized in a Site Conceptual Model (Figure 4-20). Exposure pathways at the Shipyard Area are limited to groundwater. Exposure pathways evaluated for aquatic receptors include direct contact with the groundwater as it discharges into surface water. Exposures associated with potential contamination in surface soil to terrestrial receptors were not evaluated. Terrestrial ecological receptors are not expected to occur in the vicinity of the Shipyard Area because the majority of the site is paved with asphalt or concrete and is located in an industrialized area.



NOTES:
SWMU = Solid waste management unit
RCRA = Resource Conservation and Recovery Act
* Aquatic recepors include invertebrates, plants, algae, amphibians, and fish.

FIGURE 4-20
CONTAMINANT PATHWAY MODEL FOR ECOLOGICAL RECEPTORS, THE SHIPYARD AREA (SWMUs 1, 23, 24, 25, 44, AND 45)

RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

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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). Analytes detected in groundwater at the Shipyard Area are screened as ECPCs because aquatic receptors in the St. Johns River may be exposed to chemicals in groundwater as it discharges through the benthic zone to surface water.

The monitoring well system installed at the Shipyard Area to examine potential contamination to the groundwater is described in Subsection 4.2.4. The locations of the 24 monitoring wells are shown on Plates 1 2. A summary of the results of the analyses of unfiltered samples from the monitoring wells at the Shipyard Area are summarized in Table 4-33. 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 into 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 4-33 provides a summary of the analytical results, including the frequency of detection, range of detected concentrations, and mean of detected concentrations. In addition, the summary tables include the screening background concentrations and the Florida surface water quality standards for Class III marine waters (FAC 62-302), which were used to screen ECPCs. For the analytes selected as ECPCs, maximum and average exposure point concentrations are calculated.

Calcium, magnesium, and sodium were not included in the screening process because they are naturally occurring nutrients.

Thirteen of 24 analytes detected in groundwater samples collected from the Shipyard Area were selected as ECPCs. The 13 analytes include three VOCs (1,1-Dichloroethane, 1,1-Dichloroethene, and 1,2-Dichloroethene), one SVOC (bis[2-Ethylhexyl]phthalate), and nine inorganics (arsenic, barium, copper, cyanide, iron, lead, manganese, nickel, and vanadium).

4.4.2 Exposure Assessment The exposure assessment estimates the magnitude of contaminant exposures for aquatic receptors (fish, amphibians, plants, and invertebrates) associated with ECPCs in groundwater.

Aquatic receptors in the St. Johns River may be exposed to contamination in groundwater from the Shipyard Area 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 maximum and average exposure point concentrations of ECPCs in groundwater (Table 4-33) are the concentrations to which the receptors would be exposed in the St. Johns River. Maximum and average exposure concentrations were predicted based on the 95 percent upper confidence limit (UCL) or the maximum detected concentration, and the arithmetic mean. This worst case scenario assumes no reduction in contaminant concentrations as a result of transport from the Shipyard Area to the St. Johns River and no dilution once the contaminant is discharged.

Table 4-33
Selection of Ecological Chemicals of Potential Concern
Groundwater Associated with the Shipyard Area

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

Analyte	Frequency of Detection[1]	Range of Detected Concentrations	Mean of Detected Concentrations[3]	Screening Reference Concentration[4]	Florida Surface Water Quality Standards[5]	Analyte ECPC? (Yes/No)[6]	95% UCL[7]	Arithmetic Mean[8]	Exposure Point Concentrations	
									Maximum[9]	Average[10]
Volatiles (µg/ℓ)										
1,1-Dichloroethane	2/24	7 - 8	7.5	ND	NA	Yes	3.3	2.9	3.3	2.9
1,1-Dichloroethene	2/24	2 - 5	3.5	ND	3.2	Yes	2.7	2.6	2.7	2.6
1,2-Dichloroethene (total)	2/24	1 - 5	3	ND	NA	Yes	2.8	2.5	2.8	2.5
Trichlorofluoromethane	1/24	[2]1.75	1.8	ND	NA	No[11]				
Semivolatiles (µg/ℓ)										
Di-n-butylphthalate	1/24	[2]3	3	ND	NA	No[11]				
bis(2-Ethylhexyl) phthalate	5/24	2 - 5	4	NA	NA	Yes	5.1	4.8	5	4.8
Inorganics (µg/ℓ)										
Antimony	5/19	7.9 - 50.2	21.1	ND	4,300	No[12]				
Arsenic	17/24	0.7 - 102	20.8	8.6	50	Yes	47	15	47	15
Barium	24/24	1.3 - 73.5	17.8	39.6	NA	Yes	36.6	17.8	36.6	17.8
Calcium	24/24	[2]24,450 - 254,000	103,523	220,462	NA	No[13]				
Chromium	3/24	[2]1.375 - 2.8	2	10.4	NA	No[14]				
Copper	2/24	[2]4.55 - 108	56.3	2.8	2.9	Yes	2.7	5.2	2.7	2.7
Cyanide	7/24	[2]1.225 - 7.7	3.3	1.9	1	Yes	1.9	1.5	1.9	1.5
Iron	15/24	51.9 - 9,040	1,833	1,404	300	Yes	19,732	1,149	9,040	1,149
Lead	8/24	0.5 - 8	4.6	3.6	5.6	Yes	3.8	1.7	3.8	1.7
Magnesium	24/24	2,530 - 680,000	96,159	186,914	NA	No[13]				
Manganese	24/24	3.4 - 701	109	198.6	NA	Yes	290	109	290	109
Mercury	1/24	0.15	0.15	0.16	0.025	No[11,14]				

See notes at end of table.

Table 4-33 (Continued)
Selection of Ecological Chemicals of Potential Concern
Groundwater Associated with the Shipyard Area

RCRA Facility Investigation, Group III 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)[6]	95% UCL[7]	Arithmetic Mean[8]	Exposure Point Concentrations	
									Maximum[9]	Average[10]
Nickel	6/24	6.4 - 10	7.9	ND	8.3	Yes	4.9	4.1	4.9	4.1
Selenium	5/24	[2]0.425 - 5.6	1.8	9.2	71	No[12,14]				
Silver	1/24	1.4	1.4	7.4	0.05	No[11,14]				
Sodium	24/24	5,320 - 5,370,000	748,178	1,397,710	NA	No[13]				
Vanadium	23/24	2.4 - 57	12	9.4	NA	Yes	18.5	11.6	18.5	11.6
Zinc	1/24	180	180	40	86	No[11]				

[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: 01G00101 through 01G00103, 01G00201, 01G00301, 23G00101 through 23G00701 (with duplicates at 23G00101D and 23G00401D), 24G00101, 44G00101 through 44G00103, 44G00201, 44G00301, 45G00101 through 45G00103 (with a duplicate at 45G00102D), and 45G00201 (with a duplicate at 45G00201D).
[2] A value indicated by an asterisk is the average of the detected concentration in a sample and its duplicate. For non-detect values, one-half of the Contract Required Quantitation Limit or Contract Required Detection Limit (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] The screening reference concentration is equal to two times the average background concentration for inorganics and is equal to the average background concentration for organics. The average concentrations of analytes detected in the background locations are listed in Table D-1-1 of Appendix D of the RFI General Information Report (GIR) ABB Environmental Services, Inc. (ABB-ES, 1995a).
[5] Florida Department of Environmental Protection, 62-302 (1995 Version); surface water quality standards for Class III marine waters.
[6] Ecological chemical of potential concern (ECPC) selection process is depicted in the GIR (ABB-ES, 1995a).
[7] The 95 percent upper confidence limit (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 (1991b).
[8] The arithmetic mean of all concentrations assigns a value of one-half of the CRQL for organics and Method Detection Limit (MDL) for inorganics to all non-detects.
[9] The maximum exposure concentration is equal to the 95 percent UCL or the maximum detected concentration, whichever is less.
[10] The average exposure concentration is equal to the arithmetic mean or the maximum detected concentration, whichever is less.
[11] Detected in less than five percent of the samples.
[12] Maximum detected concentration is less than the Florida surface water quality standard.
[13] Analyte is an essential nutrient and is not present at toxic levels.
[14] Maximum detected concentration is less than two times the average background concentration for inorganics.

Notes: RCRA = Resource Conservation and Recovery Act.
SWMUs = solid waste management units.
ECPC = ecological chemical of potential concern.
% = percent.
$\mu g/\ell$ = micrograms per liter.
ND = Not detected in the background samples.
NA = Not available.
RFI = Resource Conservati9on and Recovery Act (RCRA) facility investigation.

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 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 Aquatic Information Retrieval (ACQUIRE) database (Appendix E-1). Table 4-34 provides a summary of the toxicity testing information available from the ACQUIRE search and a range of concentrations associated with lethal and sublethal effects to fish, invertebrates, mollusks, amphibians, and aquatic plants. For each ECPC, the effect concentrations from ACQUIRE 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 Shipyard Area as it discharges into the St. Johns River. It is expected that groundwater from the Shipyard Area is currently discharging into the St. Johns River. The predicted maximum and average concentrations of groundwater ECPCs in the St. Johns River are compared with the State of Florida surface water quality standards for Class III marine water (FAC 62-302), the Ambient Water Quality Criteria (AWQC) (USEPA, 1986b), and the lowest reported adverse effect concentration in ACQUIRE in Table 4-35. For comparison purposes, the concentrations of analytes in surface water samples collected from the St Johns River (MPT-B-SW13, MPT-B-SW14, and MPT-B-SW15) and the background monitoring wells are also presented in Table 4-35. Currently, benchmark comparison values are not available to assess the potential aquatic toxicity of 1,2-dichloroethene and barium in the marine environment.

Maximum exposure point concentrations are less than the lowest toxicity benchmark concentrations for all ECPCs in groundwater, with the exception of cyanide and iron. The information below presents a characterization of potential risk to benthic and aquatic receptors resulting from exposure to cyanide and iron at maximum concentrations detected in groundwater samples from the Shipyard Area.

Maximum and average exposure concentrations for cyanide in groundwater are 1.9 and 1.5 $\mu g/\ell$, respectively, these values slightly exceed the Florida surface water quality standard and Federal AWQC of 1.0 $\mu g/\ell$. However, the maximum exposure point concentration of cyanide at 1.9 $\mu g/\ell$ is within the range of concentrations detected in surface water samples collected from the St. Johns River (1.1 to 3.9 $\mu g/\ell$). Exceedance of the Florida surface water quality standard and the AWQC value suggests that aquatic organisms are at risk, however, the discharge of cyanide from groundwater to surface water would not result in an increase under the current conditions. Therefore, no incremental increase in risks to aquatic receptors associated with the discharge of groundwater from the Shipyard Area to the St. Johns River is expected to occur.

The maximum and average exposure concentrations for iron in groundwater (9,040 and 1,149 $\mu g/\ell$) exceed the Florida surface water quality standard of 300 $\mu g/\ell$ and the lowest reported adverse effect reported in ACQUIRE (dinoflagellate population growth) of 100 $\mu g/\ell$. The maximum detected concentration of iron in groundwater samples from the background monitoring wells is 3,540 $\mu g/\ell$, this concentration also exceeds the aquatic toxicity benchmarks. Iron in groundwater is not expected to present a risk for aquatic receptors in the St. Johns River for the following reasons:

Table 4-34
Results of ACQUIRE Search for Toxicity of Groundwater ECPCs at the Shipyard Area to Aquatic Receptors (Number of Studies / Range of Concentrations)

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

Analyte	Fish		Invertebrates		Mollusks		Algae and Aquatic Plants
	Lethal	Sublethal	Lethal	Sublethal	Lethal	Sublethal	Sublethal
Volatiles ($\mu g/\ell$)							
1,1-Dichloroethane	1 / 2.3 x 10^5	--	6 / 3.64 x 10^4 to 9 x 10^5	1 / 4 x 10^5	--	--	--
1,1-Dichloroethene	2 / 2.5 x 10^5	--	--	--	--	--	--
1,2-Dichloroethene	--	--	--	--	--	--	--
Semivolatiles ($\mu g/\ell$)							
bis(2-Ethylhexyl)phthalate	1 / 5.5 x 10^5	--	2 / 3 x 10^5 to 1 x 10^6	--	--	--	1 / 3.1 x 10^6
Inorganics ($\mu g/\ell$)[2]							
Arsenic	--	--	--	--	--	--	1 / 2.5 x 10^4
Barium	--	--	--	--	--	--	--
Cyanide	--	--	--	--	--	--	--
Iron	--	--	1 / 3.3 x 10^4	--	1 / 1 x 10^6	--	13 / 100 to 1 x 10^5
Manganese	--	--	--	--	--	3 / 2 x 10^4	--
Vanadium	--	--	--	--	--	--	28 / 5 x 10^2 to 5 x 10^5

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

Notes: AQUIRE = Aquatic Information Retrieval.
ECPC = ecological chemical of potential concern.
RCRA = Resource Conservation and Recovery Act.
SWMUs = solid waste management units.
$\mu g/\ell$ = micrograms per liter.
-- = toxicity information not available.

Table 4-35
Comparison of Shipyard Area Groundwater ECPC Exposure Concentrations (in St. Johns River) with Toxicity Benchmarks

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

Analyte	Maximum / Average Exposure Point Concentrations for Groundwater[1]	Florida Surface Water Quality Standard[2]	Federal AWQC[3]	ACQUIRE[4] (Lowest reported adverse effect concentration)	Concentrations Detected in Surface Water of St. Johns River[5]	Concentrations Detected in Background Groundwater Samples[6]	Result
Volatiles (µg/ℓ)							
1,1-Dichloroethane	3.3 / 2.9	NA	NA	36,400 / brine shrimp immobilization	ND	ND	
1,1-Dichloroethene	2.7 / 2.6	3.2	NA	250,000 / minnow and silverside LC_{50}	ND	ND	
1,2-Dichloroethene	2.8 / 2.5	NA	NA	NA	ND	ND	Benchmark not available
Semivolatiles (µg/ℓ)							
bis(2-Ethylhexyl)phthalate	5 / 4.8	NA	NA	300,000 / copepoda LC_{50}	ND	5.5 - 7	
Inorganics (µg/ℓ)							
Arsenic	47 /15	50	NA	25,000 / diatom population growth	ND	0.6 - 14.3	
Barium	36.6 / 17.8	NA	NA	NA	6.6 - 8.7	0.66 - 75.5	Benchmark not available
Copper	2.7 / 2.7	2.9	2.9	NS	4.1 - 5	1.4	
Cyanide	1.9 / 1.5	1.0	1.0	NA	1.1 - 3.9	0.95	Benchmark exceeded
Iron	9,040 / 1,149	300	NA	100 / Dinoflagellate population growth	ND	15.4 - 3,540	Benchmark exceeded
Lead	3.8 / 1.7	5.6	8.5	NS	ND	1.4 - 2.5	
Manganese	290 / 109	NA	NA	20,000 / mollusk oxygen consumption	ND	3.5 - 397	

See notes at end of table.

Table 4-35 (Continued)
Comparison of Shipyard Area Groundwater ECPC Exposure Concentrations (in St. Johns River) with Toxicity Benchmarks

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

Analyte	Maximum / Average Exposure Point Concentrations for Groundwater[1]	Florida Surface Water Quality Standard[2]	Federal AWQC[3]	ACQUIRE[4] (Lowest reported adverse effect concentration)	Concentrations Detected in Surface Water of St. Johns River[5]	Concentrations Detected in Background Groundwater Samples[6]	Result
Inorganics (mg/kg) (Continued)							
Nickel	4.9 / 4.1	8.3	8.3	NS	ND	ND	
Vanadium	18.5 / 11.6	NA	NA	500 / algae population growth	1.8	2.2 - 9.4	

[1] From Table 4-33.
[2] Florida Department of Environmental Protection, 62-302 (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 4-34.
[5] Range of detected concentrations in background surface water samples collected from the St. Johns River (MPT-B-SW13 through MPT-B-SW15) (General Information Report [GIR], ABB Environmental Services, Inc. [ABB-ES], 1995a).
[6] Background sample locations include 01MW001, 08MW005S, 0BMW001S, 0SMW001R, 8MW5S, MPT-1-MW1-1, MPT-S-1-S, S-1, 08MW005I, 08MW005D, and 0BMW001D. The concentrations of organic and inorganic analytes detected in background groundwater samples are listed in Table D-1-1 of Appendix D of the GIR (ABB-ES, 1995a).

Notes: ECPC = ecological chemical of potential concern.
RCRA = Resource Conservation and Recovery Act.
SWMUs = solid waste management units.
AWQC = ambient water quality criteria.
ACQUIRE = Aquatic Information Retrieval.
$\mu g/\ell$ - micrograms per liter.
NA = not available.
ND = not detected.
LC = lethal concentration.
NS = not sampled.

- It is expected that advection, dispersion, mixing, and retardation, will occur as the groundwater from the Shipyard Area is discharged into surface water, and actual exposure concentrations will be lower than the benchmarks.

- The distribution of iron increasing with depth and not detected along the coastline is consistent with findings by the U.S. Geological Survey (USGS) that the water within the upper part of the surficial aquifer is fresh and becomes increasing brackish with depth (Franks, 1980). Groundwater samples collected at the Shipyard Area SWMUs contained iron at concentrations ranging from 55.9 to 603 $\mu g/\ell$ for shallow wells, 51.9 to 894 $\mu g/\ell$ for the intermediate wells, and 3,170 to 9,040 $\mu g/\ell$ for the deep wells. Iron was not detected in groundwater samples collected from shallow water table zone monitoring wells located within 400 feet from the St. Johns River.

- 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 iron. Only the dissolved phase of the metal is considered to be biologically available and potentially toxic to aquatic receptors (USEPA, 1993a).

In summary, groundwater discharges from the Shipyard Area through the benthic zone into the surface water of the St. Johns River do not pose a risk to aquatic receptors. Chapter 7.0 provides a summary of the conclusions and recommendations of the ERA for the Shipyard Area.

<u>4.4.5 Uncertainty Analyses</u> A number of uncertainties and assumptions are inherent in the ERA process. General ERA uncertainties are discussed in the NAVSTA Mayport GIR (ABB-ES, 1995a). Specific uncertainties associated with the evaluation of risks from potential groundwater contamination at the Shipyard Area include the following:

- Aquatic toxicity benchmarks are not available for 1,2-Dichloroethene and barium resulting in a possible underestimate of risks.

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

- The presumption of no risks for aquatic receptors resulting from potential exposures of iron in groundwater assumes that advection, dispersion, mixing, and retardation will occur as the groundwater from the Shipyard Area is discharged into surface water, and actual exposure concentrations in the river will be lower than the benchmarks.

5.0 SWMU 17 - THE CARBONACEOUS FUEL BOILER

SWMU 17, the Carbonaceous Fuel Boiler (CFB), is located in the north central part of NAVSTA Mayport. This Chapter provides a description and history of SWMU 17, results and interpretation of environmental sample analyses, and human health/ecological risk assessments.

5.1 SWMU 17 DESCRIPTION. SWMU 17, the CFB, is centrally located in NAVSTA Mayport, south of the Mayport Turning Basin, approximately 350 feet west of Echo pier (Figure 1-2). Until mid-1994, the CFB produced steam for ships berthed at Mayport Turning Basin. The CFB complex consists of Building 1430 that houses tipping bins (temporary holding bins for domestic, solid waste), a furnace, an asphalt road and parking lot which surrounds Building 1430, and four underground storage tanks (USTs) that contain waste oil or diesel fuel. The USTs are located on the western side of Building 1430.

The CFB was a furnace fueled by domestic solid waste from both the NAVSTA Mayport activity and the station's housing area. The CFB also burnt waste oil collected from various locations on-station, as well as waste oil recovered from bilge water by the Oily Waste Treatment Plant. Combustion was typically augmented by diesel fuel (A.T. Kearney, 1989; ABB-ES, 1994b). Waste oil and diesel fuel are stored at the CFB in two 6,000-gallon capacity USTs and two 550-gallon capacity USTs, respectively. The 6,000-gallon capacity USTs are included in Group IV as SWMU 51 (Figure 5-1).

The CFB was contractor operated 24 hours a day from 1979 to mid-1994, at which time it was taken out of service. The CFB had a design capacity of 48 tons of burnable waste per day and had a typical loading rate of 42 to 45 tons per day (A.T. Kearney, Inc., 1989). Materials in the temporary holding bins were usually incinerated within 24 hours. Boiler blowdown, tipping floor runoff, and quench water were discharged into the sanitary sewer system (A.T. Kearney, Inc., 1989). The boiler's air emission control system includes a continuous blowdown for quenching ash and a fly-ash collector. Quenched ash (wet ash or bottom ash) was removed from the bottom of the furnace and placed in dumpsters. Fly ash (dry ash) was collected by a multi-cyclone and disposed of along with the quenched ash.

Approximately 6,260 cubic yards of quenched ash and fly ash were generated yearly (A.T. Kearney, Inc., 1989). Ash materials were taken to the station's landfill(s) until early 1985 (A.T. Kearney, Inc., 1989), and subsequently to a landfill located off-station.

The RFA report identified the CFB as an SWMU because fly ash was being stored on the north side of the CFB building and a small amount of ash was noted to be piled on the asphalt near a roll-off container (A.T. Kearney, Inc., 1989). Quenched ash and fly ash were typically stored in roll-off dumpsters. These dumpsters were staged on the eastern, northern, and western sides of Building 1430.

Quenched ash has been tested in the past and was not determined to exceed Federal regulatory criteria for hazardous waste using the extraction procedure toxicity test (EP Tox) testing method (A.T. Kearney, Inc., 1989). However, the fly ash

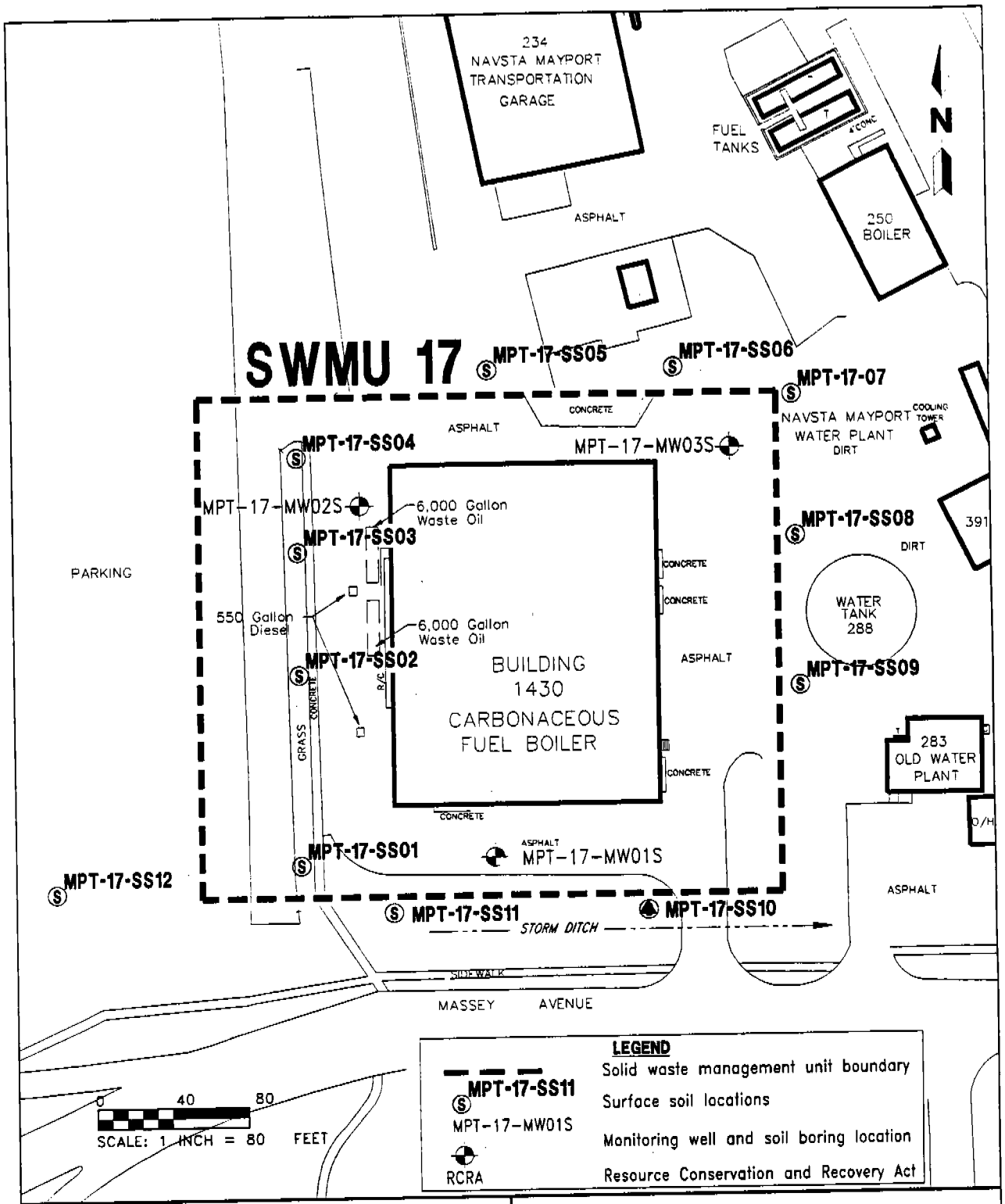

FIGURE 5-1
SITE MAP AND SAMPLE LOCATIONS, SWMU 17, CARBONACEOUS FUEL BOILER

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has been found to exceed Federal regulatory criteria for lead and cadmium using the EP Tox testing method (A.T. Kearney, Inc., 1989). Air emissions from the CFB are permitted under FDEP Permit No. A019-17873 and air emissions monitoring has been conducted by the City of Jacksonville, Bio-Environmental Services Department (A.T. Kearney, Inc., 1989).

5.1.1 Previous Investigations at SWMU 17 No previous environmental data has been collected at this location. A geotechnical investigation was conducted to evaluate subsurface conditions for design of the building foundation. Subsurface materials identified at the location of the geotechnical soil borings indicate the presence of poorly-graded sands with shell fragments.

5.1.2 RFI Field Activities RFI field activities were conducted at SWMU 17 from March through October 1995. Field activities included the installation of groundwater monitoring wells, the collection of surface and subsurface soil samples, and groundwater samples. Sampling procedures, background sampling information, and other installationwide sampling information are provided in the NAVSTA Mayport GIR (ABB-ES, 1995a), and in the NAVSTA Mayport RFI Workplan Addendum 5 (ABB-ES, 1994a).

Soil Sampling Fifteen surface soil samples (land surface to a depth of 1 foot bls) and two duplicate samples were collected (Figure 5-1). Three subsurface soil samples (4 to 5 feet bls), and one duplicate were collected along with the three surface soil samples, at borings drilled for the installation of three shallow monitoring wells MPT-17-MW01S, MPT-17-MW02S, and MPT-17-MW03S (Figure 5-1).

Surface and subsurface soil samples were collected using a decontaminated stainless-steel hand auger. From the hand auger, the aliquot for analysis of VOCs was transferred directly to a sample container with a Teflon™ lid to reduce the potential for volatilization. The soil remaining in the hand auger was transferred to a glass bowl using a stainless-steel spoon. Aliquots of the sample for analysis of SVOCs, pesticides, PCBs, and inorganics were then homogenized and transferred to appropriate sample containers. Samples were placed in coolers refrigerated with ice, and sent overnight under chain-of-custody protocol to an offsite laboratory for analysis.

In addition, one subsurface soil sample was collected during drilling of the monitoring wells and analyzed for general physical and chemical properties. This soil sample was collected at a location selected in the field to assess the variability of soil properties in the vicinity of the CFB Area. The physical and chemical properties include bulk density, CEC, TOC, soil pH, particle-size distribution, and moisture content. Properties of porosity and soil sorptive capacity were derived from these basic physical and chemical properties. These parameters will be used to assess contaminant fate and transport and human health and ecological risk and will provide fundamental engineering data to support development of potential corrective measures. The results of the geotechnical analyses are discussed in Chapter 3.0, Subsection 3.2.5.

Monitoring Well Installation Shallow monitoring wells (MPT-17-MW01S, MPT-17-MW02S, and MPT-17-MW03S) were installed in the water table zone of the surficial aquifer during the 1995 field investigation (Plate 1 and Figure 5-1). Monitoring well installation and construction were accomplished as described in the NAVSTA Mayport RFI Workplan (ABB-ES, 1991), the RFI Workplan Addendum 5 (ABB-ES, 1994a)

and the NAVSTA Mayport GIR (ABB-ES, 1995a). Boring logs and diagrams of the monitoring wells are provided in Appendix A of the NAVSTA Mayport GIR (ABB-ES, 1995a).

Groundwater Sampling Four groundwater samples were collected from SWMU 17 (Figure 5-1). Three of the samples were collected from shallow monitoring wells MPT-17-MW01S, MPT-17-MW02S, and MPT-17-MW03S. One duplicate groundwater sample was collected from shallow monitoring well MPT-17-MW01S.

Groundwater sampling was accomplished as described in Paragraph 2.1.4.2 of the NAVSTA Mayport GIR (ABB-ES, 1995a). The groundwater sample collection method was low-flow sampling which is less than or equal to 1 liter per minute. Prior to groundwater sample collection, the monitoring well was purged from the top of the water column using a peristaltic pump to remove stagnant water; limiting the suspension of silts and clays. Purging was complete when a minimum of three well volumes of water were removed and seven selected groundwater parameters (dissolved oxygen, oxidation potential, pH, salinity, specific conductance, temperature, and turbidity) were stable. This process ensured good conductance between the well and the surrounding matrix. Purging continued until a turbidity of 5 NTUs or less was achieved.

The groundwater samples were collected using a peristaltic pump and disposable Teflon™ tubing. The samples were collected before the material came in contact with the pump. The samples were collected by pumping water at less than 1 liter per minute from the middle of the well screen interval. Samples for inorganics, SVOCs, pesticides, and PCBs were collected first. VOCs were collected last with the sampler preventing agitation of the water in the monitoring well by slowly pulling the Teflon™ tubing out of the well and carefully transferring the contents of the tube to a VOC vial with a Teflon™ septa cap for shipment to the offsite laboratory. Groundwater samples were placed in a cooler, refrigerated with ice, and sent overnight under chain-of-custody protocol to an offsite laboratory for analysis.

Laboratory Analysis Soil and groundwater samples were analyzed for target analytes selected from the Groundwater Monitoring List contained in Appendix IX, 40 CFR, Part 264, and USEPA CLP TCL and TAL, including VOCs, SVOCs, pesticides, PCBs, metals, and cyanide. The analysis was conducted using methods contained in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, USEPA SW-846 (USEPA, 1986a). In addition, the groundwater samples were analyzed for indicator parameters (total dissolved solids, chloride, alkalinity, hardness, sulfate, sulfide, total kjeldahl nitrogen, ammonia, nitrate/nitrite, phosphorus, total organic carbon, color and pH). The duplicate groundwater sample was not analyzed for indicator parameters.

5.2 FINDING. The subsections below present the nature and distribution of target analytes detected in surface soil, subsurface soil, and groundwater samples collected at SWMU 17. Surface soil is presented and discussed first, followed by findings for the subsurface soil samples. Groundwater is discussed last to assess whether or not target analytes have migrated beyond the SWMU boundary.

5.2.1 Surface Soil Assessment Fifteen surface soil samples and two duplicates were collected at SWMU 17 (Figure 5-1). Tables 5-1 and 5-2 present the concentrations of organic and inorganic analytes, respectively, detected in the surface soil samples. Table 5-3 lists statistics for each chemical that was detected. Table 5-4 compares the detected concentration of the target analytes with background screening values and benchmarks.

5.2.1.1 Organics Organic analytes detected in 15 surface soil samples consist of 4 VOCs, 14 SVOCs, 6 pesticides, and 1 PCB. Two SVOCs were detected at concentrations that exceed both the FDEP soil cleanup goals and the USEPA Region III RBCs for residential exposure (Table 5-4).

Benzo(a)pyrene was detected in 3 of 15 samples (MPT-17-SS02, MPT-17-SS01, and MPT-17-SS08) and exceeded FDEP and USEPA benchmarks for residential exposure in 2 samples. Dibenz(a,h)anthracene was detected in one sample (MPT-17-SS08) at a concentration exceeding both the FDEP soil cleanup goal and USEPA Region III RBC for residential exposure. Benzo(a)pyrene and dibenz(a,h)anthracene were both detected at concentrations less than the FDEP industrial soil cleanup goal, which is 500 μg/kg for both chemicals.

The source for benzo(a)pyrene and dibenz(a,h)anthracene and the other polynuclear aromatic hydrocarbons (i.e., naphthalene, phenanthrene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, and benzo(g,h,i)perylene) detected in surface soil samples from the Carbonaceous Fuel Boiler site is likely residues from vehicle exhaust and/or engine fluids.

5.2.1.2 Inorganics Sixteen inorganic analytes were detected in surface soil samples (Table 5-2). Arsenic and beryllium were detected at concentrations that exceed benchmarks for residential exposure (Table 5-4).

Arsenic was detected in 14 of the 15 surface soil samples and the 2 associated duplicate samples. Residential exposures for the FDEP soil cleanup goal was exceeded in eight samples and the USEPA Region III RBC in 13 samples. Arsenic was not detected at concentrations that exceed the FDEP industrial soil cleanup goal of 3.1 mg/kg.

Beryllium was detected in 10 of the 15 samples and exceeded the USEPA Region III RBC for residential exposure in 2 of the samples. Beryllium was not detected at concentrations exceeding the FDEP residential soil cleanup goal.

Because the land features at NAVSTA Mayport are influenced by the deposition of dredge material from Mayport Turning Basin, it cannot be determined whether the concentrations of arsenic and beryllium are related to a release at SWMU 17, or are residual concentrations from the dredge material.

5.2.2 Subsurface Soil Assessment Three subsurface soil samples and a duplicate were collected during the installation of monitoring wells MPT-17-MW01S, MPT-17-MW02S, and MPT-17-MW03S (Figure 5-1). Tables 5-5 and 5-6 present the concentrations of the organic and inorganic analytes detected in each sample. Table 5-7 lists statistics for each chemical detected, Table 5-8 shows how detected concentrations compare to background screening and benchmark concentrations.

Table 5-1
Organic Analytes Detected in Surface Soil Samples at SWMU 17

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

Analytical Batch Number:	M8801	M8801	M8801	M8801	M8801	R9955	R9955
Sample Location:	MPT-17-SS01	MPT-17-SS01	MPT-17-SS02	MPT-17-SS03	MPT-17-SS04	MPT-17-SS05	MPT-17-SS06
Sample Number:	17S00101	17S00101DUP	17S00201	17S00301	17S00401	17S00501	17S00601
Date Sampled:	11-APR-95	11-APR-95	11-APR-95	11-APR-95	11-APR-95	24-MAY-95	24-MAY-95
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
Volatiles (µg/kg)							
Carbon disulfide	2 J	--	--	--	--	3 J	--
2-Butanone	--	--	--	--	--	11	--
Toluene	4 J	3 J	--	--	--	--	1 J
Xylenes (total)	10	8	--	--	5 J	2 J	3 J
Semivolatiles (µg/kg)							
Naphthalene	--	--	--	--	--	--	--
Phenanthrene	--	--	--	--	--	95 J	--
Di-n-Butylphthalate	--	--	--	--	--	--	--
Fluoranthene	--	--	150 J	--	--	180 J	--
Pyrene	--	--	120 J	--	--	110 J	95 J
Benzo(a)anthracene	--	--	--	--	--	--	--
Chrysene	--	--	120 J	--	--	--	--
bis(2-Ethylhexyl) phthalate	--	--	140 J	--	--	--	--
Benzo(b)fluoranthene	--	--	120 J	--	--	--	--
Benzo(k)fluoranthene	--	--	120 J	--	--	--	--
Benzo(a)pyrene	--	--	110 J	--	--	--	--
Indeno (1,2,3-cd) pyrene	--	--	94 J	--	--	--	--
Dibenz(a,h)anthracene	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	--	--	120 J	--	--	--	--
Pesticides/PCBs (µg/kg)							
Dieldrin	--	--	11	--	--	--	--
4,4'-DDE	240	110	23 J	450	250	20	3.2
Endrin	--	--	--	--	--	--	--
4,4'-DDD	--	--	--	--	--	12	1.5 J
4,4'-DDT	54	31	25	93	77	--	--
Chlordane	--	--	--	--	--	33	41
Aroclor-1260	--	--	--	--	--	--	--

See notes at end of table.

Table 5-1 (Continued)
Organic Analytes Detected in Surface Soil Samples at SWMU 17

RCRA Facility Investigation, Group III SWMUs
US Naval Station
Mayport, Florida

Analytical Batch Number:	M8801	M8801	M8801	M8801	M8801	M8801
Sample Location:	MPT-17-SS07	MPT-17-SS08	MPT-17-SS09	MPT-17-SS09	MPT-17-SS10	MPT-17-SS11
Sample Number:	17S00701	17S00801	17S00901	17S00901D	17S01001	17S01101
Date Sampled:	11-APR-95	11-APR-95	11-APR-95	11-APR-95	11-APR-95	11-APR-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Volatiles (µg/kg)						
Carbon disulfide	--	--	--	--	--	--
2-Butanone	--	--	--	--	--	--
Toluene	--	--	--	--	1 J	--
Xylenes (total)	2 J	--	--	2 J	6	1 J
Semivolatiles (ug/kg)						
Naphthalene	--	--	--	--	--	--
Phenanthrene	--	--	41 J	41 J	--	--
Di-n-Butylphthalate	44 J	--	39 J	--	--	20 J
Fluoranthene	71 J	360 J	47 J	45 J	--	--
Pyrene	56 J	280 J	--	--	--	--
Benzo (a) anthracene	37 J	170 J	--	--	--	--
Chrysene	59 J	290 J	--	--	--	--
bis(2-Ethylhexyl)phthalate	--	110 J	51 J	39 J	--	--
Benzo(b)fluoranthene	61 J	280 J	--	--	--	--
Benzo(k)fluoranthene	79 J	370 J	--	--	--	--
Benzo(a)pyrene	54 J	270 J	--	--	--	--
Indeno(1,2,3-cd)pyrene	63 J	280 J	--	--	--	--
Dibenz(a,h)anthracene	--	140 J	--	--	--	--
Benzo(g,h,i)perylene	77 J	360 J	--	--	--	--
Pesticides/PCBs (µg/kg)						
Dieldrin	--	--	--	--	--	--
4,4-DDE	2.6 J	--	3.4	5.4	1	2.2
Endrin	--	--	--	--	--	--
4,4-DDD	--	--	--	--	--	--
4,4-DDT	4.2 J	--	1.3 J	1.6	1.2 J	1.3 J
Chlordane	180	--	9.2 J	13 J	--	--
Aroclor-1260	--	--	31	18	--	--

See notes at end of table.

Table 5-1 (Continued)
Organic Analytes Detected in Surface Soil Samples at SWMU 17

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

Analytical Batch Number:	M8801	R9955	R9955	R9955
Location Number:	MPT-17-SS12	MPT-17-MW01S	MPT-17-MW02S	MPT-17-MW03S
Sample Number:	17S01201	17S01301	17S01401	17S01501
Date Sampled:	11-APR-95	23-MAY-95	23-MAY-95	24-MAY-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1
Volatiles (µg/kg)				
Carbon disulfide	1 J	--	--	--
2-Butanone	--	--	--	6 J
Toluene	1 J	--	--	--
Xylenes (total)	--	1 J	2 J	2 J
Semivolatiles (µg/kg)				
Naphthalene	--	--	--	210 J
Phenanthrene	--	--	--	--
Di-n-Butylphthalate	--	--	--	--
Fluoranthene	--	--	--	--
Pyrene	--	--	--	--
Benzo(a)anthracene	--	--	--	--
Chrysene	--	--	--	--
bis(2-Ethylhexyl) phthalate	--	--	--	--
Benzo(b)fluoranthene	--	--	--	--
Benzo(k)fluoranthene	--	--	--	--
Benzo(a)pyrene	--	--	--	--
Indeno (1,2,3-cd) pyrene	--	--	--	--
Dibenz(a,h)anthracene	--	--	--	--
Benzo(g,h,i)perylene	--	--	--	--
Pesticides/PCBs (µg/kg)				
Dieldrin	--	--	--	--
4,4'-DDE	520	9.2	200	--
Endrin	--	--	--	3.5
4,4'-DDD	--	--	4.4 J	--
4,4'-DDT	220	3.7	130	--
Chlordane	--	27	30 J	27 J
Aroclor-1260	--	--	--	--

See notes at end of table.

Table 5-1 (Continued)
Organic Analytes Detected in Surface Soil Samples at SWMU 17

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

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
DUP = duplicate.
ft bls = feet below land surface.
μg/kg = microgram per kilogram.
-- = concentration of analyte, if present, was less than the detection limit.
J = estimated value.
PCB = polychlorinated biphenyls.
4,4'-DDE = dichlorodiphenyldichloroethene.
4,4'-DDT = dichlorodiphenyltrichloroethane.
4,4'-DDD = dichlorodiphenyldichloroethane.

Table 5-2
Inorganic Analytes Detected in Surface Soil Samples at SWMU 17

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

Analytical Batch Number:	M8801	M8801	M8801	M8801	M8801	R9955	R9955	M8801	M8801
Sample Location:	MPT-17SS01	MPT-17-SS01	MPT-17-SS02	MPT-17-SS03	MPT-17-SS04	MPT-17-SS05	MPT-17-SS06	MPT-17-SS07	MPT-17-SS08
Sample Number:	17S00101	17S00101DUP	17S00201	17S00301	17S00401	17S00501	17S00601	17S00701	17S00801
Date Sampled:	11-APR-95	11-APR-95	11-APR-95	11-APR-95	11-APR-95	24-MAY-95	24-MAY-95	11-APR-95	11-APR-95
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
Inorganics (mg/kg)									
Antimony	--	0.99 J	1.6 J	0.87 J	2.1 J	--	--	1 J	2.1 J
Arsenic	1.4 J	0.73 J	0.64 J	0.81 J	0.83 J	0.9 J	0.74 J	1.8 J	0.98 J
Barium	25 J	17.4 J	21.8 J	13.1 J	25.4 J	8.4 J	9.7 J	12.5 J	21.3 J
Beryllium	0.07 J	0.07 J	0.04 J	0.04 J	--	0.13 J	0.15 J	0.07 J	0.04 J
Cadmium	--	--	--	--	--	0.32 J	--	0.77 J	1.2
Chromium	6.7 J	6.8 J	20.2 J	6.7 J	7.8 J	7.1	7	7.6 J	11.2 J
Cobalt	--	--	--	1.6 J	1.1 J	--	--	--	1.1 J
Copper	12.4 J	8.8 J	14.3 J	9.1 J	18.4 J	4.4 J	--	14.6 J	16.8 J
Lead	110	118	252	144	104	42.3	16.2	29.8 J	19.3 J
Mercury	--	0.04 J	0.03 J	0.04 J	0.04 J	--	--	0.03 J	0.14
Nickel	--	--	10.4	--	--	--	--	--	--
Selenium	0.26 J	--	--	--	--	0.11 J	--	--	--
Tin	3.5 J	69	3.2 J	--	2.1 J	--	--	2.3 J	2 J
Vanadium	7.2 J	7.1 J	7.3 J	10.1 J	8.2 J	6.2 J	8.3 J	12.2 J	13.5 J
Zinc	56.2	52	91.2	55.6	86.8	32	16	73.5	65.8
Cyanide	--	--	0.25 J	--	--	0.09 J	--	--	--

See notes at end of table.

Table 5-2 (Continued)
Inorganic Analytes Detected in Surface Soil Samples at SWMU 17

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

Analytical Batch Number:	M8801	M8801	M8801	M8801	M8801	R9955	R9955	R9955
Sample Location:	MPT-17-SS09	MPT-17-SS09	MPT-17-SS10	MPT-17-SS11	MPT-17-SS12	MPT-17-MW01S	MPT-17-MW02S	MPT-17-MW03S
Sample Number:	17S00901	17S00901DUP	17S01001	17S01101	17S01201	17S01301	17S01401	17S01501
Date Sampled:	11-APR-95	11-APR-95	11-APR-95	11-APR-95	11-APR-95	23-MAY-95	23-MAY-95	24-MAY-95
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
Inorganics (mg/kg)								
Antimony	2.5 J	--	0.91 J	--	--	--	--	--
Arsenic	0.39 J	0.57 J	0.33 J	0.4 J	--	0.39 J	0.54 J	0.73 J
Barium	14.5 J	15.5 J	14.3 J	5.1 J	5 J	14.2 J	12.9 J	14 J
Beryllium	--	--	--	--	--	0.15 J	0.17 J	0.17 J
Cadmium	--	0.68 J	--	--	--	--	--	--
Chromium	4.9 J	5 J	5.6 J	3 J	1.9 J	6.4	7.5	7.1
Cobalt	--	--	--	1.1 J	--	--	0.96 J	0.88 J
Copper	13.5 J	12.9 J	8.4 J	3.4 J	1.6 J	--	5.7	--
Lead	13.2 J	15.6 J	10.5 J	8.6	64.3 J	6.8	8.1	5
Mercury	0.05 J	0.05 J	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--
Selenium	--	0.3 J	0.44 J	--	--	--	--	--
Tin	6.1 J	--	2.3 J	2 J	--	3.6 J	--	--
Vanadium	3.5 J	3.1 J	3 J	3.1 J	7.3 J	6.8 J	8.1 J	8.5 J
Zinc	41.5	42.6	26.6	12.1	32.9	5.6	10.8	7.5
Cyanide	--	--	--	--	--	--	--	0.09 J

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
S = shallow monitoring well.
DUP = duplicate.
ft bls = feet below land surface.
mg/kg = milligram per kilogram.
J = estimated value.
-- = concentration of analyte, if present, was less than the detection limit.

Table 5-3
Summary of Analytes Detected in Surface Soil Samples at SWMU 17

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

Analyte	Frequency of Detection[1]	Minimum Detected Concentration	Maximum Detected Concentration	Mean of Detected Concentrations[3]	Range of Instrument Reporting Limits	Sample with Maximum Concentration
Volatiles (µg/kg)						
2-Butanone	2/15	6	11	9	10 - 11	17S00501
Carbon disulfide	3/15	1	3	2	5 - 6	17S00501
Toluene	4/15	1	[2]3.5	2	5 - 6	17S00101
Xylenes (total)	11/15	1	[2]9	3	5 - 6	17S00101
Semivolatiles (µg/kg)						
Benzo(a)anthracene	2/15	37	170	104	340 - 1,800	17S00801
Benzo(a)pyrene	3/15	54	270	145	340 - 1,800	17S00801
Benzo(b)fluoranthene	3/15	61	280	154	340 - 1,800	17S00801
Benzo(g,h,i)perylene	3/15	77	360	186	340 - 1,800	17S00801
Benzo(k)fluoranthene	3/15	79	370	190	340 - 1,800	17S00801
Chrysene	3/15	59	290	156	340 - 1,800	17S00801
Dibenz(a,h)anthracene	1/15	140	140	140	340 -1,800	17S00801
Di-n-butylphthalate	3/15	20	[2]199.5	88	710 - 1,900	17S00701
Fluoranthene	5/15	[2]46	360	161	340 - 1,800	17S00801
Indeno (1,2,3-cd) pyrene	3/15	63	280	146	340 - 1,800	17S00801
Naphthalene	1/15	210	210	210	340 - 1,900	17S01501
Phenanthrene	2/15	[2]41	95	68	340 - 1,900	17S00501
Pyrene	5/15	56	280	132	340 - 1,800	17S00801
bis(2-Ethylhexyl) phthalate	3/15	[2]45	140	98	340 - 1,800	17S00201

See notes at end of table.

Table 5-3 (Continued)
Summary of Analytes Detected in Surface Soil Samples at SWMU 17

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

Analyte	Frequency of Detection[1]	Minimum Detected Concentration	Maximum Detected Concentration	Mean of Detected Concentrations[3]	Range of Instrument Reporting Limits	Sample with Maximum Concentration
Pesticides/PCBs (µg/kg)						
4,4'-DDD	3/15	1.5	12	6	1.3 - 71	17S00501
4,4'-DDE	13/15	1	520	127.7	0.74 - 3.7	17S01201
4,4'-DDT	11/15	1.2	220	54.5	1.4 - 7.3	17S01201
Aroclor-1260	1/15	[2]24.5	[2]24.5	25	17 - 930	17S00901
Chlordane	7/15	[2]11.1	180	49.9	6.9 - 370	17S00701
Dieldrin	1/15	11	11	11	0.69 - 37	17S00201
Endrin	1/15	3.5	3.5	3.5	1.3 - 71	17S01501
Inorganics (mg/kg)						
Antimony	8/15	[2]0.7	2.1	1.34	0.43 - 1.1	17S00901
Arsenic	14/15	0.33	1.8	0.76	0.16 - 0.16	17S00701
Barium	15/15	5	25.4	14.3	N/A	17S00401
Beryllium	10/15	0.04	0.17	0.1	0.03 - 0.03	17S01401
Cadmium	4/15	0.32	1.2	0.69	0.26 - 0.54	17S00801
Chromium	15/15	1.9	20.2	7.4	N/A	17S00201
Cobalt	6/15	0.88	1.6	1.12	0.67 - 1	17S00301
Copper	12/15	1.6	18.4	10	1.7 - 3.5	17S00401
Cyanide	3/15	0.09	0.25	0.14	0.05 - 0.11	17S00201
Lead	15/15	5	252	56	N/A	17S00201
Mercury	7/15	[2]0.0275	0.14	0.05	0.03 - 0.06	17S00801
Nickel	1/15	10.4	10.4	10.4	1 - 4	17S00201
Selenium	4/15	0.11	0.44	0.24	0.11 - 0.25	17S01001

See notes at end of table.

Table 5-3 (Continued)
Summary of Analytes Detected in Surface Soil Samples at SWMU 17

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

Analyte	Frequency of Detection[1]	Minimum Detected Concentration	Maximum Detected Concentration	Mean of Detected Concentrations[3]	Range of Instrument Reporting Limits	Sample with Maximum Concentration
Inorganics (mg/kg) (Continued)						
Tin	9/15	2	36.25*	6.4	1.6 - 3	17S00101D
Vanadium	15/15	3	13.5	7.5	N/A	17S00801
Zinc	15/15	5.6	91.2	40.8	N/A	17S00201

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed (excluding rejected samples).
[2] Indicates the value is the average of the detected concentrations in a sample and its duplicate. For nondetected values, 1/2 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: SWMUs = solid waste management units.
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 = milligram per kilogram.
N/A = not applicable.

Table 5-4
Comparison of Concentrations Detected in Surface Soil Samples at SWMU 17 to Background Screening and Benchmark Concentrations

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

Analyte	Maximum Concentration	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
Volatiles (µg/kg)							
2-Butanone	11	NSC	N/A	2,200,000	0/15	4,700,000	0/15
Carbon disulfide	3	NSC	N/A	5,200	0/15	780,000	0/15
Toluene	[1]3.5	NSC	N/A	520,000	0/15	1,600,000	0/15
Xylenes (total)	[1]9	NSC	N/A	13,000,000	0/15	16,000,000	0/15
Semivolatiles (µg/kg)							
Benzo(a)anthracene	170	NSC	N/A	1,400	0/15	880	0/15
Benzo(a)pyrene	270	NSC	N/A	100	2/15	88	2/15
Benzo(b)fluoranthene	280	NSC	N/A	1,400	0/15	880	0/15
Benzo(g,h,i)perylene	360	NSC	N/A	14,000	0/15	NSC	N/A
Benzo(k)fluoranthene	370	NSC	N/A	14,000	0/15	8,800	0/15
Dibenz(a,h)anthracene	140	NSC	N/A	100	1/15	88	1/15
Chrysene	290	NSC	N/A	140,000	0/15	88,000	0/15
Di-n-butylphthalate	[1]199.5	NSC	N/A	7,300,000	0/15	780,000	0/15
Fluoranthene	360	NSC	N/A	2,900,000	0/15	310,000	0/15
Indeno (1,2,3-cd) pyrene	280	NSC	N/A	1,400	0/15	880	0/15
Naphthalene	210	NSC	N/A	1,300,000	0/15	310,000	0/15
Phenanthrene	95	NSC	N/A	1,700,000	0/15	NSC	N/A
Pyrene	280	NSC	N/A	2,200,000	0/15	230,000	0/15
bis(2-Ethylhexyl) phthalate	140	NSC	N/A	48,000	0/15	46,000	0/15

See notes at end of table.

Table 5-4 (Continued)
Comparison of Concentrations Detected in Surface Soil Samples at SWMU 17 to Background Screening and Benchmark Concentrations

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

Analyte	Maximum Concentration	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
Pesticides/PCBs (µg/kg)							
4,4'-DDE	520	2.3	11/15	3,000	0/15	1,900	0/15
4,4'-DDD	12	NSC	N/A	4,500	0/15	2,700	0/15
4,4'-DDT	220	NSC	N/A	3,100	0/15	1,900	0/15
Aroclor-1260	[1]24.5	NSC	N/A	900	0/15	83	0/15
Chlordane	180	NSC	N/A	800	0/15	490	0/15
Dieldrin	11	NSC	N/A	70	0/15	40	0/15
Endrin	3.5	NSC	N/A	23,000	0/15	2,300	0/15
Inorganics (mg/kg)							
Antimony	2.1	NSC	N/A	26	0/15	3.1	0/15
Arsenic	1.8	NSC	N/A	[5]0.8	8/15	0.37	13/15
Barium	25.4	5.6	13/15	5,200	0/15	550	0/15
Beryllium	0.17	0.16	2/15	0.2	0/15	0.15	2/15
Cadmium	1.2	2	0/15	37	0/15	3.9	0/15
Chromium	20.2	2.6	14/15	290	0/15	39	0/15
Cobalt	1.6	NSC	N/A	4,700	0/15	470	0/15
Copper	18.4	2.2	11/15	[6]2,900	0/15	290	0/15
Cyanide	0.25	NSC	N/A	1,600	0/15	160	0/15
Lead	252	NSC	N/A	500	0/15	400	0/15
Mercury	0.14	NSC	N/A	23	0/15	2.3	0/15
Nickel	10.4	NSC	N/A	1,500	0/15	160	0/15
Selenium	0.44	1.36	0/15	390	0/15	39	0/15

See notes at end of table.

Table 5-4 (Continued)
Comparison of Concentrations Detected in Surface Soil Samples at SWMU 17 to Background Screening and Benchmark Concentrations

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

Analyte	Maximum Concentration	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
Inorganics (mg/kg) (Continued)							
Tin	[1]36.25	NSC	N/A	44,000	0/15	4,700	0/15
Vanadium	13.5	4	12/15	490	0/15	55	0/15
Zinc	91.2	2.6	15/15	23,000	0/15	2,300	0/15

[1] Indicates the value is the average of the detected concentrations in a sample and its duplicate. For nondetected values, 1/2 the contract-required quantitation limits/contract-required detection limit is used as a surrogate.
[2] The background screening concentration is twice the mean of detected concentrations for inorganic analytes. Values for organic chemicals are the mean of the concentration detected in the background surface soil samples and are provided only as reference.
[3] Soil Cleanup Goals for Florida, September 29, 1995 (residential for surface soil).
[4] The value is from U.S. Environmental Protection Agency Region III Risk-based Concentrations tables dated February 9, 1995. Concentrations for non-carcinogenic risks are adjusted to a Hazard Index of 0.1.
[5] Soil Cleanup Goals for Florida, January 19, 1996 (residential for surface soil).
[6] Soil Cleanup Goals for the Military Sites, April 5, 1995 (residential for surface soil.)

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
µg/kg = micrograms per kilogram.
mg/kg = milligrams per kilogram.
NSC - no screening concentration.
N/A - not applicable.
PCBs = polychlorinated biphenyls.
4,4'-DDD = dichlorodiphenyldichloroethane.
4,4'-DDT = dichlorodiphenyltrichloroethane.
4,4'-DDE = dichlorodiphenyldichloroethene.

Table 5-5
Organic Analytes Detected in Subsurface Soil Samples at SWMU 17

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

Analytical Batch Number:	R9955	R9955	R9955	R9955
Sample Location:	MPT-17-MW01S	MPT-17-MW02S	MPT-17-MW03S	MPT-17-MW03S
Sample Number:	17B01305	17B01405	17B01505	17B01505DUP
Date Sampled:	23-MAY-95	23-MAY-95	24-MAY-95	24-MAY-95
Sample Depth (ft bls):	4 to 5	4 to 5	4 to 5	4 to 5
Volatiles (µg/kg)				
Carbon disulfide	–	–	3 J	–
2-Butanone	–	–	–	6 J
Toluene	–	2 J	–	–
Xylenes (total)	2 J	2 J	3 J	2 J
Semivolatiles (µg/kg)				
2-Methylnaphthalene	–	–	170 J	130 J
Pesticides/PCBs (µg/kg)				
4,4'-DDE	–	16	–	180
Endrin	–	–	200	–
4,4'-DDD	–	4.7	53	65
4,4'-DDT	–	4.1	–	–

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
DUP = duplicate.
ft bls = feet below land surface.
µg/kg = microgram per kilogram.
– = concentration of analyte, if present, was less than the detection limit.
J = estimated value.
PCB = polychlorinated biphenyls.
4,4'-DDE = dichlorodiphenyldichloroethene.
4,4'-DDD = dichlorodiphenyldichloroethane.
4,4'-DDT = dichlorodiphenyltrichloroethane.

Table 5-6
Inorganic Analytes Detected in Subsurface Soil Samples at SWMU 17

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

Analytical Batch Number:	R9955	R9955	R9955	R9955
Sample Location:	MPT-17-MW01S	MPT-17-MW02S	MPT-17-MW03S	MPT-17-MW03S
Sample Number:	17B01305	17B01405	17B01505	17B01505DUP
Date Sampled:	23-MAY-95	23-MAY-95	24-MAY-95	24-MAY-95
Sample Depth (ft bls):	4 to 5	4 to 5	4 to 5	4 to 5
Inorganics (mg/kg)				
Arsenic	0.38 J	0.26 J	0.2 J	0.31 J
Barium	4.2 J	2.7 J	2.9 J	3 J
Beryllium	0.09 J	--	--	--
Chromium	--	--	3.1	4.1
Lead	2.1	3.3	6.2	6.6
Mercury	--	--	0.03 J	--
Tin	--	4 J	5.3 J	--
Vanadium	4.4 J	1.1 J	2.9 J	3.2 J
Zinc	4.7	9.5	4.7 J	5
Cyanide	0.09 J	1.8	1.2	0.13 J

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
DUP = duplicate.
ft bls = feet below land surface.
mg/kg = milligram per kilogram.
J = estimated value.
-- = concentration of analyte, if present, was less than the detection limit.

Table 5-7
Summary of Analytes Detected in Subsurface Soil Samples at SWMU 17

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

Analyte	Frequency of Detection[1]	Minimum Detected Concentration	Maximum Detected Concentration	Mean of Detected Concentrations[3]	Range of Instrument Reporting Limits	Sample with Maximum Concentration
Volatiles (µg/kg)						
2-Butanone	1/3	[2]6	[2]6	6	11 - 13	17B01505D
Carbon disulfide	1/3	[2]3	[2]3	3	6 - 6	17B01505
Toluene	1/3	2	2	2	6 - 6	17B01405
Xylenes (total)	3/3	2	[2]2.5	2	N/A	17B01505
Semivolatiles (µg/kg)						
2-Methylnaphthalene	1/3	[2]150	[2]150	150	730 - 850	17B01505
Pesticides/PCBs (µg/kg)						
4,4'-DDD	2/3	4.7	[2]59	31.9	1.5 - 1.5	17B01505D
4,4'-DDE	2/3	16	[2]90.425	53	0.75 - 0.75	17B01505D
4,4'-DDT	1/3	4.1	4.1	4.1	1.5 - 3.15	17B01405
Endrin	1/3	[2]100.775	[2]100.775	101	1.5 - 1.7	17B01505
Inorganics (mg/kg)						
Arsenic	3/3	[2]0.255	0.38	0.3	N/A	17B01305
Barium	3/3	2.7	4.2	3.3	N/A	17B01305
Beryllium	1/3	0.09	0.09	0.09	0.07 - 0.08	17B01305
Chromium	1/3	[2]3.6	[2]3.6	3.6	0.63 - 1.4	17B01505D
Cyanide	3/3	0.09	1.8	0.85	N/A	17B01405
Lead	3/3	2.1	[2]6.4	3.9	N/A	17B01505D
Mercury	1/3	[2]0.0225	[2]0.0225	0.02	0.03 - 0.04	17B01505
Tin	2/3	[2]3.45	4	3.7	3 - 3	17B01505
Vanadium	3/3	1.1	4.4	2.9	N/A	17B01305
Zinc	3/3	4.7	9.5	6.3	N/A	17B01405

See notes at end of table

Table 5-7 (Continued)
Summary of Analytes Detected in Subsurface Soil Samples at SWMU 17

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

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed (excluding rejected samples).
[2] Indicates the value is the average of the detected concentrations in a sample and its duplicate. For nondetected values, 1/2 the contract-required quantitation limits/contract-required detection limit 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: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
µg/kg = micrograms per kilogram.
N/A = not applicable.
PCBs = polychlorinated biphenyls.
4,4'-DDD = dichlorodiphenyldichloroethane.
4,4'-DDE = dichlorodiphenyldichloroethene.
4,4'-DDT = dichlorodiphenyltrichloroethane.
mg/kg = milligram per kilogram.

Table 5-8
Comparison of Concentrations Detected in Subsurface Soil Samples at SWMU 17 to Background Screening and Benchmark Concentrations

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

Analyte	Maximum Concentration	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
Volatiles (µg/kg)							
2-Butanone	[1]6	NSC	N/A	15,000,000	0/3	50,000,000	0/3
Carbon disulfide	[1]3	NSC	N/A	34,000	0/3	10,000,000	0/3
Toluene	2	NSC	N/A	3,500,000	0/3	20,500,000	0/3
Xylenes (total)	[1]2.5	NSC	N/A	92,000,000	0/3	50,000,000	0/3
Semivolatiles (µg/kg)							
2-Methylnaphthalene	[1]150	NSC	N/A	8,800,000	0/3	4,100,000	0/3
Pesticides/PCBs (µg/kg)							
4,4'-DDD	[2]59	NSC	N/A	17,000	0/3	12,000	0/3
4,4'-DDE	[2]90.425	3.5	2/3	11,000	0/3	8,500	0/3
4,4'-DDT	4.1	NSC	N/A	12,000	0/3	8,500	0/3
Endrin	[2]100.775	NSC	N/A	470,000	0/3	30,500	0/3
Inorganics (mg/kg)							
Arsenic	0.38	0.9	0/3	[5]3.7	0/3	1.65	0/3
Barium	4.2	7.2	0/3	84,000	0/3	7,000	0/3
Beryllium	0.09	0.14	0/3	1	0/3	0.65	0/3
Chromium	[2]3.6	3.4	1/3	430	0/3	500	0/3
Cyanide	1.8	0.66	2/3	40,000	0/3	2,050	0/3
Lead	[2]6.4	2.8	2/3	1,000	0/3	400	0/3
Mercury	[1]0.0225	0.06	0/3	480	0/3	30.5	0/3
Tin	4	5.4	0/3	670,000	0/3	50,000	0/3
Vanadium	4.4	3.2	1/3	4,800	0/3	700	0/3
Zinc	9.5	4.8	2/3	560,000	0/3	30,500	0/3

See notes at end of table

Table 5-8 (Continued)
Comparison of Concentrations Detected in Subsurface Soil Samples at SWMU 17 to Background Screening and Benchmark Concentrations

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

[1] Indicates the value is the average of the detected concentrations in a sample and its duplicate. For nondetected values, 1/2 the contract-required quantitation limits/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] Soil Cleanup Goals for Florida, September 29, 1995 (industrial for subsurface soil).
[4] The value is from U.S. Environmental Protection Agency Region III Risk-based Concentrations tables dated February 9, 1995. Concentrations for non-carcinogenic risks are adjusted to a Hazard Index of 0.1.
[5] Soil Cleanup Goals for Florida, January 19, 1996 (industrial for subsurface soil).

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
μg/kg = micrograms per kilogram.
NSC - no screening concentration.
N/A - not applicable.
PCBs = polychlorinated biphenyls.
4,4'-DDD = dichlorodiphenyldichloroethane.
4,4'-DDE = dichlorodiphenyldichloroethene.
4,4'-DDT = dichlorodiphenyltrichloroethane.
mg/kg = milligram per kilogram.

5.2.2.1 **Organics** Four VOCs, one SVOC, and four pesticides were detected in subsurface soil samples. None of these compounds were detected at concentrations that exceed the FDEP soil cleanup goals and the USEPA Region III RBCs for industrial exposure.

5.2.2.2 **Inorganics** Ten inorganic analytes were detected in subsurface soil samples. None of the inorganics were detected at concentrations that exceed the industrial soil exposures for either the FDEP soil cleanup goals or the USEPA Region III RBCs.

5.2.3 **Groundwater Assessment** Three groundwater samples and one duplicate sample were collected from the three monitoring wells at SWMU 17 (Plate 1 and Figure 5-1). Tables 5-9 and 5-10 present the concentrations of organic and inorganic analytes detected in each sample. Table 5-11 lists statistics for each chemical detected, and Table 5-12 compares detected concentrations to background screening and benchmark concentrations. The paragraphs below discuss analytical results for water quality indicator parameters and for organic and inorganic analytes that exceed benchmarks.

5.2.3.1 **Groundwater Quality** Analytical results for the water quality indicator parameters are provided in Appendix A. TDS ranged from 415 to 581; the secondary water quality standard for TDS is 500 mg/ℓ (FAC 62-520). A maximum value of 10,000 mg/ℓ is criterion used to classify groundwater in an aquifer as a Class G-I or G-II drinking water supply. The TDS results span the range of values used to classify water as fresh (0 to 1,000 mg/ℓ). TDS measured in groundwater samples collected from monitoring wells screened in the shallow surficial aquifer are within or slightly exceed the secondary standard for TDS and are within the criterion used to classify the groundwater as a G-I or G-II drinking water supply.

Concentrations of chloride detected in the groundwater samples ranged from 25.2 to 34.9 mg/ℓ; the secondary water quality standard for chloride is 250 mg/ℓ (FAC 62-520 Groundwater Classes, Standards and Exemptions). Chloride measured in groundwater samples collected from monitoring wells screened in the shallow zone of the surficial aquifer did not exceed this standard.

Color measured in the groundwater samples ranged from 30 to 100 APHA units. The standard for color is 15 APHA units, which was exceeded in groundwater samples collected from monitoring wells in the shallow zone of the surficial aquifer.

Sulfate, a common form of sulfur found in oxygenated systems, ranged from 6.5 to 75.1 mg/ℓ; the water quality standard for sulfate is 250 mg/ℓ (FAC 62-520). Sulfate measured in groundwater samples collected from monitoring wells screened in the shallow zone of the surficial aquifer did not exceed this standard.

Sulfide, a common form of sulfur reduced under anaerobic conditions, was measured at 1.0 to 4.0 mg/ℓ; currently, there are no standards under FAC 62-520 for this parameter. Hardness was measured at 371 to 462 mg/ℓ which suggests that the water is very hard (greater than 180 mg/ℓ; [Durfor and Becker, 1964]).

A summary of nutrients (ammonia-N [ammonia as nitrogen], nitrate/nitrite, phosphorous-P, and total Kjeldahl nitrogen) measured in the groundwater samples is provided in Appendix A.

Table 5-9
Organic Analytes Detected in Groundwater Samples at SWMU 17

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

Analytical Batch Number:	RA044	RA044
Sample Location:	MPT-17-MW01S	MPT-17-MW03S
Sample Number:	17G00101	17G00301
Date Sampled:	18-JUN-95	18-JUN-95
Semivolatiles (μg/ℓ)		
bis(2-Ethylhexyl)phthalate	3 J	8 J

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
S = shallow monitoring well.
μg/ℓ = microgram per liter.
J = estimated value.

Table 5-10
Inorganic Analytes Detected in Groundwater Samples at SWMU 17

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

Analytical Batch Number:	RA044	RA044	RA044	RA044
Sample Location:	MPT-17-MW01S	MPT-17-MW01S	MPT-17-MW02S	MPT-17-MW03S
Sample Number:	17G00101	17G00101DUP	17G00201	17G00301
Date Sampled:	18-JUN-95	18-JUN-95	18-JUN-95	18-JUN-95
Inorganics (μg/ℓ)				
Arsenic	3.3 J	3.1 J	2.1 J	0.7 J
Barium	16.8 J	16.9 J	21.9 J	10.6 J
Calcium	162,000	163,000	126,000	155,000
Cobalt	--	--	--	3.9 J
Copper	--	--	--	1.3 J
Iron	988	1,110	2,220	229
Magnesium	10,700	10,700	6,010	9,250
Manganese	294	295	221	172
Sodium	21,900	22,000	19,100	25,400
Vanadium	4.5 J	5.2 J	2.6 J	8.2 J

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
S = shallow monitoring well.
DUP = duplicate.
μg/ℓ = microgram per liter.
J = estimated value.
-- = concentration of analyte, if present, was less than the detection limit.

Table 5-11
Summary of Analytes Detected in Groundwater Samples at SWMU 17

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

Analyte	Frequency of Detection[1]	Minimum Detected Concentration	Maximum Detected Concentration	Mean of Detected Concentrations[3]	Range of Instrument Reporting Limits	Sample with Maximum Concentration
Semivolatiles (µg/ℓ)						
bis(2-Ethylhexyl) phthalate	2/3	[2]4	8	6	10 - 10	17G00301
Inorganics (µg/ℓ)						
Arsenic	3/3	0.7	[2]3.2	2	N/A	17G00101
Barium	3/3	10.6	21.9	16.5	N/A	17G00201
Calcium	3/3	126,000	[2]162,500	147,833	N/A	17G00101D
Cobalt	1/3	3.9	3.9	3.9	3.1 - 3.1	17G00301
Copper	1/3	1.3	1.3	1.3	1 - 1	17G00301
Iron	3/3	229	2,220	1,166	N/A	17G00201
Magnesium	3/3	6,010	[2]10,700	8,653	N/A	17G00101
Manganese	3/3	172	[2]294.5	229	N/A	17G00101D
Sodium	3/3	19,100	25,400	22,150	N/A	17G00301
Vanadium	3/3	2.6	8.2	5.2	N/A	17G00301
Water Quality Criteria (mg/ℓ)						
Alkalinity (reported as $CaCO_3$)	3/3	348	453	397	N/A	17G00301
Ammonia (reported as nitrogen)	3/3	0.4	11.5	4.5	N/A	17G00301
Chloride	3/3	25.2	34.9	29.6	N/A	17G00101
Hardness (reported as $CaCO_3$)	3/3	371	462	418	N/A	17G00101
Nitrate/Nitrite (reported as nitrogen)	1/3	0.1	0.1	0.1	0.1 - 0.1	17G00101
Phosphorous-Total (reported as phosphorous)	3/3	0.34	1.5	0.96	N/A	17G00301
Sulfate	3/3	6.5	75.1	35.7	N/A	17G00101
Sulfide	1/3	4	4	4	1 - 1	17G00301
Total Dissolved Solids	3/3	415	581	522	N/A	17G00101
Total Kjeldahl Nitrogen	3/3	0.7	12	4.9	N/A	17G00301

See notes at end of table.

Table 5-11 (Continued)
Summary of Analytes Detected in Groundwater Samples at SWMU 17

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

Analyte	Frequency of Detection[1]	Minimum Detected Concentration	Maximum Detected Concentration	Mean of Detected Concentrations[3]	Range of Instrument Reporting Limits	Sample with Maximum Concentration
Water Quality Criteria (mg/ℓ) Continued)						
Total organic carbon	3/3	10.8	41.8	21.5	N/A	17G00301
Color (Alpha units)	3/3	30	100	63	N/A	17G00301
pH (standard units)	3/3	6.96	7.24	7.14	N/A	17G00101

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed (excluding rejected samples).
[2] Indicates the value is the average of the detected concentrations in a sample and its duplicate. For nondetected values, 1/2 the contract-required quantitation limits/contract-required detection limit 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: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
μg/ℓ = micrograms per liter.
N/A - not applicable.
mg/ℓ = milligram per liter.
$CaCO_3$ = calcium carbonate.

Table 5-12
Comparison of Concentrations Detected in Groundwater Samples at SWMU 17 to Background Screening and Benchmark Concentrations

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

Analyte	Maximum Concentration	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
Semivolatiles (µg/ℓ)							
bis(2-Ethylhexyl) phthalate	8	NSC	N/A	6	1/3	4.8	1/3
Inorganics (µg/ℓ)							
Arsenic	[1]3.2	8.6	0/3	50	0/3	0.038	3/3
Barium	21.9	39.6	0/3	2,000	0/3	260	0/3
Calcium	[1]162,500	220,462	0/3	NSC	N/A	1,055,398	0/3
Cobalt	3.9	6.4	0/3	NSC	N/A	220	0/3
Copper	1.3	2.8	0/3	1,000	0/3	140	0/3
Iron	2,220	1,404	1/3	300	2/3	13,267	0/3
Magnesium	[1]10,700	186,914	0/3	NSC	N/A	118,807	0/3
Manganese	[1]294.5	198.6	2/3	50	3/3	18	3/3
Sodium	25,400	1,397,710	0/3	160,000	0/3	396,022	0/3
Vanadium	8.2	9.4	0/3	49	0/3	26	0/3
Water Quality Criteria (mg/ℓ)							
Alkalinity (reported as $CaCO_3$)	453	NSC	N/A	NSC	N/A	NSC	N/A
Ammonia (reported as nitrogen)	11.5	NSC	N/A	NSC	N/A	NSC	N/A
Chloride	34.9	NSC	N/A	NSC	N/A	NSC	N/A
Hardness (reported as $CaCO_3$)	462	NSC	N/A	NSC	N/A	NSC	N/A
Nitrate/Nitrite (reported as nitrogen)	0.1	NSC	N/A	NSC	N/A	NSC	N/A
Phosphorous- Total (reported as phosphorous)	1.5	NSC	N/A	NSC	N/A	NSC	N/A
Sulfate	75.1	NSC	N/A	NSC	N/A	NSC	N/A
Sulfide	4	NSC	N/A	NSC	N/A	NSC	N/A
Total Dissolved Solids	581	NSC	N/A	NSC	N/A	NSC	N/A

See notes at end of table

Table 5-12 (Continued)
Comparison of Concentrations Detected in Groundwater Samples at SWMU 17 to Background Screening and Benchmark Concentrations

RCRA Facility Investigation, Group III 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 Concen-tration
Water Quality Criteria (mg/ℓ) (Continued)							
Total Kjeldahl Nitrogen	12	NSC	N/A	NSC	N/A	NSC	N/A
Total organic carbon	41.8	NSC	N/A	NSC	N/A	NSC	N/A
Color (apha units)	100	NSC	N/A	NSC	N/A	NSC	N/A
pH (standard units)	7.24	NSC	N/A	NSC	N/A	NSC	N/A

[1] indicates the value is the average of the detected concentrations in a sample and its duplicate. For nondetected values, 1/2 the contract-required quantitation limits/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 value is from Florida Guidance Concentrations dated June 1994.
[4] The value is from U.S. Environmental Protection Agency Region III Risk-based Concentrations dated February 9, 1995. Concentrations are based on a 1×10^{-6} cancer risk or an adjusted Hazard Index (non-carcinogenic risks) to 0.1.

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
µg/ℓ = micrograms per liter.
NSC - no screening concentration.
N/A - not applicable.
mg/ℓ = milligrams per liter.

Results of the water quality indicator parameters suggest that groundwater in the vicinity of the Shipyard Area meet the criteria of a Class G-I or G-II drinking water supply.

5.2.3.2 **Organics** VOCs, pesticides, and PCBs were not detected in the groundwater samples collected at SWMU 17. The only organic analyte detected in the groundwater samples consist of the SVOC bis(2-ethylhexyl)phthalate. The concentration detected in the groundwater sample collected from monitoring well MPT-17-MW03S (8 $\mu g/\ell$) exceeded the Florida groundwater guidance concentration (6 $\mu g/\ell$) and USEPA Region III RBC (4.8 $\mu g/\ell$). It is likely that the occurrence of bis(2-ethylhexyl)phthalate in the groundwater samples is related to field or laboratory contamination and is not related to a release from SWMU 17.

5.2.3.3 **Inorganics** Ten inorganic analytes were detected in groundwater samples collected from SWMU 17; two inorganic analytes (iron and manganese) were detected at concentrations which exceed background screening concentrations (see Table 5-12). Three of the inorganic analytes (arsenic, iron, and manganese) were detected at concentrations that exceed benchmarks.

Arsenic was detected at concentrations which exceed the USEPA Region III RBC, but did not exceed background screening concentration (see Tables 5-10 and 5-12). Arsenic was not detected at concentrations exceeding the Florida groundwater guidance concentrations.

Iron was detected at concentrations that exceeded the FDEP groundwater guidance concentration, but not the USEPA Region III RBC. Essential nutrient screening concentrations for groundwater were established for iron (13,267 $\mu g/\ell$) in the NAVSTA Mayport General Information Report (ABB-ES, 1995a). Iron was detected at concentrations that were less than its essential nutrient screening concentration.

Manganese was detected at concentrations that exceed both FDEP groundwater guidance concentrations and USEPA Region III RBC (see Table 5-12) in the three groundwater samples from SWMU 17 monitoring wells. The samples collected from monitoring wells MPT-17-MW01S and MPT-17-MW02S contained manganese at concentrations higher than the background screening concentration.

The highest detected concentrations of arsenic, iron and manganese were from monitoring wells located hydraulically upgradient or crossgradient from SWMU 17; this suggests that these chemicals are not site related. Because the land features at NAVSTA Mayport are influenced by the deposition of dredge material from the Mayport Turning Basin, it is possible that residual concentrations of inorganics from the dredge material have contributed to the inorganic concentrations detected in groundwater samples.

5.3 HUMAN HEALTH RISK ASSESSMENT FOR SWMU 17. The CFB, SWMU 17, was a furnace used to reduce the volume of domestic solid waste using diesel fuel or waste oil as auxiliary fuels, and provide steam for NAVSTA Mayport. Possible contaminants include metals, waste oil, and fuels. The location, physical description, and history (including past and current land use) associated with SWMU 17 are described in further detail in Section 5.1. Surface soil, subsurface soil, and groundwater samples were collected during the NAVSTA Mayport RFI for Group III SWMUs (Subsection 5.1.2). After evaluation and management of the environmental

data collected at SWMU 17 (Chapter 2.0), HHCPCs were selected and the potential human health risks associated with each medium at SWMU 17 were characterized.

The methodology for the human health risk assessment is described in Section 2.5 of Volume I of the NAVSTA Mayport GIR (ABB-ES, 1995a).

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 NAVSTA Mayport GIR (ABB-ES, 1995a).

5.3.1.1 **Surface Soil** Fifteen surface soil samples and two duplicates were collected at SWMU 17 and submitted for chemical analysis. Surface soil sample locations evaluated in the HHRA (MPT-17-MW01S, MPT-17-MW02S and MPT-17-MW03S and MPT-17-SS01 through MPT-17-SS12, with duplicates at sampling locations MPT-17-SS01 and MPT-17-SS09, and MPT-17-MW01S) are indicated on Figure 5-1.

Table 5-13 presents the analytes detected in the surface soil samples and the HHCPCs selected in the surface soil. Seven semivolatile organic chemicals (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene) and two inorganic chemicals (arsenic and beryllium) were selected as HHCPCs.

5.3.1.2 **Subsurface Soil** Three subsurface soil samples and one duplicate were collected at SWMU 17 and submitted for chemical analysis. Subsurface soil sample locations evaluated in the HHRA (MPT-17-MW01S, MPT-17-MW02S, MPT-17-MW03S, with a duplicate at MPT-17-MW03S) are indicated on Figure 5-1. Table 5-14 presents the analytes detected in subsurface soil samples. No HHCPCs were selected.

5.3.1.3 **Groundwater** Three unfiltered groundwater samples and one duplicate were collected at SWMU 17 and submitted for chemical analysis. Groundwater sample locations evaluated in the HHRA (MPT-17-MW01S, MPT-17-MW02S, MPT-17-MW03S, with a duplicate at MPT-17-MW01S) are indicated on Figure 5-1 and Plate 1.

Table 5-15 presents the analytes detected in the groundwater samples and the HHCPCs selected for unfiltered groundwater associated with SWMU 17. One semivolatile organic chemical (bis(2-ethylhexyl)phthalate) and two inorganic chemicals (iron and manganese) were selected as HHCPCs.

5.3.2 Exposure Assessment Medium-specific receptors and exposure scenarios are identified in Paragraph 5.3.2.1 through 5.3.2.3 for current and future land use. The information is also summarized on Table 5-16 and Figure 5-2. Receptor-specific exposure parameters for each exposure scenario are presented in Appendix D-3 to the NAVSTA Mayport GIR (ABB-ES, 1995a). The risk calculation spreadsheets in Appendix D-3 to this report also contain the exposure parameters for each exposure scenario.

5.3.2.1 **Surface Soil** Although permission is required to obtain access to NAVSTA Mayport, SWMU 17 and the surrounding area are accessible to Navy personnel and their adult and child dependents. SWMU 17 is mostly covered with Building 1430

Table 5-13
Selection of Human Health Chemicals of Potential Concern
Surface Soil at SWMU 17

RCRA Facility Investigation, Group III 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 Soil Cleanup Goal[7]	Selected as HHCPC? (Yes/No)
Volatiles (µg/kg)									
2-Butanone	2/15	10 - 11	6 - 11	8.5	NA	4,700,000	NG	2,200,000	No[S]
Carbon disulfide	3/15	5 - 6	1 - 3	2.1	NA	780,000	NG	5,200	No[S]
Toluene	4/15	5 - 6	[2]1 - 3.5	1.6	NA	1,600,000	NG	520,000	No[S]
Xylenes (total)	11/15	5 - 6	[2]1 - 9	3.2	NA	16,000,000	NG	13,000,000	No[S]
Semivolatiles (µg/kg)									
Benzo(a)anthracene	2/15	340 - 1,900	37 - 170	104	NA	880	NG	1,400	Yes[C]
Benzo(a)pyrene	3/15	340 - 1,900	54 - 270	145	NA	88	NG	100	Yes
Benzo(b)fluoranthene	3/15	340 - 1,900	61 - 280	154	NA	880	NG	1,400	Yes[C]
Benzo(g,h,i)perylene	3/15	340 - 1,900	77 - 360	186	NA	NSC	NG	14,000	No[S]
Benzo(k)fluoranthene	3/15	340 - 1,900	79 - 370	190	NA	8,800	NG	14,000	Yes[C]
Chrysene	3/15	340 - 1,900	59 - 290	156	NA	88,000	NG	140,000	Yes[C]
Dibenz(a,h)anthracene	1/15	340 - 1,900	140	140	NA	88	NG	100	Yes
Di-n-butylphthalate	3/15	340 - 1,900	[2]20 - 199.5	87.8	NA	780,000	NG	7,300,000	No[S]
Fluoranthene	5/15	340 - 1,900	[2]46 - 360	161	NA	310,000	NG	2,900,000	No[S]
Indeno(1,2,3-cd)pyrene	3/15	340 - 1,900	63 - 280	146	NA	880	NG	1,400	Yes[C]
Naphthalene	1/15	340 - 1,900	210	210	NA	310,000	NG	1,800,000	No[S]
Phenanthrene	2/15	340 - 1,900	[2]41 - 95	68	NA	NSC	NG	1,700,000	No[S]
Pyrene	5/15	340 - 1,900	56 - 280	132	NA	230,000	NG	2,200,000	No[S]
bis(2-Ethylhexyl)phthalate	3/15	340 - 1,900	[2]45 - 140	98.3	NA	46,000	11,000	48,000	No[S]
Pesticides/PCBs (µg/kg)									
4,4'-DDD	3/15	1.3 - 71	1.5 - 12	6	NA	2,700	NG	4,500	No[S]
4,4'-DDE	13/15	0.69 - 37	1 - 520	128	NA	1,900	NG	3,000	No[S]
4,4'-DDT	11/15	1.3 - 71	1.2 - 220	54.5	NA	1,900	NG	3,100	No[S]
Aroclor-1260	1/15	17 - 930	[2]24.5	24.5	NA	83	NG	900	No[S]

See notes at end of table.

Table 5-13 (Continued)
Selection of Human Health Chemicals of Potential Concern
Surface Soil at SWMU 17

RCRA Facility Investigation, Group III 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 Soil Cleanup Goal[7]	Selected as HHCPC? (Yes/No)
Pesticides/PCBs (µg/kg)--continued									
Chlordane	7/15	6.9 - 370	[2]11.1 - 180	49.9	NA	490	NG	800	No[S]
Dieldrin	1/15	0.69 - 37	11	11	NA	40	NG	70	No[S]
Endrin	1/15	1.3 - 71	3.5	3.5	NA	2,300	NG	23,000	No[S]
Inorganics (mg/kg)									
Antimony	8/15	0.43 - 1.1	[2]0.7 - 2.1	1.3	ND	3.1	NC	26	No[S]
Arsenic	14/15	0.16 - 0.6	0.33 - 1.8	0.76	ND	0.37	NC	[8]0.8	Yes
Barium	15/15	0.11 - 0.24	5 - 25.4	14.3	5.6	550	NC	5,200	No[S]
Beryllium	10/15	0.03 - 0.07	0.04 - 0.17	0.1	0.16	0.15	NC	0.2	Yes
Cadmium	4/15	0.26 - 0.56	0.32 - 1.2	0.69	2	3.9	NC	37	No[S,B]
Chromium	15/15	0.36 - 0.53	1.9 - 20.2	7.4	2.6	39	NC	290	No[S]
Cobalt	6/15	0.67 - 1.1	0.88 - 1.6	1.1	ND	470	NC	4,700	No[S]
Copper	12/15	0.22 - 3.5	1.6 - 18.4	10	2.2	[9]290	NC	2,900	No[S]
Cyanide	3/15	0.05 - 1	0.09 - 0.25	0.14	ND	160	NC	1,600	No[S]
Lead	15/15	0.25 - 3.7	5 - 252	56	ND	400	NC	500	No[S]
Mercury	7/15	0.03 - 0.06	[2]0.0275 - 0.14	0.05	ND	2.3	NC	23	No[S]
Nickel	1/15	1 - 4	10.4	10.4	ND	160	NC	1,500	No[S]
Selenium	4/15	0.11 - 0.5	0.11 - 0.44	0.24	1.36	39	NC	390	No[S,B]
Tin	9/15	1.6 - 3	2 - [2]36.25	6.4	ND	4,700	NC	44,000	No[S]
Vanadium	15/15	0.26 - 0.41	3 - 13.5	7.5	4	55	NC	490	No[S]
Zinc	15/15	0.13 - 0.46	5.6 - 91.2	40.8	2.6	2,300	NC	23,000	No[S]

See notes at end of table.

Table 5-13 (Continued)
Selection of Human Health Chemicals of Potential Concern
Surface Soil at SWMU 17

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

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed. Samples were analyzed from the following locations: MPT-17-MW01S, MPT-17-MW02S, and MPT-17-MW03S, and MPT-17-SS01 through MPT-17-SS12, and three duplicates at sampling locations, MPT-17-SS01, MPT-17-SS09, and MPT-17-MW01S.
[2] Indicates the value is the average of the detected concentration in a sample and its duplicate. For non-detect values, one-half of the contract-required quantitation limit or 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-1-1 of Appendix D-1 to the RCRA Facility Investigation General Information Report (GIR) (ABB Environmental Services, Inc. [ABB-ES], 1995a).
[5] The risk-based screening concentrations are identified in Table D-1-4 of Appendix D to the GIR (ABB-ES, 1995a).
[6] The Florida leaching values (September 29, 1995) are identified in Appendix D-6 of this report.
[7] The Soil Clean-up Goals for Florida (September 29, 1995) are identified in Appendix D-6 of this report.
[8] Soil Cleanup Goals for Florida, January 19, 1996 (residential for surface soil).
[9] Soil Cleanup Goals for the Military Sties, April 5, 1995 (residential for surface soil).

Notes: SWMU = solid waste management unit.
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.
S = The maximum detected concentration did not exceed the risk-based screening concentration, the Florida leaching value, or the Florida soil clean-up goal; therefore, this analyte will not be evaluated in the HHRA.
C = This analyte is a member of a chemical class that contains HHCPCs; therefore, this analyte is retained as an HHCPC.
PCBs = polychlorinated biphenyls.
4,4'-DDD = dichlorodiphenyldichloroethane.
4,4'-DDE = dichlorodiphenyldichloroethene.
4,4'-DDT = dichlorodiphenyltrichloroethane.
mg/kg = milligrams per kilogram.
ND = not detected in any background samples.
NC = not calculated.
B = The maximum detected concentration did not exceed the background screening concentration; therefore, the analyte will not be evaluated in the HHRA.
HHRA = human health risk assessment.

Table 5-14
Selection of Human Health Chemicals of Potential Concern
Subsurface Soil at SWMU 17

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

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	Mean of Detected Concentrations[3]	Background Screening Concentration[4]	Risk-Based Screening Concentration[5]	Florida Leaching Value[6]	Florida Soil Cleanup Goals[7]	Selected as HHCPC? (Yes/No)
Volatiles (µg/kg)									
2-Butanone	1/3	11 - 13	[2]6	6	NA	50,000,000	NG	1,500,000	No[5]
Carbon disulfide	1/3	6	[2]3	3	NA	10,000,000	NG	3,400	No[5]
Toluene	1/3	6	2	2	NA	20,500,000	NG	350,000	No[5]
Xylenes (total)	3/3	6	2 - [2]2.5	2.2	NA	50,000,000	NG	9,200,000	No[5]
Semivolatiles (µg/kg)									
2-Methylnaphthalene	1/3	730 - 850	[2]150	150	NA	4,100,000	NG	880,000	No[5]
Pesticides/PCBs (µg/kg)									
4,4'-DDD	2/3	1.5 - 3.15	4.7 - [2]59	31.9	NA	12,000	NG	17,000	No[5]
4,4'-DDE	2/3	0.75 - 1.65	16 - [2]90.425	53.2	NA	8,500	NG	11,000	No[5]
4,4'-DDT	1/3	1.5 - 3.15	4.1	4.1	NA	8,500	NG	12,000	No[5]
Endrin	1/3	1.5 - 3.15	[2]100.775	101	NA	30,500	NG	47,000	No[5]
Inorganics (mg/kg)									
Arsenic	3/3	0.6	[2]0.255 - 0.38	0.3	0.9	1.6 5	NC	[8]3.7	No[5,8]
Barium	3/3	0.25 - 0.28	2.7 - 4.2	3.3	7.2	7,000	NC	8,400	No[5,8]
Beryllium	1/3	0.07 - 0.08	0.09	0.09	0.14	0.6 5	NC	1.0	No[5,8]
Chromium	1/3	0.41 - 1.4	[2]3.6	3.6	3.4	500	NC	43	No[5]
Cyanide	3/3	1	0.09 - 1.8	0.85	ND	2,050	NC	4,000	No[5]
Lead	3/3	0.4	2.1 - [2]6.4	3.9	2.8	400	NC	1,000	No[5]
Mercury	1/3	0.03 - 0.065	[2]0.0225	0.02	0.06	30.5	NC	48	No[5]
Tin	2/3	3 - 3.5	[2]3.45 - 4	3.7	5.4	50,000	NC	67,000	No[5,8]

See notes at end of table.

Table 5-14 (Continued)
Selection of Human Health Chemicals of Potential Concern
Subsurface Soil at SWMU 17

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

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	Mean of Detected Concentrations[3]	Background Screening Concentration[4]	Risk-Based Screening Concentration[5]	Florida Leaching Value[6]	Florida Soil Cleanup Goals[7]	Selected as HHCPC? (Yes/No)
Inorganics (mg/kg) (Continued)									
Vanadium	3/3	0.27 - 0.31	1.1 - 4.4	2.9	3.2	700	NC	480	No[5,8]
Zinc	3/3	0.47 - 0.54	4.7 - 9.5	6.3	4.8	30,500	NC	56,000	No[5]

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed. Samples were analyzed from the following locations: MPT-17-MW01S, MPT-17-MW02S, MPT-17-MW03S, and a duplicate at sampling location MPT-17-MW03S.
[2] Indicates the value is the average of the detected concentration in a sample and its duplicate. For non-detect values, one-half of the contract-required quantitation limit or 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-1-1 of Appendix D-1 to the RCRA Facility Investigation General Information Report (GIR) (ABB Environmental Services, Inc. [ABB-ES], 1995a).
[5] The risk-based screening concentrations are identified in Table D-1-2 of Appendix D to the GIR (ABB-ES, 1995a).
[6] The Florida leaching values (September 29, 1995) are identified in Appendix D-6 to this report.
[7] The soil clean-up goals for Florida (September 29, 1995) are identified in Appendix D-6 to this report.
[8] Soil Cleanup Goals for Florida, January 19, 1996, (industrial for surface soil).

Notes: SWMU = solid waste management unit.
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.
S = The maximum detected concentration did not exceed the risk-based screening concentration, the Florida leaching value, or the Florida soil clean-up goal; therefore, this analyte will not be evaluated in the HHRA.
NC = not calculated.
PCBs = polychlorinated biphenyls.
4,4'-DDD = dichlorodiphenyldichloroethane.
4,4'-DDE = dichlorodiphenyldichloroethene.
4,4'-DDT dichlorodiphenyltrichloroethane.
mg/kg = milligrams per kilogram.
ND = not detected in any background samples.
B = The maximum detected concentration did not exceed the background screening concentration; therefore, the analyte will not be evaluated in the HHRA.
HHRA = human health risk assessment.

Table 5-15
Selection of Human Health Chemicals of Potential Concern
Unfiltered Groundwater Associated with SWMU 17

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

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	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)
Semivolatiles (µg/ℓ)									
bis(2-Ethylhexyl)phthalate	2/3	10	[2]4 - 8	6	NA	4.8	6	6	Yes
Inorganics (µg/ℓ)									
Arsenic	3/3	0.6	0.7 - [2]3.2	2	8.6	0.038	50	50	No[8]
Barium	3/3	1.1	10.6 - 21.9	16.5	39.6	260	2,000	2,000	No[5,8]
Calcium	3/3	34.8	126,000 - [2]162,500	147,833	220,462	1,055,398	NS	NS	No[5,8]
Cobalt	1/3	3.1	3.9	3.9	6.4	220	NS	NS	No[5,8]
Copper	1/3	1	1.3	1.3	2.8	140	1,300	1,000	No[5,8]
Iron	3/3	1.9	229 - 2,220	1,166	1,404	13,267	NS	300	Yes
Magnesium	3/3	19.8	6,010 - [2]10,700	8,653	186,914	118,807	NS	NS	No[5,8]
Manganese	3/3	0.5	172 - [2]294.5	229	198.6	18	NS	50	Yes
Sodium	3/3	19.5	19,100 - 25,400	22,150	1,397,710	396,022	NS	160,000	No[5,8]
Vanadium	3/3	1.2	2.6 - 8.2	5.2	9.4	26	NS	49	No[5,8]

See notes at end of table.

Table 5-15 (Continued)
Selection of Human Health Chemicals of Potential Concern
Unfiltered Groundwater Associated with SWMU 17

RCRA Facility Investigation, Group III SWMUs
U.S. Naval Station
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[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed. Samples were analyzed from the following locations: MPT-17-MW01S, MPT-17-MW02S, MPT-17-MW03S, and a duplicate, MPT-17-MW01D.
[2] Indicates the value is the average of the detected concentration in a sample and its duplicate. For non-detect values, one-half of the contract-required quantitation limit or contract-required detection limit 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.
[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-1-6 of Appendix D-1 to the RCRA Facility Investigation General Information Report (GIR) (ABB Environmental Services, Inc. [ABB-ES], 1995a).
[5] The risk-based screening concentrations are identified in Table D-1-5 of Appendix D to the GIR (ABB-ES, 1995a).
[6] The Federal maximum contaminant levels (MCLs) (May 1995) are identified in Appendix D-7.
[7] The Florida guidance concentrations (June 1994) are identified in Table D-1-5 of Appendix D-1 to the GIR (ABB-ES, 1995a).

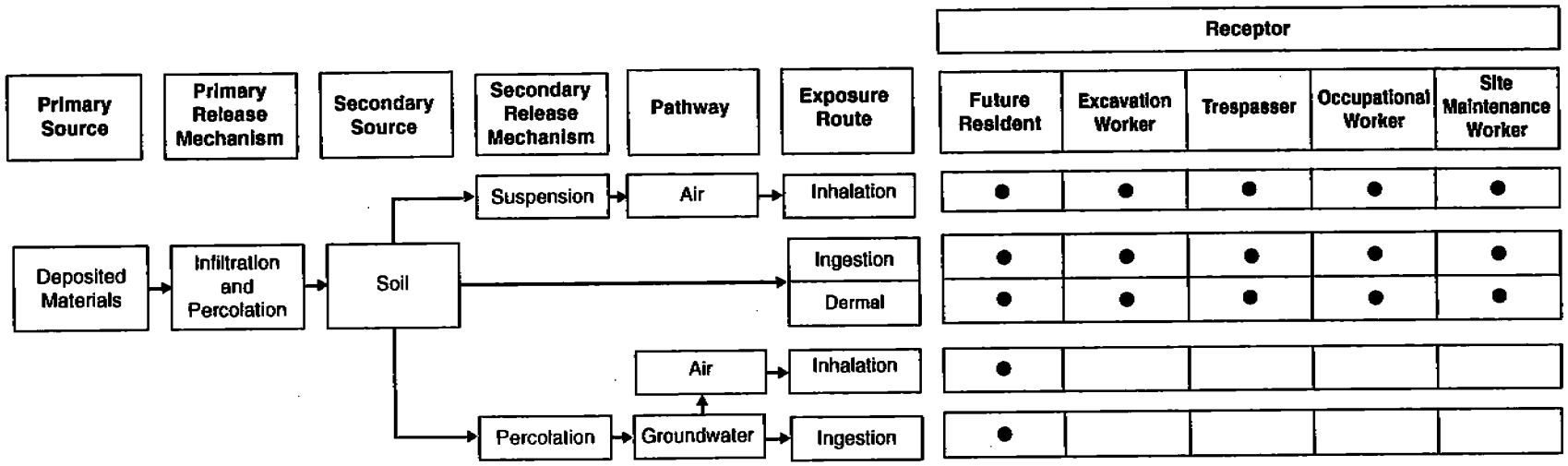
Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
$\mu g/\ell$ = micrograms per liter.
NA = not applicable.
B = The maximum detected concentration did not exceed the background screening concentration; therefore, this analyte will not be evaluated in the HHRA.
S = 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 HHRA.
NS = no standard or guideline available.
HHCPC = human health chemical of potential concern.

Table 5-16
Summary of Potential Human Exposure Pathways
SWMU 17

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

Medium of Exposure	Route of Exposure	Potentially Exposed Population	Selected 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 No No No No	SWMU 17 is mostly covered with Building 1430 and an asphalt parking lot. Therefore, it is unlikely that exposure to surface soil will occur under current land use. No excavation activities are currently ongoing at SWMU 17.
Subsurface Soil	Dermal contact with soil, ingestion of soil, and inhalation of fugitive dust.	Excavation worker (adult)	No	No HHCPCs were selected for subsurface soil.
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 Yes Yes Yes Yes	If SWMU 17 is developed for residential use, child and adult residents could be exposed to contaminants in surface soil. Future industrial use may result in occupational exposures. Site maintenance workers and adolescent and adult trespassers could be also exposed to contaminants in surface soil under residential or industrial land use. Excavation workers could be exposed to contaminants in surface soil during future construction or utility work at SWMU 17.
Subsurface Soil	Dermal contact with soil, ingestion of soil, and inhalation of fugitive dust.	Excavation worker (adult)	No	No HHCPCs were selected for subsurface soil.
Groundwater: Surficial Aquifer	Ingestion of groundwater as drinking water and inhalation of volatiles while showering.	Resident (adult)	Yes	If SWMU 17 is developed for residential use, drinking water wells in the surficial aquifer could be influenced by contaminants in the groundwater associated with SWMU 17. Therefore, residents could be exposed to contaminants in the surficial aquifer.

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
HHCPC = human health chemical of potential concern.



NOTES:
RCRA = Resource Conservation Recovery Act
SWMU = Solid waste management unit

FIGURE 5-2
COMPLETE EXPOSURE PATHWAYS FOR HUMAN RECEPTORS, SWMU 17

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and an asphalt parking lot. Therefore, it is unlikely that exposure to surface soil will occur under current land use. No excavation activities are currently ongoing at SWMU 17. If, however, SWMU 17 is developed for residential use, adult and child residents could be exposed to contaminants in surface soil.

If SWMU 17 is developed for industrial use, occupational workers, site maintenance workers, and adolescent and adult trespassers could be exposed to contaminants in surface soil. Excavation workers could be exposed to contaminants in surface soil during future construction or utility work at SWMU 17.

5.3.2.2 **Subsurface Soil** Exposure of excavation workers (i.e., ingestion,dermal contact, and inhalation of particulates) is evaluated at sites where ongoing or future construction could result in their exposure to contaminants in subsurface soil. No HHCPCs were identified for the chemicals detected in subsurface soil samples. Therefore, this exposure pathway was not evaluated.

5.3.2.3 **Groundwater** Currently, humans do not reside at SWMU 17 and groundwater is not used for any potable or non-potable purpose. However, if land near SWMU 17 is developed for residential use, drinking water wells screened in the surficial aquifer could be influenced by groundwater associated with SWMU 17. Therefore, future domestic use of the surficial aquifer (adult ingestion and inhalation of volatiles while showering) is evaluated in the HHRA.

5.3.2.4 **Exposure Point Concentrations** EPCs for surface soil and groundwater were determined according to procedures outlined in Subsection 2.5.6 of the NAVSTA Mayport GIR (ABB-ES, 1995a). The EPCs for analytes selected as HHCPCs for surface soil and groundwater are presented in Tables 5-17 and 5-18, respectively. The exposure intakes of HHCPCs for the receptors that were evaluated are also presented in the risk calculation spreadsheets in Appendix D-3 to this report.

5.3.3 **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 NAVSTA Mayport GIR (ABB-ES, 1995a). Appendix D-1 to this report contains dose-response information for the HHCPCs. Dose-response values current as of November 1995 for IRIS and May 1995 for HEAST have been used in this HHRA. Appendix D-4 to the NAVSTA Mayport GIR (ABB-ES, 1995a) and Appendix D-5 to this report contain brief toxicity summaries 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). Uncertainties associated with chemical-specific toxicity values are discussed in Subsection 5.3.5.

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 NAVSTA Mayport GIR (ABB-ES, 1995a). Risks were not estimated for residential exposure to surface soil or groundwater under current land use because no exposures are expected. Additionally, HHCPCs were determined to not exist for subsurface soil during the screening evaluation, therefore, a risk characterization was not conducted for this media. Figure 5-3 summarizes the cancer risks associated with future land use at SWMU 17. Figure 5-4 presents an HI summary for future land use at SWMU 17. Risk estimates for potential exposures to surface soil and groundwater under future land use scenarios are discussed in

Table 5-17
Exposure Point Concentrations for Human Health Chemicals of Potential Concern Surface Soil Associated with SWMU 17

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

Chemical	Frequency of Detection[1]	Maximum Detected Concentration	95% UCL[2]	Exposure Point Concentration[3]
Semivolatiles (µg/kg)				
Benzo(a)anthracene	2/15	170	871	170
Benzo(a)pyrene	3/15	270	699	270
Benzo(b)fluoranthene	3/15	280	679	280
Benzo(k)fluoranthene	3/15	370	659	370
Chrysene	3/15	290	692	290
Dibenz(a,h)anthracene	1/15	140	665	140
Indeno(1,2,3-cd)pyrene	3/15	280	692	280
Inorganics (mg/kg)				
Arsenic	14/15	1.8	1.2	1.2
Beryllium	10/15	0.17	0.17	0.17

[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 contract-required quantitation limits/contract-required detection limit for non-detected concentrations (U.S. Environmental Protection Agency, 1991b).
[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 nine or less total samples, the maximum detected concentration is the exposure point concentration.

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
% = percent.
UCL = upper confidence limit.
µg/kg = microgram per kilogram.
mg/kg = milligram per kilogram.

Table 5-18
Exposure Point Concentrations for Human Health Chemicals of Potential Concern Unfiltered Groundwater Associated with SWMU 17

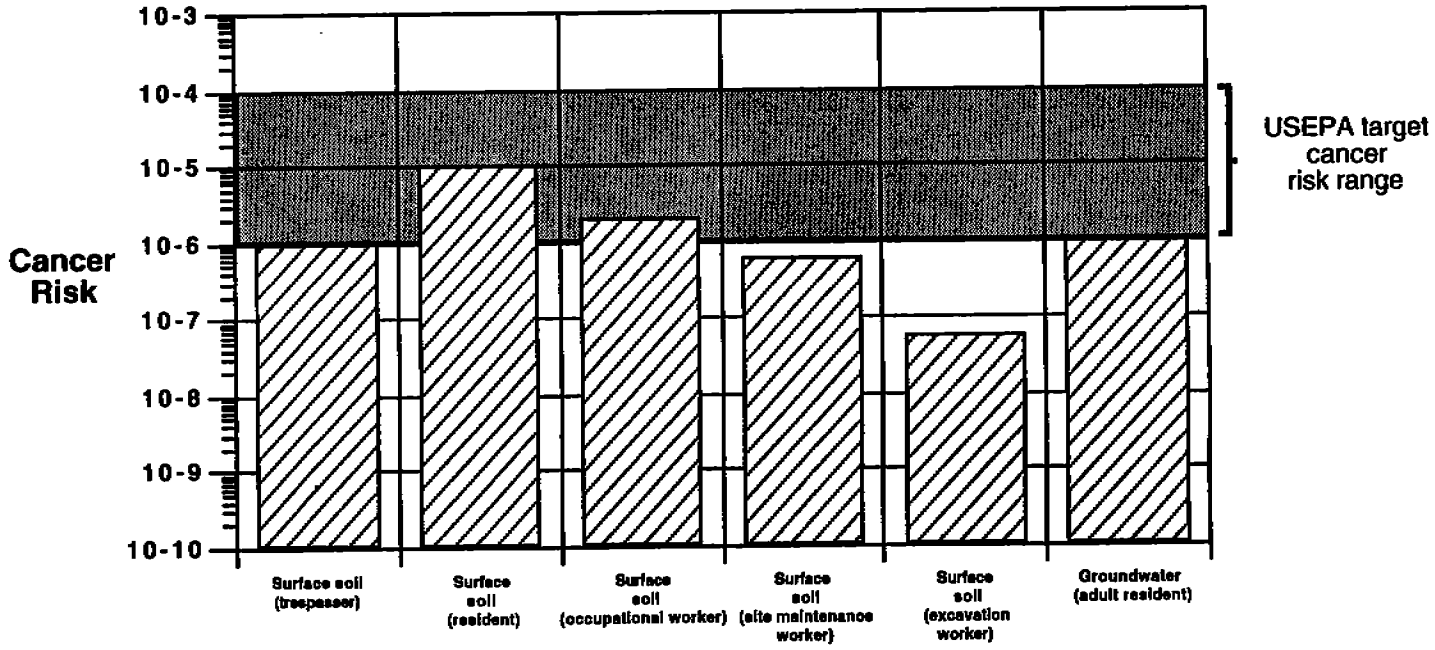
RCRA Facility Investigation, Group III SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Frequency of Detection[1]	Maximum Detected Concentration	95% UCL[2]	Exposure Point Concentration[3]
Semivolatiles (μg/ℓ)				
bis(2-Ethylhexyl)phthalate	2/3	8	NC	8
Inorganics (μg/ℓ)				
Iron	3/3	2,220	NC	2,220
Manganese	3/3	295	NC	295

[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 contract-required quantitation limits/contract-required detection limit for non-detected concentrations (U.S. Environmental Protection Agency, 1991b).
[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 nine or less total samples, the maximum detected concentration is the exposure point concentration.

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
% = percent.
UCL = upper confidence limit.
μg/ℓ = microgram per liter.
NC = not calculated.
SWMU = solid waste management unit.

Cancer Risk Summary, Future Land Use



NOTES:
RCRA = Resource Conservation and Recovery Act
USEPA = United States Environmental Protection Agency
SWMU = Solid waste management unit

FIGURE 5-3
CANCER RISK SUMMARY, FUTURE LAND USE, SWMU 17

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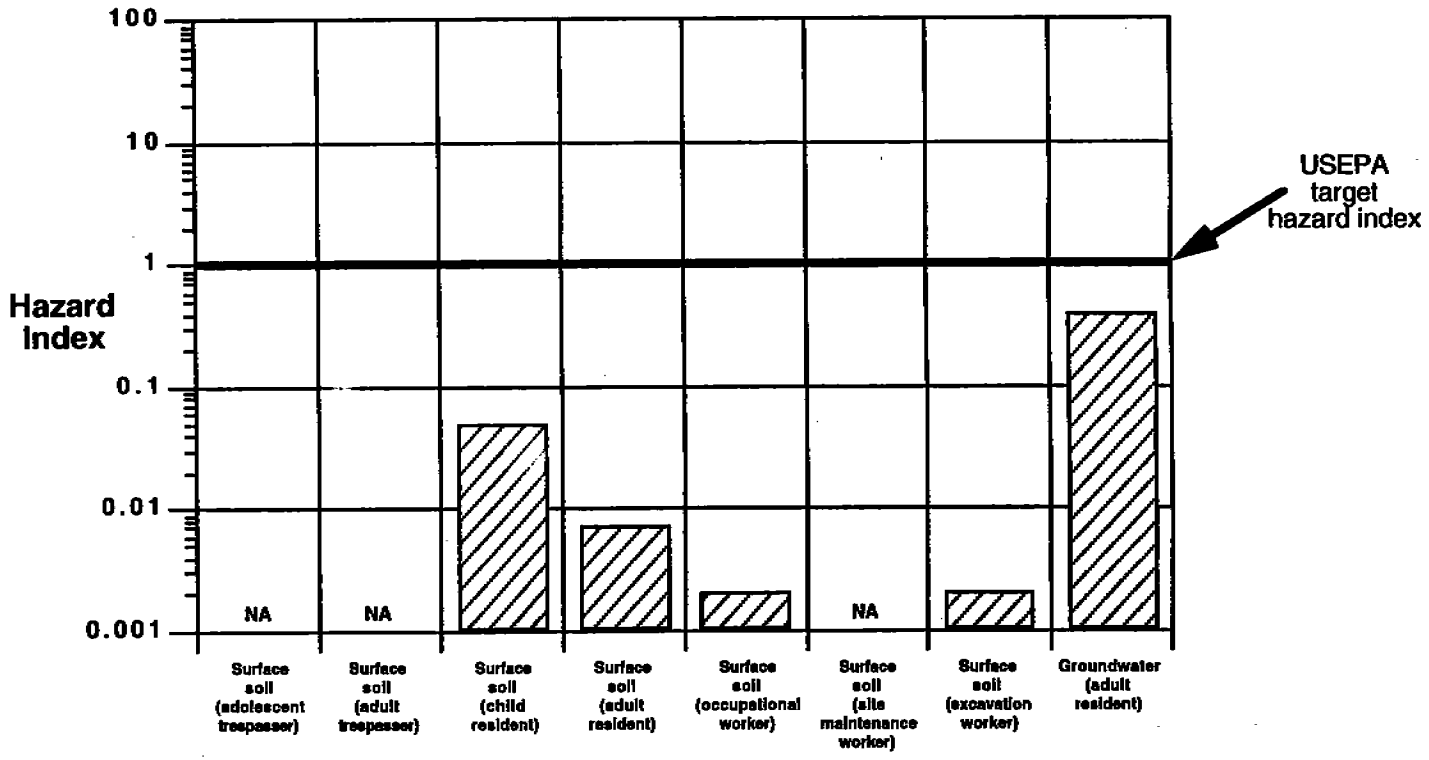
Hazard Index Summary, Future Land Use



NOTES:
RCRA = Resource Conservation and Recovery Act
NA = Hazard index is less than or equal to 0.001
USEPA = United States Environmental Protection Agency
SWMU = Solid waste management unit

FIGURE 5-4
HAZARD INDEX SUMMARY, FUTURE LAND USE, SWMU 17

RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

8534-09 TKB FIG 5-4 021596MAW

Paragraphs 5.3.4.1 and 5.3.4.2. Table 5-19 presents a summary of the risk estimates. The risk characterization results are presented in Tables D-3-1 through D-3-15 in Appendix D-3 to this report.

5.3.4.1 Surface Soil The risk characterization results for surface soil exposure scenarios are shown in Tables D-3-1 through D-3-14 in Appendix D-3 to this report. The ELCR for a hypothetical future land use for surface soil ingestion, dermal contact, and fugitive dust inhalation is $1x10^{-6}$ for the trespasser, $1x10^{-5}$ for the resident, $2x10^{-6}$ for the occupational worker, $6x10^{-7}$ for the site maintenance worker, and $6x10^{-8}$ for the excavation worker. None of the ELCRs exceeds the USEPA acceptable cancer risk range.

The total cancer risks (ingestion, dermal contact, and inhalation) for a hypothetical future resident is associated with benzo(a)pyrene ($3.9x10^{-6}$), dibenz(a,h)anthracene ($2x10^{-6}$), arsenic ($3.1x10^{-6}$), and beryllium ($3.9x10^{-6}$), which exceed FDEP's target cancer risk of $1x10^{-6}$. Therefore, RGOs for surface soil are presented in Subsection 5.3.6. The noncancer risks associated with surface soil ingestion, dermal contact, and inhalation of fugitive dust for future land use (adolescent trespasser, adult trespasser, child resident, adult resident, occupational worker, site maintenance worker, and excavation worker) are all below USEPA's and FDEP's target HI of 1.

5.3.4.2 Groundwater. The risk characterization results for the groundwater exposure scenario are shown in Table D-3-15 in Appendix D-3 to this report. Ingestion was the only pathway evaluated for groundwater because no volatiles were selected as HHCPCs. There is no exposure to groundwater from the surficial aquifer beneath SWMU 17 under current land use.

The cancer risk associated with a hypothetical future ingestion of groundwater as drinking water is $1x10^{-6}$ for the adult resident. This ELCR is within USEPA's acceptable cancer risk range. The cancer risk associated with bis(2-ethylhexyl)-phthalate, the only contributor to the ELCR for the future resident, exceeds or is equal to FDEP's target cancer risk of $1x10^{-6}$. Therefore, remedial goal options for this chemical in groundwater are presented in Subsection 5.3.6.

The noncancer risk associated with groundwater ingestion is below USEPA's and FDEP's target HI of 1. It should be noted that the HQ associated with manganese at its background screening concentration (198.6 $\mu g/\ell$) is 1.1 (future resident ingestion of groundwater).

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 NAVSTA Mayport GIR (ABB-ES, 1995a). Site-specific uncertainties that are important for the interpretation of the calculated risk estimates for surface soil, subsurface soil, and groundwater at SWMU 17 are discussed below.

- The CFB is no longer in operation and will eventually be demolished; however, future land use (industrial) is to be office space for the Fleet Training Group. The RGOs developed for this SWMU are based on residential exposures and may be too conservative. Future residential development is unlikely.

Table 5-19
Human Risk Summary for SWMU 17

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

Land Use	Exposure Route	Hazard Index	Excess Lifetime Cancer Risk
Future Land Use			
Surface Soil			
Adolescent trespasser	Incidental ingestion	0.001	3×10^{-7}
	Dermal contact	0.0001	2×10^{-7}
	Inhalation of particulates	NC[1]	2×10^{-9}
	Total adolescent trespasser:	0.001	5×10^{-7}
Adult trespasser	Incidental ingestion	0.0007	3×10^{-7}
	Dermal contact	0.00008	3×10^{-7}
	Inhalation of particulates	NC[1]	2×10^{-9}
	Total adult trespasser:	0.0008	6×10^{-7}
	Total trespasser:	NC	1×10^{-6}
Child resident	Incidental ingestion	0.05	7×10^{-6}
	Dermal contact	0.0009	1×10^{-6}
	Inhalation of particulates	NC[1]	1×10^{-7}
	Total child resident:	0.05	8×10^{-6}
Adult resident	Incidental ingestion	0.006	3×10^{-6}
	Dermal contact	0.0006	3×10^{-6}
	Inhalation of particulates	NC[1]	1×10^{-7}
	Total adult resident:	0.007	6×10^{-6}
	Total resident:	NC	1×10^{-5}
Occupational worker	Incidental ingestion	0.002	1×10^{-8}
	Dermal contact	0.0002	9×10^{-7}
	Inhalation of particulates	NC[1]	9×10^{-9}
	Total occupational worker:	0.002	2×10^{-6}
Site maintenance worker	Incidental ingestion	0.0006	3×10^{-7}
	Dermal contact	0.00005	3×10^{-7}
	Inhalation of particulates	NC[1]	1×10^{-9}
	Total site maintenance worker:	0.0006	6×10^{-7}
Excavation worker	Incidental ingestion	0.002	5×10^{-8}
	Dermal contact	0.00005	1×10^{-8}
	Inhalation of particulates	NC[1]	4×10^{-10}
	Total excavation worker:	0.002	6×10^{-8}

See notes at end of table.

Table 5-19 (Continued)
Human Risk Summary for SWMU 17

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

Land Use	Exposure Route	Hazard Index	Excess Lifetime Cancer Risk
Unfiltered Groundwater			
Adult resident	Ingestion of groundwater as drinking water	0.4	1×10^{-6}
	Inhalation of volatiles while showering	NC[2]	0[2]
	Total adult resident:	0.4	1×10^{-6}

[1] A hazard index could not be calculated for inhalation exposures because inhalation reference doses were not available for the HHCPCs.
[2] No volatiles were selected as HHCPCs.

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
NC = not calculated.
HHCPC = human health chemical of potential concern.

- One source of uncertainty is the lack of oral RfDs for carcinogenic PAHs. This probably resulted in an underestimate of the HI for surface soil at SWMU 17. However, cancer is considered a more sensitive endpoint, and oral and dermal CSFs are available for carcinogenic PAHs.

- Another source of uncertainty is the lack of inhalation RfDs for the HHCPCs in surface soil, which probably resulted in underestimates of the HIs associated with exposure to surface soil at SWMU 17.

- Some uncertainty is associated with the representativeness of the groundwater data collected to complete the risk evaluation at SWMU 17. 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.

- The arsenic CSF is a source of uncertainty in the HHRA for SWMU 17. Concentrations of arsenic tend to be present in surface soil and groundwater samples collected at NAVSTA Mayport at concentrations that suggest it is potentially a significant contributor to excess lifetime cancer risk. 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 $\mu g/\ell$). 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 non-linear dose-response curve (Goyer, 1991). In the Tseng et al. study, the normal detoxification pathways were probably overwhelmed (saturated); this, coupled with an underestimate of exposure, may have resulted in an overestimate of cancer risk. Therefore, cancer risk for surface soil at SWMU 17 may be overestimated. Based on the uncertainties associated with the arsenic CSF, risk management guidance (USEPA, 1988c) suggests that cancer risk may be up to 10-fold lower than predicted.

5.3.6 Remedial Goal Options As required by USEPA Region IV and FDEP guidance, RGOs are presented in tables of potential media cleanup levels. RGOs are a ratio of a chemical's site-specific risk for aggregate residential exposure (child and adult receptors) for a media pathway (i.e., incidental ingestion, dermal contact, and inhalation of particulates) and the chemical's exposure point concentration at designated excess lifetime cancer risk levels of $1x10^{-4}$, $1x10^{-5}$, and $1x10^{-6}$ and hazard quotients of 0.1, 1, and 3 (USEPA, 1995b). The future residential scenario is used for RGO because it represents the most restrictive site usage.

Potential media cleanup levels have been identified for HHCPCs whose EPCs exceed Federal standards or State standards and guidance values, or that have associated cancer risks greater than $1x10^{-6}$ or HQs greater than 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. Background screening concentrations and CRDLs/CRQLs are also included to provide perspective.

5.3.6.1 **Surface Soil** Potential medium cleanup levels have been identified for surface soil under the assumption that SWMU 17 will be developed for residential use. Under industrial land use, the RGOs exceed the EPCs; thus, no action is necessary to achieve a risk level of $1x10^{-6}$. Table 5-20 presents RGOs for future resident exposure to surface soil (i.e., ingestion, dermal contact, and inhalation) at SWMU 17. The total cancer risks to the resident associated with benzo(a)pyrene, dibenz(a,h)anthracene, arsenic, and beryllium exceed $1x10^{-6}$. The EPCs of benzo(a)pyrene, dibenz(a,h)anthracene, and arsenic also exceed their corresponding Florida soil cleanup goals.

The RGO for dibenz(a,h)anthracene is less than the CRDL/CRQL. Remediation to the RGO for dibenz(a,h)anthracene may not be confirmable using current analytical technologies.

The inclusion of arsenic and beryllium in the RGO table is not intended to be a statement that remediation of these chemicals is necessary. Six of 14 detected concentrations of arsenic are less than the Florida soil cleanup goal, which is 0.7 mg/kg. The RGO for arsenic is less than the Florida soil cleanup goal and the CRDL/CRQL. Therefore, remediation to the RGO for arsenic may not be required or confirmable using current analytical technologies. All of the 10 detected concentrations of beryllium are less than the Florida soil cleanup goal, which is 0.26 mg/kg. In addition, the EPC for beryllium is less than the Florida soil cleanup goal and the CRDL/CRQL. Remediation to the RGO for beryllium may not be required or confirmable using current analytical technologies.

5.3.6.2 **Groundwater** Potential medium cleanup levels have been identified for groundwater under the assumption that SWMU 17 will be developed for residential use. Table 5-21 presents RGOs for future resident ingestion of groundwater at SWMU 17. The total cancer risk to the adult resident associated with bis(2-ethylhexyl)phthalate exceeds $1x10^{-6}$. The EPCs of bis(2-ethylhexyl)phthalate, iron, and manganese exceed their corresponding Federal MCLs or Florida Guidance Concentrations.

The inclusion of bis(2-ethylhexyl)phthalate does not imply that remediation of groundwater for this chemical is necessary. Bis(2-ethylhexyl)phthalate, a common laboratory contaminant, was not detected in groundwater at concentrations greater than its detection limit.

5.4 ECOLOGICAL ASSESSMENT FOR SWMU 17

The subsections below describe the results of the ERA for SWMU 17, the CFB. SWMU 17 is located south of the Mayport Turning Basin approximately 350 feet west of Echo pier (Figure 1-2). The CFB consists of a building, the furnace, an asphalt parking lot, and four underground storage tanks that contain waste oil or diesel fuel.

The ERA was completed according to the methodology described in Section 2.4 of the NAVSTA Mayport GIR (ABB-ES, 1995a), including 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).

Table 5-20
Summary of Remedial Goal Options for SWMU 17
Surface Soil, Future Land Use

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

Chemical	Range of Detected Concentrations	Exposure Point Concentration[1]	Excess Lifetime Cancer Risk Risk Range[2]			Hazard Quotient Risk Range[3]			Florida Soil Cleanup Goal[4]	Florida Leaching Value[5]	Background Screening Concentration	CRDL/ CRQL
			10^{-4}	10^{-5}	10^{-6}	0.1	1	10				
Surface Soil (µg/kg)												
Future Land Use, Resident												
Benzo(a)pyrene	54 - 270	270	NR	NR	70	NA	NA	NA	100	NG	NA	200
Dibenz(a,h)anthracene	140 - 140	140	NR	NR	70	NA	NA	NA	100	NG	NA	200
Arsenic	330 - 1,800	1,200	NR	NR	380	NA	NA	NA	700	NC	ND	2,000
Beryllium	40 - 170	170	NR	NR	44	NA	NA	NA	200	NC	160	1,000

[1] Exposure point concentrations (EPCs) for surface soil are presented in Table 5-17.
[2] NA in these columns indicates that the chemical is not associated with a cancer risk greater than 1×10^{-6}.
[3] NA in these columns indicates that the chemical is not associated with a hazard index greater than 1.
[4] The soil cleanup goals for Florida (September 29, 1995) are identified in Appendix D-6 to this report.
[5] The Florida Leaching Values (September 29, 1995) are identified in Appendix D-6 to this report.

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
CRDL = contract-required detection limit.
CRQL = contract-required quantitation limit.
µg/kg = micrograms per kilogram.
NR = the remedial goal option exceeds the EPC; no action is necessary to achieve this risk level.
NA = not applicable.
NG = not detected in groundwater.
NC = not calculated.
ND = not detected in any background samples.

Table 5-21
Summary of Remedial Goal Options for SWMU 17
Unfiltered Groundwater, Future Land Use

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

Chemical	Range of Detected Concentrations	Exposure Point Concentration[1]	Excess Lifetime Cancer Risk Risk Range[2]			Hazard Quotient Risk Range[3]			Federal MCL[4]	Florida Guidance Concentration[5]	Background Screening Concentration[6]	CRDL/ CRQL
			10^{-4}	10^{-5}	10^{-6}	0.1	1	10				
Groundwater (µg/ℓ)												
Future Land Use, Adult Resident												
bis(2-Ethylhexyl) phthalate[7]	4 - 8	8	NR	NR	6	NA	NA	NA	6	6	12.4	10
Iron	229 - 2,220	2,220	NA	NA	NA	NA	NA	NA	NS	300	1,404	100
Manganese	172 - 294.5	295	NA	NA	NA	NA	NA	NA	NS	50	198.6	15

[1] Exposure point concentrations (EPC) for groundwater are presented in Table 5-19.
[2] NA in these columns indicates that the chemical is not associated with a cancer risk greater than 1×10^{-6}.
[3] NA in these columns indicates that the chemical is not associated with a hazard index greater than 1.
[4] The Federal Maximum Contaminant Levels (MCLs) (May 1995) are identified in Appendix D-7.
[5] The Florida Guidance Concentrations (June 1994) are identified in Table D-1-3 of Appendix D to the RFI General Information Report.
[6] Background screening concentrations are presented in Table D-1-6 of Appendix D-1 to the RFI General Information Report.
[7] This chemical is probably a laboratory contaminant.

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
CRDL = contract-required detection limit.
CRQL = contract-required quantitation limits.
µg/ℓ - micrograms per liter.
NR = the remedial goal option exceeds the EPC; no action is necessary to achieve this risk level.
NA = not applicable.
NS = no standard or guideline available.
RFI = Resource Conservation and Recovery Act (RCRA) facility assessment Investigation.

Exposure pathways for ecological receptors evaluated in the assessment are summarized in a Contaminant Pathway Model (Figure 5-5). Exposure pathways at SWMU 17 are limited to groundwater. Exposure pathways evaluated for aquatic receptors include direct contact with the groundwater as it discharges into surface water. Exposures associated with potential contamination in surface soil to terrestrial receptors were not evaluated. Terrestrial ecological receptors are not expected to occur in the vicinity of the CFB because the majority of the site is paved with asphalt and is located in a industrialized area.

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 NAVSTA Mayport GIR (ABB-ES, 1995a). Analytes detected in groundwater at SWMU 17 are screened as ECPCs because aquatic receptors in the Mayport Turning Basin may be exposed to groundwater contamination as it discharges through the benthic zone into surface water.

The monitoring well system installed at SWMU 17 to assess whether or not chemicals are present in groundwater beneath SWMU 17 is described in Subsection 5.1.2. The locations of the three monitoring wells MPT-17-MW01S, MPT-17-MW02S and MPT-17-MW03S are shown on Figure 5-1 and Plate 1. A summary of the results of the analyses of unfiltered groundwater samples collected from the monitoring wells at SWMU 17 are summarized in Table 5-22. 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 Mayport Turning Basin.

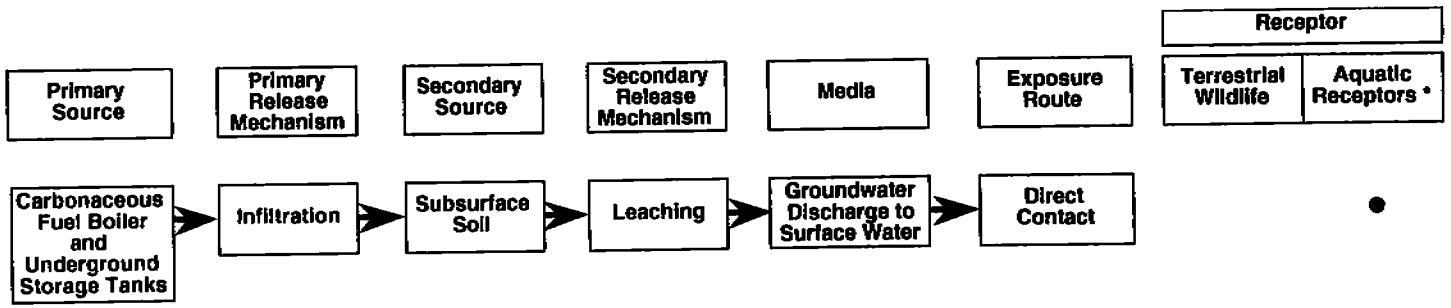
Generally, only the fraction of the contaminant in the dissolved phase is biologically available and potentially toxic to aquatic organisms (USEPA, 1993).

Table 5-22 provides a summary of the analytical results, including the frequency of detection, range of detected concentrations, and mean of detected concentrations. In addition, the summary tables include the screening background concentrations and the Florida surface water quality standards for Class III marine waters (FAC 62-302), which were used to screen ECPCs. For the analytes selected as ECPCs, maximum and average exposure point concentrations are calculated. Calcium, magnesium, and sodium were not included in the screening process because they are naturally occurring nutrients.

Three of 11 analytes detected in groundwater samples collected from the SWMU 17 monitoring wells were selected as ECPCs. The three analytes include one semivolatile (bis[2-ethylhexyl]phthalate), and two inorganics (iron and manganese).

5.4.2 Exposure Assessment The exposure assessment estimates the magnitude of contaminant exposures for aquatic receptors (fish, amphibians, plants, and invertebrates) associated with ECPCs in groundwater.

Aquatic receptors in the Mayport Turning Basin may be exposed to contamination in groundwater from SWMU 17 if it discharges into the surface water of the turning basin. Exposure concentrations of groundwater ECPCs for aquatic receptors in the turning basin are estimated based on a worst case exposure scenario. It is assumed that the maximum and average exposure point concentra-



NOTES:
SWMU = Solid waste management unit
RCRA = Resource Conservation and Recovery Act
* Aquatic recepors include invertebrates, plants, algae, amphibians, and fish.

FIGURE 5-5
CONTAMINANT PATHWAY MODEL FOR ECOLOGICAL RECEPTORS, SWMU 17

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Table 5-22
Selection of Ecological Chemicals of Potential Concern
Groundwater Associated with SWMU 17

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

Analyte	Frequency of Detection[1]	Range of Detected Concentrations	Mean of Detected Concentrations[3]	Screening Reference Concentration[4]	Florida Surface Water Quality Standards[5]	Analyte ECPC? (Yes/No)[6]	95% UCL[7]	Arithmetic Mean[8]	Exposure Point Concentrations	
									Maximum[9]	Average[10]
Semivolatiles (µg/ℓ)										
bis(2-Ethylhexyl) phthalate	2/3	[2]4 - 8	6	NA	NA	Yes	NC	5.7	8	6
Inorganics (µg/ℓ)										
Arsenic	3/3	0.7 - [2]3.2	2	8.6	50	No[11,12]	NC	2		
Barium	3/3	10.6 - 21.9	16.5	39.6	NA	No[12]	NC	16.5		
Calcium	3/3	126,000 - [2]162,500	147,833	220,462	NA	No[12,13]	NC	147,833		
Cobalt	1/3	3.9	3.9	6.4	NA	No[12]	NC	2.3		
Copper	1/3	1.3	1.3	2.8	2.9	No[11,12]	NC	0.77		
Iron	3/3	229 - 2,220	1,166	1,404	300	Yes	NC	1,166	2,220	1,166
Magnesium	3/3	6,010 - [2]10,700	8,653	186,914	NA	No[12,13]	NC	8,653		
Manganese	3/3	172 - [2]294.5	229	198.6	NA	Yes	NC	229	294.5	229
Sodium	3/3	19,100 - 25,400	22,150	1,397,710	NA	No[12,13]	NC	22,150		
Vanadium	3/3	2.6 - 8.2	5.2	9.4	NA	No[12]	NC	5.2		

See notes at end of table.

Table 5-22
Selection of Ecological Chemicals of Potential Concern
Groundwater Associated with SWMU 17

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

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed. Samples were analyzed from the following locations: MPT-17-MW01S through MPT-17-MW03S (with a duplicate at MPT-17-MW01S).
[2] A value indicated by an asterisk is the average of the detected concentration in a sample and its duplicate. For non-detect values, one-half of the Contract Required Quantitation Limit or Contract Required Detection Limit (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] The screening reference concentration is equal to two times the average background concentration for inorganics and is equal to the average background concentration for organics. The average concentrations of analytes detected in the background locations are listed in Tables D-1-1 in Appendix D of the RFI General Information Report (GIR) ABB Environmental Services, Inc. (ABB-ES, 1995a).
[5] Florida Department of Environmental Protection, 62-302 (1995 Version); surface water quality standards for Class III marine waters.
[6] Ecological chemical of potential concern (ECPC) selection process is depicted in the GIR (ABB-ES, 1995a). "A" indicates an ECPC for aquatic receptors. "W" indicates an ECPC for terrestrial receptors.
[7] The 95 percent upper confidence limit (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 (1991b).
[8] 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 non-detects.
[9] The maximum exposure concentration is equal to the 95 percent UCL or the maximum detected concentration, whichever is less.
[10] The average exposure concentration is equal to the arithmetic mean or the maximum detected concentration, whichever is less.
[11] Maximum detected concentration is less than the Florida Surface Water Quality standard.
[12] Maximum detected concentration is less than two times the average background concentration for inorganics.
[13] Analyte is an essential nutrient and is not present at toxic levels.

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
ECPC = ecological chemical of potential concern.
% = percent.
$\mu g/\ell$ = micrograms per liter.
NA = Not available.
NC = Not calculated.
RFI = Resource Conservation and Recovery Act (RCRA) facility investigation.

tions of ECPCs in groundwater (Table 5-22) are the concentrations to which the receptors would be exposed in the turning basin. Maximum and average exposure concentrations were predicted based on the maximum and average detected concentrations. This worst case scenario assumes no reduction in contaminant concentrations as a result of transport from SWMU 17 to the turning basin and no dilution once the contaminant is discharged.

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 E-1). Table 5-23 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, amphibians, and aquatic plants. 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 17 as it discharges to the Mayport Turning Basin. It is assumed that groundwater from the SWMU 17 is currently discharging to the Mayport Turning Basin. The predicted maximum and average concentrations of groundwater ECPCs in the Mayport Turning Basin are compared to the State of Florida surface water quality standards for Class III marine water (FAC 62-302, the AWQC (USEPA, 1986b), and the lowest reported adverse effect concentration in AQUIRE in Table 5-23. For comparison purposes, the concentrations of analytes detected in the surface water samples from the Mayport Turning Basin and the background surface water locations (MPT-B-SW01 through MPT-B-SW07) are presented in Table 5-24.

With the exception of iron, maximum exposure point concentrations are less than the lowest toxicity benchmark concentrations for all ECPCs in groundwater. The information below presents a characterization of potential risk to benthic and aquatic receptors resulting from exposure to iron at maximum concentrations detected in groundwater samples from the CFB area.

Maximum and average exposure concentrations of iron in groundwater of 2,220 and 1,166 $\mu g/\ell$, respectively, exceed both the Florida surface water quality standard of 300 $\mu g/\ell$ and the lowest reported adverse effect concentration in AQUIRE (dinoflagellate population growth) of 100 $\mu g/\ell$. However, the maximum exposure point concentration of iron in groundwater from SWMU 17 (2,220 $\mu g/\ell$) is less than the maximum detected concentration of iron in groundwater from the background samples (3,540 $\mu g/\ell$). Maximum and average detected concentrations of iron from the background monitoring wells (3,540 and 702 $\mu g/\ell$) also exceed toxicity benchmarks. Although exposure concentrations of iron in groundwater exceed toxicity benchmarks, discharge of iron in groundwater to the Mayport Turning Basin are not expected to present a risk for aquatic receptors for the following reasons:

- It is expected that some advection, dispersion, mixing, and retardation, will occur as the groundwater from SWMU 17 is discharged to surface water, and actual exposure concentrations will be lower than the benchmarks.

Table 5-23
Results of AQUIRE Search for Toxicity of Groundwater ECPCs at SWMU 17 to Aquatic Receptors
(Number of Studies / Range of Concentrations)

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

Analyte	Fish		Invertebrates		Mollusks		Algae and Aquatic Plants
	Lethal	Sublethal	Lethal	Sublethal	Lethal	Sublethal	Sublethal
Semivolatiles (μg/ℓ)							
bis(2-Ethylhexyl)phthalate	1 / 5.5 x 10^5	--	2 / 3 x 10^5 to 1 x 10^6	--	--	--	1 / 3.1 x 10^6
Inorganics (μg/ℓ)							
Iron	--	--	1 / 3.3 x 10^4	--	1 / 1 x 10^5	--	13 / 100 to 1 x 10^5
Manganese	--	--	--	--	--	3 / 2 x 10^4	--

Notes: AQUIRE = Aquatic Information Retrieval.
ECPC = ecological chemical of potential concern.
SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
μg/ℓ = micrograms per liter.
-- = toxicity information not available.

Table 5-24
Comparison of SWMU 17 Groundwater ECPC Exposure Concentrations (in Mayport Turning Basin) with Toxicity Benchmarks

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

Analyte	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 Water of the Mayport Turning Basin[5]	Concentrations Detected in Background Groundwater Samples[6]	Result
Semivolatiles (µg/ℓ)							
bis(2-Ethylhexyl)phthalate	8 / 6	NA	NA	300,000 / copepoda LC_{50}	ND	5.5 - 7	
Inorganics (µg/ℓ)							
Iron	2,220 / 1,166	300	NA	100 / Dinoflagellate population growth	ND	15.4 - 3,540	Benchmark exceeded
Manganese	294.5 / 229	NA	NA	20,000 / mollusk oxygen consumption	ND	3.5 - 397	

[1] From Table 5-21.
[2] Florida Department of Environmental Protection, 62-302 (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 5-22.
[5] Range of detected concentrations from surface water samples MPT-B-SW10 through MPT-B-SW12 in the Mayport Turning Basing General Information Report, ABB Environmental Services, Inc., [ABB-ES], 1995a).
[6] Background groundwater sample locations include MPT-1-MW01S, MPT-8-MW05S, MPT-B-MW01S, MPT-S-MW01S, MPT-8-MW05S, MPT-1-MW01S, MPT-8-MW05I, MPT-8-MW05D, and MPT-B-MW01D. The concentrations of organic and inorganic analytes detected in background groundwater samples are listed in Table D-1-1 of Appendix D of the GIR (ABB-ES, 1995a).

Notes: SWMU = solid waste management unit.
CPC = ecological chemical of potential concern.
RCRA = Resource Conservation and Recovery Act.
AWQC = ambient water quality criteria.
AQUIRE = Aquatic Information Retrieval.
µg/ℓ = micrograms per liter.
NA = not available.
LC_{50} =
ND = not detected.

- 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 iron. Only the dissolved phase of the metal is considered to be biologically available and potentially toxic to aquatic receptors (USEPA, 1993a).

In summary, groundwater discharges from SWMU 17 through the benthic zone to the surface water of the Mayport Turning Basin do not pose a risk to aquatic receptors.

5.4.5 Uncertainty Analyses A number of uncertainties and assumptions are inherent in the ERA process. General ERA uncertainties are discussed in the GIR (ABB-ES, 1995a). Specific uncertainties associated with the evaluation of risks from potential groundwater contamination at SWMU 17 include the following:

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

- The presumption of no risks for aquatic receptors resulting from potential exposures of iron in groundwater assumes that advection, dispersion, mixing, and retardation will occur as the groundwater from SWMU 17 is discharged to surface water, and actual exposure concentrations in the river will be lower than the benchmarks.

6.0 SWMUs 14 AND 18 - MERCURY/OIL WASTE SPILL AND FLEET TRAINING CENTER (FTC) DIESEL GENERATOR SUMP

SWMU 14, the Mercury/Oil Waste Spill Area and SWMU 18, the Fleet Training Center Diesel Generator Sump, are located at the FTC which is near the mouth of the St. Johns River in northeast NAVSTA Mayport. The two SWMUs share a similar geologic and hydrogeologic setting and therefore have been grouped to facilitate a comprehensive approach to the investigation of the sites. The environmental samples were from various locations at the FTC Area where potential contaminants may have overlapping contaminant plumes. Potential contaminants from these SWMUs include petroleum fuels, oils, and metals. Figure 1-2 illustrates the locations of SWMUs 14 and 18 and areas associated with the FTC.

6.1 SITE DESCRIPTION AND BACKGROUND. The following subsections provide historical information for SWMU 14, the Mercury/Oil Waste Spill Area, and SWMU 18, the Diesel Generator Sump; previous investigations at SWMU 14; and a summary of the Group III field investigations that were conducted from March through October 1995.

SWMU 14, the Mercury/Oil Waste Spill Area. SWMU 14, the Mercury/Oil Waste Spill Area is located at the current FTC firefighter training area (FFTA) in the northeast part of NAVSTA Mayport adjacent to the mouth of the St. Johns River (Figure 1-2). Associated with SWMU 14 at the FFTA are drains that connect to an oil-water separator, a stormwater collection system, a petroleum storage area, and an area that was reported to have been used for storage of mercuric nitrate (Figure 6-1) (A.T. Kearney, 1989).

Flammable liquid is used for training at the FFTA to simulate a fire on a ship, and water (or, in the past, foam) is used to suppress the fire. The firefighting solution at one time contained aqueous film-forming foam as a fire extinguishing material, but according to the RFA report, this practice had ceased by the mid 1980s (A.T. Kearney, 1989). It was also stated in the RFA report that in the past training fires were also made with waste fuel(s) and oil(s) collected from sources around the station, and some may have contained other contaminants such as solvents (A.T. Kearney, 1989). Currently, the flammable fuels used as ignition sources consist of diesel fuel (marine grade) and a small amount of gasoline.

Construction of the FFTA began in approximately 1964 and in later years has undergone several modifications. In 1987, construction began on a new FFTA facility adjacent to the western boundary of the original concrete apron (Figure 6-1). The new FFTA facility is not included in SWMU 14 and is not being assessed under the NAVSTA Mayport Corrective Action program.

The following paragraphs describe the firefighting training area and associated drainage systems and the modifications made since the firefighting training area was constructed in 1964.

In approximately 1964, the FFTA contained four practice areas: two chambers to simulate confined areas on a ship, Buildings 355 and 361, and two circular-shaped open tanks, Tanks 356 and 357 (Figure 6-1). Each of these practice areas drained to one oil-water separator located approximately 20 feet north of the concrete apron. In addition, located throughout the FFTA concrete apron area were surface

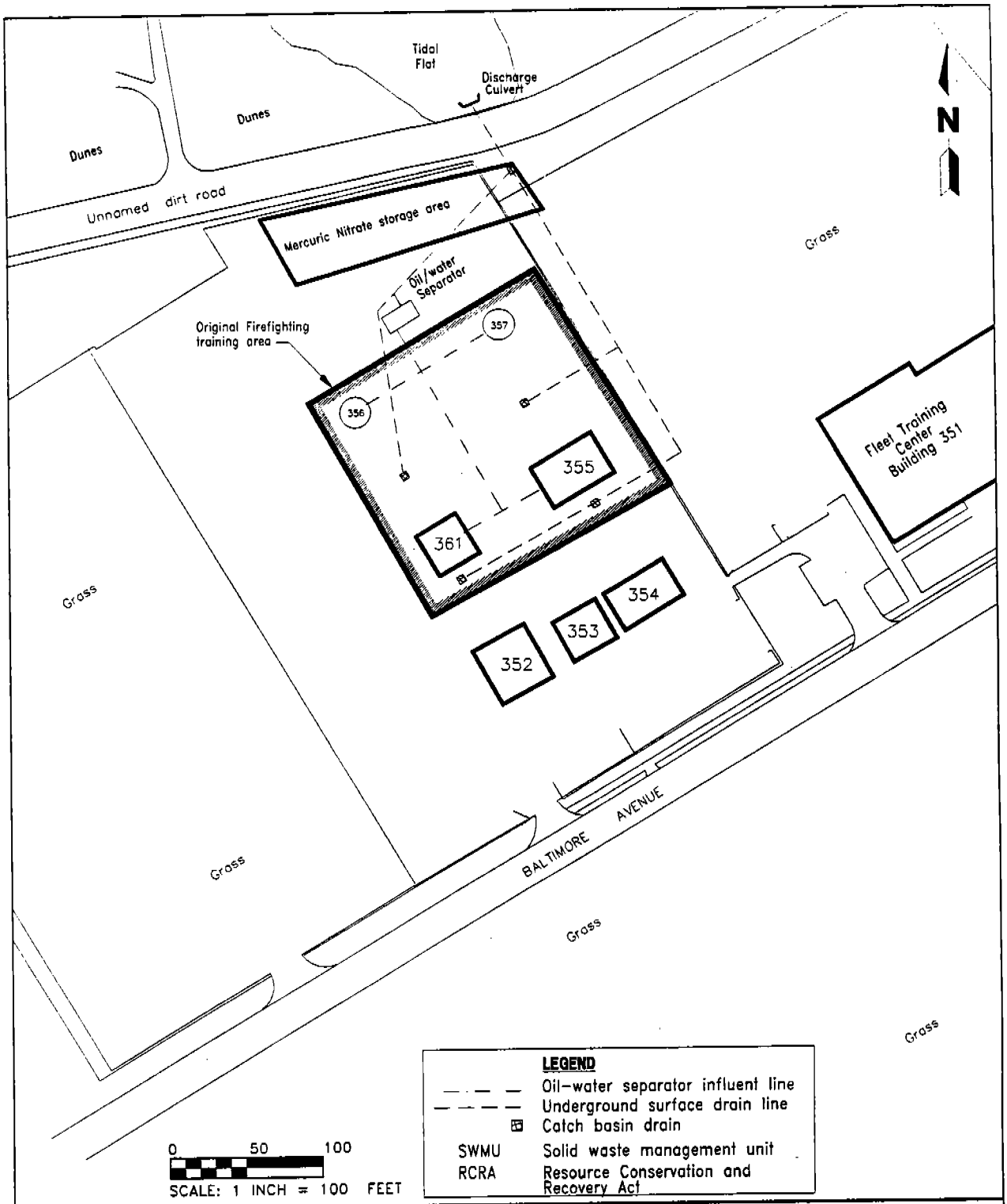

FIGURE 6-1
FIREFIGHTING TRAINING AREA AND DRAINAGE SYSTEM IN 1964

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drains that were used to collect stormwater runoff and fugitive firefighting waste liquids. The oil-water separator and other stormwater collection drains were combined at a surface drain, where the mercuric nitrate was reported to have been stored, and flowed to the St. Johns River through a single drainage culvert located approximately 120 feet northeast of the northern edge of the 1964 FFTA concrete apron (Figure 6-1). The area where the drainage ditch discharged was a tidal flat with a drainage swale that discharged to the St. Johns River at the edge of the riprap jetties. The tidal flat area was filled by the U.S. Army Corps of Engineers during 1995 with construction debris (Plate 4). A drainage pathway for stormwater drainage leading from the drainage culvert headwall to the jetties was constructed during placement of the fill materials.

In early 1970, the FFTA concrete apron was expanded to the north and west, creating an area of approximately 50,000 square feet (Figure 6-2). Two new practice areas were created and contained mockups of an airplane (Area 364) and a helicopter (Area 492). The new practice areas were designed to drain to the existing oil-water separator (Figure 6-1). The helicopter and plane mockups were surrounded by a 2-inch-high concrete berm (curb) to contain fuel and fire fighting waste. Currently the airplane and helicopter mockups are in use, but may be taken out of service during 1996, after the new firefighter training simulators are brought fully into service.

In 1978, the original oil-water separator (Figure 6-1) was removed and a new oil-water separator (estimated holding capacity of 10,000 gallons), wet well, and an unlined detention pond were constructed east of the FFTA concrete apron (Figure 6-2). The training areas located on the FFTA concrete apron and stormwater runoff both drained by gravity into the new oil-water separator. An unlined detention pond was also constructed and used to contain firefighting waste liquid and stormwater runoff when the oil-water separator was full.

Floating free-phase oil or a light non aqueous phase liquid was recovered by the new oil-water separator by allowing it to flow through an overflow pipe into an adjacent underground concrete tank. The concrete tank is estimated to have a capacity of 3,000 to 4,000 gallons. Effluent (water and oil emulsion) from the oil-water separator was piped to a manhole onto clarifiers (SWMU 44) at the NAVSTA Mayport FOWTP. The relationship of the FFTA area (SWMU 14) and the clarifiers (SWMU 44) at the FOWTP are illustrated on Figure 1-2.

Anecdotal history provided by NAVSTA Mayport FFTA facility personnel suggests that during the mid 1970s to early 1980s, the piping from the oil-water separator to the FOWTP was undersized and would occasionally become backed up and overflow at the manhole located southwest of the FTC Building 351 (Figure 6-2). This overflow allowed wastewater to flow into an open stormwater drainage ditch located on the north side of Baltimore Avenue. The drainage ditch is normally dry and only contains water during precipitation events. A new force main was constructed along the unnamed dirt road to the north of SWMU 14 (date of construction not documented) and the effluent pumped to the clarifiers at the FOWTP (Figure 6-3). Construction diagrams for modifications in 1978 to the FFTA waste liquid system show that the 10-inch-diameter force main as existing.

In 1987, the FFTA waste liquid system was modified by the addition of an oil skimmer to the oil-water separator and the removal of the 3,000- to 4,000-gallon-capacity concrete tank. The unlined detention pond was also redesigned to make

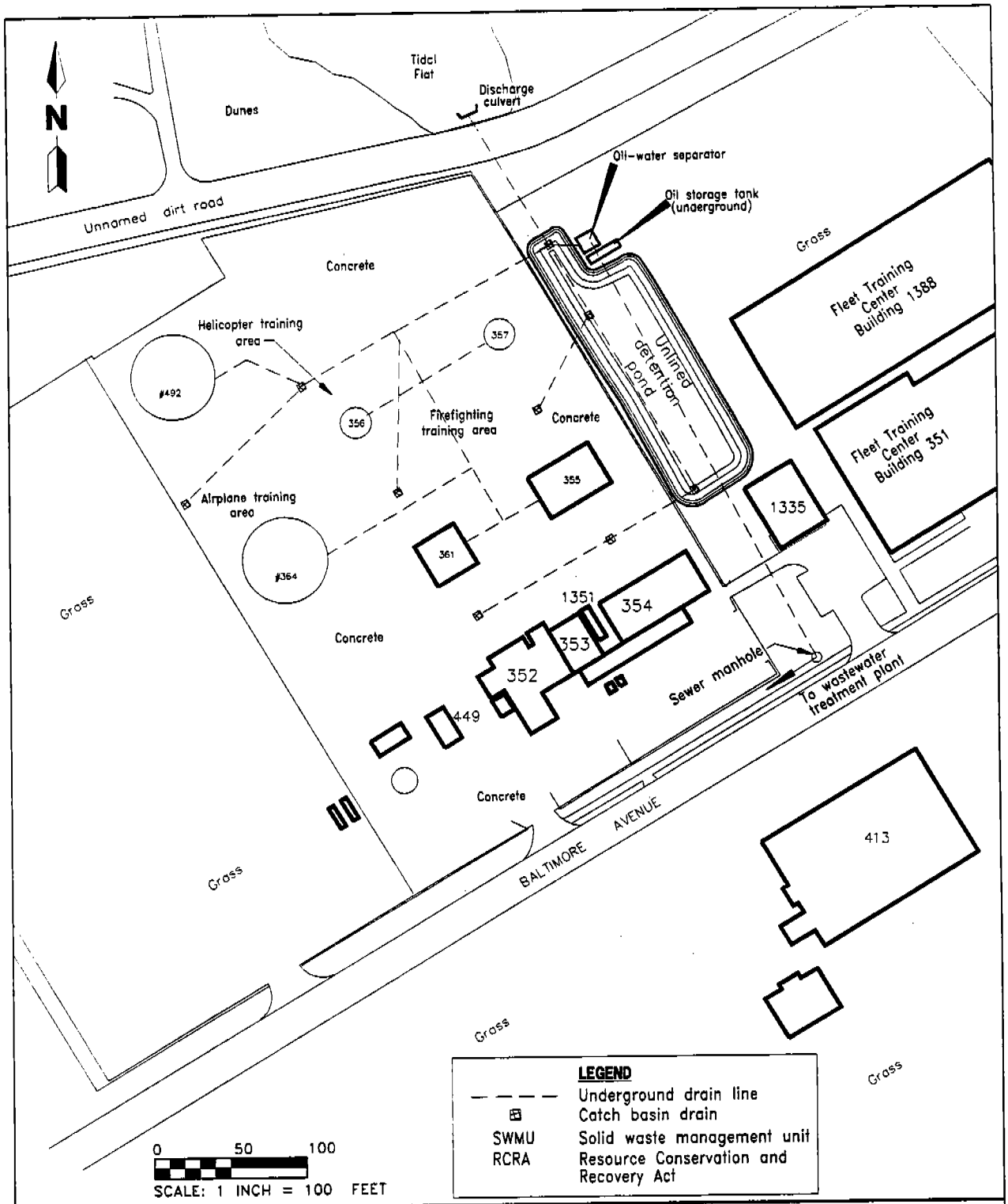

FIGURE 6-2
FIREFIGHTING TRAINING AREA AND DRAINAGE SYSTEM IN 1978

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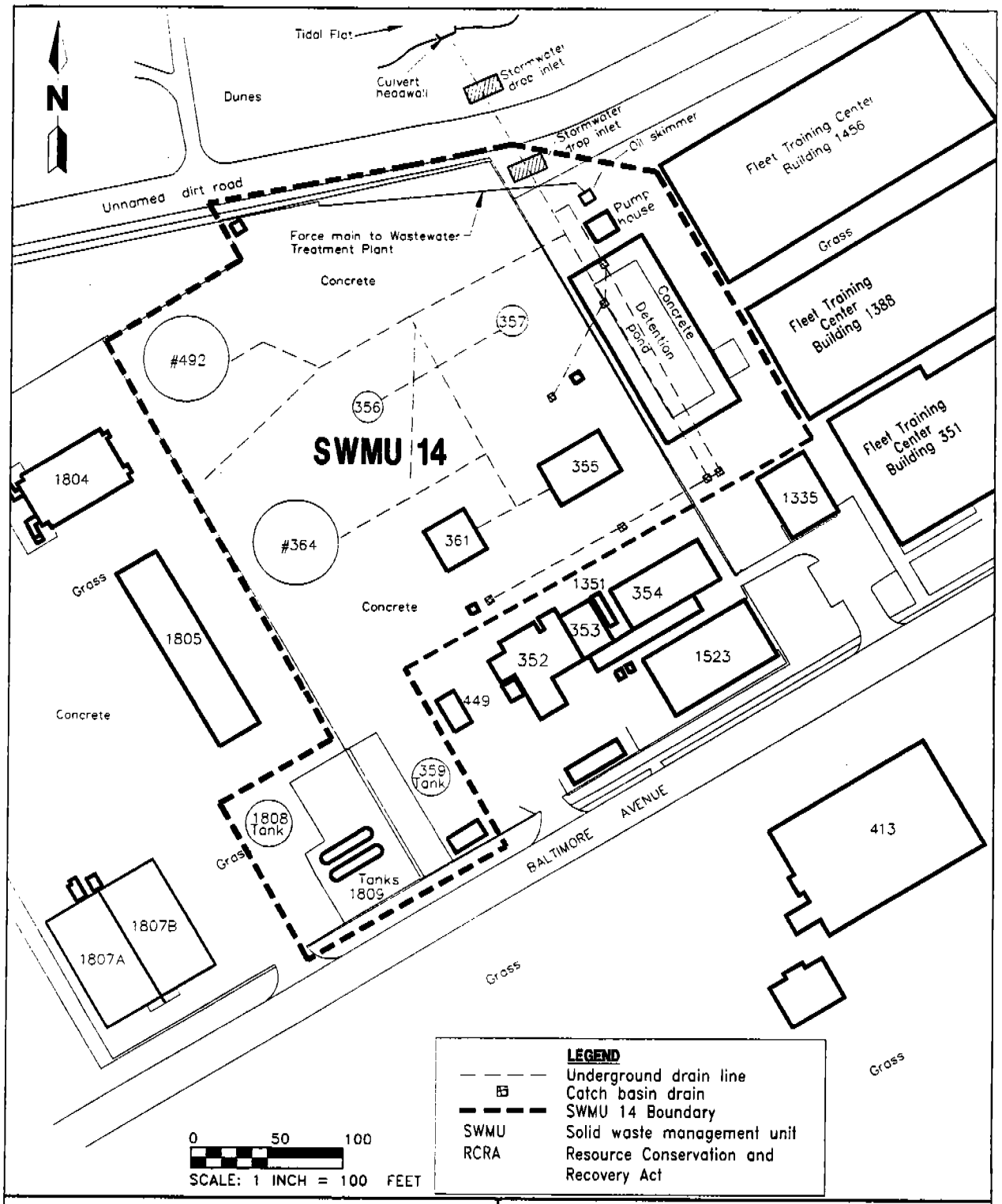

FIGURE 6-3
FIREFIGHTING TRAINING AREA AND DRAINAGE SYSTEM IN 1994

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the basin shorter and wider and constructed with a concrete liner (Figure 6-3). The oil-water separator became an FFTA waste liquid holding tank until the existing pumps could transfer the FFTA waste liquid to the FOWTP.

Since 1987, liquid wastes have been processed in the following manner. Liquid waste is stored either at the FFTA oil-water separator or the concrete-lined detention pond where it is subsequently transferred to Clarifiers 1, 2, and 3 (SWMU 44) at the FOWTP. The waste is either transferred directly from the FOWTP to the Oily Waste Treatment Plant (OWTP) (Group II, SWMU 9) or is held at Clarifiers 1, 2, and 3 until the OWTP can process the waste. After treatment at the OWTP, effluent is pumped back to the FOWTP for final treatment before being discharged into the St. Johns River. The FOWTP is regulated under National Pollutant Discharge Elimination System permit number FL0000922.

The FTC petroleum storage area located at the southwestern corner of SWMU 14 includes an underground 550-gallon-capacity, fiberglass tank for storage of gasoline and a 10,000-gallon-capacity, aboveground tank for the storage of diesel fuel. In approximately 1986, an underground 2,000-gallon-capacity tank and an unknown size underground fuel oil tank were removed. No documents have been found describing the condition of these tanks when they were removed or whether environmental samples were collected and analyzed.

The RFA report identified an area located in the northern part of the FFTA as having been used to store 55-gallon-capacity drums of mercuric nitrate (Figure 6-1) (A.T. Kearney, 1989). The report also indicated that in the past, four of the drums were rusted and mercuric nitrate possibly leaked to the environment. The rusted drums were indicated in the report to have been removed in 1984. The report did not indicate the method or location of disposal.

SWMU 18, the FTC Diesel Generator Sump. SWMU 18, FTC Diesel Generator Sump, is located on the southeastern side of FTC Building 351, immediately adjacent to a radar antenna tower (Figure 6-4). SWMU 18 consists of a diesel-powered electrical generator within a surrounding concrete containment curb approximately 6 inches high. The Diesel Generator Sump is approximately 5 feet wide and 10 feet long. The diesel electric generator is contractor-operated and maintained and has been at this location since approximately 1982 (A.T. Kearney, 1989). An open stormwater drainage ditch is located to the south of the Diesel Generator Sump and along the north side of Baltimore Avenue.

The purpose of the sump is to capture oil and diesel fuel that may leak from the diesel electric generator. A pipe with a manually operated valve protrudes out the southwestern side of the concrete containment curb, approximately 2 inches above the base. The purpose of the pipe and manual valve is to drain rainwater that accumulates in the sump. However, based on the stained and distressed vegetation near a stormwater drain adjacent to the Diesel Generator Sump, some oil and fuel appears to have been discharged onto the ground. The discharge occurs adjacent to the stormwater drain located approximately 4 feet from the Diesel Generator Sump. Stained soils also were observed between the discharge pipe and the open stormwater ditch during the VSI in 1989 (A.T. Kearney, 1989).

Fluids released from the Diesel Generator Sump drain into the stormwater ditch on the northern side of Baltimore Avenue. This is the same stormwater ditch that the FFTA waste liquids were reported to have entered when the manhole overflowed.

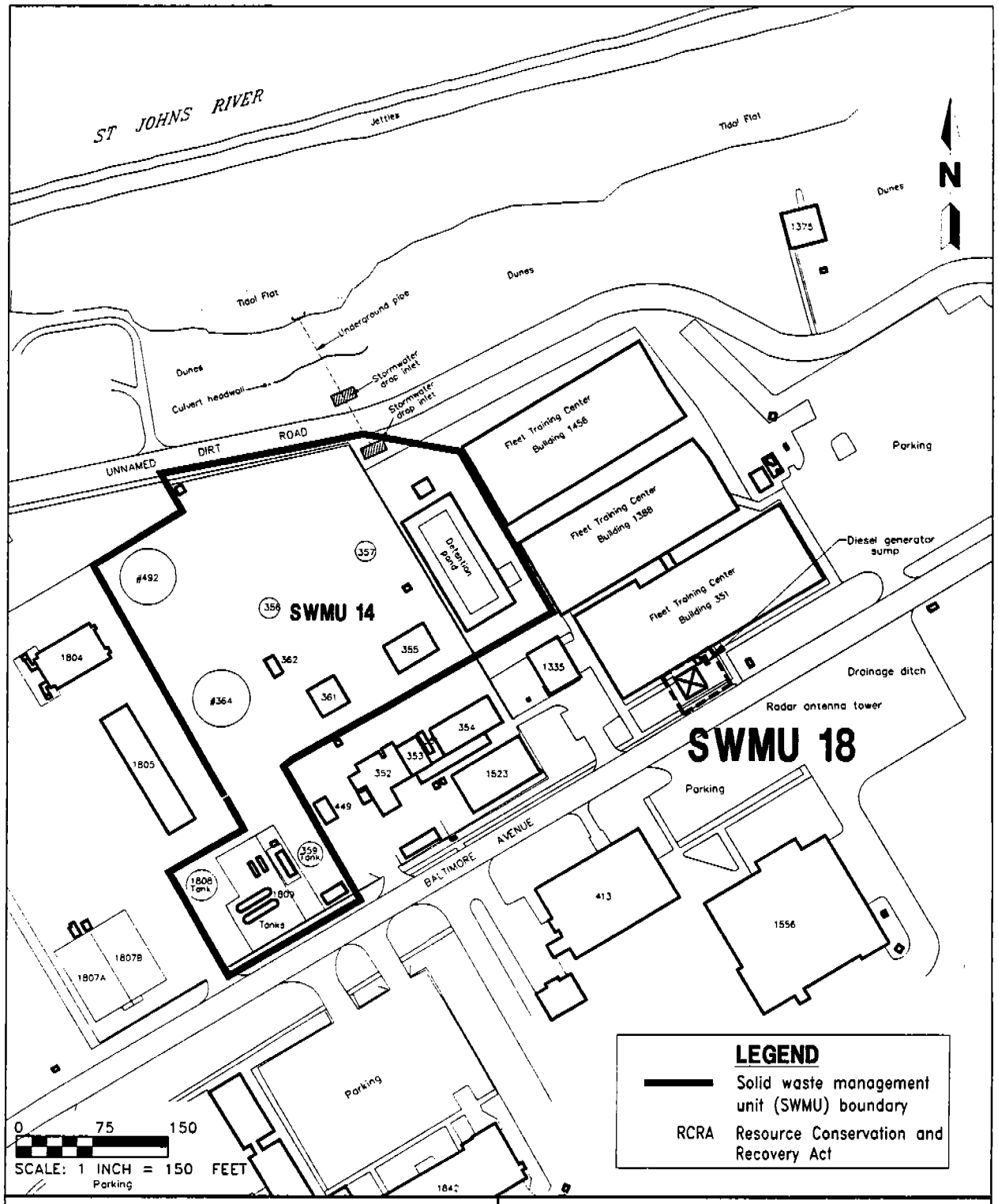

FIGURE 6-4
LOCATION OF DIESEL GENERATOR SUMP, SWMU 18

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Because both of the wastes are petroleum related, SWMUs 14 and 18 were investigated together as the FTC.

6.1.1 Previous Investigations at the FTC The following subsections summarize the previous investigations at each SWMU.

Environmental samples for chemical analyses have not been collected from SWMU 18, the FTC Diesel Generator Sump. An investigation was conducted at SWMU 14 during the ESI (E. C. Jordan, 1988) that included the following: installation of two groundwater monitoring wells (MPT-14-MW01S and MPT-14-MW02S, Figure 6-1), collection of one soil sample from each boring, and collection of a groundwater sample from each monitoring well. The soil sample was collected from the unsaturated zone above the water table, and the monitoring wells were screened across the water table (E.C. Jordan, 1988).

Analytical results of the soil samples indicate that VOCs, SVOCs, pesticides, and PCBs were detected. Leachate from the soil samples was analyzed using the EP Tox, and no metals were detected in the leachate (E.C. Jordan, 1988).

Analytical results of the groundwater samples indicate that mercury (unfiltered) was detected at a concentration of 1.8 $\mu g/\ell$ in the sample collected from monitoring well MPT-14-MW02S. VOCs, SVOCs, pesticides, and PCBs were not detected in the groundwater samples (E.C. Jordan, 1988).

Because only two monitoring wells were installed, the direction of groundwater flow for the shallow aquifer in the vicinity of SWMU 14 was not determined, but was estimated to be toward the north where it would discharge to the St. Johns River. Soil at the location of the two borings was found to consist of fine- to-medium-grained sand with some shells (E.C. Jordan, 1988).

6.1.2 RFI Field Activities RFI field activities were conducted at SWMUs 14 and 18 from March through October, 1995. Field activities consisted of a preliminary screening of groundwater samples using a gas chromatograph, the collection of surface and subsurface soil samples, the collection of surface water and sediment samples, the installation of groundwater monitoring wells, and collection of groundwater samples. Sampling procedures, background sampling information, and other installation-wide sampling information is provided in the NAVSTA Mayport GIR (ABB-ES, 1995a) and in the NAVSTA Mayport RFI Workplan (ABB-ES, 1991).

Surface and Subsurface Soil Sampling. The purpose of surface and subsurface soil samples was to assess whether or not there has been a contaminant release to the environment from SWMUs 14 and 18. Twenty-seven surface soil samples and five duplicate samples were collected from the land surface to a depth of 1 foot bls (Plate 4). Fifteen subsurface soil samples (4 to 5 feet bls) and one duplicate were collected at borings drilled for the installation of shallow monitoring wells MPT-14-MW03S through MPT-14-MW14S, and MPT-18-MW01S through MPT-18-MW03S (Plate 4).

Surface soil samples were collected at two areas where the surface soils are stained by hydrocarbons (Plate 4). One sampling location was at the south end of the detention pond at monitoring well location MPT-14-MW10S, where a subsurface soil sample also was collected, and the other sampling location (MPT-14-SS17) was northwest of SWMU 14 at a diesel fuel pump.

Because the airplane and helicopter mockups and the concrete detention pond are currently in use, surface and subsurface soil samples were not collected directly beneath these structures.

Surface and subsurface soil samples were collected using a decontaminated stainless-steel hand auger. From the hand auger, the aliquot for analysis of VOCs was transferred directly to a sample container with a Teflon™ lid to reduce the potential for volatilization. The soil remaining in the hand auger was transferred to a glass bowl using a stainless-steel spoon. Aliquots of the sample for analysis of SVOCs, pesticides, PCBs, and inorganics were then homogenized and transferred to appropriate sample containers. Samples were placed in coolers, refrigerated with ice, and sent overnight under chain-of-custody protocol to an offsite laboratory for analysis by USEPA SW-846 methods.

In addition, four subsurface soil samples were collected during drilling of the monitoring wells and analyzed for general physical and chemical properties. These soil samples were collected at locations selected in the field to assess the variability of soil properties in the vicinity of the FTC Area. The physical and chemical properties include bulk density, CEC, TOC, soil pH, particle-size distribution, and moisture content. Properties of porosity and soil sorptive capacity were derived from these basic physical and chemical properties. These parameters will be used to assess contaminant fate and transport and human health and ecological risk and will provide fundamental engineering data to support development of potential corrective measures. The results of the geotechnical analyses are discussed in Chapter 3.0, Subsection 3.2.5.

Surface Water and Sediment Sampling. The purpose of the surface water and sediment samples was to assess whether or not there was a release to a drainage feature in the immediate vicinity of SWMUs 14 and 18. Two surface water and sediment pairs and nine sediment samples (land surface to a depth of 1 foot bls) were collected near the FTC Area. One surface water duplicate sample at MPT-14-SW04 and two sediment duplicate samples at MPT-14-SD06 and MPT-18-SD01 were collected (Plate 4).

The surface water samples were collected using a peristaltic pump and disposable Teflon™ tubing, drawing the water at less than 1 liter per minute from a point midway between the surface and the bottom of a drainage feature. The samples were collected before the surface water contacted the peristaltic pump. Samples for inorganics, SVOCs, pesticides, and PCBs were collected first. Samples for VOCs were collected last by carefully removing the Teflon™ tubing that contained the surface water sample and then transferring the contents to a VOC vial for shipment to the offsite laboratory.

Sediment samples were collected at low tide with a decontaminated 3-inch-diameter stainless-steel hand auger. Sample aliquots for analysis of VOCs was transferred directly to a sample container with a Teflon™ lid to reduce the potential for volatilization. The remaining sediment sample was transferred to a glass bowl using a stainless-steel spoon. Aliquots of the sample for analysis of SVOCs, pesticides, PCBs, and inorganics were then homogenized and transferred to appropriate sample containers. Samples were placed in coolers, refrigerated with ice, and sent overnight under chain-of-custody protocol to an offsite laboratory for analysis.

Groundwater Field Screening Program. A groundwater field screening program using direct-push technology (TerraProbe℠) was conducted to collect groundwater samples in areas that store petroleum fuels and/or solvents at the FTC Area. The screening program consisted of 33 sample locations at SWMU 14 and 5 sample locations at SWMU 18 (Plate 5). Groundwater samples were collected using the TerraProbe℠ system to drive a threaded 1-inch OD hollow steel rod assembly attached to a threaded 1-inch OD hollow steel perforated screen to the proper sampling depth at each sampling location. A peristaltic pump was used to collect the groundwater sample, which was immediately containerized for transport to either the onsite screening laboratory or offsite laboratory. Because the airplane and helicopter mockups and the concrete detention pond are currently in use, groundwater field screening samples were not collected directly beneath these structures.

Onsite analyses of groundwater field screening samples were performed using a portable GC (HNU, Model 311). Approximately 10 percent of the groundwater field screening sampling locations were selected for confirmation analysis by USEPA Methods 8010, 8020, and modified 8015/8100 for fuel quantitation. Six groundwater samples and a duplicate were collected at previous field screening sampling locations from the same depth interval and submitted to the offsite laboratory for confirmational analysis. The DQO for the groundwater field screening samples was NEESA Level E (USEPA DQO level 1). This DQO was selected because the purpose of this screening program was to assist in locating monitoring wells from which groundwater samples would be collected.

Monitoring Well Installation Shallow surficial aquifer zone monitoring wells (MPT-14-MW03S through MPT-14-MW14S, and MPT-18-MW01S through MPT-18-MW03S) were installed during the 1995 field investigation (Plate 1 and Plate 5). Monitoring well installation and construction were accomplished as described in the NAVSTA Mayport RFI Workplan (ABB-ES, 1991) and in the NAVSTA Mayport GIR (ABB-ES, 1995a). Boring logs and diagrams of the monitoring wells are provided in Appendix A of the NAVSTA Mayport GIR (ABB-ES, 1995a).

Groundwater Sampling. Fourteen groundwater samples were collected from SWMU 14 and three were collected from SWMU 18 (Plate 1 and Plate 5). All groundwater samples were collected from shallow monitoring wells. Two duplicate groundwater samples were collected from shallow monitoring wells MPT-14-MW04S and MPT-18-MW01S.

Groundwater sampling was accomplished as described in Paragraph 2.1.4.2 of the NAVSTA Mayport GIR (ABB-ES, 1995a). The groundwater sample collection method was low-flow sampling. Prior to groundwater sample collection, the monitoring well was purged using a peristaltic pump to remove stagnant water from the top of the water column without causing the suspension of silts and clays. Purging was complete when a minimum of three well volumes of water were removed, and the seven selected groundwater parameters (dissolved oxygen, oxidation potential, pH, salinity, specific conductance, temperature, and turbidity) were considered stable (within 10 percent of previous three measurements). This process ensured good conductance between the well and the surrounding matrix. Purging continued until a turbidity of 5 NTUs or less was achieved.

The groundwater samples were collected using a peristaltic pump and disposable Teflon™ tubing. The samples were collected before the material came in contact with the pump. The samples were collected by pumping water at less than 1 liter

per minute from the middle of the well screen interval. Samples for inorganics, SVOCs, pesticides, and PCBs were collected first. VOCs were collected last with the sampler preventing agitation of the water in the monitoring well by slowly pulling the Teflon™ tubing out of the well and carefully transferring the contents of the tube to a VOC vial with a Teflon™ septa cap for shipment to the offsite laboratory. Groundwater samples were placed in a cooler, refrigerated with ice, and sent overnight under chain-of-custody protocol to an offsite laboratory for analysis.

Laboratory Analysis. Soil and groundwater samples were analyzed for target analytes selected from the Groundwater Monitoring List contained in Appendix IX, 40 CFR, Part 264, and USEPA CLP TCL and TAL parameters, including VOCs, SVOCs, pesticides, PCBs, metals, and cyanide. These target analytes are described in Chapter 2.0, Analytical Program. The analysis was conducted using methods contained in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, USEPA SW-846 (USEPA, 1986a). In addition, the groundwater samples were analyzed for indicator parameters (total dissolved solids, chloride, alkalinity, hardness, sulfate, sulfide, total Kjeldahl nitrogen, ammonia, nitrate/nitrite, phosphorus, total organic carbon, color, and Ph). The duplicate groundwater sample was not analyzed for indicator parameters.

6.2 FINDINGS. The following subsections present the nature and distribution of target analytes detected in surface soil, subsurface soil, surface water, sediment, and groundwater. The data are described as previously presented based on the following rationale. SWMUs 14 and 18, the FTC, are potential sources of contamination. Therefore, these SWMUs may have released contamination directly to the underlying subsurface soils and drainage features near the sites. Surface soil data are presented and discussed first, followed by findings of the subsurface soil investigation. The surface water and sediment are discussed next because of the potential for the release of contaminants to the drainage features in the immediate vicinity of the SWMUs. Groundwater is discussed last to assess whether or not target analytes have migrated beyond the areas north of the FTC and to the St. Johns River.

6.2.1 Surface Soil Assessment Twenty-seven surface soil samples and five duplicates were collected at the FTC (Plate 4). Tables 6-1 and 6-2 present concentrations of organic and inorganic analytes, respectively, detected in the surface soil samples collected at the FTC. In addition, Tables 6-3 and 6-4 present concentrations of organic and inorganic analytes, respectively, detected in sediment samples collected at the FTC that are treated as surface soil samples.

These sediment samples consist of locations MPT-18-SD01 through MPT-18-SD03 (with a duplicate at MPT-18-SD01), which were collected from dry grass-covered surface water conveyance swales located on the north side of Baltimore Avenue and locations MPT-14-SD01, MPT-14-SD02, and MPT-14-SD03 from an open drop inlet on the south and north sides of the unnamed dirt road. These open drainage swales contain water only after rainfall events.

Because these sediment samples are inundated with water only after precipitation events, they are more equivalent to surface soil samples and are included with surface soil samples in calculations presented in Tables 6-5 and 6-6. Table 6-5

Table 6-1
Organic Analytes Detected in Surface Soil Samples at SWMUs 14 and 18

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

Analytical Batch Number:	R9756	R9756	R9756	R9756	R9756
Sample Location:	MPT-14-SS01	MPT-14-SS03	MPT-14-SS05	MPT-14-SS07	MPT-14-MW10S
Sample Number:	14S00101	14S00301	14S00501	14S00701	14S01001
Date Sampled:	09-APR-95	09-APR-95	09-APR-95	09-APR-95	09-APR-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Volatiles (µg/kg)					
2-Butanone	--	--	16 J	--	4 J
Toluene	2 J	2 J	32	2 J	--
Ethylbenzene	--	--	4 J	--	--
Xylenes (total)	--	--	13	--	--
Semivolatiles (µg/kg)					
Naphthalene	--	--	3,700 J	--	--
2-Methylnaphthalene	--	--	13,000	--	--
Acenaphthene	--	--	910 J	--	--
Fluorene	--	--	2,200 J	--	--
Phenanthrene	--	--	3,600 J	--	--
Di-n-Butylphthalate	--	--	--	--	--
Fluoranthene	--	--	--	--	--
Pyrene	--	--	1,600 J	--	2,700
Benzo(a)anthracene	--	--	--	--	120 J
Chrysene	--	--	--	--	140 J
bis(2-Ethylhexyl)phthalate	--	--	--	--	--
Benzo(b)fluoranthene	--	--	--	--	--
Benzo(k)fluoranthene	--	--	--	--	--
Benzo(a)pyrene	--	--	--	--	--
Indeno (1,2,3-cd) pyrene	--	--	--	--	--
Dibenz(a,h)anthracene	--	--	--	--	--
Benzo(g,h,i)perylene	--	--	--	--	--
Pesticides/PCBs (µg/kg)					
Heptachlor	--	--	--	--	--
Dieldrin	--	--	--	--	--
Chlordane	150	--	--	--	--
Aroclor-1254	--	72	--	--	--

See notes at end of table.

Table 6-1 (Continued)
Organic Analytes Detected in Surface Soil Samples at SWMUs 14 and 18

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

Analytical Batch Number:	R9756	R9756	M9000	R9756	R9756
Sample Location:	MPT-14-SS11	MPT-14-SS13	MPT-14-SS15	MP-14-SS16	MPT-14-SS16
Sample Number:	14S01101	14S01301	14S01501	14S01601	14S01601DUP
Date Sampled:	09-APR-95	09-APR-95	23-MAY-95	09-APR-95	09-APR-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Volatiles (µg/kg)					
2-Butanone	--	--	--	--	--
Toluene	--	1 J	--	--	2 J
Ethylbenzene	--	--	--	--	--
Xylenes (total)	--	--	--	--	--
Semivolatiles (µg/kg)					
Naphthalene	--	--	--	--	--
2-Methylnaphthalene	--	--	--	--	--
Acenaphthene	--	--	--	--	--
Fluorene	--	--	--	--	--
Phenanthrene	--	--	--	--	--
Di-n-Butylphthalate	--	480 J	--	370 J	210 J
Fluoranthene	--	--	--	--	--
Pyrene	--	--	--	--	--
Benzo(a)anthracene	--	--	--	--	--
Chrysene	--	--	--	--	--
bis(2-Ethylhexyl)phthalate	--	--	--	--	--
Benzo(b)fluoranthene	--	--	--	--	--
Benzo(k)fluoranthene	--	--	--	--	--
Benzo(a)pyrene	--	--	--	--	--
Indeno (1,2,3-cd) pyrene	--	--	--	--	--
Dibenz(a,h)anthracene	--	--	--	--	--
Benzo(g,h,i)perylene	--	--	--	--	--
Pesticides/PCBs (µg/kg)					
Heptachlor	--	--	0.77	--	--
Dieldrin	--	--	--	--	--
Chlordane	12 J	--	--	--	--
Aroclor-1254	--	--	--	--	--

See notes at end of table.

Table 6-1 (Continued)
Organic Analytes Detected in Surface Soil Samples at SWMUs 14 and 18

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

Analytical Batch Number:	R9756	M8867	M8867	M8867	M8995
Sample Location:	MPT-14-SS17	MPT-14-MW05S	MPT-14-MW06S	MPT-14-MW06S	MPT-14-MW07S
Sample Number:	14S01701	14S01901	14S02001	14S02001DUP	14S02301
Date Sampled:	09-APR-95	24-APR-95	24-APR-95	24-APR-95	21-MAY-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Volatiles (µg/kg)					
2-Butanone	--	--	--	--	--
Toluene	--	--	--	--	--
Ethylbenzene	--	--	--	--	--
Xylenes (total)	--	1 J	1 J	1 J	--
Semivolatiles (µg/kg)					
Naphthalene	--	--	--	--	--
2-Methylnaphthalene	--	--	--	--	--
Acenaphthene	--	--	--	--	--
Fluorene	--	--	--	--	--
Phenanthrene	300 J	--	26 J	--	44 J
Di-n-Butylphthalate	--	--	--	--	--
Fluoranthene	--	--	120 J	54 J	--
Pyrene	--	--	100 J	56 J	--
Benzo(a)anthracene	--	--	46 J	21 J	--
Chrysene	--	--	83 J	45 J	--
bis(2-Ethylhexyl)phthalate	140 J	--	--	31 J	--
Benzo(b)fluoranthene	--	--	110 J	69 J	--
Benzo(k)fluoranthene	--	--	92 J	51 J	--
Benzo(a)pyrene	--	--	87 J	49 J	--
Indeno(1,2,3-cd)pyrene	--	--	82 J	51 J	--
Dibenz(a,h)anthracene	--	--	18 J	--	--
Benzo(g,h,i)perylene	--	--	99 J	65 J	--
Pesticides/PCBs (µg/kg)					
Heptachlor	--	--	--	--	--
7Dieldrin	--	--	--	--	--
Chlordane	--	--	--	--	--
Aroclor-1254	--	--	--	--	--

See notes at end of table.

Table 6-1 (Continued)
Organic Analytes Detected in Surface Soil Samples at SWMUs 14 and 18

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

Analytical Batch Number:	M8867	M8867	M8995	M8995
Sample Location:	MPT-18-SS01	MPT-18-MW02S	MPT-18-MW01S	MPT-18-MW01S
Sample Number:	18S00101	18S00201	18S00301	18S00301DUP
Date Sampled:	24-APR-95	24-APR-95	22-MAY-95	22-MAY-95
Sample Depth (ft bls):	0 to 1	0 to 1	0 to 1	0 to 1
Volatiles (µg/kg)				
2-Butanone	--	--	--	--
Toluene	--	--	2 J	--
Ethylbenzene	--	--	--	--
Xylenes (total)	1 J	1 J	--	--
Semivolatiles (µg/kg)				
Naphthalene	--	--	--	--
2-Methylnaphthalene	--	--	--	--
Acenaphthene	--	--	--	--
Fluorene	--	--	--	--
Phenanthrene	--	--	--	--
Di-n-Butylphthalate	--	--	--	--
Fluoranthene	--	--	55 J	41 J
Pyrene	20 J	--	66 J	50 J
Benzo(a)anthracene	--	--	68 J	55 J
Chrysene	--	--	78 J	67 J
bis(2-Ethylhexyl)phthalate	--	25 J	--	--
Benzo(b)fluoranthene	--	--	92 J	79 J
Benzo(k)fluoranthene	--	--	81 J	73 J
Benzo(a)pyrene	--	--	55 J	50 J
Indeno (1,2,3-cd) pyrene	--	--	40 J	--
Dibenz(a,h)anthracene	--	--	--	--
Benzo(g,h,i)perylene	--	--	35 J	--
Pesticides/PCBs (µg/kg)				
Heptachlor	--	--	--	--
Dieldrin	6.1	--	29	110
Chlordane	--	--	--	--
Aroclor-1254	--	--	--	--

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
DUP = duplicate.
ft bls = feet below land surface.
µg/kg = microgram per kilogram.
-- = concentration of analyte, if present, was less than the detection limit.
J = estimated value.
PCB = polychlorinated biphenyl.

Table 6-2
Inorganics Analytes Detected in Surface Soil Samples at SWMUs 14 and 18

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

Analytical Batch Number:	R9756	R9756	R9756	R9756	R9756	R9756	R9756	R9756
Sample Location:	MPT-14-SS01	MPT-14-SS02	MPT-14-SS03	MPT-14-SS04	MPT-14-SS05	MPT-14-SS06	MPT-14-SS07	MPT-14-SS08
Sample Number:	14S00101	14S00201	14S00301	14S00401	14S00501	14S00601	14S00701	14S00801
Date Sampled:	09-APR-95	09-APR-95	09-APR-95	09-APR-95	09-APR-95	09-APR-95	09-APR-95	09-APR-95
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
Inorganics (mg/kg)								
Arsenic	1.4 J	0.6 J	1.3 J	0.44 J	0.95 J	0.48 J	0.57 J	2.2 J
Barium	9.2 J	10.1 J	14 J	5.2 J	12.8 J	4.6 J	5.2 J	6.2 J
Beryllium	0.08 J	0.1 J	0.14 J	0.06 J	0.14 J	0.1 J	0.1 J	0.22 J
Cadmium	0.4 J	--	0.29 J	--	0.29 J	--	--	--
Chromium	6.1	2.2	6.5	1.2 J	5.4	2.7	3.1	7.1
Cobalt	0.89 J	--	0.89 J	--	0.59 J	--	--	--
Copper	12.5	9.1	8.3	3.2 J	5.9	5 J	5.8	4.6 J
Lead	16.2	3.8	6.8	1	7.3	3	6.1	5.1
Mercury	--	--	--	--	--	--	--	--
Nickel	3.4 J	1.4 J	1.8 J	--	1.5 J	1.1 J	--	2.2 J
Selenium	--	--	--	--	--	--	--	0.18 J
Silver	--	--	--	--	--	--	--	--
Tin	2.2 J	--	--	--	--	--	--	--
Vanadium	3.6 J	2 J	8 J	1.9 J	5.9 J	2.3 J	2.4 J	7.5 J
Zinc	46.2	98.6	26	44.8	51.1	119	26.1	15.5
Cyanide	0.13 J	0.06 J	0.13 J	0.09 J	0.13 J	0.06 J	--	0.17 J

See notes at end of table.

Table 6-2 (Continued)
Inorganic Analytes Detected in Surface Soil Samples at SWMUs 14 and 18

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

Analytical Batch Number:	R9756	R9756	R9756	R9756	R9756	R9756	R9756	M9000
Sample Location:	MPT-14-SS09	MPT-14-MW10S	MPT-14-SS11	MPT-14-SS11	MPT-14-SS12	MPT-14-SS13	MPT-14-SS14	MPT-14-SS15
Sample Number:	14S00901	14S01001	14S01101	14S01101DUP	14S01201	14S01301	14S01401	14S01501
Date Sampled:	09-APR-95	09-APR-95	09-APR-95	09-APR-95	09-APR-95	09-APR-95	09-APR-95	23-MAY-95
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
Inorganics (mg/kg)								
Arsenic	1 J	0.44 J	0.39 J	0.43 J	0.36 J	0.36 J	0.66 J	--
Barium	5.6 J	4.9 J	3.4 J	4.1 J	3.3 J	4.4 J	6.4 J	5.5 J
Beryllium	0.1 J	0.06 J	0.5 J	0.06 J	0.06 J	0.1 J	0.06 J	0.15 J
Cadmium	--	--	--	--	--	--	--	--
Chromium	2.4	2.5	1.8 J	2.0 J	2.2	3.4	3	4.2
Cobalt	--	--	--	--	--	--	0.76 J	0.93 J
Copper	1.9 J	4.7 J	1.7 J	2.0 J	1.2 J	3.9 J	9.8	1.2 J
Lead	1.4	3.2	0.89	1	1.2	9.4	3.9	2 J
Mercury	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	1.3 J	--
Selenium	--	--	--	--	--	--	--	0.34 J
Silver	--	--	--	--	--	--	--	0.43 J
Tin	--	--	--	--	--	--	--	3.9 J
Vanadium	3.7 J	1.7 J	2 J	2.4 J	1.9 J	2.4 J	2.7 J	3.3 J
Zinc	4.8	20.7	5.5	5	5.5	29	12.5	--
Cyanide	0.06 J	--	0.06 J	0.12 J	0.16 J	0.06 J	0.09 J	--

See notes at end of table.

Table 6-2 (Continued)
Inorganic Analytes Detected in Surface Soil Samples at SWMUs 14 and 18

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

Analytical Batch Number:	R9756	R9756	R9756	M8867	M8867	M8867	M8995	M8995
Sample Location:	MPT-14-SS16	MPT-14-SS16	MPT-14-SS17	MPT-14-MW05S	MPT-14-MW06S	MPT-14-MW06S	MPT-14-MW12S	MPT-14-MW13S
Sample Number:	14S01601	14S01601DUP	14S01701	14S01901	14S02001	14S02001DUP	14S02101	14S02201
Date Sampled:	09-APR-95	09-APR-95	09-APR-95	24-APR-95	24-APR-95	24-APR-95	20-APR-95	21-APR-95
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
Inorganics (mg/kg)								
Arsenic	0.52 J	0.42 J	--	0.8 J	0.5 J	1 J	1.6 J	0.78 J
Barium	5.6 J	4.8 J	21.3 J	4.5 J	3.9 J	3.8 J	4.4 J	4.2 J
Beryllium	0.1 J	0.07 J	0.18 J	0.09 J	0.06 J	0.06 J	0.09 J	0.1 J
Cadmium	--	--	1.4	--	--	--	--	--
Chromium	3.7	5.1	14.8	4.2	2.8	2.8	6.5	3.2
Cobalt	--	0.74 J	0.96 J	--	--	--	--	--
Copper	5.7 J	4.8 J	25.7	3 J	1.9 J	2 J	2.7 J	0.42 J
Lead	12	14.1	24.8	3.6	3.3	3.9	1 J	1.8 J
Mercury	--	0.04 J	0.04 J	--	--	--	--	--
Nickel	--	--	2.3 J	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	0.4 J	--
Tin	--	--	--	--	--	4.5 J	15.5	2 J
Vanadium	3 J	2.6 J	7 J	2.8 J	1.8 J	1.7 J	6.5 J	2.3 J
Zinc	41.6	47	152	8.6	7.3	7.2	--	--
Cyanide	--	--	0.18 J	--	--	--	--	--

See notes at end of table.

Table 6-2 (Continued)
Inorganic Analytes Detected in Surface Soil Samples at SWMUs 14 and 18

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

Analytical Batch Number:	M8995	M8995	M8867	M8867	M8995	M8995	M8995	M8995
Sample Location:	MPT-14-MW07S	MPT-14-MW09S	MPT-18-SS01	MPT-18-MW02S	MPT-18-MW01S	MPT-18-MW01S	MPT-18-MW03S	MPT-18-MW03S
Sample Number:	14S02301	14S02401	18S00101	18S00201	18S00301	18S00301DUP	18S00401	18S00401DUP
Date Sampled:	21-MAY-95	21-MAY-95	24-APR-95	24-APR-95	22-MAY-95	22-MAY-95	23-MAY-95	23-MAY-95
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
Inorganics (mg/kg)								
Arsenic	0.87 J	--	0.58 J	0.6 J	--	--	0.63 J	0.77 J
Barium	4.1 J	8.3 J	7.5 J	3.3 J	8.5 J	9.8 J	4.8 J	5 J
Beryllium	0.09 J	0.22 J	0.05 J	0.05 J	0.07 J	0.08 J	0.11 J	0.11 J
Cadmium	--	--	--	--	--	--	--	--
Chromium	6	8.7	3.7	3.4	4.2	4.9	--	--
Cobalt	--	1.5 J	--	--	--	0.99 J	--	--
Copper	1.9 J	1.8 J	3.2 J	3.5 J	1.8 J	1.9 J	6.8	5.9
Lead	1.3 J	3.1 J	4.3	5.8	3.9 J	9.5 J	2.7	2.8
Mercury	--	--	--	--	--	--	--	--
Nickel	--	2 J	--	--	--	1.9 J	--	--
Selenium	--	--	--	--	0.24 J	--	--	--
Silver	--	--	--	--	--	--	--	--
Tin	--	3 J	2.4 J	--	3.2 J	4.2 J	--	3.2 J
Vanadium	4.7 J	7.8 J	2.2 J	2.2 J	3.1 J	3.5 J	2 J	2.2 J
Zinc	--	--	6	12.7	--	--	13	11.9
Cyanide	--	--	--	--	--	--	0.08 J	--

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
DUP = duplicate.
mg/kg = milligram per kilogram.
-- = concentration of analyte, if present, was less than the detection limit.
J = estimated value.

Table 6-3
Organic Analytes Detected in Selected Sediment Samples Used as Surface Soil Samples at SWMUs 14 and 18

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

Analytical Batch Number:	R9800	R9800	R9800	R9800
Sample Location:	MPT-14-SD01	MPT-14-SD02	MPT-14-SD03	MPT-18-SD01
Sample Number:	14D00101	14D00201	14D00301	18D00101
Date Sampled:	19-APR-95	19-APR-95	19-APR-95	19-APR-95
Sample Depth (ft/bls):	0 to 1	0 to 1	0 to 1	0 to 1
Volatiles (µg/kg)				
Acetone	--	72	26	--
Carbon disulfide	--	--	--	--
2-Butanone	--	--	6 J	--
Toluene	--	--	--	--
Semivolatiles (µg/kg)				
Acenaphthene	--	190 J	--	--
Fluorene	--	290 J	--	--
N-Nitrosodiphenylamine	--	1,600 J	270 J	--
Phenanthrene	--	840 J	760 J	--
Anthracene	--	--	220 J	--
Fluoranthene	--	4,400	4,200	--
Pyrene	2,100	6,000	2,900	--
Butylbenzylphthalate	--	--	--	--
Benzo(a)anthracene	270 J	1,900	1,500 J	--
Chrysene	310 J	3,700	2,700	--
bis(2-Ethylhexyl) phthalate	--	1,100 J	2,400	270 J
Benzo(b)fluoranthene	--	3,500	2,100	--
Benzo(k)fluoranthene	--	3,200	2,700	--
Benzo(a)pyrene	--	2,100	1,700 J	--
Indeno (1,2,3-cd) pyrene	--	1,400 J	1,100 J	--
Dibenz(a,h)anthracene	--	230 J	--	--
Benzo(g,h,i)perylene	--	1,400 J	1,100 J	--
Pesticides/PCBs (µg/kg)				
Dieldrin	--	--	--	--
4,4'-DDE	--	--	1.1	--
4,4'-DDD	--	--	--	--
4,4'-DDT	--	--	1.2 J	--
Chlordane	--	--	--	11

See notes at end of table.

Table 6-3 (Continued)
Organic Analytes Detected in Selected Sediment Samples Used as Surface Soil Samples at SWMUs 14 and 18

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

Analytical Batch Number:	R9800	R9800	R9800
Sample Location:	MPT-18-SD01	MPT-18-SD02	MPT-18-SD03
Sample Number:	18D00101DUP	18D00201	18D00301
Date Sampled:	19-APR-95	19-APR-95	19-APR-95
Sample Depth (ft/bls)	0 to 1	0 to 1	0 to 1
Volatiles (µg/kg)			
Acetone	10 J	--	--
Carbon disulfide	--	--	--
2-Butanone	--	4 J	--
Toluene	--	--	2 J
Semivolatiles (µg/kg)			
Acenaphthene	--	--	--
Fluorene	--	--	--
N-Nitrosodiphenylamine	--	--	--
Phenanthrene	--	--	270 J
Anthracene	--	--	--
Fluoranthene	--	--	2,600
Pyrene	85 J	--	1,400
Butylbenzylphthalate	230 J	--	--
Benzo(a)anthracene	--	--	1,000
Chrysene	--	--	1,500
bis(2-Ethylhexyl) phthalate	290 J	--	--
Benzo(b)fluoranthene	--	--	1,300
Benzo(k)fluoranthene	--	--	1,300
Benzo(a)pyrene	--	--	1,100
Indeno (1,2,3-cd) pyrene	--	--	710
Dibenz(a,h)anthracene	--	--	270 J
Benzo(g,h,i)perylene	--	--	770 J
Pesticides/PCBs (µg/kg)			
Dieldrin	--	--	--
4,4'-DDE	--	--	--
4,4'-DDD	--	--	--
4,4'-DDT	--	--	--
Chlordane	16	--	--

Notes: SWMUs = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
DUP = duplicate.
ft/bls = feet per land surface.
µg/kg = micrograms per kilogram.
J = estimated value.
-- = concentration of analyte, if present, was less than the detection limit.
PCBs = polychlorinated biphenyls.
4,4'-DDE = dichlorodiphenyldichloroethene.
4,4'-DDD = dichlorodiphenyldichloroethane.
4,4'-DDT = dichlorodiphenyltrichloroethane.

Table 6-4
Inorganic Analytes Detected in Sediment Samples Used as Surface Soil Samples at SWMUs 14 and 18

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

Analytical Batch Number:	R9800	R9800	R9800	R9800	R9800	R9800	R9800
Sample Location:	MPT-14-SD01	MPT-14-SD02	MPT-14-SD03	MPT-18-SD01	MPT-18-SD01	MPT-18-SD02	MPT-18-SD03
Sample Number:	14D00101	14D00201	14D00301	18D00101	18D00101DUP	18D00201	18D00301
Date Sampled:	19-APR-95	19-APR-95	19-APR-95	19-APR-95	19-APR-95	19-APR-95	19-APR-95
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
Inorganics (mg/kg)							
Arsenic	0.51 J	0.78 J	1.2 J	0.44 J	0.59 J	0.54 J	0.81 J
Barium	4.2 J	23 J	12 J	8.9 J	12.3 J	5 J	7.1 J
Beryllium	--	0.14 J	0.27 J	0.1 J	0.08 J	0.09 J	0.08 J
Cadmium	--	0.42 J	0.62 J	0.65 J	0.56 J	--	0.29 J
Chromium	2.4 J	3.7	10	4.6	6.2	3.2	12.5
Cobalt	--	0.99 J	1.4 J	0.93 J	--	--	1.1 J
Copper	--	52	29.6	20.2	19.4	10.2	334
Lead	2.6 J	12.2 J	7.6 J	15.6	34.4 J	7.6 J	14.9 J
Mercury	--	--	0.05 J	0.13	0.11	--	0.08
Selenium	--	--	--	0.13 J	--	--	--
Silver	--	--	--	--	--	--	0.41 J
Tin	--	--	3.8 J	3.6 J	--	--	3.5 J
Vanadium	2.7 J	3.4 J	9.6 J	1.9 J	2.3 J	2.2 J	4.2 J
Zinc	--	206 J	88.2 J	86.6 J	131 J	124 J	34.1 J
Cyanide	--	--	--	0.08 J	--	0.08 J	--

Notes: SWMUs = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
DUP = duplicate.
ft/bls = feet below land surface.
mg/kg = milligram per kilogram.
J = estimated value.
-- = concentration of analyte, if present, was less than the detection limit.

Table 6-5
Summary of Analytes Detected in Surface Soil Samples at SWMUs 14 and 18

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

Analyte	Frequency of Detection[1]	Minimum Concentration	Maximum Concentration	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration
Volatiles (µg/kg)						
2-Butanone	4/33	4	16	8	10 - 62	14S00501
Acetone	3/33	[2]8	72	35	10 - 40	14D00201
Ethylbenzene	1/33	4	4	4	5 - 31	14S00501
Toluene	8/33	1	32	6	5 - 31	14S00501
Xylenes (total)	5/33	1	13	3	5 - 31	14S00501
Semivolatiles (µg/kg)						
2-Methylnaphthalene	1/33	13,000	13,000	13,000	340 - 3,600	14S00501
Acenaphthene	2/33	190	910	550	340 - 3,600	14S00501
Anthracene	1/33	220	220	220	340 - 7,100	14D00301
Benzo(a)anthracene	7/33	[2]33.5	1,900	698	340 - 7,100	14D00201
Benzo(a)pyrene	5/33	[2]52.5	2,100	1,004	340 - 7,100	14D00201
Benzo(b)fluoranthene	5/33	[2]85.5	3,500	1,415	340 - 7,100	14D00201
Benzo(g,h,i)perylene	5/33	[2]82	1,400	691	340 - 7,100	14D00201
Benzo(k)fluoranthene	5/33	[2]71.5	3,200	1,470	340 - 7,100	14D00201
Butylbenzylphthalate	1/33	[2]307.5	[2]307.5	308	340 - 7,100	18D00101D
Chrysene	7/33	[2]64	3,700	1,212	340 - 7,100	14D00201
Dibenz(a,h)anthracene	3/33	[2]96.5	270	199	340 - 7,100	18D00301
Di-n-butylphthalate	2/33	[2]290	480	385	340 - 7,100	14S01301
Fluoranthene	5/33	[2]48	4,400	2,267	340 - 7,100	14D00201
Fluorene	2/33	290	2,200	1,245	340 - 3,600	14S00501
Indeno (1,2,3-cd) pyrene	5/33	[2]66.5	1,400	677	340 - 7,100	14D00201
N-Nitrosodiphenylamine (1)	2/33	270	1,600	935	340 - 7,100	14D00201
Naphthalene	1/33	3,700	3,700	3,700	340 - 3,600	14S00501

See notes at end of table.

Table 6-5 (Continued)
Summary of Analytes Detected in Surface Soil Samples at SWMUs 14 and 18

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

Analyte	Frequency of Detection[1]	Minimum Concentration	Maximum Concentration	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration
Semivolatiles (µg/kg) (Continued)						
Phenanthrene	7/33	44	3,600	845	340 - 3,600	14S00501
Pyrene	10/33	20	6,000	1,709	340 - 3,600	14D00201
bis(2-Ethylhexyl) phthalate	6/33	25	2,400	675	340 - 7,100	14D00301
Pesticides/PCBs (µg/kg)						
4,4'-DDE	1/33	1.1	1.1	1.1	0.68 - 14	14D00301
4,4'-DDT	1/33	1.2	1.2	1.2	1.3 - 18	14D00301
Aroclor-1254	1/33	72	72	72	17 - 420	14S00301
Chlordane	3/33	[2]7.725	150	57	6.8 - 160	14S00101
Dieldrin	2/33	6.1	[2]69.5	37.8	0.68 - 14	18S00301D
Heptachlor	1/33	0.77	0.77	0.77	0.68 - 14	14S01501
Inorganics (mg/kg)						
Arsenic	30/33	0.36	2.2	0.78	0.33 - 0.63	14S00801
Barium	33/33	3.3	23	7.4	N/A	14D00201
Beryllium	32/33	0.05	0.27	0.11	0.07 - 0.07	14D00301
Cadmium	8/33	0.29	1.4	0.54	0.25 - 0.63	14S01701
Chromium	32/33	1.2	14.8	4.8	1.05 - 1.05	14S01701
Cobalt	13/33	[2]0.545	1.5	0.92	0.56 - 0.79	14S02401
Copper	32/33	0.42	334	18.19	4.8 - 4.8	18D00301
Cyanide	16/33	[2]0.0525	0.18	0.1	0.05 - 0.11	14S01701
Lead	33/33	[2]0.945	[2]25	6.46	N/A	18D00101D
Mercury	5/33	[2]0.03	[2]0.12	0.06	0.03 - 0.07	18D00101
Nickel	10/33	1.1	3.4	1.8	1.1 - 6.14	14S00101

See notes at end of table.

Table 6-5 (Continued)
Summary of Analytes Detected in Surface Soil Samples at SWMUs 14 and 18

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

Analyte	Frequency of Detection[1]	Minimum Concentration	Maximum Concentration	Mean of Detected Concentrations[3]	Range of Reporting Limits for Nondetects	Sample with Maximum Concentration
Inorganics (mg/kg) (Continued)						
Selenium	4/33	[2]0.0975	0.34	0.2	0.1 - 0.24	14S01501
Silver	3/33	0.4	0.43	0.41	0.29 - 0.6	14S01501
Tin	12/33	2	15.5	4	1.9 - 3.7	14S02101
Vanadium	33/33	1.7	9.6	3.7	N/A	14D00301
Zinc	26/33	4.8	206	50.4	3.9 - 13.7	14D00201

[1] Frequency of detection is the number of samples in which the analyte was detected, divided by the total number of samples analyzed (excluding rejected samples).
[2] Indicates the value is the average of a sample concentration and its duplicate. For nondetected values, 1/2 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: SWMUs = solid waste management units.
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.
N/A = not available.

Table 6-6
Comparison of Concentrations Detected in Surface Soil Samples at SWMUs 14 and 18 to Background Screening and Benchmark Concentrations

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

Analyte	Maximum Concentration	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
Volatiles (µg/kg)							
2-Butanone	16	NSC	N/A	2,200,000	0/33	4,700,000	0/33
Acetone	72	NSC	N/A	NSC	N/A	NSC	N/A
Ethylbenzene	4	NSC	N/A	1,400,000	0/33	780,000	0/33
Toluene	32	NSC	N/A	520,000	0/33	1,600,000	0/33
Xylenes (total)	13	NSC	N/A	13,000,000	0/33	16,000,000	0/33
Semivolatiles (µg/kg)							
2-Methylnaphthalene	13,000	NSC	N/A	960,000	0/33	310,000	0/33
Acenaphthene	910	NSC	N/A	2,800,000	0/33	470,000	0/33
Anthracene	220	NSC	N/A	20,000,000	0/33	2,300,000	0/33
Benzo(a)anthracene	1,900	NSC	N/A	1,400	2/33	880	3/33
Benzo(a)pyrene	2,100	NSC	N/A	100	3/33	88	3/33
Benzo(b)fluoranthene	3,500	NSC	N/A	1,400	2/33	880	3/33
Benzo(g,h,i)perylene	1,400	NSC	N/A	14,000	0/33	NSC	N/A
Benzo(k)fluoranthene	3,200	NSC	N/A	14,000	0/33	8,800	0/33
Butylbenzylphthalate	[1]307.5	NSC	N/A	15,000,000	0/33	1,600,000	0/33
Chrysene	3,700	NSC	N/A	140,000	0/33	88,000	0/33
Dibenz(a,h)anthracene	270	NSC	N/A	100	2/33	88	3/33
Di-n-butylphthalate	480	NSC	N/A	7,300,000	0/33	780,000	0/33
Fluoranthene	4,400	NSC	N/A	2,900,000	0/33	310,000	0/33
Fluorene	2,200	NSC	N/A	2,400,000	0/33	310,000	0/33
Indeno (1,2,3-cd) pyrene	1,400	NSC	N/A	1,400	1/33	880	2/33

See notes at end of table.

Table 6-6 (Continued)
Comparison of Concentrations Detected in Surface Soil Samples at SWMUs 14 and 18 to Background Screening and Benchmark Concentrations

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

Analyte	Maximum Concentration	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
Semivolatiles (µg/kg) (Continued)							
N-Nitrosodiphenylamine (1)	1,600	NSC	N/A	NSC	N/A	NSC	N/A
Naphthalene	3,700	NSC	N/A	1,300,000	0/33	310,000	0/33
Phenanthrene	3,600	NSC	N/A	1,700,000	0/33	NSC	N/A
Pyrene	6,000	NSC	N/A	2,200,000	0/33	230,000	0/33
bis(2-Ethylhexyl) phthalate	2,400	NSC	N/A	48,000	0/33	46,000	0/33
Pesticides/PCBs (µg/kg)							
4,4'-DDE	1.1	2.3	0/33	3,000	0/33	1,900	0/33
4,4'-DDT	1.2	NSC	N/A	3,100	0/33	1,900	0/33
Aroclor-1254	72	NSC	N/A	900	0/33	160	0/33
Chlordane	150	NSC	N/A	800	0/33	490	0/33
Dieldrin	[1]69.5	NSC	N/A	70	1/33	40	1/33
Heptachlor	0.77	NSC	N/A	200	0/33	140	0/33
Inorganics (mg/kg)							
Arsenic	2.2	NSC	N/A	[5]0.8	14/33	0.37	28/33
Barium	23	5.6	14/33	5,200	0/33	550	0/33
Beryllium	0.27	0.16	4/33	0.2	3/33	0.15	4/33
Cadmium	1.4	2	0/33	37	0/33	3.9	0/33
Chromium	14.8	2.6	25/33	290	0/33	39	0/33
Cobalt	1.5	NSC	N/A	4,700	0/33	470	0/33
Copper	334	2.2	23/33	[6]2,900	0/33	290	1/33
Cyanide	0.18	NSC	N/A	1,600	0/33	160	0/33
Lead	[1]25	NSC	N/A	500	0/33	400	0/33

See notes at end of table.

Table 6-6 (Continued)
Comparison of Concentrations Detected in Surface Soil Samples at SWMUs 14 and 18 to Background Screening and Benchmark Concentrations

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

Analyte	Maximum Concentration	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
Inorganics (mg/kg) (Continued)							
Mercury	[1]0.12	NSC	N/A	23	0/33	2.3	0/33
Nickel	3.4	NSC	N/A	1,500	0/33	160	0/33
Selenium	0.34	1.36	0/33	390	0/33	39	0/33
Silver	0.43	NSC	N/A	390	0/33	39	0/33
Tin	15.5	NSC	N/A	44,000	0/33	4,700	0/33
Vanadium	9.6	4	9/33	490	0/33	55	0/33
Zinc	206	2.6	26/33	23,000	0/33	2,300	0/33

[1] Indicates the value is the average of the detected concentrations in a sample and its duplicate. For nondetected values, 1/2 the contract-required quantitation limits/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 Soil Cleanup Goals, September 29, 1995 (residential for surface soil).
[4] The value is from U.S. Environmental Protection Agency Region III Risk-based Concentrations tables dated February 9, 1995. Concentrations for non-carcinogenic risks are adjusted to a Hazard Index of 0.1.
[5] Soil Cleanup Goals for Florida, January 19, 1996 (residential for surface soil).
[6] Soil Cleanup Goals for the Military, April 5, 1995 (residential for surface soil).

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.
PCBs = polychlorinated biphenyls.
4,4'-DDE = dichlorodiphenyldichloroethene.
4,4'-DDT = dichlorodiphenyltrichloroethane.
mg/kg = milligram per kilogram.

lists statistics for each analyte detected, and Table 6-6 compares detected concentrations of target analytes with background screening values and benchmarks.

Surface soil and the selected sediment samples analytical results are compared to background screening values for surface soils (ABB-ES, 1994b and 1995a), residential use benchmarks values from USEPA Region III Risk-Based Concentrations (RBCs)(USEPA, 1995a), and Florida soil cleanup goals (FDEP, 1995a; 1995b; and 1996). The surface soil results are described collectively as the FTC Area, SWMUs 14 and 18.

6.2.1.1 **Organics** Target analytes detected in the surface soil and sediment samples treated as surface soil consist of 5 VOCs, 20 SVOCs, 5 pesticides, and 1 PCB (Tables 6-1 and 6-3). Five SVOCs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene) and one pesticide (dieldrin) were detected at concentrations that exceed benchmark values for residential exposure scenarios (Table 6-6).

The five SVOCs that exceeded the residential benchmark values were detected in sediment samples collected from the stormwater drop inlet on the north side of the unnamed dirt road. The source of the SVOCs are possibly from the historic use of SWMU 14 for firefighter training activities and/or emission and fluid residues from vehicles at parking lots that contribute surface water runoff to the drainage ditch system at the FTC. The source of the pesticide is likely the historic applications of pesticides.

Benzo(a)anthracene, benzo(a)pyrene, dibenz(a,h)anthracene, and benzo(b)fluoranthene were detected in two sediment soil samples (MPT-14-SD02 and MPT-14-SD03) at concentrations that exceeded FDEP soil cleanup goals and the USEPA Region III RBC. Additionally, benzo(a)pyrene was detected in the two samples at a concentration that exceeds the FDEP soil cleanup goal for industrial exposure (500 μg/kg). None of the other organic chemicals were detected at concentrations that exceed their respective FDEP soil cleanup goal for industrial exposure.

Indeno(1,2,3-cd)pyrene was detected in sediment sample MPT-14-SD02 at a concentration that equals the FDEP soil cleanup goal and exceeds the USEPA Region III RBC but was detected in sample MPT-14-SD03 at a concentration that exceeded only the USEPA Region III RBC.

Dieldrin was detected in the duplicate (18S00301DUP) to the surface soil sample collected at monitoring well MPT-18-MW01S at a concentration which exceeded the FDEP soil cleanup goal and the USEPA Region III RBC. Dieldrin was detected in the associated surface soil sample (18S00301) at a concentration that did not exceed either the FDEP soil cleanup goal or the USEPA Region III RBC.

No organic compounds were detected at concentrations that exceed benchmarks at areas where surface soils are stained by hydrocarbons. These areas are south of the detention pond at monitoring well location MPT-14-MW10S and the diesel fuel dispenser located northwest of SWMU 14 at sampling location MPT-14-SS17.

6.2.1.2 **Inorganics** Sixteen inorganic analytes were detected in surface soil samples and sediment samples treated as surface soil samples (Table 6-2 and 6-4). Arsenic and beryllium were detected at concentrations that exceeded residential exposure scenarios for FDEP soil cleanup goals and USEPA Region III RBCs. Copper

was detected in one sample at a concentration that exceeded the USEPA Region III RBCs for residential exposure (Table 6-6). Arsenic and beryllium were not detected at concentrations that exceed their respective FDEP soil cleanup goal for industrial exposure of 3.1 and 1.0 mg/kg.

Arsenic was detected in 14 surface soil samples and two duplicates at concentrations that exceeded both the FDEP soil cleanup goals and the USEPA Region III RBC and in 14 additional surface soil samples at concentrations which exceeded only the USEPA Region III RBC.

Beryllium was detected in three surface soil samples at a concentration which exceeded the FDEP soil cleanup goal and in one sample where beryllium exceeded the USEPA Region III RBC.

There is no apparent numerical or spatial distribution to the occurrence of arsenic or beryllium at SWMUs 14 and 18. Because the land features at NAVSTA Mayport are influenced by the deposition of dredge material from Mayport Turning Basin, it cannot be determined whether the concentrations of arsenic and beryllium are related to a release at SWMUs 14 or 18, or are residual concentrations from the dredge material.

6.2.2 Subsurface Soil Assessment Fifteen subsurface soil samples and one duplicate were collected from the FTC Area (Plate 4). Tables 6-7 and 6-8 present concentrations of the organic and inorganic analytes detected in each subsurface soil sample, and Table 6-9 lists statistics for each analyte detected. Table 6-10 compares detected concentrations of target analytes with background screening values and benchmarks.

Subsurface soil analytical results are compared to background screening values for subsurface soil (ABB-ES, 1995a) and benchmarks for industrial exposures for USEPA Region III risk-based concentrations and for FDEP soil cleanup goals.

6.2.2.1 **Organics** Target analytes detected in the subsurface soil samples consist of one VOC, four SVOCs, and one pesticide (Table 6-7). None of the organic analytes were detected at concentrations that exceed benchmark values (Table 6-10).

6.2.2.2 **Inorganics** Thirteen inorganic analytes were detected in subsurface soil samples (Table 6-8). None of the inorganic analytes were detected at concentrations that exceed benchmarks (Table 6-10).

6.2.3 Surface Water and Sediment Assessment Two surface water samples and one duplicate, and 11 sediment samples and two duplicates were collected at the FTC Area (Plate 4). Surface water samples were collected at low tide; therefore, only two sampling locations (MPT-14-SW04 and MPT-14-SW05) had surface water present. Sediment samples MPT-14-SD04 through MPT-14-SD08, which are located in tidally influenced areas, are described in this subsection. Sediment samples that were treated as surface soil samples are described in Subsection 6.2.1. The following paragraphs describe analytical results of surface water and sediment samples located in tidally influenced areas.

6.2.3.1 **Surface Water Assessment** Surface water samples collected at the FTC Area consist of two samples and one duplicate (Plate 4). There were no organic target analytes detected in the surface water samples. Table 6-11 presents concentrations of inorganic analytes detected in each surface water sample, and

Table 6-7
Organic Analytes Detected in Subsurface Soil Samples at SWMUs 14 and 18

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

Analytical Batch Number:	R9955	M8995	M8995
Sample Location:	MPT-14-MW04S	MPT-14-MW09S	MPT-18-MW01S
Sample Number:	14B00604	14B02403*	18B00304
Date Sampled:	23-MAY-95	21-MAY-95	22-MAY-95
Sample Depth (ft bls):	3 to 4	2 to 3	3 to 4
Volatiles (µg/kg)			
Xylenes (total)	1 J	1 J	–
Semivolatiles (µg/kg)			
Phenanthrene	–	–	74 J
Fluoranthene	–	–	89 J
Pyrene	–	–	96 J
Chrysene	–	–	58 J
Pesticides/PCBs (µg/kg)			
Dieldrin	–	–	5.3

Notes: SWMUs = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
* = 14B02403RE2 was recommended to be used by data validators for volatiles organics because the initial analyses were rejected due to extremely low internal standard recovery.
ft bls = feet below land surface.
µg/kg = microgram per kilogram.
J = estimated value.
– = concentration of analyte, if present, was less than the detection limit.
PCB = polychlorinated biphenyl.

Table 6-8
Inorganic Analytes Detected in Subsurface Soil Samples at SWMUs 14 and 18

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

Analytical Batch Number	M9000	R9955	M9000	M8995	M8995	R9955	M8995	M9000
Sample Location:	MPT-14-MW03S	MPT-14-MW04S	MPT-14-MW05S	MPT-14-MW06S	MPT-14-MW07S	MPT-14-MW08S	MPT-14-MW09S	MPT-14-MW10S
Sample Number:	14B00204	14B00604	14B01904	14B02504	14B02303	14B00804	14B02403	14B01004
Date Sampled:	22-MAY-95	23-MAY-95	23-MAY-95	22-MAY-95	22-MAY-95	23-MAY-95	21-MAY-95	22-MAY-95
Sample Depth (ft bls):	3 to 4	3 to 4	3 to 4	3 to 4	2 to 3	3 to 4	2 to 3	3 to 4
Inorganics (mg/kg)								
Arsenic	0.86 J	0.34 J	--	--	1.1 J	0.68 J	1.3 J	0.79 J
Barium	1.9 J	3.2 J	5.6 J	2.4 J	2.8 J	2.7 J	4.3 J	3.2 J
Beryllium	0.09 J	0.08 J	0.19 J	0.09 J	0.1 J	0.15 J	0.13 J	0.11 J
Chromium	2 J	1.9 J	5.8	3	2 J	2.9	3.6	3.2
Cobalt	--	--	--	--	--	--	1 J	--
Copper	--	6.7	1.1 J	1.1 J	--	4.2 J	0.43 J	0.87 J
Lead	1.4	2.9	3	1.9	2.4	2	1.6	1.3
Nickel	--	--	1.9 J	--	--	--	--	--
Selenium	0.31 J	--	--	--	--	--	--	0.31 J
Tin	2.9 J	3.4 J	3.9 J	4.4 J	2.6 J	--	5.4 J	3.5 J
Vanadium	1.3 J	1.5 J	3.4 J	2.2 J	1.9 J	2 J	[illegible]	2.2 J
Zinc	--	11.9	--	--	--	--	--	--
Cyanide	--	--	--	--	--	0.09 J	--	--

See notes at end of table.

Table 6-8 (Continued)
Inorganic Analytes Detected in Subsurface Soil Samples at SWMUs 14 and 18

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

Analytical Batch Number	M9000	M8995	M8995	M9000	M8995	M9000	M9000	R9955
Sample Location:	MPT-14-MW11S	MPT-14-MW12S	MPT-14-MW13S	MPT-14-MW14S	MPT-18-MW01S	MPT-18-MW02S	MPT-18-MW02S	MPT-18-MW03S
Sample Number:	14B01404	14B02105	14B02203	14B00704	18B00304	18B00204	18B00204DUP	18B00404
Date Sampled:	22-MAY-95	20-MAY-95	21-MAY-95	23-MAY-95	22-MAY-95	22-MAY-95	22-MAY-95	23-MAY-95
Sample Depth (ft bls):	3 to 4	4 to 5	2 to 3	3 to 4	2 to 3	3 to 4	3 to 4	3 to 4
Inorganics (mg/kg)								
Arsenic	--	--	--	--	--	0.89	0.8 J	0.39 J
Barium	2 J	1.3 J	3.3 J	4.6 J	2.3 J	3.3 J	2.7 J	3.8 J
Beryllium	0.09 J	0.07 J	0.13 J	0.11 J	0.07 J	0.1 J	0.06 J	0.1 J
Chromium	2.2 J	1.8 J	3.4	3.1	2.1 J	2.9	2.5	3.2
Cobalt	--	0.84 J	--	--	--	--	--	--
Copper	--	--	--	2.7 J	0.36 J	0.52 J	0.66 J	--
Lead	1.1	0.93	1.3	1.9	3	1.8	1.8	2.7
Nickel	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--
Tin	3.6 J	6.6 J	3.2 J	31.3	2.3 J	4.4 J	2.8 J	4.8 J
Vanadium	1.4 J	1.4 J	2.3 J	1.8 J	1.2 J	2.2 J	2 J	1.7 J
Zinc	--	--	--	17.1 J	--	--	--	5.2
Cyanide	--	--	--	--	--	--	--	0.17 J

Notes: SWMUs = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
ft/bls = feet below land surface.
mg/kg = milligram per kilogram.
J = estimated value.
-- = concentration of analyte, if present, was less than the detection limit.
DUP = duplicate.

Table 6-9
Summary of Analytes Detected in Subsurface Soil Samples at SWMUs 14 and 18

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

Analyte	Frequency of Detection[1]	Minimum Detected Concentration	Maximum Detected Concentration	Mean of Detected Concentrations[2]	Range of Instrument Reporting Limits	Sample with Maximum Concentration
Volatiles (µg/kg)						
Xylenes (total)	2/15	1	1	1	5 - 6	14B00604
Semivolatiles (µg/kg)						
Chrysene	1/15	58	58	58	370 - 820	18B00304
Fluoranthene	1/15	89	89	89	370 - 820	18B00304
Phenanthrene	1/15	74	74	74	370 - 820	18B00304
Pyrene	1/15	96	96	96	370 - 820	18B00304
Pesticides/PCBs (µg/kg)						
Dieldrin	1/15	5.3	5.3	5.3	0.74 - 0.87	18B00304
Inorganics (mg/kg)						
Arsenic	8/15	0.34	1.3	0.79	0.27 - 0.76	14B02403
Barium	15/15	1.3	5.6	3.1	N/A	14B01904
Beryllium	15/15	0.07	0.19	0.11	N/A	14B01904
Chromium	15/15	1.8	5.8	2.9	N/A	14B01904
Cobalt	2/15	0.84	1	0.92	0.73 - 0.95	14B02403
Copper	9/15	0.36	6.7	2.01	0.36 - 2.8	14B00604
Cyanide	2/15	0.09	0.17	0.13	0.06 - 0.12	18B00404
Lead	15/15	0.93	3	1.95	N/A	14B01904
Nickel	1/15	1.9	1.9	1.9	1.3 - 1.8	14B01904
Selenium	2/15	0.31	0.31	0.31	0.12 - 0.28	14B00204
Tin	14/15	2.3	31.3	5.8	3.2 - 3.2	14B00704

See notes at end of table.

Table 6-9 (Continued)
Summary of Analytes Detected in Subsurface Soil Samples at SWMUs 14 and 18

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

Analyte	Frequency of Detection[1]	Minimum Detected Concentration	Maximum Detected Concentration	Mean of Detected Concentrations[3]	Range of Instrument Reporting Limits	Sample with Maximum Concentration
Inorganics (mg/kg) (Continued)						
Vanadium	15/15	1.2	3.6	2	N/A	14B02403
Zinc	3/15	5.2	17.1	11.4	2.8 - 3.6	14B00704

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed (excluding rejected samples).
[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: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
µg/kg = micrograms per kilogram.
PCBs = polychlorinated biphenyls.
mg/kg = milligram per kilogram.
N/A = not applicable.

Table 6-10
Comparison of Concentrations Detected in Subsurface Soil at SWMUs 14 and 18 to Background Screening and Benchmark Concentrations

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

Analyte	Maximum Concentration	Background Screening Concentration[2]	Frequency Above Background Screening Concentration	Florida Soil Cleanup Goal[2]	Frequency above Florida Soil Cleanup Goal	Risk-Based Screening Concentration[3]	Frequency Above Risk-Based Screening Concentration
Volatiles (µg/kg)							
Xylenes (total)	1	NSC	N/A	92,000,000	0/15	50,000,000	0/15
Semivolatiles (µg/kg)							
Chrysene	58	NSC	N/A	500,000	0/15	390,000	0/15
Fluoranthene	89	NSC	N/A	48,000,000	0/15	4,100,000	0/15
Phenanthrene	74	NSC	N/A	21,000,000	0/15	NSC	N/A
Pyrene	96	NSC	N/A	41,000,000	0/15	3,050,000	0/15
Pesticides/PCBs (µg/kg)							
Dieldrin	5.3	NSC	N/A	300	0/15	180	0/15
Inorganics (mg/kg)							
Arsenic	1.3	0.9	2/15	3.7	0/15	1.65	0/15
Barium	5.6	7.2	0/15	[4]84,000	0/15	7,000	0/15
Beryllium	0.19	0.14	2/15	1	0/15	0.65	0/15
Chromium	5.8	3.4	2/15	430	0/15	500	0/15
Cobalt	1	1.04	0/15	110,000	0/15	6,000	0/15
Copper	6.7	3.6	2/15	[5]72,000	0/15	3,800	0/15
Cyanide	0.17	0.66	0/15	40,000	0/15	2,050	0/15
Lead	3	2.8	3/15	1,000	0/15	400	0/15
Nickel	1.9	NSC	N/A	26,000	0/15	2,050	0/15
Selenium	0.31	NSC	N/A	9,900	0/15	500	0/15
Tin	31.3	5.4	2/15	670,000	0/15	50,000	0/15

See notes at end of table.

Table 6-10 (Continued)
Comparison of Concentrations Detected in Subsurface Soil at SWMUs 14 and 18 to Background Screening and Benchmark Concentrations

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

Analyte	Maximum Concentration	Background Screening Concentration[2]	Frequency Above Background Screening Concentration	Florida Soil Cleanup Goal[2]	Frequency above Florida Soil Cleanup Goal	Risk-Based Screening Concentration[3]	Frequency Above Risk-Based Screening Concentration
Inorganics (mg/kg) (Continued)							
Vanadium	3.6	3.2	2/15	4,800	0/15	700	0/15
Zinc	17.1	4.8	3/15	560,000	0/15	30,500	0/15

[1] The background screening concentration is twice the mean of detected concentrations for inorganic analytes.
[2] Soil Cleanup Goals for Florida, September 29, 1995 (industrial for subsurface soil)
[3] The value is from U.S. Environmental Protection Agency Region III Risk-based Concentrations tables dated February 9, 1995. Concentrations for non-carcinogenic risks are adjusted to a Hazard Index of 0.1.
[4] Applicability of Soil Cleanup Goals for Florida, January 19, 1996 (industrial for subsurface soil).
[5] Soil Cleanup Goals for the Military Sites, April 5, 1995 (industrial for subsurface soil).

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
µg/kg = micrograms per kilogram.
NSC - no screening concentration.
N/A - not applicable.
PCBs = polychlorinated biphenyls.
mg/kg = milligram per kilogram.

Table 6-11
Inorganic Analytes Detected in Surface Water Samples at SWMUs 14 and 18

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

Analytical Batch Number:	R9807	R9807	R9807
Sample Location:	MPT-14-SW04	MPT-14-SW04	MPT-14-SW05
Sample Number:	14W004	14W004DUP	14W005
Date Sampled:	21-APR-95	21-APR-95	21-APR-95
Inorganics (μg/ℓ)			
Barium	9.1 J	11.1 J	8.7 J
Calcium	207,000	196,000	206,000
Iron	115 J	989 J	103 J
Lead	–	4 J	–
Magnesium	674,000	581,000	661,000
Manganese	4.8 J	16.3	5.1 J
Sodium	5,050,000	4,690,000	5,540,000
Vanadium	3 J	8.4 J	4.6 J
Zinc	–	20.2	–

Notes: SWMUs = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
DUP = duplicate.
μg/ℓ = microgram per liter.
J = estimated value.
– = concentration of analyte, if present, was less than the detection limit.

Table 6-12 lists statistics for each analyte detected. Table 6-13 compares detected concentrations to background screening values, Ambient Water Quality Criteria (USEPA, 1986b), and Class III marine surface water quality criteria (FAC 62-302.530).

Concentrations of chloride detected in the two surface water samples were 3,690 and 10,500 mg/ℓ, which suggest that surface water in the vicinity of SWMUs 14 and 18 could be classified as predominantly marine water (concentrations of chloride greater than 1,500 mg/ℓ) according to FAC 62-302, Surface Water Quality Standards (Table 6-12). Hardness was measured at 3,650 and 3,690 mg/ℓ, which suggests that the water is very hard (greater than 180 mg/ℓ; [Durfor and Becker, 1964]). Sulfate and chloride were the dominant anions. Sulfate, a common form of sulfur found in oxygenated systems, was measured at 526 and 1,490 mg/ℓ.

A summary of nutrients (ammonia-N [ammonia as nitrogen], nitrate/nitrite, and phosphorous-P) measured in the surface water samples is provided in Table 6-12. Analytical results for the water quality indicator parameters are provided in Appendix A.

Nine inorganic target analytes were detected in the surface water samples collected from the FTC Area (Table 6-11). Three target analytes (lead, magnesium, and sodium) were detected at concentrations that exceed background screening values (Table 6-13). None of the inorganic analytes were detected at concentrations that exceed the benchmarks.

6.2.3.2 **Sediment Assessment** Tables 6-14 and 6-15 present concentrations of organic and inorganic analytes detected in sediment samples, and Table 6-16 lists statistics for each chemical detected. Table 6-17 compares detected concentrations to background screening values and benchmarks. The benchmarks for the sediment samples are the toxic effects levels (TELs) in *Approach to the Assessment of Sediment Quality in Florida Coastal Waters*, (MacDonald, 1994), ER-L values in the National Oceanic and Atmospheric Administration (NOAA) document, *Incidence of Adverse Biological Effects within Ranges of Chemical Concentrations in Marine and Estuarine Sediments* (Long and others, 1994).

Organics. Organic target analytes detected in the sediment samples consist of 3 VOCs, 13 SVOCs, and 4 pesticides (Table 6-14). The VOCs were only detected at one sampling location, MPT-14-SD06. The VOCs were detected in sample 14D00601, but not in the associated duplicate 14D00601DUP. Currently, there are no benchmark values established for the VOCs.

The SVOCs were detected in the sediment samples collected from the drainage pathway leading from the drainage culvert headwall to the jetties (MPT-14-SD04 through MPT-14-SD06). Eight SVOCs (benzo(a)anthracene, benzo(a)pyrene, chrysene, dibenz(a,h)anthracene, fluoranthene, pyrene, and bis(2-ethylhexyl)phthalate) were detected at concentrations that exceed their respective TEL benchmarks (Table 6-17). Seven SVOCs (the previous list with exception of bis(2-ethylhexyl)-phthalate, which currently does not have a ER-L benchmark value) were also detected at concentrations that exceed their respective ER-L benchmarks (Table 6-17). Currently, no TEL or ER-L benchmarks exist for benzo(a)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, or phenanthrene.

Table 6-12
Summary of Analytes Detected in Surface Water Samples at SWMUs 14 and 18

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

Analyte	Frequency of Detection[1]	Minimum Detected Concentration	Maximum Detected Concentration	Mean of Detected Concentrations[3]	Range of Instrument Reporting Limits	Sample with Maximum Concentration
Inorganics (µg/ℓ)						
Barium	2/2	8.7	[2]10.1	9.4	N/A	14W004D
Calcium	2/2	[2]201,500	206,000	203,750	N/A	14W005
Iron	2/2	103	[2]552	328	N/A	14W004D
Lead	1/2	[2]3	[2]3	3	4 - 4	14W004D
Magnesium	2/2	[2]627,500	661,000	644,250	N/A	14W005
Manganese	2/2	5.1	[2]10.55	7.8	N/A	14W004D
Sodium	2/2	[2]4,870,000	5,540,000	5,205,000	N/A	14W005
Vanadium	2/2	4.6	[2]5.7	5.2	N/A	14W004D
Zinc	1/2	[2]11.25	[2]11.25	11.3	4.8 - 4.8	14W004D

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed (excluding rejected samples).
[2] Indicates the value is the average of the detected concentrations in a sample and its duplicate. For nondetected values, 1/2 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: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
µg/kg = micrograms per kilogram.
N/A - not applicable.

Table 6-13
Comparison of Analytes Detected in SWMUs 14 and 18 Surface Water Samples to Background Screening and Benchmark Concentrations

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

Analyte	Maximum Concentration	Background Screening Concentration[2]	Frequency Above Background Screening Concentration	AWQC (fish consumption only)[3]	Frequency above AWQC	Class III (marine) Concentration[4]	Frequency Above Class III (marine) Concentration
Inorganics (µg/ℓ)							
Barium	[1]10.1	39.6	0/2	NSC	N/A	NSC	N/A
Calcium	206,000	220,462	0/2	NSC	N/A	NSC	N/A
Iron	[1]552	1,404	0/2	NSC	N/A	300	0/2
Lead	[1]3	3.6	1/2	NSC	N/A	5.6	0/2
Magnesium	661,000	186,914	2/2	NSC	N/A	NSC	N/A
Manganese	[1]10.55	198.6	0/2	100	0/2	NSC	N/A
Sodium	5,540,000	1,397,710	2/2	NSC	N/A	NSC	N/A
Vanadium	[1]5.7	9.4	0/2	NSC	N/A	NSC	N/A
Zinc	[1]11.25	40	0/2	NSC	N/A	86	0/2

[1] Indicates the value is the average of the detected concentrations in a sample and its duplicate. For nondetected values, 1/2 the contract-required quantitation limits/contract-required detection limits a surrogate.
[2] The background screening concentration is twice the mean of detected concentrations for inorganic analytes.
[3] Clean Water Act, Ambient Water Quality Criteria (AWQC), (for fish consumption) from U.S. Environmental Protection Agency Water Quality Criteria Summary (Draft), Office of Science and Technology, Health and Ecological Criteria Division (U.S. Environmental Protection Agency, 1986b).
[4] Florida Administrative Code, 62-302, surface water quality standards, Class III Marine as amended January 1995.

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
µg/ℓ = micrograms per liter.
NSC = no screening concentration.
N/A = not applicable.

Table 6-14
Organic Analytes Detected in Sediment Samples at SWMUs 14 and 18

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

Analytical Batch Number:	R9800	R9800	R9800	R9800	R9800
Sample Location:	MPT-14-SD04	MPT-14-SD05	MPT-14-SD06	MPT-14-SD06	MPT-14-SD07
Sample Number:	14D00401	14D00501	14D00601	14D00601DUP	14D00701
Date Sampled:	21-APR-95	21-APR-95	21-APR-95	21-APR-95	20-APR-95
Sample Depth (ft/bls)	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Volatiles (µg/kg)					
Acetone	--	--	140	--	--
Carbon disulfide	--	--	8 J	--	--
2-Butanone	--	--	30 J	--	--
Toluene	--	--	--	--	--
Semivolatiles (µg/kg)					
Acenaphthene	--	--	--	--	--
Fluorene	320 J	--	160 J	130 J	--
N-Nitrosodiphenylamine (1)	--	--	--	--	--
Phenanthrene	1,800	110 J	740 J	750 J	--
Anthracene	--	--	--	--	--
Fluoranthene	1,700	530 J	750 J	640 J	--
Pyrene	2,500	520 J	940	840 J	--
Butylbenzylphthalate	--	--	--	--	--
Benzo (a) anthracene	700 J	250 J	310 J	260 J	--
Chrysene	1,500	460 J	660 J	550 J	--
bis(2-Ethylhexyl) phthalate	790 J	110 J	240 J	270 J	--
Benzo (b) fluoranthene	1,200	400 J	590 J	530 J	--
Benzo (k) fluoranthene	1,500	440 J	470 J	540 J	--
Benzo (a) pyrene	860	290 J	360 J	340 J	--
Indeno (1,2,3-cd) pyrene	540 J	200 J	340 J	230 J	--
Dibenz (a,h) anthracene	95 J	--	170 J	--	--
Benzo (g,h,i) perylene	510 J	200 J	410 J	240 J	--
Pesticides/PCBs (µg/kg)					
Dieldrin	--	--	--	--	0.81 J
4,4-DDE	--	--	--	--	6.3
4,4-DDD	--	--	--	--	1 J
4,4-DDT	--	--	--	--	4.7
Chlordane	--	--	--	--	--

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
DUP = duplicate.
ft bls = feet below land surface.
µg/kg = microgram per kilogram.
-- = concentration of analyte, if present, was less than the detection limit.
J = estimated value.
PCBs = polychlorinated biphenyls.
DDE = dichlorodiphenyldichloroethene.
DDD = dichlorodiphenyldichloroethane.
DDT = dichlorodiphenyltrichloroethane.

Table 6-15
Inorganic Analytes Detected in Sediment Samples at SWMUs 14 and 18

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

Analytical Batch Number:	R9800	R9800	R9800	R9800	R9800	R9800
Sample Location:	MPT-14-SD04	MPT-14-SD05	MPT-14-SD06	MPT-14-SD06	MPT-14-SD07	MPT-14-SD08
Sample Number:	14D00401	14D00501	14D00601	14D00601DUP	14D00701	14D00801
Date Sampled:	21-APR-95	21-APR-95	21-APR-95	21-APR-95	20-APR-95	20-APR-95
Sample Depth (ft/bls):	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1	0 to 1
Inorganics (mg/kg)						
Arsenic	0.76 J	0.69 J	0.91 J	1.2 J	1.3 J	0.82 J
Barium	11.5 J	3.2 J	5.8 J	5.6 J	4.6 J	--
Beryllium	0.16 J	0.08 J	0.16 J	0.16 J	0.16 J	--
Cadmium	--	--	--	--	--	--
Chromium	3.6	2.3 J	3.7	3.6	4.5	1.5 J
Cobalt	0.89 J	--	--	--	--	--
Copper	11.2	--	8.5	7.7	6 J	--
Lead	4.2	7.5	6	6.3	7.2 J	1.8 J
Mercury	--	--	--	0.05 J	--	--
Selenium	--	--	--	0.16 J	--	--
Silver	--	--	--	--	--	--
Tin	--	--	--	3.6 J	--	--
Vanadium	4.1 J	2.2 J	4.8 J	4.3 J	4.8 J	2.8 J
Zinc	29.3 J	--	28 J	22.8 J	20 J	--
Cyanide	--	--	--	--	--	--

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
DUP = duplicate.
ft bls = feet below land surface.
mg/kg = milligram per kilogram.
J = estimated value.
-- = concentration of analyte, if present, was less than the detection limit.

Table 6-16
Summary of Analytes Detected in Sediment Samples at SWMUs 14 and 18

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

Analyte	Frequency of Detection[1]	Minimum Detected Concentration	Maximum Detected Concentration	Mean of Detected Concentrations[3]	Range of Instrument Reporting Limits	Sample with Maximum Concentration
Volatiles (µg/kg)						
2-Butanone	1/5	[2]31	[2]31	31	12 - 64	14D00601
Acetone	1/5	[2]79.75	[2]79.75	80	12 - 64	14D00601
Carbon disulfide	1/5	[2]12	[2]12	12	6 - 32	14D00601
Semivolatiles (µg/kg)						
Benzo(a)anthracene	3/5	250	700	412	850 - 860	14D00401
Benzo(a)pyrene	3/5	290	860	500	850 - 860	14D00401
Benzo(b)fluoranthene	3/5	400	1,200	720	850 - 860	14D00401
Benzo(g,h,i)perylene	3/5	200	510	345	850 - 860	14D00401
Benzo(k)fluoranthene	3/5	440	1,500	815	850 - 860	14D00401
Chrysene	3/5	460	1,500	855	850 - 860	14D00401
Dibenz(a,h)anthracene	2/5	95	[2]302	199	850 - 875	14D00601
Fluoranthene	3/5	530	1,700	975	850 - 860	14D00401
Fluorene	2/5	[2]145	320	233	850 - 860	14D00401
Indeno (1,2,3-cd) pyrene	3/5	200	540	342	850 - 860	14D00401
Phenanthrene	3/5	110	1,800	885	850 - 860	14D00401
Pyrene	3/5	520	2,500	1,303	850 - 860	14D00401
bis(2-Ethylhexyl) phthalate	3/5	110	790	385	850 - 860	14D00401
Pesticides/PCBs (µg/kg)						
4,4'-DDD	1/5	1	1	1	3.2 - 16	14D00701
4,4'-DDE	1/5	6.3	6.3	6.3	1.7 - 8.5	14D00701
4,4'-DDT	1/5	4.7	4.7	4.7	3.2 - 16	14D00701
Dieldrin	1/5	0.81	0.81	0.81	1.7 - 8.5	14D00701

See notes at end of table.

Table 6-16 (Continued)
Summary of Analytes Detected in Sediment Samples at SWMUs 14 and 18

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

Analyte	Frequency of Detection[1]	Minimum Detected Concentration	Maximum Detected Concentration	Mean of Detected Concentrations[3]	Range of Instrument Reporting Limits	Sample with Maximum Concentration
Inorganics (mg/kg)						
Arsenic	5/5	0.69	1.3	0.93	N/A	14D00701
Barium	4/5	3.2	11.5	6.3	1.9 - 1.9	14D00401
Beryllium	4/5	0.08	0.16	0.14	0.08 - 0.08	14D00401
Chromium	5/5	1.5	4.5	3.1	N/A	14D00701
Cobalt	1/5	0.89	0.89	0.89	0.8 - 0.82	14D00401
Copper	3/5	6	11.2	8.4	3.8 - 4.1	14D00401
Lead	5/5	1.8	7.5	5.4	N/A	14D00501
Mercury	1/5	[2]0.035	[2]0.035	0.04	0.04 - 0.04	14D00601D
Selenium	1/5	[2]0.1125	[2]0.1125	0.11	0.13 - 0.13	14D00601D
Tin	1/5	[2]2.7	[2]2.7	2.7	3.5 - 3.5	14D00601D
Vanadium	5/5	2.2	4.8	3.7	N/A	14D00701
Zinc	3/5	20	29.3	24.9	6.9 - 10.1	14D00401

[1] Frequency of detection is the number of samples in which the analyte was detected divided by the total number of samples analyzed (excluding rejected samples).
[2] Indicates the value is the average of the detected concentrations in a sample and its duplicate. For nondetected values, 1/2 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: SWMUs = solid waste management units.
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 = milligram per kilogram.
N/A = not applicable.

Table 6-17
Comparison of Concentrations Detected in Sediment Samples at SWMUs 14 and 18 to Background Screening and Benchmark Concentrations

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

Analyte	Maximum Concentration	Background Screening Concentration[2]	Frequency Above Background Screening Concentration	Florida Sediment Quality Assessment Guideline (TEL)[3]	Frequency Above Florida Sediment Quality Assessment Guideline	Effects Range (ER-L)[4]	Frequency Above Effects Range
Volatiles (µg/kg)							
2-Butanone	[1]31	NSC	N/A	NSC	N/A	NSC	N/A
Acetone	[1]79.75	NSC	N/A	NSC	N/A	NSC	N/A
Carbon disulfide	[1]12	NSC	N/A	NSC	N/A	NSC	N/A
Semivolatiles (µg/kg)							
Benzo(a)anthracene	700	NSC	N/A	74.8	3/5	261	2/5
Benzo(a)pyrene	860	NSC	N/A	88.8	3/5	430	1/5
Benzo(b)fluoranthene	1,200	NSC	N/A	NSC	N/A	NSC	N/A
Benzo(g,h,i)perylene	510	NSC	N/A	NSC	N/A	NSC	N/A
Benzo(k)fluoranthene	1,500	NSC	N/A	NSC	N/A	NSC	N/A
Chrysene	1,500	NSC	N/A	108	3/5	384	3/5
Dibenz(a,h)anthracene	[1]302	NSC	N/A	6.2	2/5	63.4	2/5
Fluoranthene	1,700	NSC	N/A	113	3/5	600	2/5
Fluorene	320	NSC	N/A	21.2	2/5	19	2/5
Indeno (1,2,3-cd) pyrene	540	NSC	N/A	NSC	N/A	NSC	N/A
Phenanthrene	1,800	NSC	N/A	NSC	N/A	NSC	N/A
Pyrene	2,500	NSC	N/A	153	3/5	665	2/5
bis(2-Ethylhexyl) phthalate	790	NSC	N/A	182	2/5	NSC	N/A
Pesticides/PCBs (µg/kg)							
4,4'-DDD	1	NSC	N/A	1.22	0/5	2	0/5
4,4'-DDE	6.3	2.3	1/5	2.07	1/5	2	1/5
4,4'-DDT	4.7	NSC	N/A	1.19	1/5	1	1/5
Dieldrin	0.81	NSC	N/A	0.72	1/5	0.02	1/5

See notes at end of table.

Table 6-17 (Continued)
Comparison of Concentrations Detected in Sediment Samples at SWMUs 14 and 18 to Background Screening and Benchmark Concentrations

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

Analyte	Maximum Concentration	Background Screening Concentration[2]	Frequency Above Background Screening Concentration	Florida Sediment Quality Assessment Guideline (TEL)[3]	Frequency Above Florida Sediment Quality Assessment Guideline	Effects Range (ER-L)[4]	Frequency Above Effects Range
Inorganics (mg/kg)							
Arsenic	1.3	NSC	N/A	7.24	0/5	8.2	0/5
Barium	11.5	5.6	2/5	NSC	N/A	NSC	N/A
Beryllium	0.16	0.16	0/5	NSC	N/A	NSC	N/A
Chromium	4.5	2.6	3/5	52.3	0/5	81	0/5
Cobalt	0.89	NSC	N/A	NSC	N/A	NSC	N/A
Copper	11.2	2.2	3/5	18.7	0/5	34	0/5
Lead	7.5	NSC	N/A	30.2	0/5	46.7	0/5
Mercury	[1]0.035	NSC	N/A	0.13	0/5	0.15	0/5
Selenium	[1]0.1125	1.36	0/5	NSC	N/A	NSC	N/A
Tin	[1]2.7	NSC	N/A	NSC	N/A	NSC	N/A
Vanadium	4.8	4	3/5	NSC	N/A	NSC	N/A
Zinc	29.3	2.6	3/5	124	0/5	150	0/5

[1] Indicates the value is the average of the detected concentrations in a sample and its duplicate. For nondetected values, 1/2 the contract-required quantitation limits/contract-required detection limit as a surrogate.
[2] The background screening concentration is twice the mean of detected concentrations for inorganic analytes.
[3] "Development and Evaluation of Sediment Quality Assessment Guidelines," Florida Department of Environmental Protection, November, 1994.
[4] "Incidence of Adverse Biological Effects Within Ranges of Chemical Concentrations in Marine and Estuarine Sediments", (National Oceanic and Atmospheric Administration, 1994).

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
mg/kg = milligram per kilogram.
μg/kg = micrograms per kilogram.
NSC - no screening concentration.
N/A - not applicable.
TEL = threshold effects levels.
PCBs = polychlorinated biphenyls.
4,4'-DDD = dichlorodiphenyldichloroethane.
4,4'-DDT = dichlorodiphenyltrichloroethane.
4,4'-DDE = dichlorodiphenyldichloroethene.
ER-L = Effects Range - (low.)

Three pesticides, dieldrin, 4,4'-DDE, and 4,4'-DDT, were detected at concentrations that exceed their respective TEL and ER-L benchmarks (Table 6-17) in one of the sediment samples, MPT-14-SD07, collected from the tidal pool (Plate 4). Pesticides were not detected in the other sediment sample, MPT-14-SD08, collected in the tidal pool.

The source of the SVOCs are possibly from the historic use of SWMU 14 for firefighter training activities and/or emission and fluid residues from vehicles at parking lots that contribute surface water runoff to the drainage ditch system at the FTC. The source of the pesticide is likely the historic applications of pesticides.

Inorganics. Twelve inorganic target analytes were detected in the sediment samples (Table 6-15). Five target analytes (barium, chromium, copper, vanadium, and zinc) were detected at concentrations that exceed the background screening values (Table 4-17). Five inorganic analytes (arsenic, cobalt, lead, mercury, and tin) were detected in FTC Area sediment samples, but not background sediment samples.

The TEL and ER-L benchmark concentrations for arsenic, chromium, copper, lead, mercury, and zinc were not exceeded. Currently, there are no TEL or ER-L benchmarks for barium, beryllium, cobalt, selenium, tin, or vanadium.

6.2.4 Groundwater Assessment The following paragraphs present the groundwater assessment, which includes the results of groundwater field screening and groundwater sampling events.

6.2.4.1 Field Screening Results The groundwater field screening program consisted of 33 sampling locations at SWMU 14 and 5 sampling locations at SWMU 18 (Plate 5). Seven of the groundwater field screening samples were submitted to an offsite laboratory for confirmation analysis. The methodology used in collecting groundwater field screening samples with the TerraProbe℠ is described in Subsection 6.1.2 of this report and the NAVSTA Mayport GIR (1995a). The results of the groundwater field screening samples were used in determining the placement of the monitoring wells in the FTC and Diesel Generator Sump Areas.

The results of groundwater field screening data suggest that benzene, ethylbenzene, toluene, and xylenes are potentially present in the shallow surficial groundwater at SWMUs 14 and 18. Interpretation of gas chromatograph results initially suggested the presence of the chlorinated compounds 1,1-dichloroethene, tetrachloroethene, and trichloroethene. Comparison of the groundwater field screening samples with offsite laboratory analysis of duplicate field screening samples suggests that the chlorinated compounds detected in the field screening samples may be possible false positives (Table 6-18).

It should also be noted that the groundwater field screening sample collected at sampling location MPT-14-TP04 was observed to have free-phase petroleum hydrocarbons when placed in the sample container.

Isopleth maps (Figures 6-5, 6-6, 6-7, and 6-8) for the chemicals (benzene, ethylbenzene, toluene and xylenes) detected during the groundwater field screening event were prepared and used in selecting locations for groundwater monitoring wells.

Table 6-18
Comparison of Organic Analytes Detected in TerraProbe[SM] Field Screening and Confirmatory Groundwater Samples at SWMUs 14 and 18

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

Analytical Batch Number:	FS	R9757	FS	R9757	FS	R9557	R9757
Sample Location:	MPT-14-TP04	MPT-14-TP04	MPT-14-TP09	MPT-14-TP09	MPT-14-TP12	MPT-14-TP12	MPT-14-TP12
Sample Number:	14Q004	14Q004	14Q009	14Q009	14Q012	14Q012	14Q012Dup
Date Sampled:	27-MAR-95	09-APR-95	28-MAR-95	09-APR-95	28-MAR-95	09-APR-95	09-APR-95
Sample Depth (ft bls)	7 to 9	7 to 9	5 to 7	5 to 7	5 to 7	5 to 7	5 to 7
Aromatic Compounds (µg/ℓ)							
Benzene	7.3	--	--	--	1.0	--	--
Toluene	202	--	--	--	--	0.52	--
Ethylbenzene	18.4	--	--	--	--	--	--
Xylenes (total)	91.5	0.57	--	--	--	--	--
Methyl tert butyl ether	NA	1.3	NA	--	NA	0.54	1.1
Chlorinated Compounds (µg/ℓ)							
1,1-Dichloroethene	5.2	--	1.3	--	19	--	--
Tetrachloroethene	7.3	--	--	--	--	--	--
Trichloroethene	102	--	--	--	2.7	--	--
Fuels (µg/ℓ)							
Diesel	NA	--	NA	--	NA	790	870
Gasoline	NA	640	NA	--	NA	--	--

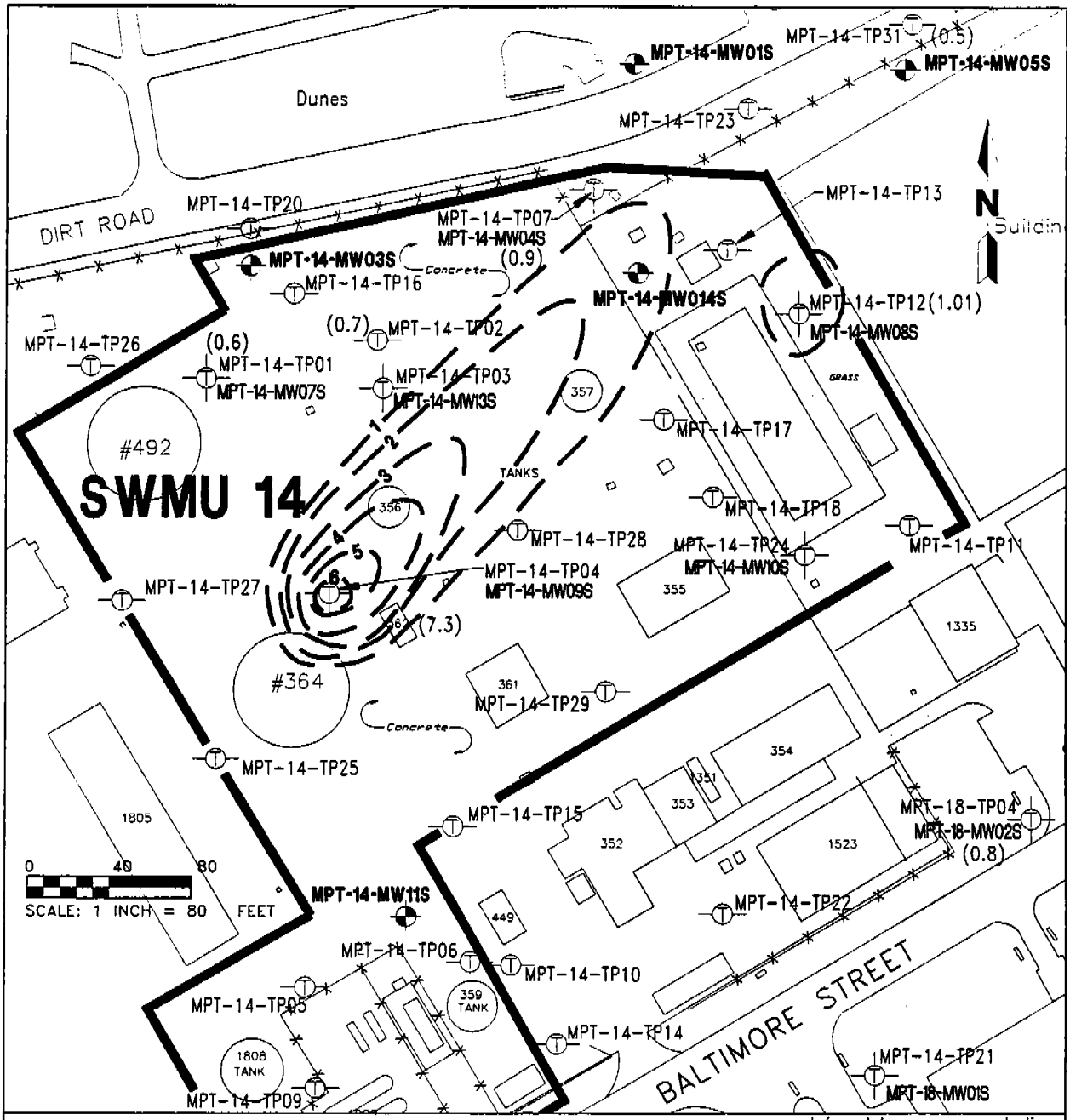
See notes at end of Table.

Table 6-18 (Continued)
Comparison of Organic Analytes Detected in TerraProbe[SM] Field Screening and Confirmatory Groundwater Samples at SWMUs 14 and 18

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

Analytical Batch Number:	FS	R9757	FS	R9757	NA	R9757
Sample Location:	MPT-14-TP20	MPT-14-TP20	MPT-14-TP23	MPT-14-TP23	MPT-18-TP01	MPT-18-TP01
Sample Number:	14Q020	14Q020	14Q023	14Q023	18Q001	18Q001
Date Sampled:	05-APR-95	09-APR-95	05-APR-95	09-APR-95	28-MAR-95	09-APR-95
Sample Depth (ft bls)	4 to 6	4 to 6	4 to 6	4 to 6	4 to 6	4 to 6
Aromatic Compounds (μg/ℓ)						
Benzene	--	--	--	--	--	--
Toluene	--	--	--	--	--	0.52
Ethylbenzene	--	--	--	--	--	--
Xylenes (total)	--	--	--	--	--	--
Methyl tert butyl ether	NA	--	N	--	NA	--
Chlorinated Compounds (μg/ℓ)						
1,1-Dichloroethene	--	--	4.1	--	--	--
Tetrachloroethene	--	--	--	--	--	--
Trichloroethene	--	--	1.0	--	--	--
Fuels (μg/ℓ)						
Diesel	NA	--	NA	--	NA	--
Gasoline	NA	--	NA	--	NA	--

Notes: [SM] = Service Mark.
SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
FS = groundwater field screening sample.
DUP = duplicate.
ft bls = sampling depth in feet beneath the land surface.
μg/ℓ = microgram per liter.
-- = concentration of analyte, if present, was less than the detection limit.
NA = analysis not conducted for the analytical parameter.



LEGEND

MPT-14-MW01S	Shallow monitoring well location and designation
MPT-18-TP21	TerraProbe[SM] sample location and designation
MPT-14-TP24 MPT-14-MW08S	Shallow monitoring well location and TerraProbe[SM] sample location and designation
— 3 —	Inferred benzene concentration Isopleth contour mg/l
(7.3)	Benzene concentration mg/l
	Solid Waste Management Unit boundaries
RCRA	Fence line Resource Conservation and Recovery Act

FIGURE 6-5
DISTRIBUTION OF INTERPRETED BENZENE CONCENTRATIONS DETECTED IN GROUNDWATER FIELD SCREENING SAMPLES

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U.S. NAVAL STATION MAYPORT, FLORIDA

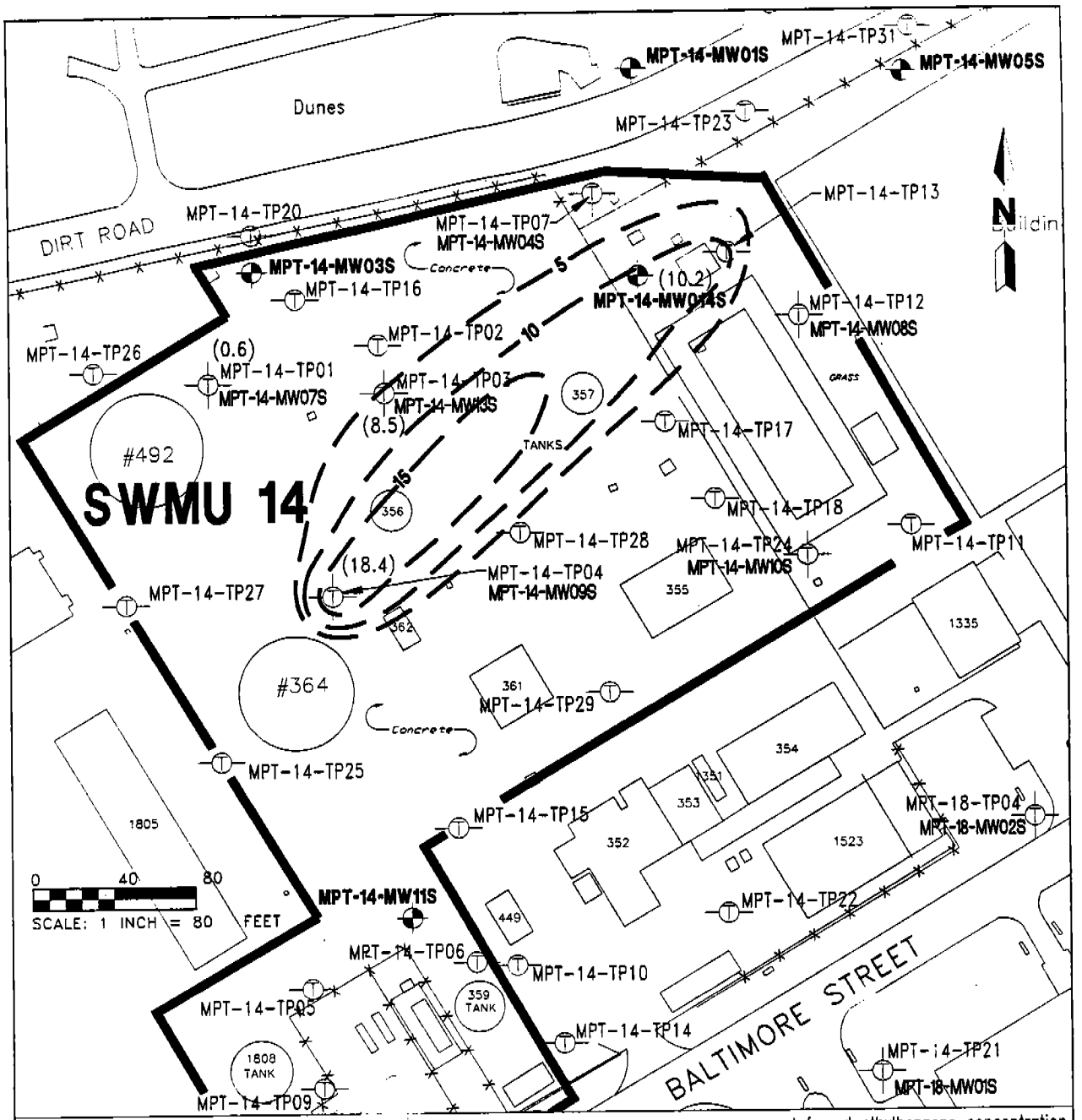

FIGURE 6-6
DISTRIBITION OF INTERPRETED ETHYLBENZENE CONCENTRATIONS DETECTED IN GROUNDWATER FIELD SCREENING SAMPLES

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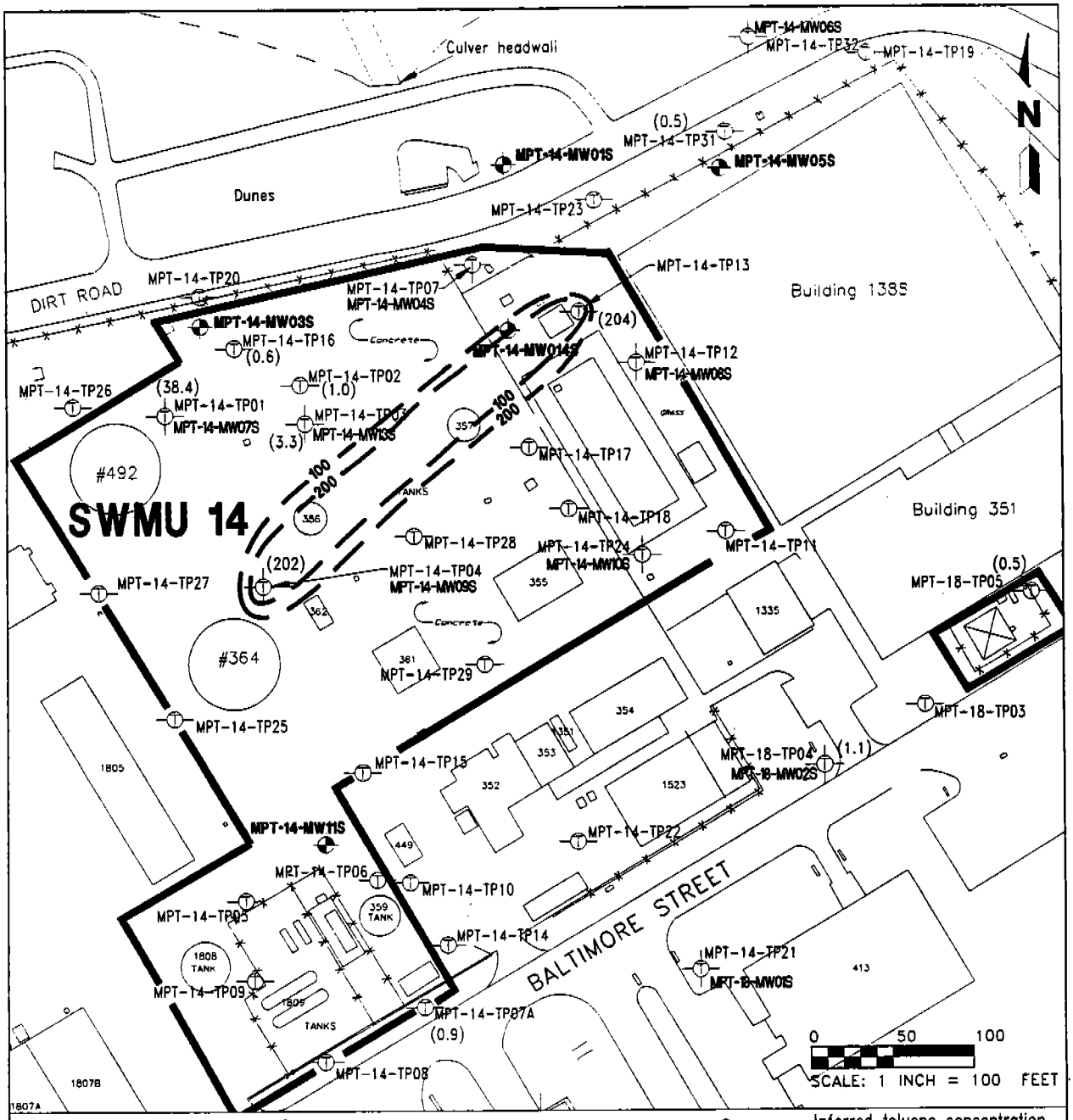
RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA



LEGEND

MPT-14-MW01S	Shallow monitoring well location and designation
MPT-18-TP21	TerraProbe SM sample location and designation
MPT-14-TP24 / MPT-14-MW08S	Shallow monitoring well location and TerraProbe SM sample location and designation
— 3 —	Inferred toluene concentration Isopleth contour mg/l
(204)	Toluene concentration mg/l
	Solid Waste Management Unit boundaries
RCRA	Fence line Resource Conservation and Recovery Act

FIGURE 6-7
DISTRIBUTION OF INTERPRETED TOLUENE CONCENTRATIONS DETECTED IN GROUNDWATER FIELD SCREENING SAMPLES

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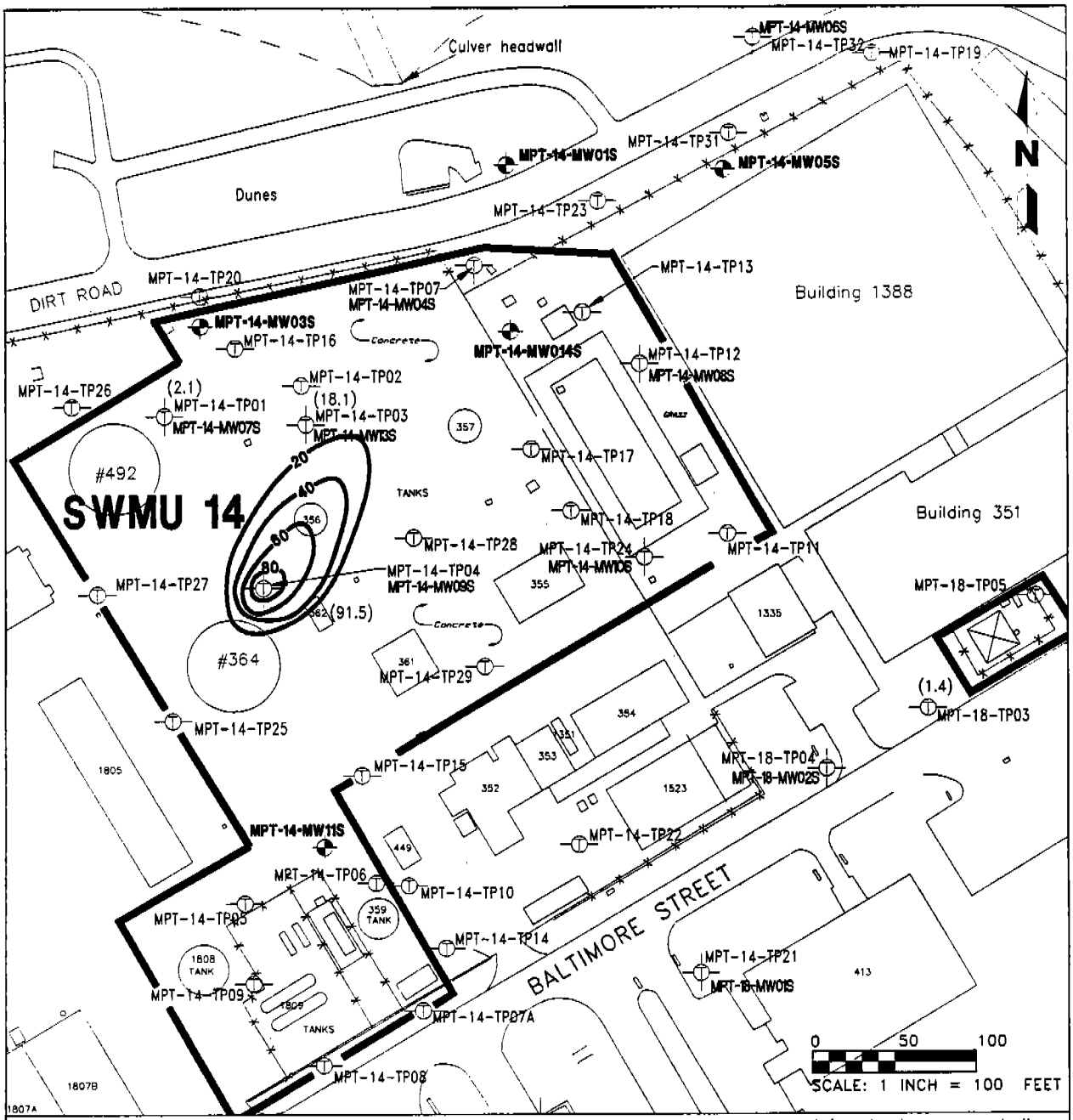
RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA



LEGEND

MPT-14-MW01S	Shallow monitoring well location and designation
MPT-18-TP21	TerraProbe℠ sample location and designation
MPT-14-TP24 / MPT-14-MW08S	Shallow monitoring well location and TerraProbe℠ sample location and designation
3	Inferred xylenes concentration Isopleth contour mg/l
(91.5)	Xylenes concentration mg/l
	Solid waste management unit boundaries
	Fence line
RCRA	Resource Conservation and Recovery Act

FIGURE 6-8
DISTRIBUTION OF INTERPRETED XYLENES CONCENTRATIONS DETECTED IN GROUNDWATER FIELD SCREENING SAMPLES

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RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

The groundwater flow direction inferred from the potentiometric lines on Plate 1 is toward the north-northeast in the vicinity of monitoring well MPT-14-MW09. The groundwater flow direction has some uncertainty because it is for a single date (July 19, 1995) that may not be representative of the overall groundwater flow direction. The direction of plumes interpreted from the field screening data was a more northeastern direction (Figures 6-5, 6-6, 6-7, and 6-8). A possible deviation of the plumes' direction of flow from the groundwater flow direction shown on Plate 1 may be hydraulic influence from permeable bedding for a pipeline that conveys fluids from the training areas, structures 364 and 492, to the wet well (Figure 6-3).

6.2.4.2 **Groundwater Samples from Monitoring Wells** Seventeen groundwater samples and two duplicates were collected from the monitoring wells at the FTC Area (Plate 1 and Plate 5). Tables 6-19 and 6-20 present concentrations of analytes detected in each groundwater sample. Table 6-21 presents statistics for each analyte detected, and Table 6-22 compares detected concentrations with benchmarks from Florida groundwater guidance concentrations (FDEP, 1994) and USEPA Region III RBCs (USEPA, 1995a). The following is a discussion of the results of water quality analysis and of the organic and inorganic target analytes detected in groundwater samples from SWMUs 14 and 18.

Water Quality. Analytical results for the water quality indicator parameters are provided in Appendix A. Total dissolved solids ranged from 230 to 524; the secondary water quality standard for total dissolved solids is 500 mg/ℓ (FAC, 62-520), which is only exceeded by one groundwater sample collected from MPT-14-MW12S (Table 6-21). A maximum value of 10,000 mg/ℓ is the criterion used to classify groundwater in an aquifer as a Class G-I or G-II drinking water supply. Total dissolved solids measured in groundwater samples collected from monitoring wells at SWMUs 14 and 18 were less than this value.

Sulfate and chloride were the dominant anions. Concentrations of chloride detected in the groundwater samples ranged from 13.1 to 40.6 mg/ℓ; the water quality standard for chloride is 250 mg/ℓ (FAC 62-520) (Groundwater Classes, Standards, and Exemptions, Table 4-62). Chloride measured in groundwater samples collected from monitoring wells screened in the surficial aquifer do not exceed this standard.

Sulfate, a common form of sulfur found in oxygenated systems, ranged from 2.4 to 153 mg/ℓ; the water quality standard for sulfate is 250 mg/ℓ (FAC, 62-520). In general, the concentrations of sulfate measured in groundwater samples collected from the shallow surficial aquifer wells do not exceed the standard.

Color measured in the groundwater ranged from 10 to 50 APHA units. The standard for color is 15 APHA units, which was exceeded in groundwater samples collected from monitoring wells in the shallow surficial aquifer.

Sulfide, a common form of sulfur reduced under anaerobic conditions, was measured at less than 1.0 mg/ℓ; currently there are no standards under FAC, 62-250, for this parameter. Hardness, calcium carbonate ($CaCO_3$) was measured at 131 to 378 mg/ℓ, which suggests that the water tends to be very hard (greater than 180 mg/ℓ: [Durfor and Becker, 1964]). A summary of nutrients (ammonia-N [ammonia as nitrogen], nitrate/nitrite, phosphorous-P, and total Kjeldahl nitrogen) measured in the surface water samples is provided in Table 6-21.

Table 6-19
Organic Analytes Detected in Groundwater Samples at SWMUs 14 and 18

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

Analytical Batch Number:	RA044	RA044
Sample Location:	MPT-14-MW07S	MPT-14-MW09S
Sample Number:	14G00701	14G00901
Date Sampled:	18-JUN-95	17-JUN-95
Semivolatiles (µg/ℓ)		
Naphthalene	–	4 J
2-Methylnaphthalene	–	21
Dibenzofuran	–	2 J
Fluorene	4 J	3 J
Phenanthrene	–	3 J
bis(2-Ethylhexyl) phthalate	2 J	–

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
µg/ℓ = microgram per liter
– = concentration of analyte, if present, was less than the detection limit.
J = estimated value.

Table 6-20
Inorganic Analytes Detected in Groundwater Samples at SWMUs 14 and 18

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

Analytical Batch Number:	RA024	RA024	RA024	RA024	RA024	RA024	RA024	RA044
Sample Location:	MPT-14-MW01S	MPT-14-MW02S	MPT-14-MW03S	MPT-14-MW04S	MPT-14-MW04S	MPT-14-MW05S	MPT-14-MW06S	MPT-14-MW07S
Sample Number:	14G00101	14G00201	14G00301	14G00401	14G00401DUP	14G00501	14G00601	14G00701
Date Sampled:	14-JUN-95	14-JUN-95	15-JUN-95	13-JUN-95	13-JUN-95	15-JUN-95	15-JUN-95	18-JUN-95
Inorganics (µg/ℓ)								
Antimony	--	--	--	--	--	--	6.2 J	--
Arsenic	2.1 J	2.2 J	1.9 J	2.1 J	1.7 J	9.3 J	0.9 J	1.4 J
Barium	2.5 J	5.4 J	5.4 J	5.2 J	5.2 J	3.5 J	3.6 J	--
Calcium	81,300	117,000	105,000	73,600	73,100	90,100	85,000	97,500
Cobalt	--	--	--	--	--	--	--	--
Iron	1,090	1,020	591	343	343	1,040	--	732
Lead	0.6 J	--	4.3	--	--	--	--	--
Magnesium	16,500	17,800	14,000	12,500	12,600	11,800	13,500	12,700
Manganese	64.4	106	70.7	69.4	68.9	70	17.2	85
Selenium	--	--	--	--	--	--	--	--
Sodium	19,900	18,400	15,400	14,800	14,900	15,200	15,000	13,800
Vanadium	4 J	2.8 J	2.6 J	3.1 J	2.9 J	4.1 J	4.9 J	2.4 J
Cyanide	--	--	--	--	--	--	--	--

See notes at end of table.

Table 6-20 (Continued)
Inorganic Analytes Detected in Groundwater Samples at SWMUs 14 and 18

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

Analytical Batch Number:	RA024	RA044	RA044	RA044	RA024	RA044	RA044
Sample Location:	MPT-14-MW08S	MPT-14-MW09S	MPT-14-MW10S	MPT-14-MW11S	MPT-14-MW12S	MPT-14-MW13S	MPT-14-MW14S
Sample Number:	14G00801	14G00901	14G01001	14G01101	14G01201	14G01301	14G01401
Date Sampled:	15-JUN-95	17-JUN-95	17-JUN-95	17-JUN-95	15-JUN-95	18-JUN-95	17-JUN-95
Inorganics (µg/ℓ)							
Antimony	--	--	--	--	--	--	--
Arsenic	1.5 J	1.8 J	3.8 J	2.1 J	1.7 J	--	3.3 J
Barium	4 J	--	10 J	--	22 J	--	--
Calcium	78,900	97,700	69,700	94,000	129,000	81,400	64,500
Cobalt	--	3.2 J	--	--	--	--	--
Iron	692	1,480	--	1,910	67.3 J	264	279
Lead	--	--	--	--	--	--	--
Magnesium	11,400	8,530	8,450	7,020	17,000	16,000	10,700
Manganese	66.2	85.4	79.8	176	51.3	27.8	30
Selenium	--	--	--	--	--	--	--
Sodium	14,700	16,800	16,200	19,100	16,100	11,500	14,300
Vanadium	1.8 J	2 J	--	2 J	10 J	1.8 J	2.9 J
Cyanide	--	--	--	--	--	--	--

See notes at end of table.

Table 6-20 (Continued)
Inorganic Analytes Detected in Groundwater Samples at SWMU 14 and 18

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

Analytical Batch Number:	RA044	RA044	RA044	RA044
Sample Location:	MPT-18-MW01S	MPT-18-MW01S	MPT-18-MW02S	MPT-18-MW03S
Sample Number:	18G00101	18G00101DUP	18G00201	18G00301
Date Sampled:	16-JUN-95	16-JUN-95	16-JUN-95	16-JUN-95
Inorganics (μg/ℓ)				
Antimony	--	--	--	--
Arsenic	3.7 J	4.1 J	3.4 J	2.1 J
Barium	11.9 J	12.2 J	8.9 J	12.4 J
Calcium	71,000	71,700	52,200	92,300
Cobalt	--	--	--	--
Iron	--	89.9 J	--	134
Lead	--	5.1	--	--
Magnesium	4,990 J	5,080	8,890	13,800
Manganese	22.6	25.9	35.1	220
Selenium	0.81 J	--	--	--
Sodium	13,100	13,300	10,700	14,500
Vanadium	8.7 J	7.8 J	2.7 J	6.8 J
Cyanide	--	--	12.8	--

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
DUP = duplicate.
μg/ℓ = microgram per liter.
-- = concentration of analyte, if present, was less than the detection limit.
J = estimated value.

Table 6-21
Summary of Analytes Detected in Groundwater Samples at SWMUs 14 and 18

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

Analyte	Frequency of Detection[1]	Minimum Detected Concentration	Maximum Detected Concentration	Mean of Detected Concentrations[3]	Range of Instrument Reporting Limits	Sample with Maximum Concentration
Semivolatiles (µg/ℓ)						
2-Methylnaphthalene	1/17	21	21	21	10 - 10	14G00901
Dibenzofuran	1/17	2	2	2	10 - 10	14G00901
Fluorene	2/17	3	4	4	10 - 10	14G00701
Naphthalene	1/17	4	4	4	10 - 10	14G00901
Phenanthrene	1/17	3	3	3	10 - 10	14G00901
bis(2-Ethylhexyl) phthalate	1/17	2	2	2	10 - 12	14G00701
Inorganics (µg/ℓ)						
Antimony	1/17	6.2	6.2	6.2	5 - 5	14G00601
Arsenic	16/17	0.9	9.3	2.7	0.6 - 0.6	14G00501
Barium	12/17	2.5	22	7.9	3.9 - 7.9	14G01201
Calcium	17/17	52,200	129,000	87,076	N/A	14G01201
Cobalt	1/17	3.2	3.2	3.2	3.1 - 3.1	14G00901
Cyanide	1/17	12.8	12.8	12.8	1.5 - 2.2	18G00201
Iron	14/17	[2]52.85	1,910	692.5	21.8 - 75.9	14G01101
Lead	3/17	0.6	4.3	2.5	0.4 - 3.5	18G00101D
Magnesium	17/17	[2]5,035	17,800	12,099	N/A	14G00201
Manganese	17/17	17.2	220	75.2	N/A	18G00301
Selenium	1/17	[2]0.53	[2]0.53	0.53	0.5 - 0.5	18G00101
Sodium	17/17	10,700	19,900	15,274	N/A	14G00101
Vanadium	16/17	1.8	10	3.9	1.2 - 1.2	14G01201

See notes at end of table.

Table 6-21 (Continued)
Summary of Analytes Detected in Groundwater Samples at SWMUs 14 and 18

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

Analyte	Frequency of Detection[1]	Minimum Detected Concentration	Maximum Detected Concentration	Mean of Detected Concentrations[3]	Range of Instrument Reporting Limits	Sample with Maximum Concentration
Water Quality Criteria (mg/ℓ)						
Alkalinity (reported as $CaCO_3$)	17/17	111	382	246	N/A	14G00201
Ammonia (reported as Nitrogen)	11/17	0.3	2.4	1	0.3 - 0.3	14G00201
Chloride	17/17	13.1	40.6	23.2	N/A	14G01101
Hardness (reported as $CaCO_3$)	17/17	131	378	249	N/A	14G00201
Nitrate/Nitrite (reported as Nitrogen)	13/17	0.11	5.41	1.02	0.1 - 0.1	14G00601
Phosphorous-Total (reported as phosphorous)	16/17	0.15	0.6	0.28	0.1 - 0.1	14G00101
Sulfate	17/17	2.4	153	32.5	N/A	14G01201
Total Dissolved Solids	17/17	230	524	349	N/A	14G01201
Total organic carbon	17/17	3	29.4	10	N/A	14G00301
Total Kjeldahl Nitrogen	13/17	0.3	2.7	1.3	0.3 - 0.3	14G00201
Color (Alpha units)	17/17	10	50	24	N/A	14G00101
pH (standard units)	17/17	7.27	7.86	7.54	N/A	18G00201

[1] Frequency of detection is the number of samples in which the analyte was detected, divided by the total number of samples analyzed (excluding rejected samples).
[2] Indicates the value is the average of a sample concentration and its duplicate. For nondetected values, 1/2 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: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
μg/ℓ = milligrams per liter.
$CaCO_3$ = calcium carbonate.
N/A = not applicable.
mg/ℓ = milligrams per liter.

Table 6-22
Comparison of Concentrations Detected in Groundwater Samples at SWMUs 14 and 18 to Background Screening and Benchmark Concentrations

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

Analyte	Maximum Concentration	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
Semivolatiles (µg/ℓ)							
2-Methylnaphthalene	21	NSC	N/A	6.8	1/17	150	0/17
Dibenzofuran	2	NSC	N/A	NSC	N/A	15	0/17
Fluorene	4	NSC	N/A	280	0/17	150	0/17
Naphthalene	4	NSC	N/A	6.8	0/17	150	0/17
Phenanthrene	3	NSC	N/A	10	0/17	NSC	N/A
bis(2-Ethylhexyl) phthalate	2	NSC	N/A	6	0/17	4.8	0/17
Inorganics (µg/ℓ)							
Antimony	6.2	NSC	N/A	6	1/17	1.5	1/17
Arsenic	9.3	8.6	1/17	50	0/17	0.038	16/17
Barium	22	39.6	0/17	2,000	0/17	260	0/17
Calcium	129,000	220,462	0/17	NSC	N/A	1,055,398	0/17
Cobalt	3.2	6.4	0/17	NSC	N/A	220	0/17
Cyanide	12.8	1.9	1/17	200	0/17	73	0/17
Magnesium	17,800	186,914	0/17	NSC	N/A	118,807	0/17
Iron	1,910	1,404	2/17	300	9/17	13,267	0/17
Lead	4.3	3.6	2/17	15	0/17	15	0/17
Manganese	220	198.6	1/17	50	12/17	18	16/17
Selenium	[1]0.53	9.2	0/17	50	0/17	18	0/17
Sodium	19,900	1,397,710	0/17	160,000	0/17	396,022	0/17
Vanadium	10	9.4	1/17	49	0/17	26	0/17

See notes at end of table.

Table 6-22 (Continued)
Comparison of Concentrations Detected in Groundwater Samples at SWMUs 14 and 18 to Background Screening and Benchmark Concentrations

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

[1] Indicates the value is the average of the detected concentrations in a sample and its duplicate. For nondetected values, 1/2 the contract-required quantitation limits/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 value is from Florida Guidance Concentrations dated June 1994.
[4] The value is from U.S. Environmental Protection Agency Region III Risk-based Concentrations dated February 9, 1995. Concentrations are based on a 1×10^{-6} cancer risk or an adjusted Hazard Index (non-carcinogenic risks) to 0.1.

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
$\mu g/\ell$ = micrograms per liter.
NSC - no screening concentration.
N/A - not applicable.

Results of the water quality indicator parameters suggest that groundwater in the vicinity of SWMUs 14 and 18 meet the criteria of a Class G-I or G-II drinking water supply.

Organics. Organic analytes detected in groundwater samples collected from the FTC Area consist of six SVOCs (Table 6-19). VOCs, pesticides, and PCBs were not detected in the groundwater samples. One SVOC, 2-methylnaphthalene, was detected at a concentration exceeding benchmark values (Table 6-22).

SVOCs were detected in two of the monitoring wells located hydraulically downgradient from the airplane and helicopter firefighter training mockup, structures 364 and 492, respectively (Plate 5). Only the groundwater sample from monitoring well MPT-14-MW09S contained 2-methylnaphthalene, which was detected at a concentration that exceeds the Florida groundwater guidance concentration, but not the USEPA Region III RBC. The detection of SVOCs in monitoring wells located hydraulically downgradient of the firefighter training mockup suggests that there has been a release from structures 364 and 492.

The groundwater field screening sample from location MPT-14-TP04 was observed to contain free-phase hydrocarbons; this is the same location as monitoring well MPT-14-MW09S. However, floating free-phase hydrocarbons have not been measured or observed at this monitoring well location.

There was not a good correlation between the groundwater field screening samples and the groundwater samples collected from monitoring wells. The volatile aromatics detected in the groundwater field screening samples were not detected in groundwater samples collected from monitoring wells. This may be a result of the length of the intake for the TerraProbe℠ sampler (2 feet) and the length of the monitoring well screen (10 feet). The groundwater sample collected with the TerraProbe℠ sampler may represent a stratum or aquifer zone where contaminants are present at higher concentrations, whereas a monitoring well with a longer intake interval may provide a sample that represents a composite over a larger area (Pohlmann and Alduino, 1992). Also, it is possible that the field screening data represent false positive identifications.

Inorganics. Thirteen inorganic analytes were detected in the groundwater samples collected from the FTC Area (Table 6-20). Six inorganic analytes (arsenic, cyanide, iron, lead, manganese, and vanadium) were detected in groundwater samples at concentrations that exceed background screening values (Table 6-22). Antimony was detected in environmental samples, but not in the background groundwater samples.

Four inorganic analytes, antimony, arsenic, iron and manganese, were detected at concentrations that exceeded the benchmarks. Antimony and manganese were detected at concentrations that exceeded both the FDEP groundwater guidance concentrations and the USEPA Region III RBCs (Table 6-22). Arsenic was detected at concentrations that exceeded only the USEPA Region III RBC, and iron was detected at concentrations exceeding the FDEP groundwater guidance concentration (Table 6-22).

Antimony was detected as a single occurrence at 6.2 $\mu g/\ell$ in the groundwater sample collected from monitoring well MPT-14-MW06S. This monitoring well, MPT-14-MW06S, is located approximately 170 feet hydraulically downgradient from SWMU 14. Antimony was not detected in groundwater samples from the other monitoring

wells at SWMUs 14 and 18. This occurrence suggests that antimony is not likely site related.

Arsenic exceeded the USEPA Region III RBC in 16 of 17 groundwater samples. The detected concentrations appear to represent a random pattern with some of the highest detected concentrations in groundwater samples from monitoring wells MPT-18-MW01S and MPT-18-MW02S located hydraulically upgradient from SWMUs 14 and 18. The distribution of arsenic suggests that it is not likely site related.

Iron exceeded the FDEP groundwater guidance concentration in 9 of 17 samples. The detected concentrations appear to represent a random pattern with some of the highest detected concentrations in a groundwater sample from monitoring well MPT-14-MW12S located hydraulically upgradient from SWMU 14 and monitoring well MPT-14-MW02S located hydraulically sidegradient to SWMU 14. The distribution of iron suggests that it is not likely site related.

Manganese was detected in 12 of 17 samples at concentrations that exceed Florida groundwater guidance concentrations. The detected concentrations appear to represent a random pattern with the highest detected concentrations in a groundwater sample from monitoring well MPT-14-MW02S located hydraulically sidegradient to SWMU 14. The distribution of manganese suggests that it is not likely site related.

Because the land features at NAVSTA Mayport are influenced by the deposition of dredge material from the Mayport Turning Basin, it is possible that residual concentrations of antimony, arsenic, iron, and manganese from the dredge material have contributed to the inorganic concentrations detected in the groundwater samples.

6.3 HUMAN HEALTH RISK ASSESSMENT FOR SWMUS 14 AND 18. Because SWMUs 14 and 18 share a similar geographic and hydrogeologic setting and have similar contaminants, SWMUs 14 and 18 were evaluated together. SWMU 14, the Mercury/Oil Waste Spill Area, is located at the FTC. Adjacent to SWMU 14 is SWMU 18, the FTC Diesel Generator Sump, which may have released petroleum or related constituents to the environment. The location, physical description, and history (including past and current land use) associated with SWMUs 14 and 18 are described in further detail in Section 6.1. Surface soil, subsurface soil, groundwater, surface water, and sediment samples were collected during the RFI (Subsection 6.1.2). After evaluation and management of the environmental data collected at SWMUs 14 and 18 (described in Chapter 2.0), HHCPCs were selected, and the potential human health risks associated with each medium at SWMUs 14 and 18 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; 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 (ABB-ES, 1995a).

6.3.1.1 **Surface Soil** Twenty-three surface soil samples and three duplicates were collected at SWMU 14, and four surface soil samples and two duplicates were collected at SWMU 18 and submitted for chemical analysis during the RFI. In addition, during the data evaluation and report preparation process, 6 of the 11 sediment samples that were collected at SWMUs 14 and 18 were determined to be surface soil samples. These six samples (MPT-14-SD01 through MPT-14-SD03 and MPT-18-SD01 through MPT-18-SD03) were collected in drainage ditches; these areas are actually dry through the majority of the year. Exposures to soil at these sample locations would be more like exposure to surface soil than to sediment (i.e., incidental ingestion, dermal contact, and inhalation of particulates is a more likely scenario than wading). Therefore, these six sediment samples were analyzed with the surface soil data for SWMUs 14 and 18. Data from SWMUs 14 and 18 were evaluated together. Surface soil sample locations evaluated in the HHRA (MPT-14-SS01 through MPT-14-SS17, MPT-14-SS19, MPT-14-SS20 through MPT-14-SS24, MPT-18-SS01 through MPT-18-SS04, MPT-14-SD01 through MPT-14-SD03, MPT-18-SD01 through MPT-18-SD03, and five duplicates, MPT-14-SS11, MPT-14-SS16, MPT-14-SS02, MPT-18-SS03, MPT-18-SS04, and MPT-18-SD01) are indicated on Plate 4.

Table 6-23 presents the analytes detected in, and the HHCPCs selected for, the surface soil at SWMUs 14 and 18. Seven semivolatile organic compounds (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene), one pesticide (dieldrin), and three inorganic compounds (arsenic, beryllium, and copper) were selected as HHCPCs.

6.3.1.2 **Subsurface Soil** Twelve subsurface soil samples were collected at SWMU 14 and three subsurface soil samples and one duplicate were collected at SWMU 18 and submitted for chemical analysis during the RFI. Data from SWMUs 14 and 18 were evaluated together. Subsurface soil sample locations evaluated in the HHRA (MPT-14-SB02, MPT-14-SB06, MPT-14-SB07, MPT-14-SB08, MPT-14-SB01, MPT-14-SB14, MPT-14-SB19, MPT-14-SB21, MPT-14-SB22, MPT-14-SB23, MPT-14-SB24, MPT-14-SB25, MPT-18-SB02, MPT-18-SB03, MPT-18-SB04, and a duplicate, MPT-18-SB02) are indicated on Plate 4. Table 6-24 presents the analytes detected in subsurface soil at SWMUs 14 and 18. No analytes were selected as HHCPCs for the subsurface soil samples.

6.3.1.3 **Surface Water** Two surface water samples and one duplicate were collected from the drainage ditch north of SWMUs 14 and 18 and submitted for chemical analyses during the RFI. Surface water sample locations evaluated in the HHRA (MPT-14-SW04, MPT-14-SW05, and a duplicate, MPT-14-SW04) are indicated on Plate 4.

Table 6-25 presents the analytes detected in surface water associated with SWMUs 14 and 18. No analytes were selected as HHCPCs for the surface water samples.

6.3.1.4 **Sediment** Eleven sediment samples and two duplicates were collected from the drainage ditch and tidal pool area north of SWMUs 14 and 18 and submitted for chemical analyses during the RFI. Six of the 11 sediment samples that were collected at SWMUs 14 and 18 were considered surface soil samples (Paragraph 6.3.1.1). Sediment sample locations evaluated in the HHRA (MPT-14-SD04 through MPT-14-SD08, and a duplicate, MPT-14-SD06) are indicated on Plate 4.

Table 6-23
Selection of Human Health Chemicals of Potential Concern
Surface Soil at SWMUs 14 and 18

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

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	Mean of Detected Concentrations[3]	Background Screening Concentration[4]	Risk-Based Screening Concentration[5]	Florida Leaching Value[6]	Florida Soil Cleanup Goal[7]	Selected as HHC-PC? (Yes/No)
Volatile (µg/kg)									
2-Butanone	4/33	10 - 62	4 - 16	7.5	NA	4,700,000	NG	2,200,000	No[S]
Acetone	3/33	10 - 62	[2]8 - 72	35.3	NA	780,000	NG	260,000	No[S]
Ethylbenzene	1/33	5 - 31	4	4	NA	780,000	NG	1,400,000	No[S]
Toluene	8/33	5 - 31	1 - 32	5.7	NA	1,600,000	NG	520,000	No[S]
Xylenes (total)	5/33	5 - 31	1 - 13	3.4	NA	16,000,000	NG	13,000,000	No[S]
Semivolatiles (µg/kg)									
2-Methylnaphthalene	1/33	340 - 7,100	13,000	13,000	NA	310,000	NC	960,000	No[S]
Acenaphthene	2/33	340 - 7,100	190 - 910	550	NA	470,000	NG	2,800,000	No[S]
Anthracene	1/33	340 - 7,100	220	220	NA	2,300,000	NG	20,000,000	No[S]
Benzo(a)anthracene	7/33	340 - 7,100	[2]33.5 - 1,900	698	NA	880	NG	1,400	Yes
Benzo(a)pyrene	5/33	340 - 7,100	[2]52.5 - 2,100	1,004	NA	88	NG	100	Yes
Benzo(b)fluoranthene	5/33	340 - 7,100	[2]85.5 - 3,500	1,415	NA	880	NG	1,400	Yes
Benzo(g,h,i)perylene	5/33	340 - 7,100	[2]82 - 1,400	691	NA	NSC	NG	14,000	No[S]
Benzo(k)fluoranthene	5/33	340 - 7,100	[2]71.5 - 3,200	1,470	NA	8,800	NG	14,000	Yes[C]
Butylbenzylphthalate	1/33	340 - 7,100	[2]307.5	308	NA	1,600,000	NG	15,000,000	No[S]
Chrysene	7/33	340 - 7,100	[2]64 - 3,700	1,212	NA	88,000	NG	140,000	Yes[C]
Dibenz(a,h)anthracene	3/33	340 - 7,100	[2]96.5 - 270	199	NA	88	NG	100	Yes
Di-n-butylphthalate	2/33	340 - 7,100	[2]290 - 480	385	NA	780,000	NG	7,300,000	No[S]
Fluoranthene	5/33	340 - 7,100	[2]48 - 4,400	2,267	NA	310,000	NG	2,900,000	No[S]
Fluorene	2/33	340 - 7,100	290 - 2,200	1,245	NA	310,000	NG	2,400,000	No[S]
Indeno(1,2,3-cd)pyrene	5/33	340 - 7,100	[2]66.5 - 1,400	677	NA	880	NG	1,400	Yes

See notes at end of table.

Table 6-23 (Continued)
Selection of Human Health Chemicals of Potential Concern
Surface Soil at SWMUs 14 and 18

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

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	Mean of Detected Concentrations[3]	Background Screening Concentration[4]	Risk-Based Screening Concentration[5]	Florida Leaching Value[6]	Florida Soil Cleanup Goal[7]	Selected as HHCPC? (Yes/No)
Semivolatiles (µg/kg) (Continued)									
N-Nitrosodiphenylamine	2/33	340 - 7,100	270 - 1,600	935	NA	130,000	NG	73,000	No[S]
Naphthalene	1/33	340 - 7,100	3,700	3,700	NA	310,000	NG	1,800,000	No[S]
Phenanthrene	7/33	340 - 7,100	44 - 3,600	845	NA	NSC	NG	1,700,000	No[S]
Pyrene	10/33	340 - 7,100	20 - 6,000	1,709	NA	230,000	NG	2,200,000	No[S]
bis(2-Ethylhexyl)phthalate	6/33	340 - 7,100	25 - 2,400	675	NA	46,000	NG	48,000	No[S]
Pesticides/PCBs (µg/kg)									
4,4'-DDE	1/33	0.68 - 14	1.1	1.1	NA	1,900	NG	3,000	No[S]
4,4'-DDT	1/33	1.3 - 18	1.2	1.2	NA	1,900	NG	3,100	No[S]
Aroclor-1254	1/33	17 - 420	72	72	NA	160	NG	900	No[S]
Chlordane	3/33	6.8 - 160	[2]7.725 - 150	57.1	NA	490	NG	800	No[S]
Dieldrin	2/33	0.68 - 14	[2]6.1 - 69.5	37.8	NA	40	NG	70	Yes
Heptachlor	1/33	0.68 - 14	0.77	0.77	NA	140	NG	200	No[S]
Inorganic (mg/kg)									
Arsenic	30/33	0.16 - 0.7	0.36 - 2.2	0.78	ND	0.37	NC	[9]0.8	Yes
Barium	33/33	0.08 - 0.3	3.3 - 23	7.4	5.6	550	NC	5,200	No[S]
Beryllium	32/33	0.03 - 0.08	0.05 - 0.27	0.11	0.16	0.15	NC	0.2	Yes
Cadmium	8/33	0.25 - 0.63	0.29 - 1.4	0.54	2	3.9	NC	37	No[S,8]
Chromium	32/33	0.36 - 1.3	1.2 - 14.8	4.8	2.6	39	NC	290	No[S]
Cobalt	13/33	0.56 - 0.85	[2]0.545 - 1.5	0.92	ND	470	NC	4,700	No[S]
Copper	32/33	0.21 - 4.8	0.42 - 334	18.2	2.2	[9]290	NC	NS	Yes
Cyanide	16/33	0.05 - 1	[2]0.0525 - 0.18	0.1	ND	160	NC	1,600	No[S]
Lead	33/33	0.22 - 2.5	[2]0.945 - 25[2]	6.5	ND	400	NC	500	No[S]

See notes at end of table.

Table 6-23 (Continued)
Selection of Human Health Chemicals of Potential Concern
Surface Soil at SWMUs 14 and 18

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

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	Mean of Detected Concentrations[3]	Background Screening Concentration[4]	Risk-Based Screening Concentration[5]	Florida Leaching Value[6]	Florida Soil Cleanup Goal[7]	Selected as HHCPC? (Yes/No)
Inorganics (mg/kg) (Continued)									
Mercury	5/33	0.03 - 0.1	[2]0.03 - [2]0.12	0.06	ND	2.3	NC	23	No[S]
Nickel	10/33	1.1 - 6.14	1.1 - 3.4	1.8	ND	160	NC	1,500	No[S]
Selenium	4/33	0.1 - 0.6	[2]0.0975 - 0.34	0.2	1.36	39	NC	390	No[S,B]
Silver	3/33	0.29 - 0.6	0.4 - 0.43	0.41	ND	39	NC	390	No[S]
Tin	12/33	1.9 - 3.7	2 - 15.5	4	ND	4,700	NC	44,000	No[S]
Vanadium	33/33	0.25 - 0.43	1.7 - 9.6	3.7	4	55	NC	490	No[S]
Zinc	26/33	0.25 - 13.7	4.8 - 206	50.4	2.6	2,300	NC	23,000	No[S]

[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 sampling locations were analyzed: MPT-14-SS01 through MPT-14-SS17, MPT-14-SS19, MPT-14-SS20 through MPT-14-SS24, MPT-18-SS01 through MPT-18-SS04, MPT-14-SD01 through MPT-14-SD03, MPT-18-SD01 through MPT-18-SD03, and five duplicates, MPT-14-SS11, MPT-14-SS16, MPT-14-SS02, MPT-18-SS03, MPT-18-SS04, and MPT-18-SD01.
[2] Indicates the value is the average of the detected concentration in a sample and its duplicate. For non-detect values, one-half of the contract-required quantitation limit or 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-1-1 of Appendix D-1 to the RCRA Facility Investigation General Information Report (GIR).
[5] The risk-based screening concentrations are identified in Table D-1-4 of Appendix D to the GIR.
[6] The Florida leaching values (September 29, 1995) are identified in Appendix D-6 to this report.
[7] The Florida soil cleanup goals (September 29, 1995) are identified in Appendix D-6 to this report.
[8] Soil Cleanup Goals for Florida, January 19, 1996 (residential for surface soil).
[9] Soil Cleanup Goals for the Military Sites, April 5, 1995 (residential for surface soil).

Notes: SWMUs = solid waste management units.
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.
S = The maximum detected concentration did not exceed the risk-based screening concentration, the Florida leaching value, or the Florida soil cleanup goal; therefore, this analyte will not be evaluated in the human health risk assessment.
C = This analyte is a member of a chemical class that contains other human health chemicals of potential concern (HHCPCs); therefore, this analyte is retained as an HHCPC.
PCB = polychlorinated biphenyl.
4,4'-DDE = dichlorodiphenyldichloroethene.
4,4'-DDT = dichlorodiphenyltrichloroethane.
mg/kg = milligrams per kilogram.
NC = not calculated.
B = The maximum detected concentration did not exceed the background screening concentration; therefore, the analyte will not be evaluated in the HHRA.
ND = not detected in any background samples.
HHRA = human health risk assessment.

Table 6-24
Selection of Human Health Chemicals of Potential Concern
Subsurface Soil at SWMUs 14 and 18

RCRA Facility Investigation, Group III 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 Goal[6]	Selected as HHCPC? (Yes/No)
Volatiles (µg/kg)									
Xylenes (total)	2/15	5 - 6	1 - 1	1	NA	50,000,000	NG	9,200,000	No[S]
Semivolatiles (µg/kg)									
Chrysene	1/15	370 - 820	58	58	NA	390,000	NG	500,000	No[S]
Fluoranthene	1/15	370 - 820	89	89	NA	4,100,000	NG	4,800,000	No[S]
Phenanthrene	1/15	370 - 820	74	74	NA	NSC	NG	2,100,000	No[S]
Pyrene	1/15	370 - 820	96	96	NA	3,050,000	NG	4,100,000	No[S]
Pesticides/PCBs (µg/kg)									
Dieldrin	1/15	0.74 - 0.87	5.3	5.3	NA	180	NG	300	No[S]
Inorganic (mg/kg)									
Arsenic	8/15	0.18 - 0.76	0.34 - 1.3	0.79	0.9	1.65	NC	[7]3.7	No[S]
Barium	15/15	0.09 - 0.27	1.3 - 5.6	3.1	7.2	7,000	NC	8,400	No[S,B]
Beryllium	15/15	0.03 - 0.07	0.07 - 0.19	0.11	0.14	0.65	NC	1.0	No[S]
Chromium	15/15	0.4 - 1.5	1.8 - 5.8	2.9	3.4	500	NC	43	No[S]
Cobalt	2/15	0.73 - 0.95	0.84 - 1	0.92	1.04	6,000	NC	11,000	No[S,B]
Copper	9/15	0.23 - 2.8	0.36 - 6.7	2	3.6	3,800	NC	NSC	No[S]
Cyanide	2/15	0.06 - 1	0.09 - 0.17	0.13	0.66	2,050	NC	4,000	No[S,B]
Lead	15/15	0.24 - 0.4	0.93 - 3	1.9	2.8	400	NC	1,000	No[S]
Nickel	1/15	1.3 - 1.8	1.9	1.9	ND	2,050	NC	2,600	No[S]
Selenium	2/15	0.12 - 0.28	0.31 - 0.31	0.31	ND	500	NC	990	No[S]
Tin	14/15	2 - 3.3	2.3 - 31.3	5.8	5.4	50,000	NC	67,000	No[S]

See notes at end of table.

Table 6-24 (Continued)
Selection of Human Health Chemicals of Potential Concern
Subsurface Soil at SWMUs 14 and 18

RCRA Facility Investigation, Group III 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 Soil Cleanup Goal[7]	Selected as HHCPC? (Yes/No)
Inorganics (mg/kg) (Continued)									
Vanadium	15/15	0.28 - 0.51	1.2 - 3.6	2	3.2	700	NC	490	No[S]
Zinc	3/15	0.35 - 3.6	5.2 - 17.1	11.4	4.8	30,500	NC	56,000	No[S]

[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 sampling locations were analyzed: MPT-14-SB02, MPT-14-SB06, MPT-14-SB07, MPT-14-SB08, MPT-14-SB01, MPT-14-SB14, MPT-14-SB19, MPT-14-SB21, MPT-14-SB22, MPT-14-SB23, MPT-14-SB24, MPT-14-SB25, MPT-18-SB02, MPT-18-SB03, MPT-18-SB04, and a duplicate, MPT-18-SB02.
[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 samples included in the background data set are identified in Table D-1-1 of Appendix D-1 to the RCRA Facility Investigation General Information Report (GIR).
[4] The risk-based screening concentrations are identified in Table D-1-2 of Appendix D to the GIR (ABB Environmental Services, Inc. [ABB-ES], 1995a).
[5] The Florida leaching values (September 29, 1995) are identified in Appendix D-6 to this report.
[6] The Florida soil cleanup goals (September 29, 1995) are identified in Appendix D-6 to this report.
[7] Soil Cleanup Goal for Florida, January 19, 1996 (industrial for subsurface soil).

Notes: SWMUs = solid waste management units.
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.
S = The maximum detected concentration did not exceed the risk-based screening concentration, the Florida leaching value, or the Florida soil clean-up goal; therefore, this analyte will not be evaluated in the human health risk assessment.
NSC = no screening concentration.
PCB = polychlorinated biphenyls.
mg/kg = milligrams per kilogram.
NC = not calculated.
B = The maximum detected concentration did not exceed the background screening concentration; therefore, the analyte will not be evaluated in the HHRA.
ND = not detected in any background samples.
HHRA = human health risk assessment.

Table 6-25
Selection of Human Health Chemicals of Potential Concern
Surface Water Associated with SWMUs 14 and 18

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

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	Mean of Detected Concentrations[3]	Background Screening Concentration[4]	Risk-Based Screening Concentration[5]	Federal MCL[6]	Florida Guidance Concentration[7]	Florida Surface Water Quality Standards[8]	Selected as HHCPC? (Yes/No)
Inorganic (µg/l)										
Barium	2/2	1.1	8.7 - [2]10.1	9.4	22.6	260	2,000	2,000	NS	No[S,B]
Calcium	2/2	34.8	[2]201,500 - 206,000	203,750	282,176	1,055,398	NS	NS	NS	No[S,B]
Iron	2/2	1.9	103 - [2]552	328	452	13,267	NS	300	300	No[X]
Lead	1/2	4	[2]3	3	2.6	15	15	15	5.6	No[S]
Magnesium	2/2	19.8	[2]627,500 - 661,000	644,250	671,150	118,807	NS	NS	NS	No[B]
Manganese	2/2	0.5	5.1 - [2]10.55	7.8	83.4	18	NS	50	NS	No[S,B]
Sodium	2/2	390	[2]4,870,000 - 5,540,000	5,205,000	766,000	396,022	NS	160,000	NS	No[X]
Vanadium	2/2	1.2	4.6 - [2]5.7	5.2	8	26	NS	49	NS	No[S,B]
Zinc	1/2	3.35 - 4.8	[2]11.25	11.3	4	1,100	NS	5,000	86	No[S,B]

See notes at end of table.

Table 6-25 (Continued)
Selection of Human Health Chemicals of Potential Concern
Surface Water Associated with SWMUs 14 and 18

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

[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: MPT-14-SW04, MPT-14-SW05, and a duplicate, MPT-14-SW04.
[2] Indicates the value is the average of the detected concentration in a sample and its duplicate. For non-detect values, one-half of the contract-required quantitation limit or contract-required detection limit 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.
[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-1-6 of Appendix D-1 to the RCRA Facility Investigation General Information Report (GIR).
[5] The risk-based screening concentrations are identified in Table D-1-5 of Appendix D to the GIR.
[6] The Federal maximum contaminants levels (MCLs) (November 1994) are identified in Table D-1-5 of Appendix D-1 to the GIR.
[7] The Florida guidance concentrations (June 1994) are identified in Table D-1-5 of Appendix D-1 to the GIR.
[8] Applicable human health-based Florida surface water quality standards for class III (marine) waters are identified in Florida Administration Code 62-302.

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
HHCPC = human health chemical of potential concern.
$\mu g/\ell$ = micrograms per liter.
NS = no standard or guideline available.
S = 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).
B = The maximum detected concentration did not exceed the background screening concentration; therefore, the analyte will not be evaluated in the HHRA.
X = The high detected concentrations of sodium and iron are believed to be due to the fact that the tidal basin receives water from the St. Johns River, which is marine in this area; therefore, these analytes will not be evaluated in the HHRA.

Table 6-26 presents the analytes detected in, and the HHCPCs selected for, sediment associated with SWMU 14. Twelve semivolatile compounds (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene) were selected as HHCPCs.

6.3.1.5 **Groundwater** Seventeen unfiltered groundwater samples and two duplicates were collected from the surficial aquifer associated with SWMUs 14 and 18 using the low-flow sampling method and submitted for chemical analysis during the RFI. Data from SWMUs 14 and 18 were evaluated together. Groundwater sample locations evaluated in the HHRA (MPT-14-MW01S through MPT-14-MW10S, MPT-14-MW12S through MPT-14-MW14S, MPT-18-MW01S through MPT-18-MW03S, and duplicates MPT-14-MW04S and MPT-18-MW01S) are indicated on Plate 1.

Table 6-27 presents the analytes detected in, and the HHCPCs selected for, unfiltered groundwater associated with SWMUs 14 and 18. Four semivolatile organic compounds (2-methylnaphthalene, fluorene, naphthalene, and phenanthrene) and four inorganic compounds (antimony, arsenic, iron, and manganese) were selected as HHCPCs.

6.3.2 **Exposure Assessment** Medium-specific receptors and exposure scenarios are identified in Paragraphs 6.3.2.1 through 6.3.2.3 for current and future land use. The information is also summarized in Table 6-28 and Figure 6-9. Receptor-specific exposure parameters for each exposure scenario are presented in Appendix D-3 of the RFI GIR. The risk calculation spreadsheets in Appendix D-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, SWMUs 14 and 18 and the surrounding area are accessible to Navy personnel and their adult and child dependents. Currently, adult and adolescent trespassers 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. Most of the FTC is paved; therefore, it is unlikely that occupational and site maintenance workers are currently exposed to contaminants in surface soil. Excavation workers may be exposed to contaminants in surface soil at the detention pond (based on the presence of hydrocarbon-stained soil at the south end of the detention pond).

No humans currently reside at SWMUs 14 and 18. In the near future, SWMU 14 is proposed to be used as a parking lot. However, SWMUs 14 and 18 could eventually be developed for residential use. Therefore, exposure of residents to contaminants in surface soil is evaluated in the HHRA. If SWMUs 14 and 18 are developed for industrial use in the future, occupational workers and excavation workers could be exposed to contaminants in surface soil. Therefore, exposure of these receptors to contaminants in surface soil is also evaluated in the HHRA.

6.3.2.2 **Groundwater** Currently, groundwater at SWMUs 14 and 18 is not used for any potable or nonpotable purpose. If SWMUs 14 and 18 ever were developed for residential use, drinking water wells screened in the surficial aquifer could be influenced by groundwater associated with SWMUs 14 and 18. Therefore, future domestic use of the surficial aquifer (adult ingestion) is evaluated in the HHRA. Inhalation of volatiles from groundwater is not evaluated because no volatile organic compounds were selected as HHCPCs.

Table 6-26
Selection of Human Health Contaminants of Potential Concern
Sediment Associated with SWMU 14

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

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	Mean of Detected Concentrations[3]	Background Screening Concentration[4]	Risk-Based Concentration[5]	Selected as HHCPC? (Yes/No)
Volatiles (µg/kg)							
Acetone	1/5	12 - 64	[2]79.75 - [2]79.75	79.8	NA	780,000	No[g]
2-Butanone	1/5	12 - 65	[2]31 - [2]31	31	NA	4,700,000	No[g]
Carbon disulfide	1/5	6 - 32.5	[2]12 - [2]12	12	NA	780,000	No[g]
Semivolatiles (µg/kg)							
Benzo(a)anthracene	3/5	850 - 875	250 - 700	412	NA	880	Yes[c]
Benzo(a)pyrene	3/5	850 - 875	290 - 860	500	NA	88	Yes
Benzo(b)fluoranthene	3/5	850 - 875	400 - 1,200	720	NA	880	Yes
Benzo(g,h,i)perylene	3/5	850 - 875	200 - 510	345	NA	NSC	Yes
Benzo(k)fluoranthene	3/5	850 - 875	440 - 1,500	815	NA	8,800	Yes[c]
Chrysene	3/5	850 - 875	460 - 1,500	855	NA	88,000	Yes[c]
Dibenz(a,h)anthracene	2/5	850 - 875	95 - [2]302.5	199	NA	88	Yes
Fluoranthene	3/5	850 - 875	530 - 1,700	975	NA	310,000	Yes[c]
Fluorene	2/5	850 - 875	[2]145 - 320	233	NA	310,000	Yes[c]
Indeno(1,2,3-cd)pyrene	3/5	850 - 875	200 - 540	342	NA	880	Yes[c]
Phenanthrene	3/5	850 - 875	110 - 1,800	885	NA	NSC	Yes
Pyrene	3/5	850 - 875	520 - 2,500	1,303	NA	230,000	Yes[c]
bis(2-Ethylhexyl)phthalate	3/5	850 - 875	110 - 790	385	NA	46,000	No[s]
Pesticides/PCBs (µg/kg)							
4,4'-DDD	1/5	1.6 - 16	1 - 1	1	NA	2,700	No[s]
4,4'-DDE	1/5	0.85 - 8.5	6.3 - 6.3	6.3	NA	1,900	No[s]
4,4'-DDT	1/5	1.6 - 16	4.7 - 4.7	4.7	NA	1,900	No[s]
Dieldrin	1/5	0.85 - 8.5	0.81 - 0.81	0.81	NA	40	No[s]

See notes at end of table.

Table 6-26 (Continued)
Selection of Human Health Contaminants of Potential Concern
Sediment Associated with SWMU 14

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

Chemical	Frequency of Detection[1]	Range of Reporting Limits	Range of Detected Concentrations	Mean of Detected Concentrations[3]	Background Screening Concentration[4]	Risk-Based Concentration[5]	Selected as HHCPC? (Yes/No)
Inorganic (mg/kg)							
Arsenic	5/5	0.6 - 0.6	0.69 - 1.3	0.93	5.4	0.37	No[B]
Barium	4/5	0.28 - 1.9	3.2 - 11.5	6.3	14.6	550	No[S,B]
Beryllium	4/5	0.08 - 0.08	0.08 - 0.16	0.14	0.54	0.15	No[B]
Chromium	5/5	0.44 - 0.45	1.5 - 4.5	3.1	15.2	39	No[S,B]
Cobalt	1/5	0.8 - 0.82	0.89 - 0.89	0.89	4.8	470	No[S,B]
Copper	3/5	0.26 - 4.1	6 - 11.2	8.4	6.8	290	No[S]
Lead	5/5	0.4 - 0.4	1.8 - 7.5	5.4	9.2	400	No[S,B]
Mercury	1/5	0.04 - 0.07	[2]0.035 - [2]0.035	0.04	0.98	2.3	No[S,B]
Selenium	1/5	0.13 - 0.315	[2]0.1125 - [2]0.1125	0.11	1.1	39	No[S,B]
Tin	1/5	3.5 - 3.6	[2]2.7 - [2]2.7	2.7	24.6	4,700	No[S,B]
Vanadium	5/5	0.31 - 0.32	2.2 - 4.8	3.7	14.8	55	No[S,B]
Zinc	3/5	0.54 - 10.1	20 - 29.3	24.9	25.8	2,300	No[S]

See notes at end of table.

Table 6-26 (Continued)
Selection of Human Health Contaminants of Potential Concern
Sediment Associated with SWMU 14

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

[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 sampling locations were analyzed: MPT-14-SD04 through MPT-14-SD08, and a duplicate, MPT-14-SD06.
[2] Indicates the value is the average of the detected concentration in a sample and its duplicate. For non-detect values, one-half of the contract-required quantitation limit or 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-1-7 of Appendix D-1 to the RCRA Facility Investigation General Information Report (GIR) (ABB Environmental Services, Inc. [ABB-ES], 1995a).
[5] The risk-based screening concentrations are identified in Table D-1-4 of Appendix D-1 to the GIR.

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
HHCPC = human health contaminant of potential concern.
μg/kg = micrograms per kilogram.
NA = not applicable.
S = The maximum detected concentration does not exceed the risk-based screening concentration; therefore, this analyte will not be evaluated in the human health risk assessment.
C = This analyte is a member of a chemical class that contains HHCPCs; therefore, this analyte is retained as an HHCPC.
PCBs = polychlorinated biphenyls.
4,4'-DDD = dichlorodiphenyldichloroethane.
4,4'-DDE = dichlorodiphenyldichloroethene.
4,4'-DDT = dichlorodiphenyltrichloroethane.
mg/kg = milligrams per kilogram.
B = The maximum detected concentration did not exceed the background screening concentration; therefore, the analyte will not be evaluated in the HHRA.

Table 6-27
Selection of Human Health Chemicals of Potential Concern
Groundwater Associated with SWMUs 14 and 18

RCRA Facility Investigation, Group III 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)
Semivolatiles (µg/ℓ)									
Dibenzofuran	1/17	10 - 10	2 - 2	2	NA	15	NS	NS	No[S]
bis(2-Ethylhexyl)phthalate	1/17	10 - 12	2 - 2	2	NA	4.8	6	6	No[S]
Fluorene	2/17	10 - 10	3 - 4	3.5	NA	150	NS	280	Yes[C]
2-Methylnaphthalene	1/17	10 - 10	21 - 21	21	NA	150	NS	6.8	Yes
Naphthalene	1/17	10 - 10	4 - 4	4	NA	150	NS	6.8	Yes[C]
Phenanthrene	1/17	10 - 10	3 - 3	3	NA	NSC	NS	10	Yes[C]
Inorganic (µg/ℓ)									
Antimony	1/17	5 - 5	6.2 - 6.2	6.2	ND	1.5	6	6	Yes
Arsenic	16/17	0.6 - 0.6	0.9 - 9.3	2.7	8.6	0.038	50	50	Yes
Barium	12/17	1.1 - 7.9	2.5 - 22	7.9	39.6	260	2,000	2,000	No[S,B]
Calcium	17/17	34.8 - 34.8	52,200 - 129,000	87,076	220,462	1,055,398	NS	NS	No[S,B]
Cobalt	1/17	3.1 - 3.1	3.2 - 3.2	3.2	6.4	220	NS	NS	No[S,B]
Cyanide	1/17	1.5 - 2.2	12.8 - 12.8	12.8	1.9	73	200	200	No[S]
Iron	14/17	1.9 - 75.9	[2]52.85 - 1,910	693	1,404	13,267	NS	300	Yes
Lead	3/17	0.4 - 3.5	0.6 - 4.3	2.5	3.6	15	15	15	No[S]
Magnesium	17/17	19.8 - 19.8	[2]5,035 - 17,800	12,099	186,914	118,807	NS	NS	No[S,B]
Manganese	17/17	0.5 - 0.5	17.2 - 220	75.2	198.6	18	NS	50	Yes
Selenium	1/17	0.5 - 0.5	[2]0.53 - 0.53	0.53	9.2	18	50	50	No[S,B]
Sodium	17/17	19.5 - 19.5	10,700 - 19,900	15,274	1,397,710	396,022	NS	160,000	No[S,B]
Vanadium	16/17	1.2 - 1.2	1.8 - 10	3.9	9.4	26	NS	49	No[S]

See notes at end of table.

Table 6-27 (Continued)
Selection of Human Health Chemicals of Potential Concern
Groundwater Associated with SWMUs 14 and 18

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

[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: MPT-14-MW01S through MPT-14-MW10S, MPT-14-MW12S through MPT-14-MW14S, MPT-18-MW01S through MPT-18-MW03S, and duplicates MPT-14-MW04S and MPT-18-MW01S.
[2] Indicates the value is the average of the detected concentration in a sample and its duplicate. For non-detect values, one-half of the contract-required quantitation limit or 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-1 to the RCRA Facility Investigation General Information Report (GIR) (ABB Environmental Services, Inc. [ABB-ES], 1995a).
[5] The risk-based screening concentrations are identified in Table D-1-5 of Appendix D to the GIR.
[6] The Federal maximum contaminants levels (MCLs) (May 1995) are identified in Table D-1-5 of Appendix D-1 to the GIR.
[7] The Florida guidance concentrations (June 1994) are identified in Table D-1-5 of Appendix D-1 to the GIR.

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
HHCPC = human health chemical of potential concern.
$\mu g/\ell$ = micrograms per liter.
NA = not applicable.
NS = no standard or guideline available.
S = The maximum detected concentration did not exceed the risk-based screening concentration, the Federal MCL, or the Florida Guidance Concentration; therefore, the analyte will not be evaluated in the human health risk assessment.
C = This analyte is a member of a chemical class that contains HHCPCs; therefore, this analyte is retained as an HHCPC.
NSC = no screening concentration.
ND = not detected in any background samples.
B = The maximum detected concentration did not exceed the background screening concentration; therefore, the analyte will not be evaluated in the HHRA.

Table 6-28
Summary of Potential Human Exposure Pathways
SWMUs 14 and 18

RCRA Facility Investigation, Group III 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 No No Yes	No humans currently reside at SWMUs 14 and 18. Adolescents and adults may be exposed to contaminants in the surface soil while trespassing. Most of the Fleet Training Center is paved; therefore, it is unlikely that occupational and site maintenance workers will be exposed to contaminants in surface soil. Excavation workers may be exposed to contaminants in the surface soil during bioremediation of soil around the detention pond.
Subsurface Soil	Dermal contact with soil, ingestion of soil, and inhalation of fugitive dust.	Excavation worker (adult)	No	No HHCPCs were selected for subsurface soil.
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.
Surface Water	Dermal contact with surface water and ingestion of surface water while wading.	Resident (child and adult) Trespasser (adolescent and adult)	No No	No HHCPCs were selected for surface water.
Surface Water	Fish consumption	Resident (child and adult) Trespasser (adolescent and adult)	No No	The tidal pool area and drainage ditch area do not contain water often enough or in great enough quantities to sustain fish.
Sediment	Dermal contact with sediment and ingestion of sediment.	Resident (child and adult) Trespasser (adolescent and adult)	No Yes	No humans currently reside at SWMUs 14 and 18. Adolescents and adults may be exposed to contaminants in the sediment while trespassing.

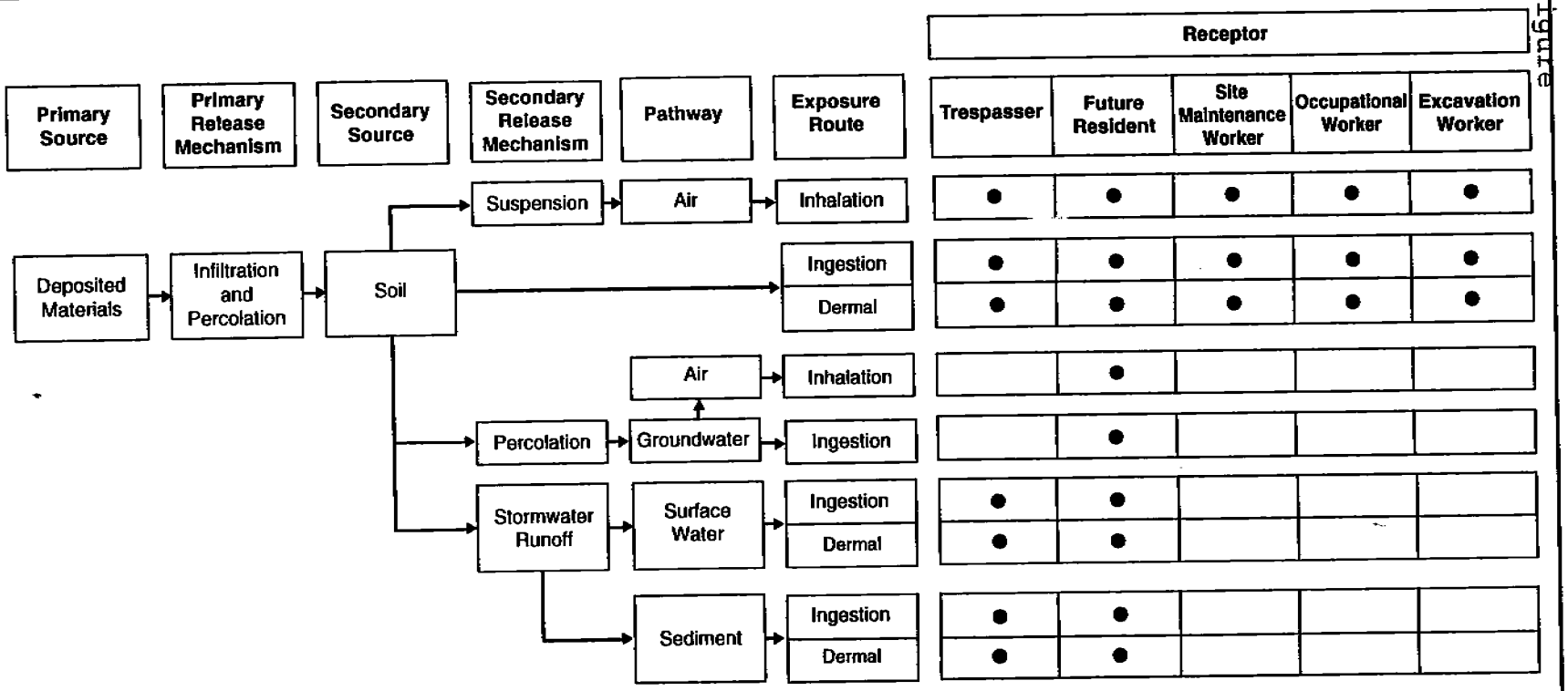
See notes at end of table.

Table 6-28 (Continued)
Summary of Potential Human Exposure Pathways
SWMUs 14 and 18

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

Medium of Exposure	Route of Exposure	Potentially Exposed Population	Selected for Evaluation?	Reason for Selection or Exclusion
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 Yes Yes No	SWMUs 14 and 18 may be developed for residential use; therefore, residential exposure to contaminants in surface soil is evaluated. If SWMUs 14 and 18 are developed for industrial use, occupational and site maintenance workers may be exposed to contaminants in surface soil. Trespassers and excavation workers could also be exposed to contaminants in surface soil; however, trespasser and excavation worker exposure scenarios are evaluated under current land use.
Subsurface Soil	Dermal contact with soil, ingestion of soil, and inhalation of fugitive dust.	Excavation worker (adult)	No	No HHCPCs were selected for subsurface soil.
Groundwater: Surficial Aquifer	Ingestion of groundwater as drinking water and inhalation of volatiles while showering.	Resident (adult)	Yes	If SWMUs 14 and 18 are developed for residential use, drinking water wells in the surficial aquifer could be influenced by groundwater associated with SWMUs 14 and 18. Therefore, residents could be exposed to contaminants in the surficial aquifer.
Surface Water	Dermal contact with surface water and ingestion of surface water while wading.	Resident (child and adult) Trespasser (adolescent and adult)	No No	No HHCPCs were selected for surface water.
Surface Water	Fish consumption	Resident (child and adult) Trespasser (adolescent and adult)	No No	The tidal pool area and drainage ditch area do not contain water often enough or in great enough quantities to sustain fish.
Sediment	Dermal contact with sediment and ingestion of sediment.	Resident (child and adult) Trespasser (adolescent and adult)	Yes No	If SWMUs 14 and 18 are developed for residential use, child and adult residents could be exposed to contaminants in sediment. Exposure of trespassers to sediment contaminants is evaluated under current land use.

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
HHCPC = Human Health Chemicals of Potential Concern.



NOTES:
RCRA = Resource Conservation Recovery Act
SWMU = Solid waste management unit

FIGURE 6-9
COMPLETE EXPOSURE PATHWAYS FOR HUMAN RECEPTORS, SWMUs 14 AND 18

RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

8534-09 TKB FIG6-9 021596MAW

6.3.2.3 **Sediment** As stated previously, permission is required to obtain access to NAVSTA Mayport; however, SWMUs 14 and 18 and the surrounding area are accessible to Navy personnel and their adult and child dependents. People have been observed standing in the ditch and tidal pool area north of SWMU 14 to fish in the St. Johns River. Currently, adult and adolescent trespassers could be exposed to contaminants in sediment; therefore, exposure of these receptors (ingestion of and direct contact with sediment) is evaluated in the HHRA. It is unlikely that site maintenance workers or occupational workers would venture down to the tidal pool area and thereby be exposed to contaminants in sediment; therefore, exposure of these receptors is not evaluated in the HHRA. It is possible that SWMUs 14 and 18 could be developed for residential use sometime in the future; therefore, exposure of a future resident (ingestion of and dermal contact with sediment) is evaluated in the HHRA.

6.3.2.4 **Exposure Point Concentrations** EPCs for surface soil, groundwater, and sediment 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, groundwater, and sediment are presented in Tables 6-29, 6-30, and 6-31, respectively. The exposure intakes of HHCPCs for the receptors that were evaluated are also presented in the risk calculation spreadsheets in Appendix D-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 and Appendix D-5 to this report contain brief toxicity summaries for the HHCPCs. Appendix D-1 to this report contains dose-response information for the HHCPCs. Dose-response values current as of November 1995 for IRIS and May 1995 for HEAST have been used in this HHRA. This information was used to estimate the ELCR for carcinogens and the HI for all HHCPCs in the risk characterization (Subsection 6.3.4). 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 6-10 summarizes the cancer risks associated with current land use at SWMUs 14 and 18.

Figure 6-11 presents an HI summary for current land use at SWMUs 14 and 18. Figure 6-12 summarizes the cancer risks associated with future land use at SWMUs 14 and 18. Figure 6-13 presents an HI summary for future land use at SWMUs 14 and 18. Risk estimates for potential exposures to surface soil, groundwater, and sediment under current and future land use scenarios are discussed in Paragraphs 6.3.6.1, 6.3.4.2, and 6.3.4.3, respectively. Table 6-32 presents a summary of the risk estimates. The risk characterization results are presented in Tables D-4-1 through D-4-19 in Appendix D-4 to this report.

6.3.4.1 **Surface Soil** The risk characterization results for surface soil exposure scenarios are shown in Tables D-4-1 through D-4-6 and Tables D-4-9 through D-4-16 in Appendix D-4 to this report. The cancer risk associated with

Table 6-29
Exposure Point Concentrations for Human Health Chemicals of Potential Concern Surface Soil at SWMUs 14 and 18

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

Chemical	Frequency of Detection[1]	Maximum Detected Concentration	95% UCL[2]	Exposure Point Concentration[3]
Semivolatiles (µg/kg)				
Benzo(a)anthracene	7/33	1,900	889	889
Benzo(a)pyrene	5/33	2,100	916	916
Benzo(b)fluoranthene	5/33	3,500	982	982
Benzo(k)fluoranthene	5/33	3,200	1,012	1,012
Chrysene	7/33	3,700	1,022	1,022
Dibenz(a,h)anthracene	3/33	270	659	270
Indeno(1,2,3-cd)pyrene	5/33	1,400	796	796
Pesticides/PCBs (µg/kg)				
Dieldrin	2/33	69.5	3.6	3.6
Inorganic (mg/kg)				
Arsenic	30/33	2.2	0.89	0.89
Beryllium	32/33	0.27	0.12	0.12
Copper	32/33	334	20.9	20.9

[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 contract-required quantitation limits/contract-required detection limit for non-detected concentrations (U.S. Environmental Protection Agency, 1991b).
[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 nine or less total samples, the maximum detected concentration is the exposure point concentration.

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
% = percent.
UCL = upper confidence limit.
µg/kg = micrograms per kilogram.
PCBs = polychlorinated biphenyls.
mg/kg = milligrams per kilogram.

Table 6-30
Exposure Point Concentrations for Human Health Chemicals of Potential Concern Groundwater Associated with SWMUs 14 and 18

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

Chemical	Frequency of Detection[1]	Maximum Detected Concentration	95% UCL[2]	Exposure Point Concentration[3]
Semivolatiles (μg/ℓ)				
2-Methylnaphthalene	1/17	21	6.8	6.8
Fluorene	2/17	4	5.2	4
Naphthalene	1/17	4	NC[4]	4
Phenanthrene	1/17	3	5.1	3
Inorganic (μg/ℓ)				
Antimony	1/17	6.2	3	3
Arsenic	16/17	9.3	4	4
Iron	14/17	1,910	4,629	1,910
Manganese	17/17	220	112	112

[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 contract-required quantitation limits/contract-required detection limit for non-detected concentrations (U.S. Environmental Protection Agency, 1991b).
[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 nine or less total samples, the maximum detected concentration is the exposure point concentration.
[4] The standard deviation of the log values is less than 0.1; therefore, the 95% UCL could not be calculated.

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
% = percent.
UCL = upper confidence limit.
μg/ℓ = microgram per liter.
NC = not calculated.

Table 6-31
Exposure Point Concentrations for Human Health Chemicals of Potential Concern Sediment Associated with SWMU 14

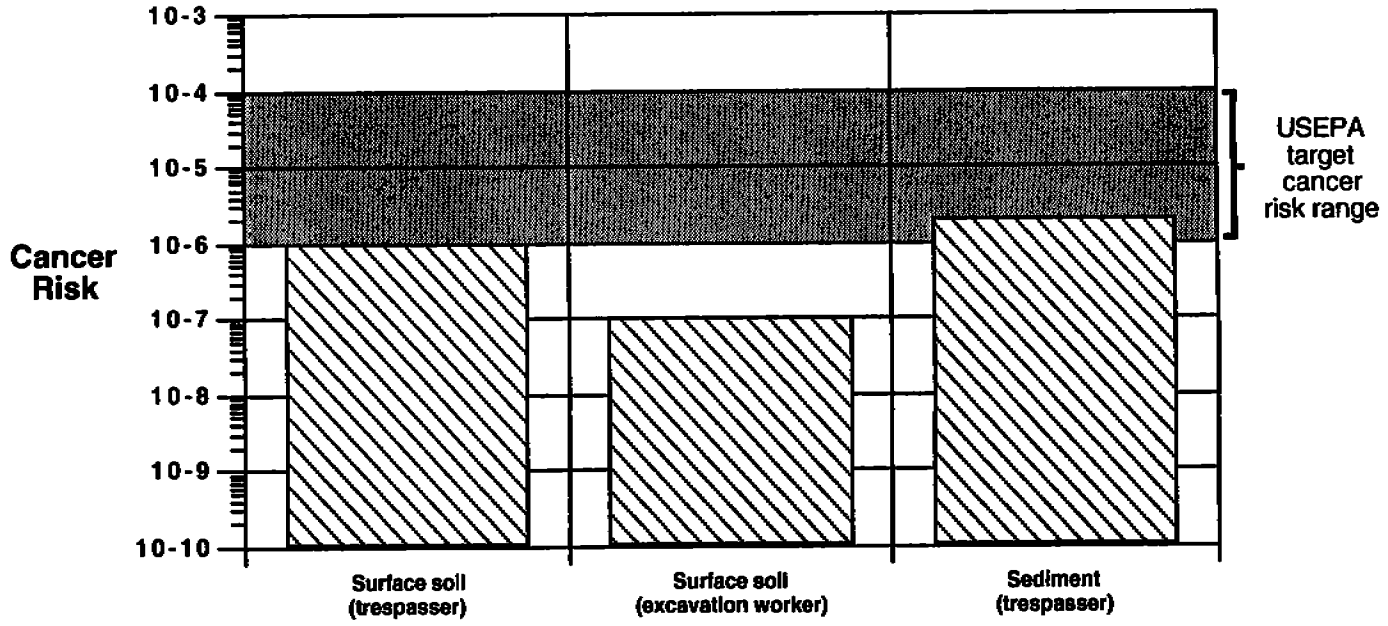
RCRA Facility Investigation, Group III SWMUs
U.S. Naval Station
Mayport, Florida

Chemical	Frequency of Detection[1]	Maximum Detected Concentration	95% UCL[2]	Exposure Point Concentration[3]
Semivolatiles (µg/kg)				
Benzo(a)anthracene	3/5	700	NC	700
Benzo(a)pyrene	3/5	860	NC	860
Benzo(b)fluoranthene	3/5	1,200	NC	1,200
Benzo(g,h,i)perylene	3/5	510	NC	510
Benzo(k)fluoranthene	3/5	1,500	NC	1,500
Chrysene	3/5	1,500	NC	1,500
Dibenz(a,h)anthracene	2/5	302.5	NC	302.5
Fluoranthene	3/5	1,700	NC	1,700
Fluorene	2/5	320	NC	320
Indeno(1,2,3-cd)pyrene	3/5	540	NC	540
Phenanthrene	3/5	1,800	NC	1,800
Pyrene	3/5	2,500	NC	2,500

[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 limits/contract-required detection limit for non-detected concentrations (U.S. Environmental Protection Agency, 1991b).
[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 nine or less total samples, the maximum detected concentration is the exposure point concentration.

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
% = percent.
UCL = upper confidence limit.
µg/kg = microgram per kilogram.
NC = not calculated.

Cancer Risk Summary, Current Land Use



NOTES:
RCRA = Resource Conservation and Recovery Act
USEPA = United States Environmental Protection Agency
SWMU = Solid waste management unit

FIGURE 6-10
CANCER RISK SUMMARY,
CURRENT LAND USE,
SWMUs 14 AND 18

RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

U.S. NAVAL STATION
MAYPORT, FLORIDA

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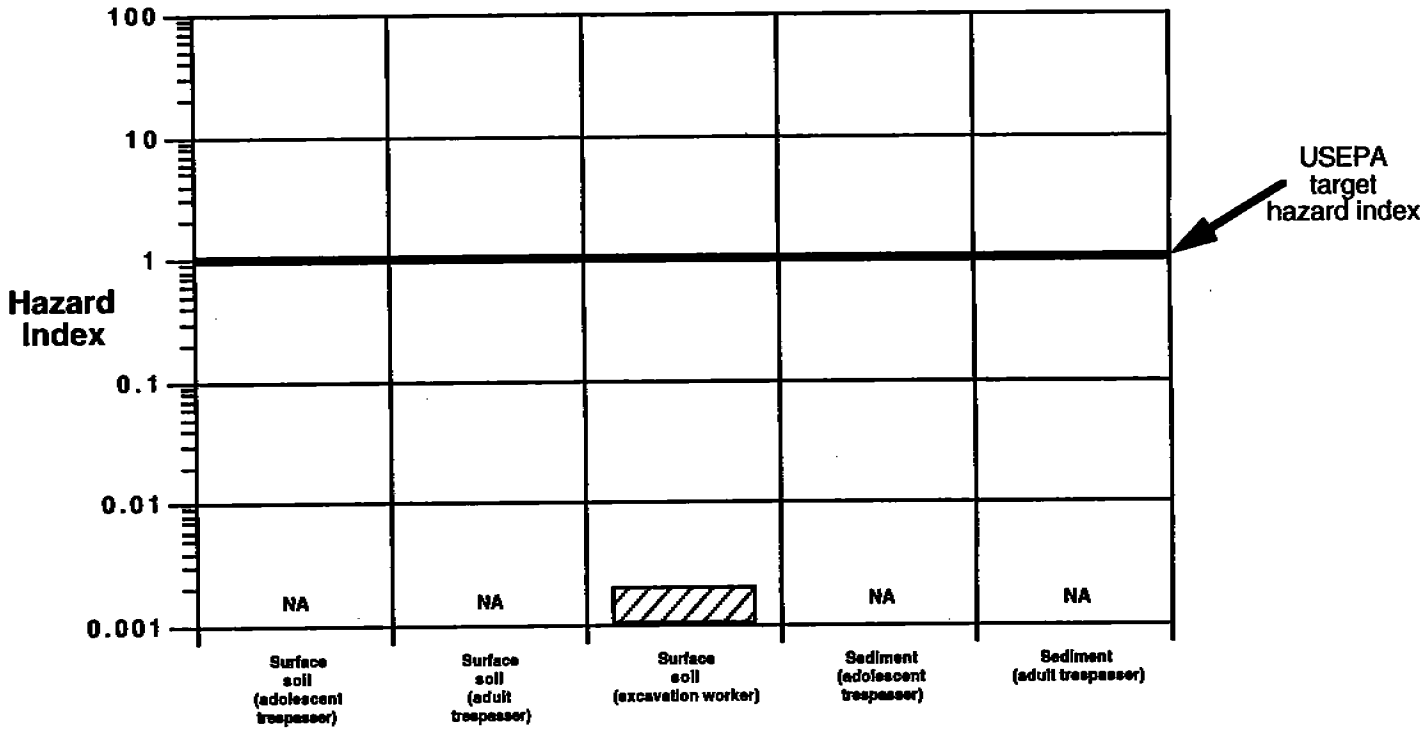
Hazard Index Summary, Current Land Use



NOTES:
RCRA = Resource Conservation and Recovery Act
NA = Hazard index is less than or equal to 0.001
USEPA = United States Environmental Protection Agency
SWMU = Solid waste management unit

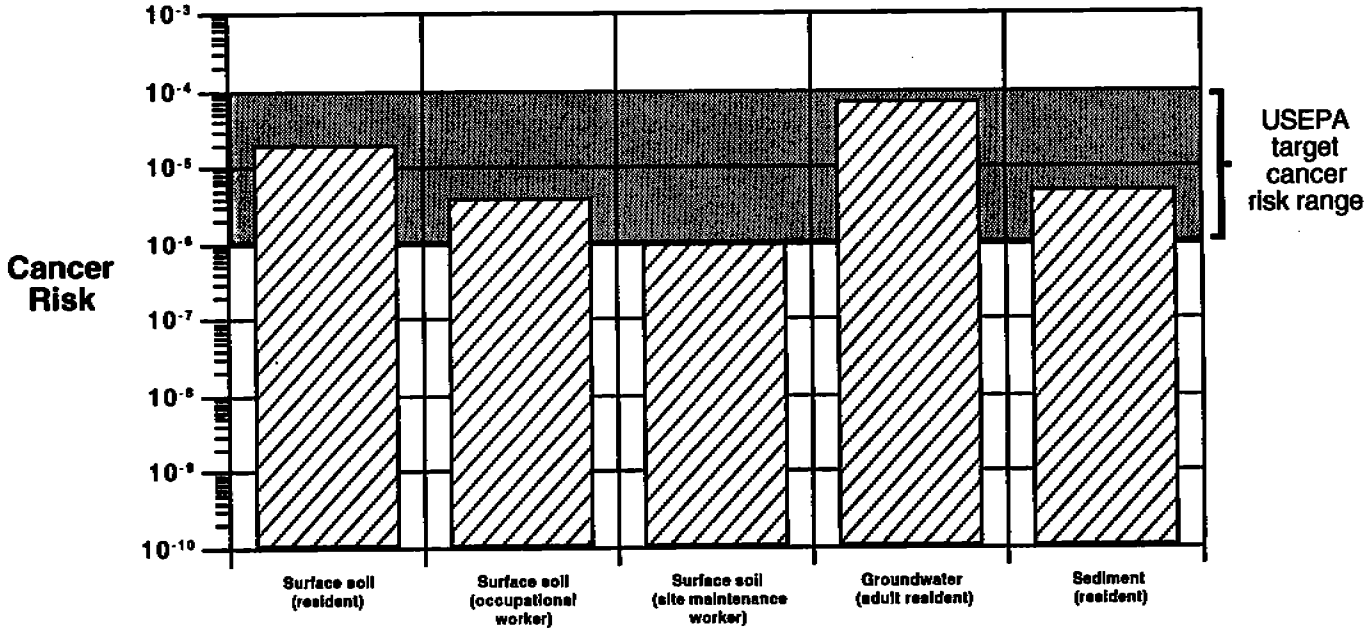
FIGURE 6-11
HAZARD INDEX SUMMARY, CURRENT LAND USE, SWMUs 14 AND 18

RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

8534-09 TKB FIG6-11 021596MAW

Cancer Risk Summary, Future Land Use



NOTES:
RCRA = Resource Conservation and Recovery Act
USEPA = United States Environmental Protection Agency
SWMU = Solid waste management unit

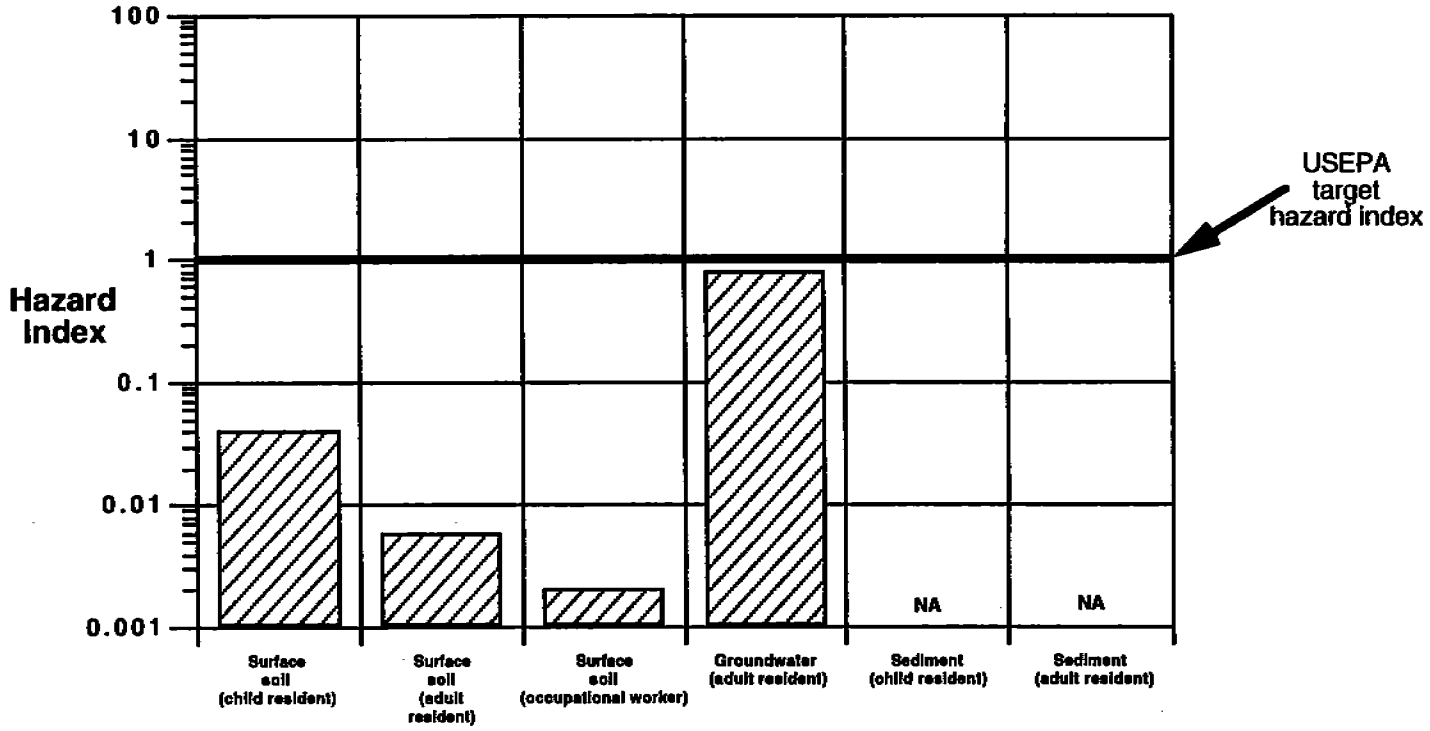
FIGURE 6-12
CANCER RISK SUMMARY, FUTURE LAND USE, SWMUs 14 AND 18

RCRA FACILITY INVESTIGATION REPORT, GROUP III SWMUs

U.S. NAVAL STATION MAYPORT, FLORIDA

8534-09 TKB FIG6-12 021596MAW

Hazard Index Summary, Future Land Use



NOTES:
RCRA = Resource Conservation and Recovery Act
USEPA = United States Environmental Protection Agency
SWMU = Solid waste management unit
NA = Hazard index is less than or equal to 0.001

FIGURE 6-13
HAZARD INDEX SUMMARY,
FUTURE LAND USE,
SWMUs 14 AND 18

RCRA FACILITY INVESTIGATION
REPORT, GROUP III SWMUs

U.S. NAVAL STATION
MAYPORT, FLORIDA

8534-09 TKB FIG6-13 021596MAW

Table 6-32
Human Risk Summary for SWMUs 14 and 18

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

Land Use	Exposure Route	Hazard Index	Excess Lifetime Cancer Risk
Current Land Use			
Surface Soil			
Adolescent trespasser	Incidental ingestion	0.0009	6×10^{-7}
	Dermal contact	0.0004	4×10^{-7}
	Inhalation of particulates	NC[1]	1×10^{-9}
	Total adolescent trespasser:	0.001	1×10^{-6}
Adult trespasser	Incidental ingestion	0.0005	6×10^{-7}
	Dermal contact	0.0003	5×10^{-7}
	Inhalation of particulates	NC[1]	1×10^{-9}
	Total adult trespasser:	0.0008	1×10^{-6}
	Total trespasser:	NC	2×10^{-6}
Excavation worker	Incidental ingestion	0.002	1×10^{-7}
	Dermal contact	0.0002	2×10^{-8}
	Inhalation of particulates	NC[1]	3×10^{-10}
	Total excavation worker:	0.002	1×10^{-7}
Sediment			
Adolescent trespasser	Incidental ingestion	0.00004	5×10^{-7}
	Dermal contact	0.00002	2×10^{-7}
	Total adolescent trespasser:	0.00006	7×10^{-7}
Adult trespasser	Incidental ingestion	0.00002	5×10^{-7}
	Dermal contact	0.00002	3×10^{-7}
	Total adult trespasser:	0.00004	8×10^{-7}
	Total trespasser:	NC	2×10^{-6}
Future Land Use			
Surface Soil			
Child resident	Incidental ingestion	0.04	1×10^{-5}
	Dermal contact	0.003	2×10^{-6}
	Inhalation of particulates	NC[1]	1×10^{-7}
	Total child resident:	0.04	1×10^{-5}

See notes at end of table.

Table 6-32 (Continued)
Human Risk Summary for SWMUs 14 and 18

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

Land Use	Exposure Route	Hazard Index	Excess Lifetime Cancer Risk
Adult resident	Incidental ingestion	0.004	6×10^{-6}
	Dermal contact	0.002	4×10^{-6}
	Inhalation of particulates	NC[1]	9×10^{-8}
	Total adult resident:	0.006	1×10^{-5}
	Total resident:		2×10^{-5}
Occupational worker	Incidental ingestion	0.001	2×10^{-6}
	Dermal contact	0.0006	2×10^{-6}
	Inhalation of particulates	NC[1]	6×10^{-8}
	Total occupational worker:	0.002	4×10^{-6}
Site maintenance worker	Incidental ingestion	0.0004	6×10^{-7}
	Dermal contact	0.0002	5×10^{-7}
	Inhalation of particulates	NC[1]	8×10^{-9}
	Total site maintenance worker:	0.0006	1×10^{-6}
Groundwater			
Adult resident	Ingestion of groundwater as drinking water	0.8	7×10^{-5}
	Inhalation of volatiles while showering	NC[2]	NC[2]
	Total adult resident:	0.8	7×10^{-5}
Sediment			
Child resident	Incidental ingestion	0.0005	3×10^{-6}
	Dermal contact	0.00005	3×10^{-7}
	Total child resident:	0.0006	3×10^{-6}
Adult resident	Incidental ingestion	0.000053	1×10^{-6}
	Dermal contact	0.000034	9×10^{-7}
	Total adult resident:	0.00009	2×10^{-6}
	Total resident:	NC	5×10^{-6}

[1] A hazard index could not be calculated for inhalation exposures because inhalation reference doses were not available for the HHCPCs.
[2] No volatiles were selected as HHCPCs.

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
NC = not calculated.
HHCPC = human health chemical of potential concern.

current land use for surface soil ingestion, dermal contact, and fugitive dust inhalation is $2x10^{-6}$ for the trespasser (adolescent and adult) and $1x10^{-7}$ for the excavation worker.

The cancer risk for hypothetical future land use is $2x10^{-5}$ for the resident, $4x10^{-6}$ for the occupational worker, and $1x10^{-6}$ for the site maintenance worker. None of the ELCRs exceeds USEPA's target cancer risk range.

Total cancer risks for the resident includes ingestion, dermal contact, and inhalation of benzo(a)anthracene ($1.3x10^{-6}$), benzo(a)pyrene ($1.3x10^{-5}$), benzo(b)fluoranthene ($1.4x10^{-6}$), dibenz(a,h)anthracene ($3.9x10^{-6}$), indeno-(1,2,3cd)pyrene ($1.1x10^{-6}$), arsenic ($2.3x10^{-6}$), and beryllium ($1.3x10^{-6}$), which exceed FDEP's target cancer risk of $1x10^{-6}$.

Total cancer risk for the occupational worker includes ingestion, dermal contact, and inhalation of benzo(a)pyrene ($1.8x10^{-6}$), which exceeds FDEP's target risk of $1x10^{-6}$. Therefore, remedial goal options (RGOs) for surface soil are presented in Subsection 6.3.6.

The noncancer risks associated with surface soil ingestion, dermal contact, and inhalation of fugitive dust for current land use (adolescent trespasser, adult trespasser, and excavation worker) are all below USEPA's and FDEP's target HI of 1. The noncancer risks associated with surface soil for future land use (child resident, adult resident, occupational worker, and site maintenance worker) are also below the USEPA's and FDEP's target HI of 1.

6.3.4.2 **Groundwater** The risk characterization results for the groundwater exposure scenario are shown in Table D-4-17 in Appendix D-4 to this report. There is no exposure to groundwater from the surficial aquifer under current land use. No volatile organic compounds were detected in the groundwater samples collected from the monitoring wells installed at SWMU 14 and 18; therefore, cancer risk associated with the inhalation of volatiles was not evaluated.

The total cancer risk associated with hypothetical future ingestion of groundwater as drinking water is $7x10^{-5}$ for the adult resident. This ELCR does not exceed USEPA's target cancer risk range. However, the cancer risk associated with arsenic, the only contributor to the ELCR for the future resident, exceeds FDEP's target cancer risk of $1x10^{-6}$. Therefore, RGOs for groundwater are presented in Subsection 6.3.6.

Noncancer risk associated with groundwater ingestion is below USEPA's and FDEP's target HI of 1.

6.3.4.3 **Sediment** The risk characterization results for the sediment exposure scenarios are shown in Tables D-4-7, D-4-8, D-4-18, and D-4-19 in Appendix D-4 to this report. The ELCR for current land use including incidental ingestion of and dermal contact with sediment is $2x10^{-6}$ for the trespasser. The cancer risk under a hypothetical future land use is $5x10^{-6}$ for the resident. Neither of the ELCRs exceeds USEPA's target cancer risk range.

Total cancer risks for the resident include ingestion and dermal contact with benzo(a)pyrene ($3.6x10^{-6}$) and dibenz(a,h)anthracene ($1.2x10^{-6}$), which exceeds FDEP's target cancer risk of $1x10^{-6}$. Therefore, RGOs for sediment are presented in Subsection 6.3.6.

The noncancer risk associated with sediment ingestion and dermal contact under current and future land use (adolescent trespasser, adult trespasser, child resident, and adult resident) is below USEPA's and FDEP's target HI of 1.

6.3.5 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 surface soil, groundwater, and sediment at SWMUs 14 and 18 are discussed below.

- In the near future, it is proposed that SWMU 14 will be used as a parking lot. Therefore, exposure to contaminants in surface soil is unlikely, and the risks associated with future exposure to surface soil are probably overestimated.

- One source of uncertainty is the lack of oral RfDs for carcinogenic PAHs. This probably resulted in underestimates of the HIs associated with exposure to surface soil and sediment at SWMUs 14 and 18. However, cancer is considered a more sensitive endpoint, and oral and dermal CSFs are available for carcinogenic PAHs.

- Another source of uncertainty is the lack of inhalation RfDs for the HHCPCs in surface soil, which probably resulted in underestimates of the HIs associated with exposure to surface soil at SWMUs 14 and 18.

- Some uncertainty is associated with the representativeness of the groundwater data collected to complete the risk evaluation at SWMUs 14 and 18. 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.

- The arsenic CSF is a source of uncertainty in the HHRA for SWMUs 14 and 18. Concentrations of arsenic tend to be present in surface soil and groundwater samples collected at NAVSTA Mayport at concentrations that suggest it is potentially a significant contributor to excess lifetime cancer risk. 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 normal detoxification pathways were probably overwhelmed (saturated); this, coupled with an underestimate of exposure, may have resulted in an overestimate of cancer risk. Therefore, cancer risk for SWMUs 14 and 18 may be

overestimated. Based on the uncertainties associated with the arsenic CSF, risk management guidance (USEPA, 1988c) suggests that cancer risk may in be up to ten-fold lower than predicted.

6.3.6 Remedial Goal Options As required by USEPA Region IV and FDEP guidance, RGOs are presented in tables of potential media cleanup levels. RGOs are a ratio of a chemical's site-specific risk for aggregate residential exposure (child and adult receptors) for a media pathway (i.e., incidental ingestion, dermal contact, and inhalation of particulates) and the chemical's exposure point concentration at designated excess lifetime cancer risk levels of $1x10^{-4}$, $1x10^{-5}$, and $1x10^{-6}$ and hazard quotients of 0.1, 1 and 3 (USEPA, 1995b). The future residential scenario is used for RGO because it represents the most restrictive site usage.

Potential media cleanup levels have been identified for HHCPCs whose maximum detected concentrations exceed Federal standards or State standards and guidance values, or that have associated cancer risks greater than $1x10^{-6}$ or HQs greater than 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. Background screening concentrations and CRDLs/CRQLs are also included to provide perspective.

6.3.6.1 **Surface Soil** Potential cleanup levels for surface soils have been identified for surface soil based on residential or industrial use of SWMUs 14 and 18. It is unlikely that SWMUs 14 and 18 will be developed for residential use in the future; therefore, RGOs based on a hypothetical future residential use may be inappropriate. Table 6-33 presents RGOs for future resident and future occupational worker exposure to surface soil (i.e., ingestion, dermal contact, and inhalation) at SWMUs 14 and 18. The total cancer risks to the resident are associated with benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, arsenic, and beryllium exceed $1x10^{-6}$. The total cancer risk to the occupational worker associated with benzo(a)pyrene exceeds $1x10^{-6}$. The EPCs of benzo(a)pyrene, dibenz(a,h)-anthracene, and arsenic exceed their respective Florida soil cleanup goals for residential exposure.

The inclusion of PAHs in the RGO table does not imply that remediation of these chemicals is necessary. The EPCs for benzo(a)anthracene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene are less than their respective Florida soil cleanup goals. The RGOs for benzo(a)pyrene and dibenz(a,h)anthracene are less than the CRDLs/CRQLs for these chemicals, which indicates that remediation to these RGOs may not be confirmable using current analytical technologies.

The inclusion of arsenic and beryllium in the RGO table is also not intended to be a statement that remediation of these chemicals is necessary. Fourteen of 33 surface soil samples contained arsenic at concentrations that exceed the Florida soil cleanup goal for a residential exposure, which is 0.7 mg/kg. The maximum detected concentration 2.2 mg/kg does not exceed the Florida soil cleanup goal for an industrial exposure, which is 3.1 mg/kg. In addition, the RGO for a residential exposure to arsenic is less than the Florida soil cleanup goal as well as the CRDL/CRQL. Remediation of soil to the RGO for a residential exposure arsenic may not be required or confirmable using current analytical technologies.

Table 6-33
Summary of Remedial Goal Options for SWMUs 14 and 18
Surface Soil, Future Land Use

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

Chemical	Range of Detected Concentrations	Exposure Point Concentration[1]	Excess Lifetime Cancer Risk Risk Range[2]			Hazard Quotient Risk Range[3]			Florida Cleanup Goal[4]	Florida Leaching Value[5]	Background Screening Concentration[6]	CRDL/-CRQL
			10^{-4}	10^{-5}	10^{-6}	0.1	1	10				
Surface Soil (µg/kg)												
Future Land Use, Resident												
Benzo(a)anthracene	33.5 - 1,900	889	NR	NR	690	NA	NA	NA	1,400	NG	NA	200
Benzo(a)pyrene	52.5 - 2,100	916	NR	690	69	NA	NA	NA	100	NG	NA	200
Benzo(b)fluoranthene	85.5 - 3,500	982	NR	NR	690	NA	NA	NA	14,000	NG	NA	200
Dibenz(a,h)anthracene	96.5 - 270	270	NR	NR	69	NA	NA	NA	100	NG	NA	200
Indeno(1,2,3-cd)pyrene	66.5 - 1,400	796	NR	NR	690	NA	NA	NA	1,400	NG	NA	200
Arsenic	0.36 - 2.2	890	NR	NR	100	NA	NA	NA	700	NC	ND	2,000
Beryllium	0.05 - 0.27	120	NR	NR	90	NA	NA	NA	260	NC	160	1,000
Future Land Use, Occupational Worker												
Benzo(a)pyrene	52.5 - 2,100	916	NR	NR	494	NA	NA	NA	100	NG	NA	200

[1] Exposure point concentrations (EPCs) for surface soil are presented in Table 6-29.
[2] NA in these columns indicates that the chemical is not associated with a cancer risk greater than 1×10^{-6}.
[3] NA in these columns indicates that the chemical is not associated with a hazard index greater than 1.
[4] The Florida Clean-up Goals (September 29, 1995) are identified in Appendix D-6 to this report.
[5] The Florida Leaching Values (September 29, 1995) are identified in Appendix D-6 to this report.
[6] Background screening concentrations are presented in Table D-1-1 of Appendix D-1 to the RCRA Facility Investigation General Information Report.

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
CRDL = contract-required detection limit.
CRQL = contract-required quantitation limit.
µg/kg = micrograms per kilogram.
NR = the remedial goal option exceeds the EPC; no action is necessary to achieve this risk level.
NA = not applicable.
NG = not detected in groundwater.
NC = not calculated.
ND = not detected in any background samples.

Three of 33 surface soil samples contained beryllium at concentrations that exceed the Florida soil cleanup goal for a residential exposure, which is 0.2 mg/kg. The maximum detected concentration 0.27 mg/kg does not exceed the Florida soil cleanup goal for an industrial exposure, which is 1.0 mg/kg. The EPC for beryllium (0.12 mg/kg) is also less than the Florida soil cleanup goal and the background screening concentration. In addition, the RGO for a residential exposure to beryllium is less than the CRDL/CRQL. Remediation of soil to the RGO for a residential exposure to beryllium may not be required or confirmable using current analytical technologies.

6.3.6.2 Groundwater Potential cleanup levels have been identified for groundwater under the assumption that SWMUs 14 and 18 will be developed for residential use. It is unlikely that SWMUs 14 and 18 will be developed for residential use in the future; therefore, RGOs based on a hypothetical future residential use may be inappropriate. Table 6-34 presents RGOs for future resident exposure to unfiltered groundwater (i.e., ingestion) associated with SWMUs 14 and 18. The total cancer risk to the adult resident associated with arsenic exceeds $1x10^{-6}$. The EPCs of iron and manganese exceed their corresponding MCLs and/or Florida Guidance Concentrations.

Inclusion of arsenic, iron, and manganese in the RGO table is not intended to be a statement that remediation of these chemicals is necessary. The concentrations of arsenic detected in groundwater samples are less than Federal MCL and Florida guidance concentration, the background screening concentration, and the CRDL/CRQL. Remediation of groundwater to the RGO may not be required, technically feasible, or confirmable using current analytical technologies.

Nine of 17 groundwater samples contained iron, an essential nutrient, at concentrations that exceed the Florida Guidance Concentration, which is a secondary water quality standard of 300 $\mu g/\ell$. There is no Federal MCL for iron. The maximum detected concentration for iron was 1,910 $\mu g/\ell$, which is less than the essential nutrient screening concentration of 13,267 $\mu g/\ell$ (ABB-ES, 1995a). There is no apparent pattern to the distribution of iron in the surficial aquifer (See Subparagraph 6.2.4.2.3)

Twelve of 17 groundwater samples contained manganese at concentrations that exceed the Florida Guidance Concentration, which is a secondary standard of 50 $\mu g/\ell$. There is no Federal MCL for manganese. In addition, the EPC for manganese is less than the background screening concentration. There is not an apparent pattern of distribution of manganese in the surficial aquifer (See Subparagraph 6.2.4.2.3).

6.3.6.3 Sediment Potential medium cleanup levels have been identified for sediment under the assumption that SWMUs 14 and 18 will be developed for residential use. It is unlikely that SWMUs 14 and 18 will be developed for residential use in the future; therefore, RGOs based on a hypothetical future residential use may be inappropriate.

Table 6-35 presents RGOs for future resident exposure to sediment (i.e., incidental ingestion and dermal contact). Total cancer risks to a hypothetical future resident are associated with exposure to benzo(a)pyrene and dibenz(a,h)anthracene, which exceeds $1x10^{-6}$.

Table 6-34
Summary of Remedial Goal Options for SWMUs 14 and 18
Unfiltered Groundwater, Future Land Use

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

Chemical	Range of Detected Concentrations	Exposure Point Concentration[1]	Excess Lifetime Cancer Risk Risk Range[2]			Hazard Quotient Risk Range[3]			Federal MCL[4]	Florida Guidance Concentration[5]	Background Screening Concentration[6]	CRDL/ CRQL
			10^{-4}	10^{-5}	10^{-6}	0.1	1	10				
Groundwater (µg/ℓ)												
Future Land Use, Adult Resident												
Arsenic	0.9 - 9.3	4	NR	0.57	0.06	NA	NA	NA	50	50	8.6	10
Iron	52.85 - 1,910	1,910	NA	NA	NA	NA	NA	NA	NS	300	1,404	100
Manganese	17.2 - 220	112	NA	NA	NA	NA	NA	NA	NS	50	198.6	15

[1] Exposure point concentrations (EPCs) for groundwater are presented in Table 6-30.
[2] NA in these columns indicates that the chemical is not associated with a cancer risk greater than 1×10^{-6}.
[3] NA in these columns indicates that the chemical is not associated with a hazard index greater than 1.
[4] The Federal Maximum Contaminant Levels (MCLs) (May 1995) are identified in Table D-1-5 of Appendix D to the RCRA Facility Investigation (RFI) General Information Report.
[5] The Florida Guidance Concentrations (June 1994) are identified in Table D-1-5 of Appendix D to the RFI GIR.
[6] Background screening concentrations are presented in Table D-1-3 of Appendix D-1 to the RFI GIR.

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
CRDL = contract-required detection limit= micrograms per liter.
CRQL = contract-required quantitation limits.
µg/ℓ = micrograms per liter.
NR = the remedial goal option exceeds the EPC. no action is necessary to achieve this risk level.
NA = not applicable.
NS = no standard or guideline available.

Table 6-35
Summary of Remedial Goal Options for SWMUs 14 and 18
Sediment, Future Land Use

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

Chemical	Range of Detected Concentrations	Exposure Point Concentration[1]	Excess Lifetime Cancer Risk Risk Range			Hazard Quotient Risk Range[2]			Background Screening Concentration[3]	CRDL/ CRQL
			10^{-4}	10^{-5}	10^{-6}	0.1	1	10		
Sediment (µg/kg)										
Future Land Use, Resident										
Benzo(a)pyrene	290 - 860	860	NR	NR	240	NA	NA	NA	NA	200
Dibenz(a,h)anthracene	95 - 302.5	302.5	NR	NR	240	NA	NA	NA	NA	200

[1] Exposure point concentrations (EPCs) for sediment are presented in Table 6-31.
[2] NA in these columns indicates that the chemical is not associated with a hazard index greater than 1.
[3] Background screening concentrations are presented in Table D-1-7 of Appendix D-1 to the RCRA Facility Investigation General Information Report.

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
CRDL = contract-required detection limit.
CRQL = contract-required quantitation limits.
µg/kg = micrograms per kilogram.
NR = the remedial goal option exceeds the EPC; no action is necessary to achieve this risk level.
NA = not applicable.

6.4 ECOLOGICAL RISK ASSESSMENT FOR SWMUS 14 AND 18. The following subsections describe the results of the ERA for SWMU 14, the Mercury/Oil Waste Spill Area, and SWMU 18, the FTC Diesel Generator Sump. The ecological risk assessment for SWMUs 14 and 18 will be conducted as a single comprehensive effort because of their close proximity and similarity in hydrogeologic setting and contaminants.

The ERA was completed according to the methodology described in Section 2.4 of the GIR (ABB-ES, 1995a), including 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).

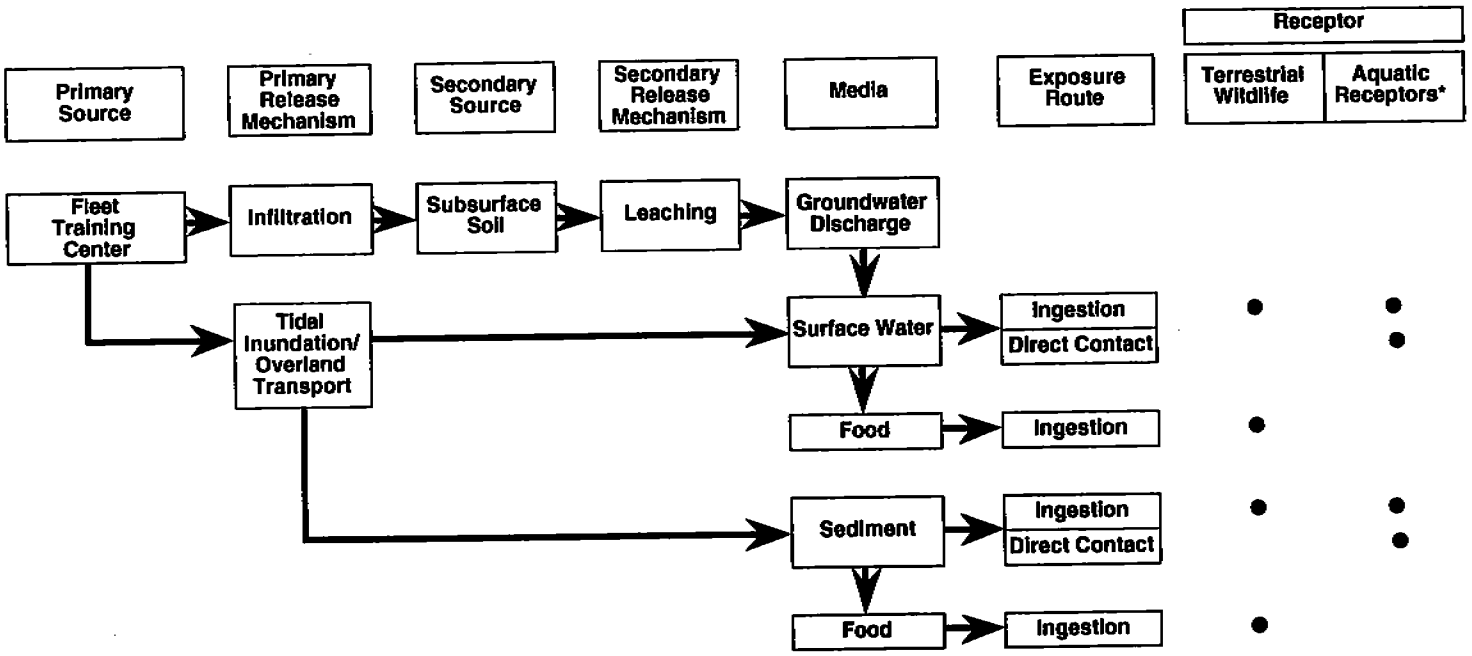
Exposure pathways for ecological receptors evaluated in the assessment are summarized in a Contaminant Pathway Model for Ecological Receptors, SWMU 14 and 18 (Figure 6-14). The pathways include exposures to contamination in the surface water, sediment, and groundwater.

Potential pathways of exposure for ecological receptors to contamination in surface soil at SWMUs 14 and 18 were not identified because these areas are either paved or covered with buildings. The surface structures (buildings and concrete paved firefighter training area) prevent exposures to ecological receptors by covering the surface soil and by preventing the growth of vegetation that could provide habitat.

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 GIR (ABB-ES, 1995a). The results of the selection of ECPCs for surface water, sediment, and groundwater for SWMUs 14 and 18 are described in the following sections. ECPCs for aquatic life and terrestrial wildlife were selected separately for both surface water and sediment.

6.4.1.1 **Surface Water** Surface water samples were collected from two locations (MPT-14-SW04 and MPT-14-SW05 with a duplicate sample located at MPT-14-SW04) in the drainage ditch area located to the north of SWMU 14 and east of the tidal pool area (Plate 4). Surface water was not collected from the other sediment sampling locations because samples were collected during low tide (as specified in the Group III SWMUs Workplan, ABB-ES, 1994a), and surface water was not present. The drainage ditch and tidal pool area are normally dry during periods of low tide.

Table 6-36 provides a summary of the results of the analyses of surface water samples from the drainage ditch north of SWMU 14. The summary table includes the Florida surface water quality standards Standard for Class III marine waters (FAC, 62-302), which were used to screen for ECPCs. Calcium, magnesium, and sodium were excluded from the screening process because they are naturally occurring nutrients. Out of the nine analytes detected in surface water, only iron was selected as an ECPC for both terrestrial wildlife and aquatic receptors. Two analytes (lead and zinc) were selected as ECPCs for only terrestrial wildlife. These two chemicals were not selected as ECPC for aquatic receptors because the maximum detected concentration does not exceed their respective Florida surface water quality standards standard.



NOTES:
SWMU = Solid waste management unit
RCRA = Resource Conservation and Recovery Act
* Aquatic recepors include invertebrates, plants, algae, amphibians, and fish.

FIGURE 6-14
CONTAMINANT PATHWAY MODEL FOR
ECOLOGICAL RECEPTORS, SWMUs 14 AND 18

RCRA FACILITY INVESTIGATION
REPORT, GROUP III SWMUs

U.S. NAVAL STATION
MAYPORT, FLORIDA

8534-09 TKB FIG 6-14 021996MAW

Table 6-36
Selection of Ecological Chemicals of Potential Concern
Surface Water Associated with the Drainage Ditch North of SWMU 14

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

Analyte	Frequency of Detection[1]	Range of Detected Concentrations	Mean of Detected Concentrations[3]	Screening Reference Concentration[4]	Florida Surface Water Quality Standards[5]	Analyte ECPC? (Yes/No)[6]	Wildlife Exposure Concentrations[14]			
							95% UCL[7]	Arithmetic Mean[8]	Exposure Point Concentrations	
									Maximum[9]	Average[10]
Inorganics (µg/ℓ)										
Barium	2/2	[2]8.7 - 10.1	9.4	22.6	NA	No[11]				
Calcium	2/2	[2]201,500 - 206,000	203,750	282,176	NA	No[11,13]				
Iron	2/2	[2]103 - 552	328	452	300	A/W	NC	328	552	328
Lead	1/2	[2]3	3	2.6	5.6	W[12]	NC	2.5	3	3
Magnesium	2/2	[2]627,500 - 661,000	644,250	671,150	NA	No[11,13]				
Manganese	2/2	[2]5.1 - 10.55	7.8	83.4	NA	No[11]				
Sodium	2/2	[2]4,870,000 - 5,540,000	5,205,000	766,000	NA	No[11,13]				
Vanadium	2/2	[2]4.6 - 5.7	5.2	8	NA	No[11]				
Zinc	1/2	[2]11.25	11.3	4	86	W[12]	NC	6.8	11.3	11.3

See notes at end of table.

Table 6-36 (Continued)
Selection of Ecological Chemicals of Potential Concern
Surface Water Associated with the Drainage Ditch North of SWMU 14

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

[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 sample locations were analyzed: MPT-14-SW04 (duplicate at MPT-14-SW04) and MPT-14-SW05.
[2] Indicates the value is the average of the detected concentration in a sample and its duplicate. For non-detect values, one-half of the Contract Required Quantitation Limit or 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 screening reference concentration is equal to two times the average background concentration for inorganics and is equal to the average background concentration for organics. Background sample locations include MPT-B-SW1 through MPT-B-SW7 with duplicates at MPT-B-SW3 and MPT-B-SW7. The average concentrations of analytes detected in the background locations are listed in Tables 3-17, 3-18, and 3-19 of the RFI General Information Report (GIR) (ABB Environmental Services, Inc. [ABB-ES], 1995a).
[5] Florida Department of Environmental Protection, 62-302 (1995 Version); surface water quality standards for Class III marine waters.
[6] Ecological chemical of potential concern (ECPC) selection process is depicted in the GIR (ABB-ES, 1995a). "A" indicates an ECPC for aquatic receptors. "W" indicates an ECPC for terrestrial receptors.
[7] The 95 percent upper confidence limit (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 (1991b).
[8] The arithmetic mean of all concentrations assigns a value of one-half of the Contract Required Quantitation Limit (CRQL) for organics and Method Detection Limit (MDL) for inorganics to all non-detects.
[9] The maximum exposure concentration is equal to the maximum detected concentration.
[10] The average exposure concentration is equal to the mean of detected concentrations.
[11] Maximum detected concentration is less than two times the average background concentration for inorganics.
[12] Maximum analyte concentration is below the Florida surface water quality standard; therefore, the analyte was not considered as an ECPC for aquatic receptors.
[13] Analyte is an essential nutrient and is not present at toxic levels.
[14] Aquatic receptor exposure concentrations are location specific and are equal to the respective concentrations measured in surface water and sediment samples.

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
% = percent.
$\mu g/\ell$ = micrograms per liter.
NA = not available.
NC = not calculated.
RFI = Resource Conservation and Recovery Act (RCRA) facility assessment.

6.4.1.2 **Sediment** Sediment was sampled from eight locations at SWMU 14 (MPT-14-SD01 through MPT-14-SD08 with a duplicate sample from location MPT-14-SD06) and three locations from SWMU 18 (MPT-18-SD01 through MPT-18-SD03 with a duplicate sample from location MPT-18-SD01) (Plate 4). The following provides a brief description of the locations of sediment samples designated as being associated with SWMU 14.

Sediment samples MPT-14-SD01, MPT-14-SD02, and MPT-14-SD03 are located in open stormwater drop inlets located north of the SWMU 14 detention pond (Plate 4). The open drop inlets receive stormwater piped from the open drainage ditch along Baltimore Avenue and the parking area east of Buildings 1388 and 351. Sediment samples MPT-14-SD04, MPT-14-SD05, and MPT-14-SD06 are located in the drainage ditch, where the stormwater drainage system discharges to the St. Johns River north of the northern-most catch basin. Sediment samples MPT-14-SD07 and MPT-14-SD08 are located in the tidal pool area north of SWMU 14.

Sediment samples collected from the open drainage ditch inlet boxes (MPT-14-SD01 through MPT-14-SD03) were included in the ecological risk assessment because of the potential for sediment eroded from the boxes to be deposited in the tidally influenced drainage ditch (i.e., at the locations of sediment samples MPT-14-SD04 through MPT-14-SD06 [Plate 4]). It should be noted that the boxes are usually dry and water is present only during rainfall events; therefore, it is not likely that the open drainage boxes would be a source of water for ecological receptors. Additionally, prey items are not expected to be present in the drop inlet sediment.

The three sediment samples for SWMU 18 were collected from the drainage ditch along the north side of Baltimore Avenue. This part of the drainage ditch system has a grass cover and is dry except after rainfall events, therefore, it is more appropriately classified as surface soil. Because surface soil is not being evaluated due to limited habitat for terrestrial wildlife, data from the three samples at SWMU 18 were not evaluated as part of the ecological risk assessment for SWMUs 14 and 18.

Table 6-37 provides a summary of the analyses of the sediment samples from SWMU 14. Analytes detected in the sediment were screened against two times the average background concentration for inorganic and for organic and inorganic chemicals at benchmark values based on whether or not adverse effects are likely to biological organisms (ABB-ES, 1995a). The sediment benchmark value was derived from the lower of the TEL from the Florida Sediment Quality Assessment guidelines (MacDonald and others, 1994) or the ER-L sediment values (Long and Morgan, 1990; and Long et.al, 1994).

Twenty-five of the 36 analytes detected in sediment samples were selected as ECPCs for both aquatic life and terrestrial wildlife. The selected analytes include 3 volatile organics (2-Butanone, acetone, and carbon disulfide), 16 semivolatile organics (acenaphthene, anthracene, benzo (a) anthracene, benzo (a) pyrene, benzo (b) fluoranthene, benzo (g,h,i) perylene, benzo (k) fluoranthene, chrysene, dibenz (a,h) anthracene, fluoranthene, fluorene, indeno (1,2,3-cd) pyrene, N-Nitrosodiphenylamine, phenanthrene, pyrene, and bis(2-Ethylhexyl) phthalate), three pesticides (4,4'-DDE, 4,4'-DDT, and dieldrin), and three inorganics (barium, copper, and zinc). 4,4'-DDD and lead were selected as ECPCs for terrestrial wildlife only.

Table 6-37
Selection of Ecological Chemicals of Potential Concern
Sediment Associated with SWMU 14

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

Analyte	Frequency of Detection[1]	Range of Detected Concentrations	Mean of Detected Concentrations[3]	Screening Reference Concentration[4]	Sediment Quality Screening Value[5]	Analyte ECPC? (Yes/No)[6]	Wildlife Exposure Concentrations[13]			
							95% UCL[7]	Arithmetic Mean[8]	Exposure Point Concentrations	
									Maximum[9]	Average[10]
Volatiles (µg/kg)										
2-Butanone	2/8	[2]6 - 31	18.5	ND	NA	A/W	56.3	18.7	31	18.5
Acetone	3/8	[2]26 - 79.75	59.3	ND	NA	A/W	145	30	79.8	59.3
Carbon disulfide	1/8	[2]12	12	NA	NA	A/W	25.3	8.9	12	12
Semivolatiles (µg/kg)										
Acenaphthene	1/8	190	190	ND	6.71	A/W	773	505	190	190
Anthracene	1/8	220	220	ND	46.9	A/W	750	508	220	220
Benzo(a)anthracene	6/8	250 - 1,900	818	ND	74.8	A/W	1,737	720	1,900	818
Benzo(a)pyrene	5/8	290 - 2,100	1,060	ND	88.8	A/W	1,920	869	2,100	1,060
Benzo(b)fluoranthene	5/8	400 - 3,500	1,552	ND	NA	A/W	2,951	1,177	3,500	1,552
Benzo(g,h,i)perylene	5/8	200 - 1,400	707	ND	NA	A/W	1,287	649	1,400	707
Benzo(k)fluoranthene	5/8	440 - 3,200	1,669	ND	NA	A/W	3,429	1,250	3,200	1,669
Chrysene	6/8	310 - 3,700	1,546	ND	108	A/W	4,273	1,266	3,700	1,546
Dibenz(a,h)anthracene	3/8	[2]95 - 302.5	209	ND	6.22	A/W	1,002	451	302.5	209
Fluoranthene	5/8	530 - 4,400	2,305	ND	113	A/W	5,597	1,648	4,400	2,305
Fluorene	3/8	[2]145 - 320	252	ND	21.2	A/W	821	467	320	252
Indeno (1,2,3-cd) pyrene	5/8	200 - 1,400	705	ND	NA	A/W	1,300	648	1,400	705
N-Nitrosodiphenylamine (1)	2/8	270 - 1,600	935	ND	NA	A/W	973	602	1,600	935
Phenanthrene	5/8	110 - 1,800	851	ND	86.7	A/W	2,018	739	1,800	851
Pyrene	6/8	520 - 6,000	2,485	NA	153	A/W	7,708	1,971	6,000	2,485
bis(2-Ethylhexyl) phthalate	5/8	110 - 2,400	931	NA	182	A/W	2,697	789	2,400	931

See notes at end of table.

Table 6-37 (Continued)
Selection of Ecological Chemicals of Potential Concern
Sediment Associated with SWMU 14

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

Analyte	Frequency of Detection[1]	Range of Detected Concentrations	Mean of Detected Concentrations[3]	Screening Reference Concentration[4]	Sediment Quality Screening Value[5]	Analyte ECPC? (Yes/No)[6]	Wildlife Exposure Concentrations[13]			
							95% UCL[7]	Arithmetic Mean[8]	Exposure Point Concentrations	
									Maximum[9]	Average[10]
Pesticides/PCBs (µg/kg)										
4,4'-DDD	1/8	1	1	NA	1.22	W[12]	16.4	4.6	1	1
4,4'-DDE	2/8	1.1 - 6.3	3.7	NA	2	A/W	7	3.2	6.3	3.7
4,4'-DDT	2/8	1.2 - 4.7	3	NA	1	A/W	12.3	5.1	4.7	4.5
Dieldrin	1/8	0.81	0.81	ND	0.02	A/W	7.5	2.4	0.81	0.81
Inorganics (mg/kg)										
Arsenic	8/8	0.51 - 1.3	0.89	5.4	7.24	No[11,12]				
Barium	7/8	3.2 - 23	9.2	14.6	NA	A/W	30.6	8.1	23	9.2
Beryllium	6/8	0.08 - 0.27	0.16	0.54	NA	No[11]				
Cadmium	2/8	0.42 - 0.62	0.52	1.14	0.676	No[11,12]				
Chromium	8/8	1.5 - 10	4	15.2	52.3	No[11,12]				
Cobalt	3/8	0.89 - 1.4	1.1	4.8	NA	No[11]				
Copper	5/8	6 - 52	21.4	6.8	18.7	A/W	104	14.2	52	21.4
Lead	8/8	1.8 - 12.2	6.2	9.2	30.2	W[12]	11.9	6.2	12.2	6.2
Mercury	2/8	[2]0.035 - 0.05	0.04	0.98	0.13	No[11,12]				
Selenium	1/8	[2]0.1125	0.11	1.1	NA	No[11]				
Tin	2/8	[2]2.7 - 3.8	3.3	24.6	NA	No[11]				
Vanadium	8/8	2.2 - 9.6	4.3	14.8	NA	No[11]				
Zinc	5/8	20 - 206	73.8	25.8	120	A/W	626	48	206	73.8

See notes at end of table.

Table 6-37 (Continued)
Selection of Ecological Chemicals of Potential Concern
Sediment Associated with SWMU 14

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

[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 sample locations were analyzed: MPT-14-SD01 through MPT-14-SD08 (with a duplicate at MPT-14-SD06).
[2] Indicates the value is the average of the detected concentration in a sample and its duplicate. For non-detect values, one-half of the Contract Required Quantitation Limit or 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 screening reference concentration is equal to two times the average background concentration for inorganics and is equal to the average background concentration for organics. Background sample locations include MPT-B-SD1 through MPT-B-SD7 with duplicates at MPT-B-SD3 and MPT-B-SD-7. The average concentrations of analytes detected in the background locations are listed in Tables 3-17, 3-18, and 3-19 of the RFI General Information Report (GIR) (ABB Environmental Services, Inc. [ABB-ES], 1995a).
[5] Sediment quality screening values are the lower of the threshold effects level for the Florida Sediment Quality Assessment guidelines (MacDonald and others, 1994) or the effects range-low (Long and Morgan, 1990; and Long et.al., 1994).
[6] Ecological chemical of potential concern (ECPC) selection process is depicted in the GIR (ABB-ES, 1995). "A" indicates an ECPC for aquatic receptors. "W" indicates an ECPC for terrestrial receptors.
[7] The 95 percent upper confidence limit (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 (1991b).
[8] The arithmetic mean of all concentrations assigns a value of one-half of the Contract Required Quantitation Limit (CRQL) for organics and Method Detection Limit for inorganics to all non-detects.
[9] The maximum exposure concentration is equal to the maximum detected concentration.
[10] The average exposure concentration is equal to the mean of detected concentrations.
[11] Maximum detected concentration is less than two times the average background concentration for inorganics.
[12] Maximum analyte concentration is below the sediment quality screening value; therefore, the analyte was not considered as an ECPC for aquatic receptors.
[13] Aquatic receptor exposure concentrations are location specific and are equal to the respective concentrations measured in surface water and sediment samples.

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
% = percent.
µg/kg = micrograms per kilogram.
ND = Not detected in the background samples.
NA = Not available.
PCB = polychlorinated biphenyl.
4,4'-DDD = dichlorodiphenyldichloroethane.
4,4'-DDE = dichlorodiphenyldichloroethene.
4,4'-DDT = dichlorodiphenyltrichloroethane.
mg/kg = milligram per kilogram
RFI = Resource Conservation and Recovery Act (RCRA) facility investigation.

6.4.1.3 **Groundwater** Analytes detected in groundwater samples (unfiltered) at SWMUs 14 and 18 are screened as ECPCs because aquatic receptors in the St. Johns River may be exposed to groundwater contamination as it discharges to surface water.

The monitoring well system installed at SWMUs 14 and 18 to assess whether or not contaminants have been released to groundwater is described in Subsection 6.2.1. The locations of the 17 monitoring wells are shown on Plate 5. A summary of the results of the analyses of unfiltered samples from the monitoring wells at SWMUs 14 and 18 are summarized in Table 6-38. 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 6-38 provides a summary of the analytical results, including the frequency of detection, range of detected concentrations, and mean of detected concentrations. In addition, the summary table includes the screening background concentrations and the Florida surface water quality standards for Class III marine waters (FAC, 62-302), which were used to screen for ECPCs. For the analytes selected as ECPCs, maximum and average exposure point concentrations are calculated. Calcium, magnesium, and sodium were not included in the screening process because they are naturally occurring nutrients.

Ten of 19 analytes detected in groundwater collected from the SWMUs 14 and 18 were selected as ECPCs. The 10 analytes include 6 semivolatiles (2-methylnaphthalene, dibenzofuran, fluorene, naphthalene, phenanthrene, and bis(2-ethylhexyl)-phthalate), and 4 inorganics (cyanide, iron, manganese, and vanadium).

6.4.2 Exposure Assessment Exposure assessment is the process of estimating or measuring the amount of an ECPC to which an ecological receptor may be exposed. The following paragraphs discuss how contaminant exposures were estimated or measured for aquatic receptors and terrestrial wildlife at SWMUs 14 and 18. The site conceptual model (Figure 6-14) provides a summary of the potential exposure pathways that exist at SWMUs 14 and 18 for each group of receptors.

6.4.2.1 **Surface Water and Sediment** Exposure pathways for aquatic receptors and terrestrial wildlife to ECPCs in surface water and sediment are depicted on Figure 6-14. Exposure concentrations for ECPCs in surface water and sediment are estimated for both aquatic receptors and terrestrial wildlife. Exposures for terrestrial wildlife to ECPCs in surface water and sediment are evaluated concurrently.

Terrestrial Receptors. Three species were selected as representative wildlife species to evaluate risks associated with exposures to surface water and sediment ECPCs at SWMU 14. Life history information used to estimate exposures for representative wildlife species is summarized in Table 6-39. The three species used for exposure modeling at SWMU 14 include the following:

Table 6-38
Selection of Ecological Chemicals of Potential Concern
Groundwater Associated with SWMUs 14 and 18

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

Analyte	Frequency of Detection[1]	Range of Detected Concentrations	Mean of Detected Concentrations[3]	Screening Reference Concentration[4]	Florida Surface Water Quality Standards[5]	Analyte ECPC? (Yes/No)[6]	95% UCL[7]	Arithmetic Mean[8]	Exposure Point Concentrations	
									Maximum[9]	Average[10]
Semivolatiles (µg/ℓ)										
2-Methylnaphthalene	1/17	21	21	ND	NA	Yes	6.8	5.9	6.8	5.9
Dibenzofuran	1/17	2	2	ND	NA	Yes	5.4	4.8	2	2
Fluorene	2/17	3 - 4	3.5	ND	NA	Yes	5.2	4.8	4	4
Naphthalene	1/17	4	4	ND	NA	Yes	NC	4.9	4	4
Phenanthrene	1/17	3	3	ND	0.031	Yes	5.1	4.9	3	3
bis(2-Ethylhexyl) phthalate	1/17	2	2	NA	NA	Yes	5.5	4.9	2	2
Inorganics (µg/ℓ)										
Antimony	1/17	6.2	6.2	ND	4,300	No[11]				
Arsenic	16/17	0.9 - 9.3	2.7	8.6	50	No[11]				
Barium	12/17	2.5 - 22	7.9	39.6	NA	No[12]				
Calcium	17/17	52,200 - 129,000	87,076	220,462	NA	No[12,13]				
Cobalt	1/17	3.2	3.2	6.4	NA	No[12]				
Cyanide	1/17	12.8	12.8	1.9	1	Yes	1.8	1.5	1.8	1.5
Iron	14/17	[2]52.85 - 1,910	693	1,404	300	Yes	4,629	574	1,909	574
Lead	3/17	0.6 - 4.3	2.5	3.6	5.6	No[11]				
Magnesium	17/17	[2]5,035 - 17,800	12,099	186,914	NA	No[12,13]				
Manganese	17/17	17.2 - 220	75.2	198.6	NA	Yes	112	75.2	112	75.2
Selenium	1/17	[2]0.53	0.53	9.2	71	No[11,12]				
Sodium	17/17	10,700 - 19,900	15,274	1,397,710	NA	No[12,13]				
Vanadium	16/17	1.8 - 10	3.9	9.4	NA	Yes	5.4	3.7	5.4	3.7

See notes at end of table.

Table 6-38 (Continued)
Selection of Ecological Chemicals of Potential Concern
Groundwater Associated with SWMUs 14 and 18

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

[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 sample locations were analyzed: MPT-14-MW01 through MPT-14-MW14 (with a duplicate at MPT-14-MW04) and MPT-18-MW01 through MPT-18-MW03 (with a duplicate at MPT-18-MW01).
[2] Indicates the value is the average of the detected concentration in a sample and its duplicate. For non-detect values, one-half of the Contract Required Quantitation Limit or 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 screening reference concentration is equal to two times the average background concentration for inorganics and is equal to the average background concentration for organics. The average concentrations of analytes detected in the background locations are listed in Tables D-1-1 in Appendix D of the RFI General Information Report (GIR) (ABB Environmental Services, Inc. [ABB-ES], 1995).
[5] Florida Department of Environmental Protection, 62-302 (1995 Version); surface water quality standards for Class III marine waters.
[6] Ecological chemical of potential concern (ECPC) selection process is depicted in the GIR (ABB-ES, 1995a).
[7] The 95 percent upper confidence limit (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 (1991b).
[8] The arithmetic mean of all concentrations assigns a value of one-half of the Contract Required Quantitation Limit (CRQL) for organics and Method Detection Limit for inorganics to all non-detects.
[9] The maximum exposure concentration is equal to the 95 percent UCL or the maximum detected concentration, whichever is less.
[10] The average exposure concentration is equal to the arithmetic mean or the maximum detected concentration, whichever is less.
[11] Maximum detected concentration is less than the Florida surface water quality standard.
[12] Maximum detected concentration is less than two times the average background concentration for inorganics.
[13] Analyte is an essential nutrient and is not present at toxic levels.

Notes: SWMUs = solid waste management units.
RCRA = Resource Conservation and Recovery Act.
ECPC = ecological chemical of potential concern.
% = percent.
$\mu g/\ell$ = micrograms per liter.
ND = Not detected in the background samples.
NA = Not available.
NC = Not calculated.
RFI = Resource Conservation and Recovery Act (RCRA) facility investigation.

Table 6-39
Exposure Parameters for Representative Wildlife Species North of SWMU 14

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

Representative Wildlife Species	Body Weight (kg)	Reported Diet	Soil/Sediment Ingestion (% of diet)	Assumed Diet for Exposure Assessment (% of diet)	Food Ingestion Rate (kg/day)	Water Intake Rate (ℓ/day)	Home Range (acres)
Marsh rabbit (*Sylvilagus bachmani*)	1.35 [a]	Marsh vegetation including rhizomes and bulbs [a]	6% sed. [b]	94% Plants 6% Sediment	0.110 [c]	0.124 [d]	7.39 [e]
Herring gull (*Larus argentatus*)	1.025 [f]	Fish, squid, crustacea, molluscs, worms, insects, small mammals and birds, duck and gull eggs and chicks, and garbage [g]	2% sed. [m]	98% Aquatic organisms 2% Sediment	0.157 [k]	0.06 [l]	0.75 [g]
Spotted sandpiper (*Actitis macularis*)	0.0425 [i]	Terrestrial and marine insects; some molluscs, young fishes, and small crustaceans [g]	20% sed. [j]	80% Aquatic invertebrates 20% Sediment	0.007 [k]	0.007 [l]	0.62 [g]

References:
[a] Average value from Burt and Grossenheider (1976).
[b] Sediment ingestion assumed to be equal to soil ingestion for Jackrabbit from Beyer and Connor (1992).
[c] By mammal equation based on body weight (Wt.) in kilograms (kg). Food ingestion (kilograms per day [kg/day]) = $0.0687 \times Wt^{0.822}$ (U.S. Environmental Protection Agency [USEPA], 1993b).
[d] By mammal equation based on body weight (Wt.) in kg. Water ingestion (liters per day [ℓ/day]) = $0.099 \times Wt^{0.90}$ (USEPA, 1993b).
[e] Value for eastern cottontail rabbit (USEPA, 1993b)
[f] Average of adult males and females (USEPA, 1993b).
[g] Wildlife Exposure Factors Handbook (USEPA, 1993b).
[h] Mean reported for adult females in May (USEPA, 1993b).
[i] Median of mean weights for adult males and females in spring (USEPA, 1993b).
[j] Sediment ingestion based on values reported for soil ingestion by other sandpipers (USEPA, 1993b).
[k] By bird equation based on body weight (Wt.) in kg. Food ingestion (kg/day) = $0.0582 \times Wt^{0.651}$ (USEPA, 1993b).
[l] By bird equation based on body weight (Wt.) in kg. Water ingestion (liters per day [ℓ/day]) = $0.059 \times Wt^{0.67}$ (USEPA, 1993b).
[m] Sediment ingestion based on values reported for birds with similar diets, mainly ducks (USEPA, 1993b).

Notes: SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
% = percent.
sed. = sediment.
g = grams.
USEPA = U.S. Environmental Protection Agency.

- Marsh rabbit (*Sylvilagus bachmani*). The marsh rabbit represents a small mammalian herbivore that may be exposed to contamination in surface water as a result of direct ingestion.

- Herring gull (*Larus argentatus*). The herring gull represents an avian omnivore. The common large "sea gull" of the Atlantic coast feeds on small fish and other aquatic organisms, as well as garbage and sewage along waterfronts (Terres, 1991).

- Spotted sandpiper (*Actitus macularis*). The sandpiper represents an avian omnivore. This shorebird searches for food on the beach and muddy shores of creeks and inlets. Its diet consists of insects including grasshoppers and crickets, worms, young fish, and small crustaceans.

Exposure pathways for representative wildlife species in surface water include direct ingestion and ingestion of aquatic life that may bioconcentrate ECPCs in surface water. Because only two surface water samples and eight sediment samples were collected, the maximum and average exposure concentrations are equal to the maximum and mean of the detected concentrations, respectively.

Potential dietary exposures (PDEs) for each of the representative wildlife species for each of the surface water and sediment ECPCs are estimated using a model discussed in the GIR (ABB-ES, 1995a). In the model, exposure doses for each ECPC for each of the representative wildlife species are calculated based on the exposure concentrations in surface water and sediment and life history factors for the species. The equations are provided in Table 2-7 of the GIR (ABB-ES, 1995a). Contaminant concentrations in aquatic food items for each ECPC are calculated using the bioconcentration factors listed in Appendix E-2. To estimate exposures for the representative wildlife species via the diet, a 1:1 ratio is assumed between the concentration of ECPCs in sediment and the concentration of ECPCs in the tissue of aquatic prey for pesticides. The exposure doses for each ECPC calculated for each of the representative wildlife species in the area north of SWMU 14 are presented in Appendix E-5.

Aquatic Receptors. Contaminant exposures related to dermal contact with surface water are evaluated for aquatic receptors at each of the geographic sampling locations in the drainage ditch where surface water was collected (MPT-14-SW04 and MPT-14-SW05). Contaminant exposures related to dermal contact with sediment are evaluated for aquatic receptors at each of the geographic sampling locations in the drainage ditch (MPT-14-SD04 through MPT-14-SD06) and tidal pool area (MPT-14-SD07 and MPT-14-SD08). Exposure concentrations are equal to the amount of an analyte detected in surface water and sediment from the respective location. Aquatic receptors are not expected to be present at sampling locations MPT-14-SD01, MPT-14-SD02, MPT-14-SD03, MPT-18-SD01, MPT-18-SD02, and MPT-18-SD03 because these stations are located in dry areas. Consequently, contaminant exposures were not evaluated for aquatic receptors at these six sampling locations.

6.4.2.2 **Groundwater** Aquatic receptors in the St. Johns River may be exposed to contamination in groundwater from SWMUs 14 and 18 as it discharges through the benthic zone 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 maximum and average exposure point concentrations of ECPCs in groundwater (Table 6-38) are

the concentrations to which the receptors would be exposed in the St. Johns River. Maximum and average exposure concentrations were predicted based on the 95 percent UCL or the maximum detected concentration, and the arithmetic mean. This worst-case scenario assumes no reduction in contaminant concentrations as a result of transport from SWMUs 14 and 18 to the St. Johns River and no dilution once the contaminant is discharged.

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 to surface water, sediment, and groundwater at SWMUs 14 and 18 are described below.

6.4.3.1 **Surface Water and Sediment** The following paragraphs describe the methodology used to assess whether or not possible ecological effects to terrestrial and aquatic receptors have resulted from contact with the ECPCs identified for surface water and sediment.

Terrestrial Receptors. The ecological effects assessment for ECPCs in surface water and sediment 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. Lethal and sublethal RTVs are identified for each ECPC and representative wildlife species.

A lethal RTV represents the threshold for lethal effects and is based on oral low dose where 50 percent of animals die (LD_{50}) values (oral dose lethal to 50 percent of a test population). 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, 1986). 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 14 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 RTVs derived for each of the representative wildlife species for each of the ECPCs detected in surface water and sediment samples at SWMU 14 are summarized in Appendix E-3. The dose-response information used to derive RTVs is included as Appendix E-4.

Aquatic Receptors. Ecological effects associated with surface water ECPCs are estimated based on aquatic toxicity benchmarks. Aquatic toxicity benchmarks include the Florida surface water quality standards for Class III marine water (FAC 62-302) and aquatic toxicity information from the USEPA AQUIRE database (Appendix E-1). Information from the AQUIRE database on the aquatic toxicity of surface water ECPCs to marine life is summarized in Table 6-40. Table 6-40 provides a range of concentrations associated with lethal and sublethal effects

Table 6-40
Results of AQUIRE Search for Toxicity of Surface Water and Groundwater ECPCs at SWMUs 14 and 18 to Aquatic Receptors
(Number of Studies / Range of Concentrations)

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

Analyte	Fish		Invertebrates		Mollusks		Algae and Aquatic Plants
	Lethal	Sublethal	Lethal	Sublethal	Lethal	Sublethal	Sublethal
Semivolatiles (μg/ℓ)							
2-Methylnaphthalene	12 / 2×10^3 to 6×10^3	5 / 300 to 1×10^4	12 / 600 to 5×10^3	1 / 15.03	--	--	--
Dibenzofuran	2 / 1×10^3 to 1.8×10^3	--	--	--	--	--	--
Fluorene	--	--	1 / 1×10^3	--	--	--	2 / 1.1×10^3 to 1×10^4
Naphthalene	17 / 960 to 6×10^3	11 / 120 to 6.5×10^3	39 / 850 to 2×10^4	3 / 88 to 1.11×10^3	1 / 1.1×10^4	3 / 5×10^3 to 1.94×10^5	4 / 695 to 2.21×10^3
Phenanthrene	--	--	9 / 75 to 600	--	--	--	--
bis(2-Ethylhexyl)phthalate	1 / 5.5×10^5	--	1 / 3×10^5	--	--	--	1 / 3.1×10^6
Inorganics (μg/ℓ)							
Cyanide	--	--	--	--	--	--	--
Iron	--	--	1 / 3.3×10^4	--	1 / 1×10^5	--	13 / 100 to 1×10^5
Manganese	--	--	--	--	--	3 / 2×10^4	--
Vanadium	--	--	--	--	--	--	1 / 5×10^4

Toxicity information was retrieved from AQUIRE and is included as Appendix E-1.

Notes: AQUIRE = Aquatic Information Retrieval.
ECPC = ecological chemical of potential concern.
SWMU = solid waste management unit.
RCRA = Resource Conservation and Recovery Act.
μg/ℓ = micrograms per liter.
-- = toxicity information not available.

to fish, invertebrates, mollusks, and algae. The effect concentrations for each ECPC are compared with the exposure concentrations from AQUIRE to evaluate potential risks in Paragraph 6.4.4.1.

The toxicity of ECPCs in sediment to aquatic receptors was estimated by comparing maximum and average exposure concentrations of ECPCs in sediment to available sediment toxicity benchmarks. Sediment toxicity benchmarks are the concentrations reported in the literature as a "safe" no-effect concentration, a "threshold" concentration above which adverse effects are observed, and various adverse effects concentrations. Benchmarks are available from *Approach to the Assessment of Sediment Quality in Florida Coastal Waters* (SQAG) (McDonald, 1994) and the updated National Oceanic and Atmospheric Administration (NOAA) database (Long et. al., 1994). These benchmarks are listed in Table 6-41 as part of the risk characterization for sediment.

The Florida SQAGs are based on two data sets. The "effects data set" (EDS) is composed primarily of information in which specific adverse biological effects were observed at some of the sites sampled. A "no effects data set" (NEDS) includes data on concentrations that were not associated with adverse effects. Concentrations of contaminants in both of the data sets were ranked and then used to derive the SQAGs.

The arithmetic procedures in the guidelines are intended to define three distinct ranges of contaminant concentrations, including a minimal effects range, a possible effects range, and a probable effects range. The range of contaminant concentrations in sediment that are not likely to be associated with adverse biological effects on aquatic organisms was defined by a two-step process.

In the first step, a TEL is calculated. The TEL represents the upper limit of the range of sediment contaminant concentrations dominated by no-effects data entries (i.e., the minimal effects range). Within this range, concentrations of sediment-associated contaminants below the TEL are not considered to represent significant hazards to aquatic organisms. The TEL is calculated by taking the square root of the product of the 15th percentile concentration in the NEDS.

In the second step, a probable effects level (PEL) is calculated to define the lower limit of the range of contaminant concentrations that are usually or always associated with adverse biological effects (i.e., the lower limit of the probable effects range). Within the probable effects range, concentrations of sediment-associated contaminants above the PEL are considered to represent significant and immediate hazards to aquatic organisms. The PEL is calculated by taking the square root of the product of the 50th percentile concentration in the EDS and 85th percentile concentration in the NEDS.

NOAA, as part of the National Status and Trends Program, collects and analyzes sediment samples from sites located in coastal marine and estuarine environments. NOAA compiled data from a wide variety of sampling and analytical methods and approaches to evaluate the potential for biological effects associated with the sediment measurements. Data from three basic approaches to establish effects-based criteria were evaluated: the equilibrium-partitioning approach, the spiked-sediment bioassay approach, and various methods of evaluating synoptically collected biological and chemical data in field surveys.

Table 6-41
Comparison of Tidal Pool and Drainage Ditch Sediment with Toxicity Benchmarks[1]

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

Analyte	Range of Detected Reference Concentrations[2]	MPT-14-SD04	MPT-14-SD05	MPT-14-SD06[3]	MPT-14-SD07	MPT-14-SD08	ER-L/ER-M[4]	State of Florida TEL/PEL[5]
Volatiles (µg/kg)								
2-Butanone	ND	ND	ND	30 J	ND	ND	NA	NA
Acetone	ND	ND	ND	140	ND	ND	NA	NA
Carbon disulfide	51	ND	ND	8 J	ND	ND	NA	NA
Semivolatiles (µg/kg)								
Acenaphthene	ND	ND	ND	ND	ND	ND	16 / 500	6.71 / 88.9
Anthracene	ND	ND	ND	ND	ND	ND	85.3 / 1,110	46.9 / 245
Benzo(a)anthracene	ND	700 J	250 J	285 J	ND	ND	261 / 1,600	74.8 / 693
Benzo(a)pyrene	ND	860	290 J	350 J	ND	ND	430 / 1,600	88.8 / 763
Benzo(b)fluoranthene	ND	1,200	400 J	560 J	ND	ND	NA	NA
Benzo(g,h,i)perylene	ND	510 J	200 J	325 J	ND	ND	NA	NA
Benzo(k)fluoranthene	ND	1,500	440 J	505 J	ND	ND	NA	NA
Chrysene	ND	1,500	460 J	605 J	ND	ND	384 / 2,800	108 / 846
Dibenz(a,h)anthracene	ND	95 J	ND	170 J	ND	ND	63.4 / 260	6.22 / 135
Fluoranthene	ND	1,700	530 J	695 J	ND	ND	600 / 5,100	113 / 1,494
Fluorene	ND	320 J	ND	145 J	ND	ND	19 / 540	21.2 / 144
Indeno(1,2,3-cd)pyrene	ND	540 J	200 J	285 J	ND	ND	NA	NA
N-Nitrosodiphenylamine (1)	ND	ND	ND	ND	ND	ND	NA	NA
Phenanthrene	ND	1,800	110 J	745 J	ND	ND	240 / 1,500	86.7 / 544
Pyrene	282	2,500	520 J	890 J	ND	ND	665 / 2,600	153 / 1,398
bis(2-Ethylhexyl)phthalate	170 - 292.5	790 J	110 J	255 J	ND	ND	NA	182 / 2,647

See notes at end of table.

Table 6-41 (Continued)
Comparison of Tidal Pool and Drainage Ditch Sediment with Toxicity Benchmarks[1]

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

Analyte	Range of Detected Reference Concentrations[2]	MPT-14-SD04	MPT-14-SD05	MPT-14-SD06[3]	MPT-14-SD07	MPT-14-SD08	ER-L/ER-M[4]	State of Florida TEL/PEL[5]
Pesticides/PCBs (µg/kg)								
4,4'-DDE	3 - 7.9	ND	ND	ND	1 J	ND	2.2 / 27	2.07 / 3.74
4,4'-DDT	0.8	ND	ND	ND	6.3	ND	NA	1.19 / 4.77
Dieldrin	ND	ND	ND	ND	0.81 J	ND	NA	0.715 / 4.3
Inorganics (mg/kg)								
Barium	3.6 - 15.65	11.5 J	3.2 J	5.7 J	4.6 J	ND	NA	NA
Copper	0.88 - 7.5	11.2	ND	8.1	6 J	ND	34 / 270	18.7 / 108
Zinc	2.1 - 34.3	29.3 J	ND	25.4 J	20 J	ND	150 / 410	124 / 271

[1] Results of analyses of sediment samples included in Appendix C-11. Sample locations are depicted in Plate 4.
[2] Reference locations include MPT-B-SD1 through MPT-B-SD7 and 00SD01 (Table D-1-6 of the General Information Report (ABB Environmental Services, Inc. [ABB-ES], 1995)).
[3] A duplicate was collected at MPT-14-SD06. If the analyte was detected in both the original and its duplicate, the listed detected concentration is the average of the two samples. In instances where the analyte was detected in only one of the samples, the listed detected concentration is equal to the concentration detected in either the original or its duplicate.
[4] Effects Range-Low (ER-L) and Effects Range-Median (ER-M) sediment values (Long et. al., 1994). ER-L (10th percentile) represents a lower threshold value, above which adverse effects would occasionally occur. ER-M (50th percentile) represents a second threshold value, above which adverse effects would frequently occur.
[5] Florida Department of Environmental Protection Sediment Quality Assessment Guidelines (MacDonald, 1994). Probable effects level (PEL) defines the lower limit of the range of contaminant concentrations associated with adverse biological effects. Threshold effects level (TEL) defines the upper limit of the range of contaminant concentrations not considered to represent significant hazards to aquatic organisms.

Notes: RCRA = Resource Conservation and Recovery Act.
SWMUs = solid waste management units.
µg/kg = micrograms per kilogram.
ND = not detected.
J = estimated value.
NA = not available.
PCB = polychlorinated biphenyl.
4,4'-DDE = dichlorodiphenyldichloroethene.
4,4'-DDT = dichlorodiphenyltrichloroethane.
mg/kg = milligrams per kilogram.

The NOAA database has been expanded and updated guideline values are available (Long et.al., 1994). The chemical-specific benchmark values for the ER-L and effects range median (ER-M) are used to delineate three concentration ranges that describe whether or not adverse effects are likely to be observed. The three concentrations ranges are as follows:

- Concentrations below the ER-L value represent a minimal-effects range; a range intended to estimate conditions where effects would rarely be observed.

- Concentrations equal to and above the ER-L, but below the ER-M, represent a possible-effects range where effects would occasionally occur.

- Concentrations equal to and above the ER-M value represent a probable-effects range where effects would frequently occur.

6.4.3.2 **Groundwater** Ecological effects of contaminants in groundwater 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 E-1). Table 6-40 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, amphibians, and aquatic plants. For each ECPC, the effect concentrations from AQUIRE are compared with the exposure concentrations to evaluate potential risks in Paragraph 6.4.4.2

6.4.4 **Ecological Risk Characterization** The following paragraphs evaluate the potential adverse ecological effects associated with ECPCs in surface water, sediment, and groundwater.

6.4.4.1 **Surface Water and Sediment** Potential risks associated with exposures to ECPCs in surface water and sediment north of SWMU 14 are discussed separately for terrestrial wildlife and aquatic life.

Terrestrial Wildlife. Risks for the representative terrestrial wildlife species associated with ingestion of surface water, sediment, and aquatic life were quantitatively evaluated using HQs, which are calculated for each ECPC by dividing the estimated PDE concentrations by the toxicological benchmark (RTV). HIs are determined for each representative wildlife species by summing all 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.

Lethal and sublethal HQs and HIs calculated for the representative terrestrial wildlife species for exposures to ECPCs in surface water and sediment are presented in Appendix E-5. All of the HIs and HQs are less than 1, indicating no potential adverse effects to reproduction, growth, or survival for the representative terrestrial wildlife species from exposure to ECPCs in surface water and sediment north of SWMU 14. No risks to terrestrial wildlife populations are assumed. Because the HIs for maximum exposure point concentrations did not exceed 1, it was not necessary to calculate the HQs associated with exposure to the average exposure point concentrations.

Lethal-effect HIs ranged from 0.000095 for the herring gull to 0.0022 for the marsh rabbit, and sublethal-effect HIs ranged from 0.0042 for the marsh rabbit to 0.074 for the sandpiper.

Aquatic Receptors. Risks for aquatic receptors resulting from exposure to ECPCs in surface water are based upon comparison of the exposure concentrations of the ECPCs in surface water samples with respective toxicity benchmarks or standards.

Table 6-42 provides a comparison of the concentrations of iron in surface water samples from the drainage ditch area (MPT-14-SW04, a duplicate sample collected at MPT-14-SW04, and MPT-14-SW05) with available aquatic toxicity benchmarks. Concentrations of iron detected in surface water samples collected from the drainage ditch exceed the available aquatic toxicity benchmarks. However, the concentrations of iron detected at sample locations MPT-14-SW04 (115 $\mu g/\ell$) and MPT-14-SW05 (103 $\mu g/\ell$) are below the Florida surface water quality standard (300 $\mu g/\ell$) and the maximum detected concentration of iron in the background surface water samples (435 $\mu g/\ell$).

Iron was detected at sample location MPT-14-SW04 at 115 $\mu g/\ell$ and in the associated duplicate at 989 $\mu g/\ell$. Comparison of concentrations of iron detected at sampling location MPT-14-SW04 with the concentration (103 $\mu g/\ell$) detected at another nearby sampling location MPT-14-SW05 suggests that the concentration of iron detected in the duplicate may be an anomaly and not representative of either of the sampling locations.

It is not likely that the concentrations of iron detected in the surface water samples pose a risk to aquatic receptors because of the ephemeral nature of the system. The surface water drainage ditch is dry during low tide, and habitat utilization by aquatic receptors is limited to periods of high tide, when the area is flooded by water from the St. Johns River or Atlantic Ocean.

Risks for aquatic receptors in the drainage ditch and tidal pool area north of SWMU 14 associated with ECPCs in sediment are characterized for sampling locations MPT-14 SD04 through MPT-14-SD08. Aquatic receptors are not expected to be present at sampling locations MPT-14-SD01, MPT-14-SD02, and MPT-14-SD03 because these locations are normally dry and become flooded only during and shortly after rainfall events, and are located in areas not subject to tidal fluctuation. Consequently, risks associated with contaminant exposures in sediment were not evaluated for aquatic receptors at these three sampling locations.

Table 6-41 presents the distribution of ECPCs detected in sediment from the tidal pool area and drainage ditch north of SWMU 14. The ER-L and ER-M sediment values (Long and others, 1995) and the State of Florida SQAGs (MacDonald, 1994) are provided as a point of reference. Benchmarks for aquatic receptors are not available to assess the potential toxicity of 2-butanone, acetone, carbon disulfide, benzo (b) fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, N-nitrosodipheynlamine, and barium in sediment.

Table 6-43 summarizes the results of the risk characterization for aquatic receptors in the drainage ditch and tidal pool area north of SWMU 14. Based on comparison of detected concentrations of sediment ECPCs with benchmarks, risks for aquatic receptors are possible at all three sampling locations in the drainage ditch (MPT-14-SD04, MPT-14-SD05, and MPT-14-SD06). Comparison of the

Table 6-42
Comparison of Concentrations of ECPCs in Surface Water of Drainage Ditch with Aquatic Toxicity Benchmarks[1]

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

Analyte	Range of Detected Reference Concentrations[2]	MPT-14-SW04	MPT-14-SW04D	MPT-14-SW05	AWQC[3] (µg/ℓ)	Florida Surface Water Quality Standard[4] (µg/ℓ)	AQUIRE Lowest Reported Adverse Effect Concentration[5] (µg/ℓ)
Inorganics (µg/ℓ)							
Iron	89.1 - 435	115 J	989 J	103	NA	300	100

[1] Results of analyses of surface water samples included in Appendix C-11. Sample locations are depicted in Plate 4.
[2] Reference locations include MPT-B-SW1 through MPT-B-SW7 and 00SW01 (Table D-1-6 of the General Information Report (ABB Environmental Services, Inc., 1995a).
[3] Federal Ambient Water Quality Criteria (AWQC) (U.S. Environmental Protection Agency, 1986b).
[4] Florida Department of Environmental Protection, 62-302 (1995 Version); surface water quality standards for Class III marine waters.
[5] From Table 6-40.

Notes: ECPC = ECPC = ecological chemical of potential concern.
RCRA = Resource Conservation and Recovery Act.
SWMUs = solid waste management units.
AQUIRE = Aquatic Information Retrieval.
µg/ℓ = micrograms per liter.
J = estimated value.
NA = not available.

Table 6-43
Summary of Risk Characterization for Aquatic Receptors in Drainage Ditch and Tidal Pool Area

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

Sampling Location[1]	Exceedance of Benchmarks[2]		Interpretation
	Surface Water	Sediment	
MPT-14-SD04	Iron	Benzo(a)anthracene (ER-L, TEL, PEL); Benzo(a)pyrene (ER-L, TEL, PEL); Chrysene (ER-L, TEL, PEL); Dibenz(a,h)anthracene (ER-L, TEL); Fluoranthene (ER-L, TEL, PEL); Fluorene (ER-L, TEL, PEL); Phenanthrene (ER-L, ER-M, TEL, PEL); Pyrene (ER-L, TEL, PEL); bis(2-Ethylhexyl) phthalate (TEL)	Risks for aquatic receptors are possible due to elevated concentrations of PAHs in the sediment of the drainage ditch. The highest concentration of PAHs were detected at this sampling station. It is believed that the source of the PAHs is a parking lot to the east of SWMU 14, which directly drains into the drainage ditch.
MPT-14-SD05	Iron	Benzo(a)anthracene (TEL); Benzo(a)pyrene (TEL); Chrysene (ER-L, TEL); Fluoranthene (TEL); Phenanthrene (TEL); Pyrene (TEL)	Risks for aquatic receptors are possible due to elevated concentrations of PAHs in the sediment of the drainage ditch. It is believed that the source of the PAHs is a parking lot to the east of SWMU 14, which directly drains into the drainage ditch.
MPT-14-SD06		Benzo(a)anthracene (ER-L, TEL); Benzo(a)-pyrene (TEL); Chrysene (ER-L, TEL); Dibenz-(a,h)anthracene (ER-L, TEL, PEL); Fluoranthene (ER-L, TEL); Fluorene (ER-L, TEL, PEL); Phenanthrene (ER-L, TEL, PEL); Pyrene (ER-L, TEL); bis(2-Ethylhexyl) phthalate (TEL)	Risks for aquatic receptors are possible due to elevated concentrations of PAHs in the sediment of the drainage ditch. It is believed that the source of the PAHs is a parking lot to the east of SWMU 14, which directly drains into the drainage ditch.
MPT-14-SD07		4,4'-DDT (TEL, PEL); Dieldrin (TEL)	Detected concentrations of 4,4'-DDT are of concern at this location in the tidal pool area.
MPT-14-SD08		No exceedances	Risks are not identified.

[1] Locations shown on Plate 4.
[2] ECPCs listed were detected at concentrations exceeding at least one benchmark. Benchmarks for surface water and sediment ECPCs are listed in Tables 6-40 and 6-39, respectively.

Notes: RCRA = Resource Conservation and Recovery Act.
SWMUs = solid waste management units.
ER-L = effects range low concentration.
TEL = threshold effects level from Florida SQAG.
PEL = probable effects level from Florida SQAG.
PAHs = polynuclear aromatic hydrocarbons.
ER-M = effects range median concentration.
4,4'-DDT = dichlorodiphenyltrichloroethane.
ECPC = ecological chemicals of potential concern.

analytical data with the benchmarks suggest that adverse risks to aquatic receptors in the drainage ditch are associated with the PAHs detected in the sediment samples.

The highest concentrations of PAHs were detected in the sediment sample from location MPT-14-SD04, where benzo(a)anthracene, benzo(a)pyrene, chrysene, fluoranthene, fluorene, phenanthrene, and pyrene exceed the State of Florida PEL. The PEL defines the lower limit of the range of contaminant concentrations that are usually or always associated with adverse biological effects. Therefore, the concentrations of PAHs detected at this sediment sampling location are considered to represent a hazard to aquatic organisms.

Concentrations of PAHs detected in sediment sample MPT-14-SD05 are lower than sample MPT-14-SD04; however, the concentrations of benzo(a)anthracene, benzo(a)pyrene, chrysene, fluoranthene, phenanthrene, and pyrene exceed the State of Florida TEL, but are less than the PEL.

Within this range of concentrations adverse biological effects are possible; however, it is difficult to predict the occurrence, nature, and/or severity of these effects. Toxicity testing (survival testing with benthic organisms) using sediment from sampling location MPT-14-SD04 would be necessary to determine if the concentrations of PAHs represent a hazard to aquatic organisms.

The sediment sample from location MPT-14-SD06 contained dibenz(a,h)anthracene, fluorene, and phenanthrene at concentrations exceeding the PEL, and benzo(a)-anthracene, benzo(a)pyrene, chrysene, fluoranthene, and pyrene at concentrations that exceed the TEL, but not the PEL. The PAHs that were detected at concentrations that exceeded the PEL represent a hazard to aquatic organisms.

Concentrations of 4,4'-DDT and dieldrin were detected in one of the two samples collected at the tidal pool area. The sediment sample from location MPT-14-SD07 contained 4,4'-DDT at a concentration that exceeded the State of Florida PEL, and the concentration of dieldrin exceeded the TEL. Therefore, risks associated with the pesticide 4,4'-DDT are likely for aquatic receptors where this chemical may be present at concentrations similar to or higher than the sample from location MPT-14-SD07. However, risks are not predicted for aquatic receptors at location MPT-14-SD08 because ECPCs in sediment were not detected at this location. The close proximity of the sampling locations in the tidal pool area suggest that 4,4'-DDT and dieldrin are a localized "hot spot."

6.4.4.2 **Groundwater** Risks are evaluated for aquatic life associated with exposures to ECPCs in groundwater from the SWMUs 14 and 18 as it discharges to the St. Johns River. It is expected that groundwater from SWMUs 14 and 18 is currently discharging to the St. Johns River. The predicted maximum and average concentrations of groundwater ECPCs in the St. Johns River are compared to the State of Florida surface water quality standards for Class III marine water (FAC 62-302), the Ambient Water Quality Criteria (AWQC) (USEPA, 1986b), and the lowest reported adverse effect concentration in AQUIRE in Table 6-44. For comparison purposes, the concentrations of analytes in surface water samples collected from the St. Johns River (MPT-B-SW13, MPT-B-SW14, and MPT-B-SW15) and the background monitoring wells are also presented in Table 6-42. Maximum exposure point concentrations are less than the lowest toxicity benchmark concentrations for all ECPCs detected in the groundwater samples, with the exception of cyanide and iron.

Table 6-44
Comparison of SWMUs 14 and 18 Groundwater ECPC Exposure Concentrations (in St. Johns River) with Toxicity Benchmarks

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

Analyte	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 Water of St. Johns River[5]	Concentrations Detected in Background Groundwater Samples[6]	Result
Semivolatiles (µg/ℓ)							
2-Methylnaphthalene	6.8 / 5.9	NA	NA	15.03 / copepoda reproduction	ND	ND	
Dibenzofuran	2 / 2	NA	NA	1,000 / sheepshead minnow LC_{50}	ND	ND	
Fluorene	4 / 4	NA	NA	1,000 / polychaete LC_{50}	ND	ND	
Naphthalene	4 / 4	NA	NA	88 / shrimp oxygen consumption	ND	ND	
Phenanthrene	3 / 3	0.0031	4.6	75 / crab mortality	ND	ND	
bis(2-Ethylhexyl)phthalate	2 / 2	NA	NA	300,000 / copepoda LC_{50}	ND	5.5 - 7	
Inorganics (µg/ℓ)							
Cyanide	1.8 / 1.5	1.0	1.0	NA	1.1 - 3.9	0.95	Benchmark exceeded
Iron	1,909 / 574	300	NA	100 / Dinoflagellate population growth	ND	15.4 - 3,540	Benchmark exceeded
Manganese	112 / 75.2	NA	NA	20,000 / mollusk oxygen consumption	ND	3.5 - 397	
Vanadium	5.4 / 3.7	NA	NA	500 / algae population growth	1.8	2.2 - 9.4	

See notes at end of table.

Table 6-44 (Continued)
Comparison of SWMUs 14 and 18 Groundwater ECPC Exposure Concentrations (in St. Johns River) with Toxicity Benchmarks

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

[1] From Table 6-38.
[2] Florida Department of Environmental Protection, 62-302 (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 6-40.
[5] Range of detected concentrations in background surface water samples collected from the St. Johns River (MPT-B-SW13 through MPT-B-SW15) (General Information Report, ABB Environmental Services, Inc. [ABB-ES], 1995a).
[6] Background sample locations include 01MW001, 08MW005S, 0BMW001S, 0SMW001R, 8MW5S, MPT-1-MW1-1, MPT-S-1-S, S-1, 08MW005I, 08MW005D, and 0BMW001D. The concentrations of organic and inorganic analytes detected in background groundwater samples are listed in Table D-1-1 of Appendix D of the GIR (ABB-ES, 1995a).

Notes: SWMU = solid waste management unit.
ECPC = ecological chemical of potential concern.
RCRA = Resource Conservation and Recovery Act.
AWQC = ambient water quality criteria.
$\mu g/\ell$ = micrograms per liter.
NA = not available.
ND = not detected.
LC_{50} = lowest lethal concentration where 50 percent of animals die.

Maximum and average exposure concentrations for cyanide in groundwater of 1.8 and 1.5 $\mu g/\ell$, respectively, slightly exceed the Florida surface water quality standard and Federal AWQC of 1.0 $\mu g/\ell$. Exceedance of the Florida surface water quality standard and the AWQC value suggests that aquatic organisms are at risk. However, the maximum exposure point concentration of cyanide at 1.8 $\mu g/\ell$ is within the range of concentrations detected in the St. Johns River surface water samples (1.1 to 3.9 $\mu g/\ell$) (ABB-ES, 1995a). Therefore, the discharge of groundwater containing cyanide at the concentration detected in the groundwater sample to surface water would not result in increasing the current condition. No incremental increase in risks to aquatic receptors is expected to occur as a result of exposure to cyanide by the discharge of groundwater to surface water in the vicinity of SWMUs 14 and 18.

Maximum and average exposure concentrations for iron in groundwater of 1,909 and 574 $\mu g/\ell$, respectively, exceed both the Florida surface water quality standard of 300 $\mu g/\ell$ and the lowest reported adverse effect concentration in AQUIRE (dinoflagellate population growth) of 100 $\mu g/\ell$. However, the maximum exposure point concentration of iron in groundwater from SWMUs 14 and 18 (1,909 $\mu g/\ell$) is below the maximum detected concentration of iron in groundwater from the background samples (3,540 $\mu g/\ell$) (ABB-ES, 1995a). Maximum and average detected concentrations of iron from the background monitoring wells (3,540 and 702 $\mu g/\ell$) also exceed toxicity benchmarks. Exposure of aquatic receptors to concentrations of iron detected in groundwater samples exceed toxicity benchmarks; however, the discharge of iron at the concentration detected in the groundwater samples to the St. Johns River is not expected to present a risk for aquatic receptors for the following reasons:

- It is expected that advection, dispersion, mixing, and retardation, will occur as the groundwater from SWMUs 14 and 18 is discharged through the benthic zone to surface water, and actual exposure concentrations 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 iron. Only the dissolved phase of the metal is considered to be biologically available and potentially toxic to aquatic receptors (USEPA, 1993a).

In summary, the discharge of groundwater from SWMUs 14 and 18 through the benthic zone to the surface water of the St. Johns River does not pose a risk to aquatic receptors.

<u>6.4.5 Uncertainty Analyses</u> A number of uncertainties and assumptions are inherent in the ERA process. General ERA uncertainties are discussed in the GIR (ABB-ES, 1995a). Specific uncertainties associated with the evaluation of risks from potential surface water, sediment, and groundwater contamination at SWMUs 14 and 18 include the following:

- The lack of direct measurements to assess ecological risks (i.e., toxicity testing of the sediment) may result in an overestimation of risks. Conservative sediment toxicity benchmarks, which are not representative of site conditions, were used to estimate adverse risks to aquatic receptors.

- The lack of aquatic toxicity benchmarks for some of the sediment ECPCs may result in an underestimation of risks for aquatic life.

- The lack of information concerning the toxicity of sediment ECPCs to avian species may result in an underestimation of risks.

- Assumption of a 1:1 ratio between pesticides in sediment and the concentration of these ECPCs in aquatic prey may result in an overestimation or underestimation of risks to aquatic receptors from ingestion of contaminated biota. Risks would be dependant on the site-specific uptake of pesticides from sediment to biota.

- With the exception of pesticides in sediment, uptake modeling was based on accumulation only from surface water, although most of the chemicals detected were associated with sediment.

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

- The presumption of no risks for aquatic receptors resulting from potential exposures of iron in groundwater assumes that advection, dispersion, mixing, and retardation will occur as the groundwater from SWMUs 14 and 18 is discharged to surface water, and actual exposure concentrations in the river will be lower than the benchmarks.

7.0 CONCLUSIONS AND RECOMMENDATIONS

The following sections summarize the results of the Group III RFI and present recommendations for the Group III SWMUs.

7.1 THE SHIPYARD AREA, SWMUs 1, 23, 24, 25, 44, and 45. RFI SWMU 1 and RFA SV SWMUs 23, 24, 25, 44, and 45 (SWMUs requiring confirmatory sampling) were grouped together for RFI field investigations and reporting and are collectively referred to as the Shipyard Area. The Shipyard Area is an industrial area located in the northeastern part of NAVSTA Mayport.

Shallow soil in the vicinity of the Shipyard Area consists of fine grained, well-sorted sands which typically contain shell fragments. At some of the soil boring locations, thin (less than 1 foot) seams of clay or clayey to silty fine sand were encountered. These seams appear to be restricted in areal extent. The relatively low CEC and TOC values suggest that the soil at the Shipyard Area SWMUs has a limited ability to retard contaminant migration; therefore, contaminants, if present, in the surficial aquifer may migrate at rates near linear groundwater flow velocities.

The SWMUs comprising the Shipyard Area are located due south of the Mayport Turning Basin entrance channel. The direction of groundwater flow is generally to the north, toward the Mayport Turning Basin entrance channel (Plate 1). Groundwater in the water table zone at and north of the northern boundaries of the Shipyard Area may be affected by tidal fluctuations. It is likely that the effect in the water table zone of the surficial aquifer is limited to areas located less than 330 feet from the shoreline of the St. Johns River.

Horizontal groundwater flow velocities in the surficial aquifer beneath the Shipyard Area SWMUs are estimated to range from approximately 0.05 ft/d (18 feet per year [ft/yr]) to 0.15 ft/d (54 ft/yr). Assuming a value of 36 ft/yr for the horizontal linear groundwater velocity and no retardation of contaminants, the time for contaminants to migrate from the Shipyard Area, which ranges from 200 to 1,050 feet from the St. Johns River, would be approximately 6 to 29 years.

Geophysical anomalies were detected that could not be readily explained by cultural interferences. The anomalies were investigated with ground-penetrating radar and interpreted to be related to buried utilities and not landfilled materials. The location of SWMU 1 was not confirmed by the geophysical survey. Seven shallow borings to the water table were conducted at SWMU 1 to assess whether landfill materials were present. Landfilled materials were not encountered.

VOCs were not detected in surface soil samples at concentrations that exceed benchmarks; however, five SVOCs, two pesticides, two PCBs and nine inorganics were detected at concentrations that exceed residential benchmarks. Five of the analytes, two SVOCs (benzo(a)pyrene, dibenz(a,h)anthracene), one pesticide (dieldrin), and two inorganics (arsenic and beryllium) were also detected at concentrations that exceed their respective industrial values for FDEP soil cleanup criteria. The SVOCs, pesticides, PCBs, and inorganics that exceeded the benchmarks were detected at various locations in the Shipyard Area and likely represent "hot spots."

None of the organic or inorganic analytes were detected in subsurface soil samples at concentrations that exceed benchmark concentrations.

None of the VOCs or pesticides were detected in the sludge samples collected at SWMU 45 at concentrations that exceed benchmarks. Only one SVOC, benzo(a)pyrene, was detected at concentrations that exceeded residential human health-based benchmarks, but not the FDEP industrial soil cleanup goal of 500 μg/kg. Three of the inorganic analytes (antimony, arsenic, and copper) were detected at concentrations that exceed residential human health-based benchmark concentrations. However, the sludge samples only contained arsenic at concentrations exceeding the FDEP residential soil cleanup goal, but did not exceed the FDEP industrial soil cleanup goal (3.1 mg/kg).

Results of water quality indicator parameters suggest that groundwater in the vicinity of the Shipyard Area does not meet the criteria of a Class G-I or G-II drinking water supply. An appropriate designation for the surficial aquifer beneath the Shipyard Area would be Class G-III.

Pesticides and PCBs were not detected in the groundwater samples. One VOC (1,1-dichloroethene) and one SVOC (bis(2-ethylhexyl)phthalate) were detected at concentrations that exceed their respective USEPA Region III RBCs, but not their Florida Groundwater Guidance Concentrations.

There does not appear to be a discernible areal and numerical distribution for the organic target analytes, nor does there appear to have been significant release of volatile organic compounds to the environment based on comparison of the analytical results with Florida Groundwater Guidance Concentrations.

Seven inorganic analytes (antimony, arsenic, iron, magnesium, manganese, sodium, and vanadium) were detected in groundwater samples at concentrations that exceed benchmark concentrations. Currently, a promulgated primary or secondary standard has not been established for magnesium.

The occurrence of antimony, vanadium, copper, lead, and nickel and possibly manganese and arsenic in the water table zone of the surficial aquifer tend to occur in areas that are hydraulically downgradient from the areas where they were detected in surface soil samples at concentrations that exceeded the FDEP industrial soil cleanup goals. This distribution suggests that a release has occurred to the environment.

The concentrations of iron, magnesium, manganese, and sodium detected in groundwater samples from monitoring wells screened in the deep zone of the surficial aquifer are likely naturally occurring. This is based on groundwater in the surficial aquifer beneath NAVSTA Mayport becoming more saline with depth (Franks, 1980).

<u>7.1.1 Human Health Risk Assessment</u> Risk characterization was conducted for potential exposures to surface and subsurface soil, sludge, and groundwater under current and future land use scenarios. HHCPCs were determined not to exist for subsurface soil during the screening evaluation; therefore, a risk characterization was not conducted for this medium. The following paragraphs summarize the human health risk assessment for surface soil, sludge, and groundwater.

Surface Soil. The cancer risk associated with current land use, including surface soil ingestion, dermal contact, and fugitive dust inhalation, is $2x10^{-6}$ for the trespasser, $4x10^{-6}$ for the occupational worker, $1x10^{-6}$ for the site maintenance worker, and $1x10^{-7}$ for the excavation worker. The cancer risk for a hypothetical future land use is $2x10^{-5}$ for the resident. None of the ELCRs exceed USEPA's target cancer risk range; however, FDEP's target cancer risk of $1x10^{-6}$ is exceeded by some of the exposure scenarios.

The total cancer risks to the resident (ingestion, dermal contact, and inhalation) associated with benzo(a)pyrene ($5.5x10^{-6}$), dibenz(a,h)anthracene ($5.4x10^{-6}$), arsenic ($4.5x10^{-6}$), and beryllium ($5x10^{-6}$) exceed FDEP's target cancer risk of $1x10^{-6}$. It should be noted that five PAHs were detected in the sample designated as the duplicate to surface soil sample, MPT-24-SS06, but were not detected in the sample designated as the environmental sample. The samples was located in a sandy area adjacent to a paved road and an area where vehicles are commonly parked.

Noncancer risks associated with surface soil ingestion, dermal contact, and inhalation of fugitive dust for current and future land use (adolescent trespasser, adult trespasser, occupational worker, site maintenance worker, excavation worker, child resident, and adult resident) are below USEPA's and FDEP's target HI of 1.

Sludge. The cancer risk associated with current land use for sludge ingestion, dermal contact, and fugitive dust inhalation is $6x10^{-7}$ for the trespasser, $1x10^{-6}$ for the occupational worker, $3x10^{-7}$ for the site maintenance worker, and $3x10^{-8}$ for the excavation worker. None of these ELCRs exceed USEPA's target cancer risk range or FDEP's target cancer risk of $1x10^{-6}$.

Noncancer risks for sludge ingestion, dermal contact, and fugitive dust inhalation for current land use (adolescent trespasser, adult trespasser, occupational worker, site maintenance worker, and excavation worker) are all below USEPA's and FDEPs target HI of 1.

Groundwater. The cancer risk associated with hypothetical future ingestion of unfiltered groundwater as drinking water and inhalation of volatiles while showering is $8x10^{-4}$ for the adult resident. Arsenic ($8.3x10^{-4}$) and 1,1-dichloroethene ($2.1x10^{-5}$) are the major contributors to this ELCR, which exceeds USEPA's target cancer risk range. In addition, the total cancer risks associated with 1,1-dichloroethene and arsenic exceed FDEP's target cancer risk of $1x10^{-6}$.

The HI for groundwater ingestion is 8 for the adult resident. This HI exceeds USEPA's and FDEP's target HI of 1. The risk drivers are arsenic (HQ = 2.3) and manganese (HQ = 1.6).

It should be noted that the cancer risk and HQ associated with arsenic at its background screening concentration (8.6 $\mu g/\ell$) are $1x10^{-4}$ and 0.8, respectively (future resident ingestion of groundwater). The HQ associated with manganese at its background screening concentration (198.6 $\mu g/\ell$) is 1.1 (future resident ingestion of groundwater).

Currently, there is no exposure to groundwater from the surficial aquifer under current land use.

7.1.2 Ecological Risk Assessment Exposure pathways evaluated for aquatic receptors include direct contact with the groundwater as it discharges to surface water. Exposures associated with potential contamination in surface soil to terrestrial receptors were not evaluated. Terrestrial ecological receptors are not expected to occur in the vicinity of the Shipyard Area because the majority of the site is paved with asphalt or concrete and is located in an industrialized area.

Thirteen of 24 analytes detected in groundwater samples collected from the Shipyard Area were selected as ECPCs. The predicted maximum and average concentrations of groundwater ECPCs in the St. Johns River are compared to the State of Florida surface water quality standards for Class III marine water (FAC 62-302), AWQC (USEPA, 1986b), and the lowest reported adverse effect concentration in AQUIRE. Maximum exposure point concentrations are less than the lowest toxicity benchmark concentrations for all ECPCs in the groundwater samples, with the exception of cyanide and iron.

Maximum and average exposure concentrations for cyanide in the groundwater samples slightly exceed the Florida surface water quality standard and Federal AWQC. However, the maximum exposure point concentration of cyanide at 1.9 $\mu g/\ell$ is within the range of concentrations detected in background surface water samples collected from the St. Johns River (1.1 to 3.9 $\mu g/\ell$). This suggests that the discharge of cyanide from groundwater to surface water would not result in an increase risk to aquatic receptors under the current conditions.

Maximum and average exposure concentrations for iron in the groundwater samples exceed the sample Florida surface water quality standard and the lowest reported adverse effect reported in AQUIRE (dinoflagellate population growth). The maximum detected concentration of iron detected in groundwater samples from the background monitoring wells is 3,540 $\mu g/\ell$; this concentration also exceeds the aquatic toxicity benchmarks. Iron in groundwater is not expected to present a risk for aquatic receptors in the St. Johns River because it is expected that advection, dispersion, mixing, and retardation, will occur as the groundwater from the Shipyard Area is discharged to surface water and the exposure concentration will be lower than the benchmarks.

Based on these assumptions, groundwater discharges from the Shipyard Area to the surface water of the St. Johns River do not pose a risk to aquatic receptors.

7.1.3 Recommendations The following recommendations are based on the current use of the Shipyard Area as an industrial area and the assumption that this use will not change in the foreseeable future. The basis for the recommendations is the detection of chemicals in surface soil and groundwater beneath SWMUs 1, 23, 24, 25, 44, and 45 at concentrations that exceed residential use criteria. Therefore, the SWMU areas should be designated for industrial use only and groundwater from the surficial aquifer beneath these SWMUs should not be used as a source of potable water. Should use of the Shipyard Area change in the future, the recommendations presented in this report should be reevaluated.

Surface Soil. Additional investigation under an RFI or a corrective measures study for surface soil is not warranted at this time under a current industrial use scenario, as it is unlikely the Shipyard Area would be developed for residential use in the immediate or near future. However, an interim measure should be considered for eliminating the "hot spots" where SVOCs and inorganics

exceed FDEP's industrial soil cleanup goals. The goal of the interim measure should be to reduce the risk under current use for trespasser, occupational worker, and hypothetical residential exposure scenarios to levels that are less than or near the FDEP target cancer risk of $1x10^{-6}$ for industrial exposure.

Additional investigation is warranted for the interim measure to collect surface soil samples for analysis of analytes that exceed the benchmarks at a specific "hot spot." This information should be used to assess the horizontal and vertical extent of the specific chemicals at a "hot spot" and minimize the amount of surface soil requiring remediation.

An ecological risk assessment of terrestrial receptors was not conducted for surface soil at SWMUs 1, 23, 24, 25, 44, and 45. This would be considered a data gap in the RFI should use of the site change from industrial to residential.

Subsurface Soil. Additional investigation under an RFI or a corrective measures study for subsurface soil is not warranted at this time under a current industrial use scenario. The target analytes detected in subsurface soil samples did not exceed benchmarks for industrial exposure.

Sludge. Additional investigation under an RFI or a corrective measures study for sludge is not warranted at this time under a current industrial use scenario, as it is unlikely the Shipyard Area would be developed for residential use in the immediate or near future. Currently, the Navy Public Works Center in Jacksonville, Florida, is developing plans for removal of the sludge drying beds. This removal action would eliminate "hot spots" where SVOCs and inorganics exceed FDEP's residential soil cleanup goals. Upon completion of the removal action, documentation should be provided to regulatory agencies and the site should be reviewed for placement on the no further action list.

The risk assessment completed for SWMU 45 included receptor pathways that may reasonably occur under the current industrial setting. A complete baseline human health risk assessment and possibly an ecological risk assessment would be considered data gaps should the removal of the SWMU 45 Sludge Drying Bed not occur, or the site usage change from industrial to residential. However, it is not likely that the site usage would change to residential without an assessment and demolition of the FOWTP.

Groundwater. Additional investigation under an RFI or a corrective measures study for groundwater is not warranted at this time under a current industrial use scenario, as it is unlikely the Shipyard Area would be developed for residential use in the immediate or near future. The recommendation is based on the following: water in the surficial aquifer beneath the Shipyard Area has characteristics similar to Class G-III; organic chemicals did not exceed Florida Groundwater Guidance Concentrations; the highest concentrations of arsenic, iron, magnesium, manganese, and sodium, which exceed Florida groundwater guidance concentrations, were detected in groundwater samples from monitoring wells screened in the deep zone of the surficial aquifer are likely naturally occurring; groundwater discharges from the Shipyard Area to the surface water of the St. Johns River do not pose a risk to aquatic receptors; and cancer risk is associated with the hypothetical future use of groundwater; however, the surficial aquifer beneath the Shipyard Area is not currently used as a source of potable water.

7.2 THE CARBONACEOUS FUEL BOILER, SWMU 17. SWMU 17, the Carbonaceous Fuel Boiler (CFB), is located in the north central part of NAVSTA Mayport. The Carbonaceous Fuel Boiler, SWMU 17, was a furnace used to reduce the volume of domestic solid waste using diesel fuel or waste oil as auxiliary fuels, and provide steam for NAVSTA Mayport.

Shallow soil in the vicinity of the CFB plant consists of relatively uniform, light tan to tan, brown to dark brown, or gray very fine to fine-grained sand and silty sand with shell fragments that may make up to approximately 20 percent of the soil sample. The relatively low CEC and TOC values suggest that the soil at SWMU 17 has a limited ability to retard contaminant migration; therefore, contaminants, if present, in the surficial aquifer may migrate at rates near linear groundwater flow velocities.

The Carbonaceous Fuel Boiler plant is located on the southwestern side of Mayport Turning Basin (Plate 1). This location is not directly affected by the groundwater mound that dominates flow patterns in the rest of the Group III Area. Groundwater flow in the area near SWMU 17 appears to be to the northeast toward Mayport Turning Basin. Retaining walls constructed for the ship berthing piers may also divert groundwater around the retaining walls, flow beneath the wall, or through stormwater outfalls. Tidal influence of the shallow aquifer in the vicinity of the Carbonaceous Fuel Boiler plant is not likely due to the presence of the Mayport Turning Basin retaining walls (ABB-ES, 1993).

The horizontal groundwater flow velocity in the surficial aquifer beneath the CFB Area is estimated to be approximately 0.1 ft/d (35 ft/yr). Assuming a value of 35 ft/yr for the horizontal linear groundwater velocity and no retardation of contaminants, the time of travel for contaminants from SWMU 17 to Mayport Turning Basin (approximately 300 feet) is estimated to be approximately 9 years.

Two organic analytes (benzo(a)pyrene and dibenz(a,h)anthracene) and two inorganic analytes (arsenic and beryllium) were detected in surface soil samples at concentrations exceeding benchmarks for residential exposure scenarios, but did not exceed the FDEP industrial soil cleanup goal. A likely source for benzo(a)pyrene and dibenz(a,h)anthracene, which were detected in surface soil samples, is residues from vehicle exhaust and/or engine fluids on the parking lot of the Carbonaceous Fuel Boiler. 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 17 or are residual concentrations from the dredge material.

Results of water quality indicator parameters suggest that groundwater in the vicinity of the Carbonaceous Fuel Boiler meet the criteria of a Class G-I or G-II drinking water supply.

VOCs, pesticides, and PCBs were not detected in groundwater samples. One organic, bis(2-ethylhexyl)phthalate, was detected in a groundwater sample at a concentration that exceeded benchmarks. Bis(2-ethylhexyl)phthalate is a common field and laboratory contaminant and is unlikely to be from a release at SWMU 17.

Three inorganic analytes (arsenic, iron, and manganese) were detected in the SWMU 17 groundwater samples at concentrations that exceed benchmarks. The highest detected concentrations of arsenic, iron, and manganese were from monitoring

wells located hydraulically upgradient or crossgradient from SWMU 17; this suggests that these chemicals are not site located. Because the land features at NAVSTA Mayport are influenced by the deposition of dredge material from the Mayport Turning Basin, it is possible that residual concentrations of inorganics from the dredge material have contributed to the inorganic concentrations detected in groundwater samples.

Based on comparison the data collected during the Group III RFI field activity with regulatory benchmarks, there does not appear to have been a significant release of chemicals, if any, to the environment from the Carbonaceous Fuel Boiler at SWMU 17.

7.2.1 Human Health Risk Assessment Risk characterization was conducted for potential exposures to surface and subsurface soil, and groundwater under current and future land-use scenarios. Risks for residential exposure to surface soil and groundwater were not estimated for current land use because no exposures are expected. Additionally, HHCPCs were determined not to exist for subsurface soil during the screening evaluation; therefore, a risk characterization was not conducted for this medium. The following paragraphs summarize the risk characterization for human health risk associated with exposure to surface soil and groundwater.

Surface Soil. The excess lifetime cancer risk (ELCR) for a hypothetical future land use for surface soil ingestion, dermal contact, and fugitive dust inhalation is $1x10^{-6}$ for the trespasser, $1x10^{-5}$ for the resident, $2x10^{-6}$ for the occupational worker, $6x10^{-7}$ for the site maintenance worker, and $6x10^{-8}$ for the excavation worker. None of the ELCRs exceed the USEPA acceptable cancer risk range. The ELCR for a hypothetical future resident exceeds FDEP's risk management goal of $1x10^{-6}$.

The total cancer risks (ingestion, dermal contact, and inhalation) for a hypothetical future resident is associated with benzo(a)pyrene ($3.9x10^{-6}$), dibenz(a,h)anthracene ($2x10^{-6}$), arsenic ($3.1x10^{-6}$), and beryllium ($3.9x10^{-6}$), which exceed FDEP's target cancer risk of $1x10^{-6}$.

The noncancer risks associated with surface soil ingestion, dermal contact, and inhalation of fugitive dust for future land use (adolescent trespasser, adult trespasser, child resident, adult resident, occupational worker, site maintenance worker, and excavation worker) are all below USEPA's and FDEP's target HI of 1.

Groundwater. The cancer risk associated with a hypothetical future ingestion of groundwater as drinking water is $1x10^{-6}$ for the adult resident. This ELCR is within USEPA's acceptable cancer risk range and is at FDEP's target level. The cancer risk associated with bis(2-ethylhexyl)phthalate, the only contributor to the ELCR for the future resident, exceeds or is equal to FDEP's target cancer risk of $1x10^{-6}$. The noncancer risk associated with groundwater ingestion is below USEPA's and FDEP's target HI of 1.

7.2.2 Ecological Risk Assessment Exposure pathways evaluated for aquatic receptors include direct contact with the groundwater as it discharges to surface water. Exposures associated with potential contamination in surface soil to terrestrial receptors were not evaluated. Terrestrial ecological receptors are not expected to occur in the vicinity of the Carbonaceous Fuel Boiler because the

majority of the site is paved with asphalt or concrete and is located in an industrialized area.

Three of 11 analytes detected in groundwater samples collected from the SWMU 17 were selected as ECPCs. The three analytes include one semivolatile (bis[2-ethylhexyl]phthalate), and two inorganics (iron and manganese). The predicted maximum and average concentrations of groundwater ECPCs in the St. Johns River are compared to the State of Florida surface water quality standards for Class III marine water (FAC 62-302), AWQC (USEPA, 1986b), and the lowest-reported adverse effect concentration in AQUIRE. With the exception of iron, maximum exposure point concentrations are less than the lowest toxicity benchmark concentrations for all ECPCs in groundwater.

Maximum and average exposure concentrations of iron in groundwater exceed both the Florida surface water quality standard and the lowest-reported adverse effect concentration in AQUIRE (dinoflagellate population growth) of 100 $\mu g/\ell$. However, the maximum exposure point concentration of iron in groundwater from SWMU 17 (2,220 $\mu g/\ell$) is less than the maximum detected concentration of iron in groundwater from NAVSTA Mayport background samples. Maximum and average detected concentrations of iron from the background monitoring wells also exceed toxicity benchmarks. Iron in groundwater is not expected to present a risk for aquatic receptors in the St. Johns River because it is expected that advection, dispersion, mixing, and retardation will occur as the groundwater from SWMU 17 is discharged to surface water and the exposure concentration will be lower than the benchmark.

Based on these assumptions, groundwater discharges from SWMU 17 to the surface water of the St. Johns River do not pose a risk to aquatic receptors.

7.2.3 Recommendations The following recommendations are based on the current use of the Carbonaceous Fuel Boiler building area as an industrial area and the assumption that this use will not change in the foreseeable future. The basis for the recommendation is the detection of chemicals in surface soil and groundwater beneath SWMU 17 at concentrations that exceed residential use criteria. Therefore, SWMU 17 should be designated for industrial use only, and groundwater from the surficial aquifer beneath the SWMU should not be used as a source of potable water. Should use of the CFB building area change in the future, the recommendations presented in this report should be reevaluated.

Surface Soil. Additional investigation under an RFI or a corrective measures study for surface soil is not warranted at this time under a current industrial use scenario, as it is unlikely the CFB building area would be developed for residential use in the immediate or near future. The target analytes detected in surface soil samples did not exceed benchmarks for industrial exposure scenarios and exposures for the trespasser, occupational worker, site maintenance worker, and excavation worker are less than $1x10^{-6}$.

An ecological risk assessment of terrestrial receptors was not conducted for surface soil at SWMU 17. This may be considered a data gap in the RFI should use of the site change from industrial to residential.

Subsurface Soil. Additional investigation under an RFI or a corrective measures study for subsurface soil is not warranted at this time under a current industrial use scenario, as it is unlikely the CFB building area would be

developed for residential use in the immediate or near future. The target analytes detected in subsurface soil samples did not exceed benchmarks for industrial exposure.

Groundwater. Additional investigation under an RFI or a corrective measures study for groundwater is not warranted at this time under a current industrial use scenario, as it is unlikely the CFB building area would be developed for residential use in the immediate or near future. The recommendation is based on the following: the organic chemical bis(2-ethylhexyl)phthalate detected at concentrations exceeding Florida Groundwater guidance concentrations is likely from cross-contamination of the sample in the field or laboratory; bis(2-ethylhexyl)phthalate was the only contributor to ELCR for the future resident, and exceeds or is equal to FDEP's target cancer risk of $1x10^{-6}$; noncancer risk associated with groundwater ingestion is below USEPA's and FDEP's target HI of 1; groundwater discharges from SWMU 17 to the surface water of Mayport Turning Basin do not pose a risk to aquatic receptors; and cancer risk is associated with the hypothetical future use of groundwater; however, the surficial aquifer beneath SWMU 17 is not currently used as a source of potable water.

7.3 THE FLEET TRAINING CENTER, SWMUs 14 AND 18. SWMU 14, the Mercury/Oil Waste Spill Area and SWMU 18, the Fleet Training Center Diesel Generator Sump, are located at the FTC which is near the mouth of the St. Johns River in northeast NAVSTA Mayport. Associated with SWMU 14 at the FFTA are drains that connect to an oil-water separator, a stormwater collection system, a petroleum storage area, and an area that was reported to have been used for storage of mercuric nitrate (A.T. Kearney, 1989). SWMU 18 consists of a diesel-powered electrical generator within a surrounding concrete containment curb approximately 6 inches high. The two SWMUs share a similar geologic and hydrogeologic setting and therefore were grouped to facilitate a comprehensive approach to the investigation of the sites.

Shallow soil in the vicinity of SWMUs 14 and 18 typically consists of various shades from light tan to brown, dark gray, or black fine-grained sand or silty sand. Minor amounts of shell material are present in some of the borings. The relatively low CEC and TOC values suggest that the soil at the FTC SWMUs has a limited ability to retard contaminant migration; therefore, contaminants, if present, in the surficial aquifer may migrate at rates near linear groundwater flow velocities.

The SWMUs comprising the Fleet Training Center Area are located due south of the St. Johns River, and approximately 1,000 feet west of the Atlantic Ocean in the northeastern part of NAVSTA Mayport. The direction of groundwater flow is generally to the north, toward the St. Johns River (Plate 1). Tidal influence of the water table zone of the surficial aquifer was observed to occur in an area north of the Fleet Training Center Area SWMUs, approximately 400 feet or less from the shoreline.

Radial hydraulic conductivity values in the vicinity of the FTC ranged from approximately 7.2 to 22.1 ft/d with an average of approximately 12.2 ft/d. Horizontal groundwater flow velocities in the surficial aquifer beneath the Fleet Training Center Area SWMUs are estimated to range from approximately 0.03 ft/d (10 ft/yr) to 0.14 ft/d (51 ft/yr).

Five SVOCs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz-(a,h)anthracene, and indeno(1,2,3-cd)pyrene) and one pesticide (dieldrin) were detected in surface soil samples at concentrations that exceed benchmark values for residential exposure scenarios. None of the organic analytes were detected in subsurface soil samples at concentrations that exceed benchmark values. It should be noted that soil samples were not collected directly beneath the two aircraft mockups and the concrete detention basin because these structures were in use.

Three SVOCs that exceeded the residential benchmark values were all detected in sediment samples collected from the stormwater drop inlet on the north side of the unnamed dirt road.

Dieldrin was detected in the duplicate to the surface soil sample collected at monitoring well MPT-18-MW01S at a concentration which exceeded the FDEP soil cleanup goal and the USEPA Region III RBC. Dieldrin was detected in the associated surface soil sample at a concentration that did not exceed either the FDEP soil cleanup goal or the USEPA Region III RBC.

Arsenic and beryllium were detected at concentrations that exceeded residential exposure scenarios for FDEP soil cleanup goals and USEPA Region III RBCs. Copper was detected in one sample at a concentration that exceeded the USEPA Region III RBCs for residential exposure. Arsenic and beryllium were not detected at concentrations that exceed their respective FDEP soil cleanup goal for industrial exposure.

There is no apparent numerical or spatial distribution to the occurrence of arsenic or beryllium at SWMUs 14 and 18. Because the land features at NAVSTA Mayport are influenced by the deposition of dredge material from Mayport Turning Basin, it cannot be determined whether or not the concentrations of arsenic and beryllium are related to a release at SWMUs 14 or 18, or are residual concentrations from the dredge material.

Concentrations of chloride detected in the two surface water samples suggest that surface water in the vicinity of SWMUs 14 and 18 could be classified as predominantly marine water (concentrations of chloride greater than 1,500 mg/ℓ) according to FAC, 62-302, Surface Water Quality standards.

There were no organic target analytes detected in the surface water samples. Three target analytes (lead, magnesium, and sodium) were detected at concentrations that exceed background screening values. None of the inorganic analytes were detected at concentrations that exceed the Ambient Water Quality Criteria (USEPA, 1986b) and Class III Marine surface water quality criteria (FAC, 62-302.530) benchmarks.

PAHs were detected in the sediment samples collected from the drainage pathway leading from the drainage culvert headwall to the jetties. Pesticides were detected in one of the two sediment samples collected from the tidal pool area. The benchmarks for the sediment samples are the TELs in *Approach to the Assessment of Sediment Quality in Florida Coastal Waters*, (MacDonald, 1994), ER-L values in the National Oceanic, and Atmospheric Administration (NOAA) document *Incidence of Adverse Biological Effects within Ranges of Chemical Concentrations in Marine and Estuarine Sediments* (Long et. al., 1994). The PAHs and pesticides

exceeded the benchmark values. None of the inorganic analytes detected in the sediment samples exceeded the benchmarks.

The sources of the SVOCs are possibly from the historic use of SWMU 14 for firefighter training activities and/or emission and fluid residues from vehicles at parking lots that contribute surface water runoff to the drainage ditch system at the FTC. The source of the pesticide is likely the historic applications of pesticides.

Results of water quality indicator parameters suggest that groundwater in the vicinity of the SWMUs 14 and 18 meets the criteria of a Class G-I or G-II drinking water supply.

Only the groundwater sample from monitoring well MPT-14-WM09S contained the SVOC 2-methylnaphthalene, which was detected in a groundwater sample hydraulically downgradient from the airplane mockup, at a concentration that exceeds the Florida groundwater guidance concentration, but not the USEPA Region III RBC. The detection of this and other SVOCs in monitoring wells located hydraulically downgradient of the firefighter training mockup suggests that there has been a release from SWMU 14.

The groundwater field screening sample from location MPT-14-TP04 was observed to contain free-phase hydrocarbons; this is the same location as monitoring well MPT-14-MW09S. However, floating free-phase hydrocarbons have not been measured or observed at this monitoring well location.

Four inorganic analytes, antimony, arsenic, iron, and manganese, were detected at concentrations that exceeded the benchmarks from Florida groundwater guidance concentrations (FDEP, 1994) and USEPA Region III RBCs (USEPA, 1995a).

Antimony was detected as a single occurrence in the groundwater sample collected from monitoring well MPT-14-MW06S, which approximately 170 feet hydraulically downgradient from SWMU 14. Antimony was not detected in groundwater samples from the other monitoring wells at SWMUs 14 and 18.

Arsenic exceeded the USEPA Region III RBC in 16 of 17 groundwater samples. Iron exceeded the FDEP groundwater guidance concentration in 9 of 17 samples. Manganese was detected in 12 of 17 samples at concentrations that exceed Florida groundwater guidance concentrations. The detections of arsenic, iron, and manganese appear to represent a random pattern with some of the highest-detected concentrations in groundwater samples from monitoring wells located hydraulically upgradient or sidegradient from SWMUs 14 and 18. The distribution of antimony, arsenic, iron, and manganese suggests that they are not likely site related.

<u>7.3.1 Human Health Risk Assessment</u> Risk characterization was conducted for potential exposures to surface and subsurface soil, surface water, sediment, and groundwater under current and future land-use scenarios.

<u>Surface Soil</u>. The cancer risk associated with current land use for surface soil ingestion, dermal contact, and fugitive dust inhalation is $2x10^{-6}$ for the trespasser and $3x10^{-7}$ for the excavation worker. The cancer risk for hypothetical future land use is $2x10^{-5}$ for the resident, $4x10^{-6}$ for the occupational worker, and $1x10^{-6}$ for the site maintenance worker. None of the ELCRs exceed USEPA's target cancer risk range.

Noncancer risks associated with surface soil ingestion, dermal contact, and inhalation of fugitive dust for current land use (adolescent trespasser, adult trespasser, and excavation worker) are all below USEPA's and FDEP's target HI of 1. Noncancer risks associated with surface soil for future land use (child resident, adult resident, occupational worker, and site maintenance worker) are also below the USEPA's and FDEP's target HI of 1.

Subsurface Soil. HHCPCs were determined not to exist for subsurface soil during the screening evaluation; therefore, a risk characterization was not conducted for this media.

Sediment. The ELCR for current land use including incidental ingestion of and dermal contact with sediment is $2x10^{-6}$ for the trespasser. The cancer risk under a hypothetical future land use is $5x10^{-6}$ for the resident. Neither of the ELCRs exceeds USEPA's target cancer risk range.

Noncancer risk associated with sediment ingestion and dermal contact under current and future land use (adolescent trespasser, adult trespasser, child resident, and adult resident) is below USEPA's and FDEP's target HI of 1.

Groundwater. No volatile organic compounds were detected in the groundwater samples collected from the monitoring wells installed at SWMU 14 and 18, therefore, cancer risk associated with the inhalation of volatiles was not evaluated.

The total cancer risk associated with hypothetical future ingestion of groundwater as drinking water is $7x10^{-5}$ for the adult resident. The cancer risk associated with arsenic, the only contributor to the ELCR for the future resident, exceeds FDEP's target cancer risk of $1x10^{-6}$. This ELCR does not exceed USEPA's target cancer risk range.

Noncancer risk associated with groundwater ingestion is below USEPA's and FDEP's target HI of 1.

7.3.2 Ecological Risk Assessment Exposure pathways evaluated for terrestrial and aquatic receptors include direct contact with surface water, sediment, and the groundwater as it discharges to surface water. Exposures associated with potential contamination in surface soil to terrestrial receptors were not evaluated. Terrestrial ecological receptors are not expected to occur in the vicinity of SWMUs 14 and 18 because the majority of the site is paved with asphalt or concrete and is located in an industrialized area.

Risks for the representative wildlife species associated with ingestion of surface water, sediment, and aquatic life were quantitatively evaluated using HQs, which are calculated for each ECPC by dividing the estimated dietary exposure concentrations (PDE) by the toxicological benchmark (RTV). No risks to terrestrial wildlife populations are assumed because the HIs for maximum exposure point concentrations did not exceed 1.

The following paragraphs present a summary of the ecological risk characterization for potential aquatic receptors.

Surface Water. Concentrations of iron detected in surface water samples collected from the drainage ditch exceed the available aquatic toxicity

benchmarks. However, the concentrations of iron are below the Florida surface water quality standard and the maximum detected concentration of iron in the background surface water samples.

It is not likely that the concentrations of iron detected in the surface water samples pose a risk to aquatic receptors because of the ephemeral nature of the system. The surface water drainage ditch is dry during low tide and habitat utilization by aquatic receptors is limited to periods of high tide, when the area is flooded by water from the St. Johns River or Atlantic Ocean.

Sediment. Risks for aquatic receptors were identified for aquatic receptors at the three sampling locations in the drainage ditch located north of SWMU 14 that discharges to the St. Johns River. Comparison of the analytical data with the benchmarks suggests that adverse risks to aquatic receptors in the drainage ditch are associated with the PAHs and pesticides detected in the sediment samples.

PAHs were detected at concentrations exceeding the State of Florida PEL. The PEL defines the lower limit of the range of contaminant concentrations that are usually or always associated with adverse biological effects. PAHs were also detected at concentrations that exceed the State of Florida TEL, but are less than the PEL. Within this range of concentrations, adverse biological effects are possible; however, it is difficult to predict the occurrence, nature, and/or severity of these effects.

Concentrations of PAHs that exceed the PEL are considered to represent a hazard to aquatic organisms. However, where concentrations of PAHs exceed the TEL, but not the PEL, toxicity testing (survival testing with benthic organisms) using sediment from the sampling locations where this occurred would be necessary to determine if the concentrations of PAHs represent a hazard to aquatic organisms.

A sediment sample from the tidal pool area contained 4,4'-DDT at a concentration that exceeded the State of Florida PEL and the concentration of dieldrin exceeded the TEL. 4,4'-DDT and dieldrin were not detected in the sediment sample from the other sampling location at the tidal pool area. The close proximity of the two sampling locations in the tidal pool area suggest that 4,4'-DDT and dieldrin are a localized "hot spot".

Groundwater. Maximum exposure point concentrations are less than the lowest toxicity benchmark concentrations for all ECPCs in detected in the groundwater samples, with the exception of cyanide and iron. However, the maximum exposure point concentration of cyanide is within the range of concentrations detected in the St. Johns River surface water samples and the maximum exposure point concentration of iron in groundwater is less than the maximum detected concentration of iron in groundwater from the background samples (ABB-ES, 1995a).

Therefore, the discharge of groundwater containing cyanide and iron at the concentration detected in the groundwater sample to surface water would not result in increasing the current condition. No incremental increase in risks to aquatic receptors is expected to occur as a result of exposure to cyanide by the discharge of groundwater to surface water in the vicinity of SWMUs 14 and 18.

7.3.3 Recommendations The following recommendations are based on the current use of the SWMUs 14 and 18 as an industrial area and the assumption that this use will not change in the foreseeable future. The basis for the recommendation is

the detection of chemicals in sediment and groundwater beneath SWMUs 14 and 18 at concentrations that exceed residential use criteria. Therefore, the areas should be designated for industrial use only, and groundwater from the surficial aquifer beneath these SWMUs should not be used as a source of potable water. Should use of the SWMUs 14 and 18 change in the future, the recommendations presented in this report should be reevaluated.

Surface Soil. Additional investigation under an RFI or a corrective measures study for surface soil is not warranted at this time under a current industrial use scenario, as it is unlikely that SWMUs 14 and 18 would be developed for residential use in the immediate or near future. However, an interim measure should be considered for eliminating the SVOCs detected in the open drainage culverts if they exceed FDEP's industrial soil cleanup goals. The goal of the interim measure should be to reduce the risk under current use for a trespasser and hypothetical residential exposure scenarios to levels that are less than or near the FDEP target cancer risk of $1x10^{-6}$ for industrial exposure.

Additional investigation is warranted for the interim measure to collect surface soil samples for analysis of analytes that exceed the benchmarks at the open stormwater drop inlets. This information should be used to assess the horizontal and vertical extent of the specific chemicals and minimize the amount of surface soil requiring remediation.

Assessment of the soil beneath the aircraft mockups and the concrete detention basin should be conducted after firefighting training activities at SWMU 14 are discontinued in 1996. It is recommended that if chemicals are found in surface or subsurface soil samples at concentrations exceeding human health and/or ecological screening concentrations that an interim measure should be conducted. This recommendation is based on interpretation of analytical results from groundwater samples collected from monitoring wells located hydraulically downgradient from these structures. These data suggest that a release has occurred, but not at concentrations that exceed promulgated Federal or State maximum contaminant levels.

An ecological risk assessment of terrestrial receptors was not conducted for surface soil at SWMUs 14 and 18. This would be considered a data gap in the RFI should use of the site change from industrial to residential.

Subsurface Soil. Additional investigation under an RFI or a corrective measures study for subsurface soil is not warranted at this time under a current industrial use scenario, as it is unlikely the SWMUs 14 and 18 would be developed for residential use in the immediate or near future. The target analytes detected in subsurface soil samples did not exceed benchmarks for industrial exposure.

Sediment. Additional investigation under an RFI or a corrective measures study for sediments is not warranted at this time under a current industrial use scenario, as it is unlikely that SWMUs 14 and 18 would be developed for residential use in the immediate or near future. However, an interim measure should be considered for eliminating the PAHs detected in the drainage ditch north of SWMU 14 that exceed FDEP's industrial soil cleanup goals and the Florida sediment quality goals.

The goal of the interim measure should be to reduce the risk to human receptors under current use for a trespasser and hypothetical residential exposure scenarios and for ecological receptors to concentrations of PAHs less than the Florida sediment quality goal TEL.

Surface Water. Additional investigation under an RFI or a corrective measures study for surface water is not warranted at this time under a current industrial use scenario, as it is unlikely that SWMUs 14 and 18 would be developed for residential use in the immediate or near future. Concentrations of iron detected in the surface water samples are below the Florida surface water quality standard and the maximum detected concentration of iron in the background surface water samples. It is not likely that the concentrations of iron detected in the surface water samples pose a risk to aquatic receptors because of the ephemeral nature of the system.

The surface water drainage ditch is dry during low tide and habitat utilization by aquatic receptors is limited to periods of high tide, when the area is flooded by water from the St. Johns River or Atlantic Ocean.

Groundwater. Additional investigation under an RFI or a corrective measures study for groundwater is not warranted at this time under a current industrial use scenario, as it is unlikely SWMUs 14 and 18 would be developed for residential use in the immediate or near future. The recommendation is based on the following: volatile organic compounds were not detected in the groundwater samples; noncancer risk associated with groundwater ingestion is below USEPA's and FDEP's target HI of 1; groundwater discharges from the SWMUs 14 and 18 to the surface water of the St. Johns River do not pose a risk to aquatic receptors; and cancer risk is associated with the hypothetical future use of groundwater; however, the surficial aquifer beneath SWMUs 14 and 18 is not currently used as a source of potable water.

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APPENDIX A

VALIDATED ANALYTICAL DATA

A-1 Surface Soil Sample Analyses, SWMUs 1, 23, 24, 25, 44 and 45
A-2 Subsurface Soil Sample Analyses, SWMUs 1, 23, 24, 25, 44, and 45
A-3 Sludge Sample Analyses, SWMU 45
A-4 Field Screening Results, Groundwater, SWMUs 1, 23, 24, 25, 44, and 45
A-5 Groundwater Sample Analyses, SWMUs 1, 23, 24, 25, 44, and 45
A-6 Surface Soil Sample Analyses, SWMU 17
A-7 Subsurface Soil Sample Analyses, SWMU 17
A-8 Groundwater Sample Analyses, SWMU 17
A-9 Surface Soil Sample Analyses, SWMUs 14 and 18
A-10 Subsurface Soil Sample Analyses, SWMUs 14 and 18
A-11 Surface Water Sample Analyses, SWMU 14
A-12 Sediment Sample Analyses, SWMUs 14 and 18
A-13 Field Screening Results, Groundwater, SWMUs 14 and 18
A-14 Groundwater Sample Analyses, SWMUs 14 and 18
A-15 Field Gas Chromatograph Screening Results Tables, Groundwater, Group III

APPENDIX A-1

SURFACE SOIL SAMPLE ANALYSES, SWMUs 1, 23, 24, 44, AND 45

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SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		R9861001				R9861002				R9861004				R9861006		
Site		GROUP111				GROUP111				GROUP111				GROUP111		
Locator		01S00101				01S001010				01S00201				01S00301		
Collect Date:		03-MAY-95				03-MAY-95				03-MAY-95				03-MAY-95		
		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	U	ug/kg	11	10	U	ug/kg	10
Bromomethane		11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10
Vinyl chloride		11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10
Chloroethane		11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10
Methylene chloride		9	U	ug/kg	9	11	U	ug/kg	11	9	U	ug/kg	9	7	U	ug/kg	7
Acetone		11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10
Carbon disulfide		6	U	ug/kg	6	1	J	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,1-Dichloroethane		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,1-Dichloroethene		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dichloroethene (total)		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Chloroform		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dichloroethane		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
2-Butanone		11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10
1,1,1-Trichloroethane		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Carbon tetrachloride		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Bromodichloromethane		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dichloropropane		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
cis-1,3-Dichloropropene		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Trichloroethene		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Dibromochloromethane		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,1,2-Trichloroethane		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Benzene		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
trans-1,3-Dichloropropene		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Bromoform		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
4-Methyl-2-pentanone		11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10
2-Hexanone		11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10
Tetrachloroethene		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,1,2,2-Tetrachloroethane		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Toluene		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Chlorobenzene		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Ethylbenzene		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Styrene		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Xylenes (total)		6	U	ug/kg	6	3	J	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Dichlorodifluoromethane		11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10
Trichlorofluoromethane		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,3-Dichlorobenzene		730	U	ug/kg	730	5	U	ug/kg	5	700	R	ug/kg	700	5	U	ug/kg	5
Acrolein		110	UJ	ug/kg	110	110	UJ	ug/kg	110	110	UJ	ug/kg	110	100	UJ	ug/kg	100
Iodomethane		11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10
1,4-Dichlorobenzene		6	U	ug/kg	6	5	U	ug/kg	5	700	R	ug/kg	700	5	U	ug/kg	5
Acrylonitrile		110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	100	U	ug/kg	100
Dibromomethane		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dichlorobenzene		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
2-Chloroethylvinyl ether		11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10
Ethyl methacrylate		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,2,3-Trichloropropane		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
trans-1,4-Dichloro-2-butene		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Isobutyl alcohol		220	U	ug/kg	220	220	U	ug/kg	220	220	U	ug/kg	220	210	U	ug/kg	210
1,1,1,2-Tetrachloroethane		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dibromo-3-chloropropane		11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10
1,2-Dibromoethane		6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5

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SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9861001				R9861002				R9861004				R9861006			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01S00101				01S00101D				01S00201				01S00301			
Collect Date:	03-MAY-95				03-MAY-95				03-MAY-95				03-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	220	R	ug/kg	220	220	R	ug/kg	220	220	R	ug/kg	220	210	R	ug/kg	210
3-Chloropropene	6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Acetonitrile	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	100	U	ug/kg	100
Chloroprene	220	U	ug/kg	220	220	U	ug/kg	220	220	U	ug/kg	220	210	U	ug/kg	210
Methacrylonitrile	6	U	ug/kg	6	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Methyl methacrylate	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10
Pentachloroethane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10
Propionitrile	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	100	U	ug/kg	100
Vinyl acetate	11	U	ug/kg	11	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.

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SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9861007				R9861010				R9861012				R9861015			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01S00401				01S00501				01S00601				01S00701			
Collect Date:	03-MAY-95				03-MAY-95				03-MAY-95				03-MAY-95			
	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	10	U	ug/kg	10	11	U	ug/kg	11
Bromomethane	11	U	ug/kg	11	10	U	ug/kg	10	10	UJ	ug/kg	10	11	U	ug/kg	11
Vinyl chloride	11	U	ug/kg	11	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11
Chloroethane	11	U	ug/kg	11	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11
Methylene chloride	11	U	ug/kg	11	7	U	ug/kg	7	7	U	ug/kg	7	12	U	ug/kg	12
Acetone	17	U	ug/kg	17	10	U	ug/kg	10	10	U	ug/kg	10	13	U	ug/kg	13
Carbon disulfide	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	2	J	ug/kg	6
1,1-Dichloroethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,1-Dichloroethene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,2-Dichloroethene (total)	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Chloroform	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,2-Dichloroethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
2-Butanone	4	J	ug/kg	11	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	6	U	ug/kg	6
Carbon tetrachloride	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Bromodichloromethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,2-Dichloropropane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
cis-1,3-Dichloropropene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Trichloroethene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Dibromochloromethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,1,2-Trichloroethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Benzene	1	J	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
trans-1,3-Dichloropropene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Bromoform	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
4-Methyl-2-pentanone	11	U	ug/kg	11	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11
2-Hexanone	11	U	ug/kg	11	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	6	U	ug/kg	6
1,1,2,2-Tetrachloroethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Toluene	1	J	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Chlorobenzene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Ethylbenzene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Styrene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Xylenes (total)	2	J	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	2	J	ug/kg	6
Dichlorodifluoromethane	11	U	ug/kg	11	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	6	U	ug/kg	6
1,3-Dichlorobenzene	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Acrolein	110	UJ	ug/kg	110	100	UJ	ug/kg	100	100	UJ	ug/kg	100	110	UJ	ug/kg	110
Iodomethane	11	U	ug/kg	11	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11
1,4-Dichlorobenzene	5	U	ug/kg	5	690	U	ug/kg	690	5	U	ug/kg	5	6	U	ug/kg	6
Acrylonitrile	110	U	ug/kg	110	100	U	ug/kg	100	100	U	ug/kg	100	110	U	ug/kg	110

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SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9861007				R9861010				R9861012				R9861015			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01S00401				01S00501				01S00601				01S00701			
Collect Date:	03-MAY-95				03-MAY-95				03-MAY-95				03-MAY-95			
	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	6	U	ug/kg	6
1,2-Dichlorobenzene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
2-Chloroethylvinyl ether	11	U	ug/kg	11	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	6	U	ug/kg	6
1,2,3-Trichloropropane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Isobutyl alcohol	210	U	ug/kg	210	210	U	ug/kg	210	210	UJ	ug/kg	210	230	U	ug/kg	230
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11	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	6	U	ug/kg	6
1,4-Dioxane	210	R	ug/kg	210	210	R	ug/kg	210	210	R	ug/kg	210	230	R	ug/kg	230
3-Chloropropene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Acetonitrile	110	U	ug/kg	110	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	230	U	ug/kg	230
Methacrylonitrile	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Methyl methacrylate	11	U	ug/kg	11	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11
Pentachloroethane	11	U	ug/kg	11	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11
Propionitrile	110	U	ug/kg	110	100	U	ug/kg	100	100	U	ug/kg	100	110	U	ug/kg	110
Vinyl acetate	11	U	ug/kg	11	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.

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SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		M8994010			R9743001			R9743002			R9743003		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		01S00801			23S00101			23S00201			23S00301		
Collect Date:		21-MAY-95			05-APR-95			05-APR-95			05-APR-95		
		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	11 U	ug/kg	11	10 U	ug/kg	10
Bromomethane		10 UJ	ug/kg	10	10 U	ug/kg	10	11 U	ug/kg	11	10 U	ug/kg	10
Vinyl chloride		10 U	ug/kg	10	10 U	ug/kg	10	11 U	ug/kg	11	10 U	ug/kg	10
Chloroethane		10 U	ug/kg	10	10 U	ug/kg	10	11 U	ug/kg	11	10 U	ug/kg	10
Methylene chloride		8 U	ug/kg	8	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5
Acetone		10 U	ug/kg	10	10 U	ug/kg	10	11 U	ug/kg	11	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	11 U	ug/kg	11	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	11 U	ug/kg	11	10 U	ug/kg	10
2-Hexanone		10 U	ug/kg	10	10 U	ug/kg	10	11 U	ug/kg	11	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 UJ	ug/kg	10	10 U	ug/kg	10	11 U	ug/kg	11	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		5 U	ug/kg	5	690 U	ug/kg	690	5 U	ug/kg	5	5 U	ug/kg	5
Acrolein		100 U	ug/kg	100	100 U	ug/kg	100	110 U	ug/kg	110	100 U	ug/kg	100
Iodomethane		10 U	ug/kg	10	10 U	ug/kg	10	11 U	ug/kg	11	10 U	ug/kg	10
1,4-Dichlorobenzene		5 U	ug/kg	5	690 U	ug/kg	690	5 U	ug/kg	5	5 U	ug/kg	5
Acrylonitrile		100 U	ug/kg	100	100 U	ug/kg	100	110 U	ug/kg	110	100 U	ug/kg	100

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Lab Sample Number:	M8994010				R9743001				R9743002				R9743003			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01S00801				23S00101				23S00201				23S00301			
Collect Date:	21-MAY-95				05-APR-95				05-APR-95				05-APR-95			
	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	350	U	ug/kg	350	5	U	ug/kg	5	5	U	ug/kg	5	680	U	ug/kg	680
2-Chloroethylvinyl ether	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11	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	R	ug/kg	210	220	R	ug/kg	220	210	R	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	11	U	ug/kg	11	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	210	R	ug/kg	210	220	R	ug/kg	220	210	R	ug/kg	210
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	110	U	ug/kg	110	100	U	ug/kg	100
Chloroprene	210	U	ug/kg	210	210	U	ug/kg	210	220	U	ug/kg	220	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	11	U	ug/kg	11	10	U	ug/kg	10
Pentachloroethane	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11	10	U	ug/kg	10
Propionitrile	100	U	ug/kg	100	100	U	ug/kg	100	110	U	ug/kg	110	100	U	ug/kg	100
Vinyl acetate	10	U	ug/kg	10	10	U	ug/kg	10	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		R9743005			R9743004			R9743006			R9743007		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		23S00401			23S00501			23S00601			23S00701		
Collect Date:		05-APR-95			05-APR-95			05-APR-95			05-APR-95		
		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	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Acetone		10 U	ug/kg	10	10 U	ug/kg	10	10 U	ug/kg	10	11 U	ug/kg	11
Carbon disulfide		5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
1,1-Dichloroethane		5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
1,1-Dichloroethene		5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
1,2-Dichloroethene (total)		5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Chloroform		5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
1,2-Dichloroethane		5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
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	6 U	ug/kg	6
Carbon tetrachloride		5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Bromodichloromethane		5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
1,2-Dichloropropane		5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
cis-1,3-Dichloropropene		5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Trichloroethene		5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Dibromochloromethane		5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
1,1,2-Trichloroethane		5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Benzene		5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
trans-1,3-Dichloropropene		5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Bromoform		5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
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	6 U	ug/kg	6
1,1,2,2-Tetrachloroethane		5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Toluene		5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Chlorobenzene		5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Ethylbenzene		5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Styrene		5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Xylenes (total)		5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
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	6 U	ug/kg	6
1,3-Dichlorobenzene		5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
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		5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Acrylonitrile		100 U	ug/kg	100	100 U	ug/kg	100	100 U	ug/kg	100	110 U	ug/kg	110

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9743005				R9743004				R9743006				R9743007			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S00401				23S00501				23S00601				23S00701			
Collect Date:	05-APR-95				05-APR-95				05-APR-95				05-APR-95			
	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	6	U	ug/kg	6
1,2-Dichlorobenzene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
2-Chloroethylvinyl ether	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	6	U	ug/kg	6
1,2,3-Trichloropropane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Isobutyl alcohol	200	R	ug/kg	200	200	R	ug/kg	200	200	R	ug/kg	200	230	R	ug/kg	230
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
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	6	U	ug/kg	6
1,4-Dioxane	200	R	ug/kg	200	200	R	ug/kg	200	200	R	ug/kg	200	230	R	ug/kg	230
3-Chloropropene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Acetonitrile	100	U	ug/kg	100	100	U	ug/kg	100	100	U	ug/kg	100	110	U	ug/kg	110
Chloroprene	200	U	ug/kg	200	200	U	ug/kg	200	200	U	ug/kg	200	230	U	ug/kg	230
Methacrylonitrile	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		R9743008			R9743009			R9743010			R9743011		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		23S00801			23S00801D			23S00901			23S01001		
Collect Date:		05-APR-95			05-APR-95			05-APR-95			05-APR-95		
		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		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Acetone		12 U	ug/kg	12	12 U	ug/kg	12	11 UJ	ug/kg	11	11 UJ	ug/kg	11
Carbon disulfide		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
1,1-Dichloroethane		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
1,1-Dichloroethene		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
1,2-Dichloroethene (total)		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Chloroform		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
1,2-Dichloroethane		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
2-Butanone		12 U	ug/kg	12	12 U	ug/kg	12	11 U	ug/kg	11	11 U	ug/kg	11
1,1,1-Trichloroethane		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Carbon tetrachloride		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Bromodichloromethane		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
1,2-Dichloropropane		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
cis-1,3-Dichloropropene		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Trichloroethene		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Dibromochloromethane		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
1,1,2-Trichloroethane		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Benzene		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
trans-1,3-Dichloropropene		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Bromoform		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
4-Methyl-2-pentanone		12 U	ug/kg	12	12 U	ug/kg	12	11 U	ug/kg	11	11 U	ug/kg	11
2-Hexanone		12 U	ug/kg	12	12 U	ug/kg	12	11 U	ug/kg	11	11 U	ug/kg	11
Tetrachloroethene		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
1,1,2,2-Tetrachloroethane		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Toluene		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Chlorobenzene		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Ethylbenzene		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Styrene		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Xylenes (total)		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Dichlorodifluoromethane		12 U	ug/kg	12	12 U	ug/kg	12	11 U	ug/kg	11	11 U	ug/kg	11
Trichlorofluoromethane		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
1,3-Dichlorobenzene		770 U	ug/kg	770	6 U	ug/kg	6	690 U	ug/kg	690	5 U	ug/kg	5
Acrolein		120 U	ug/kg	120	120 U	ug/kg	120	110 U	ug/kg	110	110 U	ug/kg	110
Iodomethane		12 U	ug/kg	12	12 U	ug/kg	12	11 U	ug/kg	11	11 U	ug/kg	11
1,4-Dichlorobenzene		6 U	ug/kg	6	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Acrylonitrile		120 U	ug/kg	120	120 U	ug/kg	120	110 U	ug/kg	110	110 U	ug/kg	110

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Lab Sample Number:	R9743008				R9743009				R9743010				R9743011			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S00801				23S00801D				23S00901				23S01001			
Collect Date:	05-APR-95				05-APR-95				05-APR-95				05-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichlorobenzene	6	U	ug/kg	6	770	U	ug/kg	770	5	U	ug/kg	5	5	U	ug/kg	5
2-Chloroethylvinyl ether	12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11
Ethyl methacrylate	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,2,3-Trichloropropane	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
trans-1,4-Dichloro-2-butene	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Isobutyl alcohol	230	R	ug/kg	230	230	R	ug/kg	230	210	R	ug/kg	210	210	R	ug/kg	210
1,1,1,2-Tetrachloroethane	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dibromo-3-chloropropane	12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11
1,2-Dibromoethane	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,4-Dioxane	230	R	ug/kg	230	230	R	ug/kg	230	210	R	ug/kg	210	210	R	ug/kg	210
3-Chloropropene	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Acetonitrile	120	U	ug/kg	120	120	U	ug/kg	120	110	U	ug/kg	110	110	U	ug/kg	110
Chloroprene	230	U	ug/kg	230	230	U	ug/kg	230	210	U	ug/kg	210	210	U	ug/kg	210
Methacrylonitrile	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Methyl methacrylate	12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11
Pentachloroethane	12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11
Propionitrile	120	U	ug/kg	120	120	U	ug/kg	120	110	U	ug/kg	110	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9743015				R9743014				R9743016				R9743017			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S01101				23S01201				23S01301				23S01401			
Collect Date:	07-APR-95				07-APR-95				07-APR-95				07-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES ug/kg																
Chloromethane	11	UJ	ug/kg	11	11	U	ug/kg	11	13	UJ	ug/kg	13	12	UJ	ug/kg	12
Bromomethane	11	U	ug/kg	11	11	U	ug/kg	11	13	U	ug/kg	13	12	U	ug/kg	12
Vinyl chloride	11	U	ug/kg	11	11	U	ug/kg	11	13	U	ug/kg	13	12	U	ug/kg	12
Chloroethane	11	U	ug/kg	11	11	U	ug/kg	11	13	U	ug/kg	13	12	U	ug/kg	12
Methylene chloride	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Acetone	11	UJ	ug/kg	11	11	UJ	ug/kg	11	13	UJ	ug/kg	13	12	UJ	ug/kg	12
Carbon disulfide	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
1,1-Dichloroethane	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
1,1-Dichloroethene	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
1,2-Dichloroethene (total)	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Chloroform	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
1,2-Dichloroethane	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
2-Butanone	11	UJ	ug/kg	11	11	U	ug/kg	11	13	UJ	ug/kg	13	12	UJ	ug/kg	12
1,1,1-Trichloroethane	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Carbon tetrachloride	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Bromodichloromethane	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
1,2-Dichloropropane	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
cis-1,3-Dichloropropene	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Trichloroethene	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Dibromochloromethane	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
1,1,2-Trichloroethane	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Benzene	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
trans-1,3-Dichloropropene	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Bromoform	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
4-Methyl-2-pentanone	11	U	ug/kg	11	11	U	ug/kg	11	13	U	ug/kg	13	12	U	ug/kg	12
2-Hexanone	11	U	ug/kg	11	11	U	ug/kg	11	13	U	ug/kg	13	12	U	ug/kg	12
Tetrachloroethene	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
1,1,2,2-Tetrachloroethane	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Toluene	2	J	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	2	J	ug/kg	6
Chlorobenzene	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Ethylbenzene	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Styrene	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Xylenes (total)	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Dichlorodifluoromethane	11	U	ug/kg	11	11	U	ug/kg	11	13	U	ug/kg	13	12	U	ug/kg	12
Trichlorofluoromethane	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
1,3-Dichlorobenzene	5	U	ug/kg	5	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Acrolein	110	U	ug/kg	110	110	U	ug/kg	110	130	U	ug/kg	130	120	U	ug/kg	120
Iodomethane	11	U	ug/kg	11	11	U	ug/kg	11	13	U	ug/kg	13	12	U	ug/kg	12
1,4-Dichlorobenzene	5	U	ug/kg	5	5	U	ug/kg	5	850	U	ug/kg	850	6	U	ug/kg	6
Acrylonitrile	110	U	ug/kg	110	110	U	ug/kg	110	130	U	ug/kg	130	120	U	ug/kg	120

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SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9743015				R9743014				R9743016				R9743017			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S01101				23S01201				23S01301				23S01401			
Collect Date:	07-APR-95				07-APR-95				07-APR-95				07-APR-95			
	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	6	U	ug/kg	6	6	U	ug/kg	6
1,2-Dichlorobenzene	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	800	U	ug/kg	800
2-Chloroethylvinyl ether	11	U	ug/kg	11	11	U	ug/kg	11	13	U	ug/kg	13	12	U	ug/kg	12
Ethyl methacrylate	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
1,2,3-Trichloropropane	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Isobutyl alcohol	220	R	ug/kg	220	220	R	ug/kg	220	260	R	ug/kg	260	240	R	ug/kg	240
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11	11	U	ug/kg	11	13	U	ug/kg	13	12	U	ug/kg	12
1,2-Dibromoethane	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
1,4-Dioxane	220	R	ug/kg	220	220	R	ug/kg	220	260	R	ug/kg	260	240	R	ug/kg	240
3-Chloropropene	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Acetonitrile	110	U	ug/kg	110	110	U	ug/kg	110	130	U	ug/kg	130	120	U	ug/kg	120
Chloroprene	220	U	ug/kg	220	220	U	ug/kg	220	260	U	ug/kg	260	240	U	ug/kg	240
Methacrylonitrile	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6
Methyl methacrylate	11	U	ug/kg	11	11	U	ug/kg	11	13	U	ug/kg	13	12	U	ug/kg	12
Pentachloroethane	11	UJ	ug/kg	11	11	U	ug/kg	11	13	UJ	ug/kg	13	12	UJ	ug/kg	12
Propionitrile	110	UJ	ug/kg	110	110	U	ug/kg	110	130	UJ	ug/kg	130	120	UJ	ug/kg	120
Vinyl acetate	11	U	ug/kg	11	11	U	ug/kg	11	13	U	ug/kg	13	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		R9743018			R9743019			R9743020			R9743021		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		23S01501			23S01601			23S01701			23S01701D		
Collect Date:		07-APR-95			07-APR-95			07-APR-95			07-APR-95		
	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	U	ug/kg	11	
Bromomethane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	
Vinyl chloride	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	
Chloroethane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	
Methylene chloride	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
Acetone	11	UJ	ug/kg	11	11	UJ	ug/kg	11	11	UJ	ug/kg	11	
Carbon disulfide	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
1,1-Dichloroethane	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
1,1-Dichloroethene	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
1,2-Dichloroethene (total)	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
Chloroform	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
1,2-Dichloroethane	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
2-Butanone	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	
1,1,1-Trichloroethane	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
Carbon tetrachloride	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
Bromodichloromethane	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
1,2-Dichloropropane	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
cis-1,3-Dichloropropene	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
Trichloroethene	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
Dibromochloromethane	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
1,1,2-Trichloroethane	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
Benzene	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
trans-1,3-Dichloropropene	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
Bromoform	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
4-Methyl-2-pentanone	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	
2-Hexanone	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	
Tetrachloroethene	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
1,1,2,2-Tetrachloroethane	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
Toluene	6	U	ug/kg	6	4	J	ug/kg	6	5	U	ug/kg	5	
Chlorobenzene	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
Ethylbenzene	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
Styrene	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
Xylenes (total)	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
Dichlorodifluoromethane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	
Trichlorofluoromethane	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
1,3-Dichlorobenzene	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
Acrolein	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	
Iodomethane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	
1,4-Dichlorobenzene	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	
Acrylonitrile	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9743018				R9743019				R9743020				R9743021			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S01501				23S01601				23S01701				23S01701D			
Collect Date:	07-APR-95				07-APR-95				07-APR-95				07-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichlorobenzene	750	U	ug/kg	750	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
2-Chloroethylvinyl ether	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Ethyl methacrylate	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,2,3-Trichloropropane	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
trans-1,4-Dichloro-2-butene	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Isobutyl alcohol	230	R	ug/kg	230	230	R	ug/kg	230	220	R	ug/kg	220	220	R	ug/kg	220
1,1,1,2-Tetrachloroethane	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
1,2-Dibromoethane	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,4-Dioxane	230	R	ug/kg	230	230	R	ug/kg	230	220	R	ug/kg	220	220	R	ug/kg	220
3-Chloropropene	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Acetonitrile	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Chloroprene	230	U	ug/kg	230	230	U	ug/kg	230	220	U	ug/kg	220	220	U	ug/kg	220
Methacrylonitrile	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Methyl methacrylate	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Pentachloroethane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Propionitrile	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Vinyl acetate	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		R9743022			M8775001			M8775002			M8780001		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		23S01801			23S01901			23S02001			23S02101		
Collect Date:		07-APR-95			07-APR-95			07-APR-95			08-APR-95		
		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 U	ug/kg	11	11 U	ug/kg	11
Bromomethane		11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Vinyl chloride		11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Chloroethane		11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Methylene chloride		5 U	ug/kg	5	11 U	ug/kg	11	10 U	ug/kg	10	10 U	ug/kg	10
Acetone		11 UJ	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Carbon disulfide		2 J	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,1-Dichloroethane		5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,1-Dichloroethene		5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,2-Dichloroethene (total)		5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Chloroform		5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,2-Dichloroethane		5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
2-Butanone		11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
1,1,1-Trichloroethane		5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Carbon tetrachloride		5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Bromodichloromethane		5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,2-Dichloropropane		5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
cis-1,3-Dichloropropene		5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Trichloroethene		5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Dibromochloromethane		5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,1,2-Trichloroethane		5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Benzene		5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
trans-1,3-Dichloropropene		5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Bromoform		5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
4-Methyl-2-pentanone		11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
2-Hexanone		11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Tetrachloroethene		5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,1,2,2-Tetrachloroethane		5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Toluene		5 U	ug/kg	5	1 J	ug/kg	6	6 U	ug/kg	6	6	ug/kg	6
Chlorobenzene		5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Ethylbenzene		5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Styrene		5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Xylenes (total)		5 U	ug/kg	5	1 J	ug/kg	6	2 J	ug/kg	6	8	ug/kg	6
Dichlorodifluoromethane		11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Trichlorofluoromethane		5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,3-Dichlorobenzene		5 U	ug/kg	5	370 U	ug/kg	370	6 U	ug/kg	6	6 U	ug/kg	6
Acrolein		110 U	ug/kg	110	110 U	ug/kg	110	110 U	ug/kg	110	110 U	ug/kg	110
Iodomethane		11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
1,4-Dichlorobenzene		5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Acrylonitrile		110 U	ug/kg	110	110 U	ug/kg	110	110 U	ug/kg	110	110 U	ug/kg	110

US Naval Station, Mayport, RCRA Facility Investigation Group 111 Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9743022				M8775001				M8775002				M8780001			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S01801				23S01901				23S02001				23S02101			
Collect Date:	07-APR-95				07-APR-95				07-APR-95				08-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
1,2-Dichlorobenzene	5	U	ug/kg	5	6	U	ug/kg	6	380	U	ug/kg	380	6	U	ug/kg	6
2-Chloroethylvinyl ether	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Ethyl methacrylate	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
1,2,3-Trichloropropane	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
Isobutyl alcohol	220	R	ug/kg	220	220	U	ug/kg	220	230	U	ug/kg	230	230	U	ug/kg	230
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
1,2-Dibromoethane	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
1,4-Dioxane	220	R	ug/kg	220	220	R	ug/kg	220	230	R	ug/kg	230	230	R	ug/kg	230
3-Chloropropene	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
Acetonitrile	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Chloroprene	220	U	ug/kg	220	220	U	ug/kg	220	230	U	ug/kg	230	230	U	ug/kg	230
Methacrylonitrile	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
Methyl methacrylate	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Pentachloroethane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Propionitrile	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Vinyl acetate	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8780003			M8780002			M8775003			M8775004		
Site	GROUP111			GROUP111			GROUP111			GROUP111		
Locator	23S02201			23S02301			23S02401			23S02501		
Collect Date:	08-APR-95			08-APR-95			07-APR-95			07-APR-95		
	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 U	ug/kg	11	11 U	ug/kg	11
Bromomethane	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Vinyl chloride	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Chloroethane	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Methylene chloride	8 U	ug/kg	8	11 U	ug/kg	11	8 U	ug/kg	8	13 U	ug/kg	13
Acetone	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Carbon disulfide	6 U	ug/kg	6	4 J	ug/kg	5	5 U	ug/kg	5	1 J	ug/kg	5
1,1-Dichloroethane	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5
1,1-Dichloroethene	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5
1,2-Dichloroethene (total)	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5
Chloroform	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5
1,2-Dichloroethane	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5
2-Butanone	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
1,1,1-Trichloroethane	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5
Carbon tetrachloride	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5
Bromodichloromethane	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5
1,2-Dichloropropane	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5
cis-1,3-Dichloropropene	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5
Trichloroethene	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5
Dibromochloromethane	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5
1,1,2-Trichloroethane	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5
Benzene	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5
trans-1,3-Dichloropropene	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5
Bromoform	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5
4-Methyl-2-pentanone	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
2-Hexanone	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Tetrachloroethene	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5
1,1,2,2-Tetrachloroethane	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5
Toluene	7	ug/kg	6	13	ug/kg	5	5 U	ug/kg	5	2 J	ug/kg	5
Chlorobenzene	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5
Ethylbenzene	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5
Styrene	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5
Xylenes (total)	12	ug/kg	6	2 J	ug/kg	5	5 U	ug/kg	5	6	ug/kg	5
Dichlorodifluoromethane	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Trichlorofluoromethane	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5
1,3-Dichlorobenzene	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5
Acrolein	110 U	ug/kg	110	110 U	ug/kg	110	110 U	ug/kg	110	110 U	ug/kg	110
Iodomethane	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
1,4-Dichlorobenzene	6 U	ug/kg	6	5 U	ug/kg	5	360 U	ug/kg	360	5 U	ug/kg	5
Acrylonitrile	110 U	ug/kg	110	110 U	ug/kg	110	110 U	ug/kg	110	110 U	ug/kg	110

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8780003				M8780002				M8775003				M8775004			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S02201				23S02301				23S02401				23S02501			
Collect Date:	08-APR-95				08-APR-95				07-APR-95				07-APR-95			
	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	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichlorobenzene	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
2-Chloroethylvinyl ether	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Ethyl methacrylate	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,2,3-Trichloropropane	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
trans-1,4-Dichloro-2-butene	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Isobutyl alcohol	230	U	ug/kg	230	220	U	ug/kg	220	220	U	ug/kg	220	220	U	ug/kg	220
1,1,1,2-Tetrachloroethane	6	U	ug/kg	6	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	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
1,2-Dibromoethane	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,4-Dioxane	230	R	ug/kg	230	220	R	ug/kg	220	220	R	ug/kg	220	220	R	ug/kg	220
3-Chloropropene	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Acetonitrile	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Chloroprene	230	U	ug/kg	230	220	U	ug/kg	220	220	U	ug/kg	220	220	U	ug/kg	220
Methacrylonitrile	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Methyl methacrylate	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Pentachloroethane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Propionitrile	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Vinyl acetate	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.

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SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		M8775005				M8775006				M8775007				M8775008			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		23S02601				23S02701				23S02701D				23S02801			
Collect Date:		07-APR-95				07-APR-95				07-APR-95				07-APR-95			
		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	11	U	ug/kg	11	11	U	ug/kg	11
Bromomethane		10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Vinyl chloride		10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Chloroethane		10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Methylene chloride		13	U	ug/kg	13	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11
Acetone		10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Carbon disulfide		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,1-Dichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,1-Dichloroethene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,2-Dichloroethene (total)		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Chloroform		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,2-Dichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
2-Butanone		10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
1,1,1-Trichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Carbon tetrachloride		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Bromodichloromethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,2-Dichloropropane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
cis-1,3-Dichloropropene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Trichloroethene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Dibromochloromethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,1,2-Trichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Benzene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
trans-1,3-Dichloropropene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Bromoform		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
4-Methyl-2-pentanone		10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
2-Hexanone		10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Tetrachloroethene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,1,2,2-Tetrachloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Toluene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Chlorobenzene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Ethylbenzene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Styrene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Xylenes (total)		2	J	ug/kg	5	2	J	ug/kg	5	5	U	ug/kg	5	2	J	ug/kg	6
Dichlorodifluoromethane		10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Trichlorofluoromethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,3-Dichlorobenzene		5	U	ug/kg	5	5	U	ug/kg	5	360	U	ug/kg	360	6	U	ug/kg	6
Acrolein		100	U	ug/kg	100	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Iodomethane		10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
1,4-Dichlorobenzene		350	U	ug/kg	350	5	U	ug/kg	5	360	U	ug/kg	360	6	U	ug/kg	6
Acrylonitrile		100	U	ug/kg	100	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110

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Lab Sample Number:	M8775005				M8775006				M8775007				M8775008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S02601				23S02701				23S02701D				23S02801			
Collect Date:	07-APR-95				07-APR-95				07-APR-95				07-APR-95			
	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	6	U	ug/kg	6
1,2-Dichlorobenzene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	370	U	ug/kg	370
2-Chloroethylvinyl ether	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Ethyl methacrylate	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,2,3-Trichloropropane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Isobutyl alcohol	210	U	ug/kg	210	220	U	ug/kg	220	220	U	ug/kg	220	220	U	ug/kg	220
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,2-Dibromo-3-chloropropane	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
1,2-Dibromoethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,4-Dioxane	210	R	ug/kg	210	220	R	ug/kg	220	220	R	ug/kg	220	220	R	ug/kg	220
3-Chloropropene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Acetonitrile	100	U	ug/kg	100	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Chloroprene	210	U	ug/kg	210	220	U	ug/kg	220	220	U	ug/kg	220	220	U	ug/kg	220
Methacrylonitrile	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Methyl methacrylate	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Pentachloroethane	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Propionitrile	100	U	ug/kg	100	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Vinyl acetate	10	U	ug/kg	10	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.

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SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		M8994003				M8994004				M8780004				M8780005			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		23S02901				23S02901D				24S00101				24S00201			
Collect Date:		20-MAY-95				20-MAY-95				08-APR-95				08-APR-95			
		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	U	ug/kg	11	11	U	ug/kg	11
Bromomethane		11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Vinyl chloride		11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Chloroethane		11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Methylene chloride		8	U	ug/kg	8	6	U	ug/kg	6	14	U	ug/kg	14	15	U	ug/kg	15
Acetone		11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Carbon disulfide		5	U	ug/kg	5	5	U	ug/kg	5	2	J	ug/kg	6	3	J	ug/kg	5
1,1-Dichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,1-Dichloroethene		5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dichloroethene (total)		5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Chloroform		5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
2-Butanone		11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
1,1,1-Trichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Carbon tetrachloride		5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Bromodichloromethane		5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dichloropropane		5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
cis-1,3-Dichloropropene		5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Trichloroethene		5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Dibromochloromethane		5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,1,2-Trichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Benzene		5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
trans-1,3-Dichloropropene		5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Bromoform		5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
4-Methyl-2-pentanone		11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
2-Hexanone		11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Tetrachloroethene		5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,1,2,2-Tetrachloroethane		5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Toluene		5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Chlorobenzene		5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Ethylbenzene		5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Styrene		5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Xylenes (total)		5	U	ug/kg	5	5	U	ug/kg	5	3	J	ug/kg	6	5	U	ug/kg	5
Dichlorodifluoromethane		11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Trichlorofluoromethane		5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,3-Dichlorobenzene		5	U	ug/kg	5	1800	U	ug/kg	1800	6	U	ug/kg	6	5	U	ug/kg	5
Acrolein		110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Iodomethane		11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
1,4-Dichlorobenzene		5	U	ug/kg	5	5	U	ug/kg	5	370	U	ug/kg	370	5	U	ug/kg	5
Acrylonitrile		110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110

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Lab Sample Number:	M8994003				M8994004				M8780004				M8780005			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S02901				23S029010				24S00101				24S00201			
Collect Date:	20-MAY-95				20-MAY-95				08-APR-95				08-APR-95			
	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	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dichlorobenzene	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
2-Chloroethylvinyl ether	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Ethyl methacrylate	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,2,3-Trichloropropane	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Isobutyl alcohol	220	U	ug/kg	220	210	U	ug/kg	210	220	U	ug/kg	220	220	U	ug/kg	220
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
1,2-Dibromoethane	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,4-Dioxane	220	R	ug/kg	220	210	R	ug/kg	210	220	R	ug/kg	220	220	R	ug/kg	220
3-Chloropropene	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Acetonitrile	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Chloroprene	220	U	ug/kg	220	210	U	ug/kg	210	220	U	ug/kg	220	220	U	ug/kg	220
Methacrylonitrile	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Methyl methacrylate	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Pentachloroethane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Propionitrile	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Vinyl acetate	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.

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Lab Sample Number:	M8780006			M8780007			M8780008			M8780009		
Site	GROUP111			GROUP111			GROUP111			GROUP111		
Locator	24S00301			24S00401			24S00401D			24S00501		
Collect Date:	08-APR-95			08-APR-95			08-APR-95			08-APR-95		
	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 U	ug/kg	11	11 U	ug/kg	11
Bromomethane	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Vinyl chloride	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Chloroethane	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Methylene chloride	15 U	ug/kg	15	14 U	ug/kg	14	14 U	ug/kg	14	15 U	ug/kg	15
Acetone	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Carbon disulfide	2 J	ug/kg	6	5 U	ug/kg	5	1 J	ug/kg	5	1 J	ug/kg	6
1,1-Dichloroethane	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
1,1-Dichloroethene	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
1,2-Dichloroethene (total)	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Chloroform	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
1,2-Dichloroethane	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
2-Butanone	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
1,1,1-Trichloroethane	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Carbon tetrachloride	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Bromodichloromethane	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
1,2-Dichloropropane	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
cis-1,3-Dichloropropene	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Trichloroethene	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Dibromochloromethane	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
1,1,2-Trichloroethane	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Benzene	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
trans-1,3-Dichloropropene	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Bromoform	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
4-Methyl-2-pentanone	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
2-Hexanone	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Tetrachloroethene	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
1,1,2,2-Tetrachloroethane	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Toluene	3 J	ug/kg	6	5 U	ug/kg	5	1 J	ug/kg	5	6 U	ug/kg	6
Chlorobenzene	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Ethylbenzene	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Styrene	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Xylenes (total)	6	ug/kg	6	3 J	ug/kg	5	6	ug/kg	5	3 J	ug/kg	6
Dichlorodifluoromethane	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Trichlorofluoromethane	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
1,3-Dichlorobenzene	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Acrolein	110 U	ug/kg	110	110 U	ug/kg	110	110 U	ug/kg	110	110 U	ug/kg	110
Iodomethane	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
1,4-Dichlorobenzene	6 U	ug/kg	6	5 U	ug/kg	5	370 U	ug/kg	370	6 U	ug/kg	6
Acrylonitrile	110 U	ug/kg	110	110 U	ug/kg	110	110 U	ug/kg	110	110 U	ug/kg	110

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Lab Sample Number:	M8780006				M8780007				M8780008				M8780009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	24S00301				24S00401				24S00401D				24S00501			
Collect Date:	08-APR-95				08-APR-95				08-APR-95				08-APR-95			
	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	5	U	ug/kg	5	6	U	ug/kg	6
1,2-Dichlorobenzene	370	U	ug/kg	370	360	U	ug/kg	360	5	U	ug/kg	5	370	U	ug/kg	370
2-Chloroethylvinyl ether	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Ethyl methacrylate	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,2,3-Trichloropropane	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
trans-1,4-Dichloro-2-butene	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Isobutyl alcohol	220	U	ug/kg	220	220	U	ug/kg	220	220	U	ug/kg	220	220	U	ug/kg	220
1,1,1,2-Tetrachloroethane	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
1,2-Dibromoethane	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,4-Dioxane	220	R	ug/kg	220	220	R	ug/kg	220	220	R	ug/kg	220	220	R	ug/kg	220
3-Chloropropene	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Acetonitrile	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Chloroprene	220	U	ug/kg	220	220	U	ug/kg	220	220	U	ug/kg	220	220	U	ug/kg	220
Methacrylonitrile	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Methyl methacrylate	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Pentachloroethane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Propionitrile	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Vinyl acetate	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.

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SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		M8867001			M8985001			M8985002			M8793001		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		24S00601			24S00701			24S00701D			25S00101		
Collect Date:		24-APR-95			19-MAY-95			19-MAY-95			10-APR-95		
	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	11	U	ug/kg	11	
Bromomethane	10	U	ug/kg	10	11	UJ	ug/kg	11	11	UJ	ug/kg	11	
Vinyl chloride	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	
Chloroethane	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	
Methylene chloride	6	U	ug/kg	6	9	U	ug/kg	9	16	U	ug/kg	16	
Acetone	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	
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	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	
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	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	
2-Hexanone	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	
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)	4	J	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	
Dichlorodifluoromethane	10	U	ug/kg	10	11	UJ	ug/kg	11	11	U	ug/kg	11	
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	1800	U	ug/kg	1800	
Acrolein	100	UJ	ug/kg	100	110	U	ug/kg	110	110	U	ug/kg	110	
Iodomethane	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	
1,4-Dichlorobenzene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	
Acrylonitrile	100	U	ug/kg	100	110	U	ug/kg	110	110	U	ug/kg	110	

	VALUE	QUAL	UNITS	DL
Chloromethane	10	U	ug/kg	10
Bromomethane	10	U	ug/kg	10
Vinyl chloride	10	U	ug/kg	10
Chloroethane	10	U	ug/kg	10
Methylene chloride	6	U	ug/kg	6
Acetone	1	J	ug/kg	5
Carbon disulfide	5	U	ug/kg	5
1,1-Dichloroethane	5	U	ug/kg	5
1,1-Dichloroethene	5	U	ug/kg	5
1,2-Dichloroethene (total)	5	U	ug/kg	5
Chloroform	5	U	ug/kg	5
1,2-Dichloroethane	5	U	ug/kg	5
2-Butanone	10	U	ug/kg	10
1,1,1-Trichloroethane	5	U	ug/kg	5
Carbon tetrachloride	5	U	ug/kg	5
Bromodichloromethane	5	U	ug/kg	5
1,2-Dichloropropane	5	U	ug/kg	5
cis-1,3-Dichloropropene	5	U	ug/kg	5
Trichloroethene	5	U	ug/kg	5
Dibromochloromethane	5	U	ug/kg	5
1,1,2-Trichloroethane	5	U	ug/kg	5
Benzene	5	U	ug/kg	5
trans-1,3-Dichloropropene	5	U	ug/kg	5
Bromoform	5	U	ug/kg	5
4-Methyl-2-pentanone	10	U	ug/kg	10
2-Hexanone	10	U	ug/kg	10
Tetrachloroethene	5	U	ug/kg	5
1,1,2,2-Tetrachloroethane	5	U	ug/kg	5
Toluene	2	J	ug/kg	5
Chlorobenzene	5	U	ug/kg	5
Ethylbenzene	5	U	ug/kg	5
Styrene	5	U	ug/kg	5
Xylenes (total)	2	J	ug/kg	5
Dichlorodifluoromethane	10	U	ug/kg	10
Trichlorofluoromethane	5	U	ug/kg	5
1,3-Dichlorobenzene	5	U	ug/kg	5
Acrolein	100	U	ug/kg	100
Iodomethane	10	U	ug/kg	10
1,4-Dichlorobenzene	5	U	ug/kg	5
Acrylonitrile	100	U	ug/kg	100

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Lab Sample Number:	M8867001				M8985001				M8985002				M8793001			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	24S00601				24S00701				24S00701D				25S00101			
Collect Date:	24-APR-95				19-MAY-95				19-MAY-95				10-APR-95			
	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	1800	U	ug/kg	1800	5	U	ug/kg	5	1800	U	ug/kg	1800	5	U	ug/kg	5
2-Chloroethylvinyl ether	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	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	220	U	ug/kg	220	220	U	ug/kg	220	210	UJ	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	11	U	ug/kg	11	11	U	ug/kg	11	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	220	R	ug/kg	220	220	R	ug/kg	220	210	R	ug/kg	210
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	110	U	ug/kg	110	110	U	ug/kg	110	100	U	ug/kg	100
Chloroprene	210	U	ug/kg	210	220	U	ug/kg	220	220	U	ug/kg	220	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	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10
Pentachloroethane	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10
Propionitrile	100	U	ug/kg	100	110	U	ug/kg	110	110	U	ug/kg	110	100	U	ug/kg	100
Vinyl acetate	10	U	ug/kg	10	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8793006			M8793007			M8793009			M8793010		
Site	GROUP111			GROUP111			GROUP111			GROUP111		
Locator	25S00201			25S00301			25S00401			25S00401D		
Collect Date:	10-APR-95			10-APR-95			10-APR-95			10-APR-95		
	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	12 U	ug/kg	12	11 U	ug/kg	11
Bromomethane	11 U	ug/kg	11	11 U	ug/kg	11	12 U	ug/kg	12	11 U	ug/kg	11
Vinyl chloride	11 U	ug/kg	11	11 U	ug/kg	11	12 U	ug/kg	12	11 U	ug/kg	11
Chloroethane	11 U	ug/kg	11	11 U	ug/kg	11	12 U	ug/kg	12	11 U	ug/kg	11
Methylene chloride	10 U	ug/kg	10	13 U	ug/kg	13	18 U	ug/kg	18	14 U	ug/kg	14
Acetone	11 U	ug/kg	11	24 U	ug/kg	24	48 U	ug/kg	48	25 U	ug/kg	25
Carbon disulfide	5 U	ug/kg	5	1 J	ug/kg	6	2 J	ug/kg	6	1 J	ug/kg	6
1,1-Dichloroethane	5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,1-Dichloroethene	5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,2-Dichloroethene (total)	5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Chloroform	5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,2-Dichloroethane	5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
2-Butanone	4 J	ug/kg	11	11 U	ug/kg	11	6 J	ug/kg	12	7 J	ug/kg	11
1,1,1-Trichloroethane	5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Carbon tetrachloride	5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Bromodichloromethane	5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,2-Dichloropropane	5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
cis-1,3-Dichloropropene	5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Trichloroethene	5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Dibromochloromethane	5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,1,2-Trichloroethane	5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Benzene	5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
trans-1,3-Dichloropropene	5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Bromoform	5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
4-Methyl-2-pentanone	11 U	ug/kg	11	11 U	ug/kg	11	12 U	ug/kg	12	11 U	ug/kg	11
2-Hexanone	11 U	ug/kg	11	11 U	ug/kg	11	12 U	ug/kg	12	11 U	ug/kg	11
Tetrachloroethene	5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,1,2,2-Tetrachloroethane	5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Toluene	1 J	ug/kg	5	22	ug/kg	6	14	ug/kg	6	2 J	ug/kg	6
Chlorobenzene	5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Ethylbenzene	5 U	ug/kg	5	13	ug/kg	6	6 J	ug/kg	6	6 U	ug/kg	6
Styrene	5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Xylenes (total)	5 J	ug/kg	5	81	ug/kg	6	43	ug/kg	6	4 J	ug/kg	6
Dichlorodifluoromethane	11 U	ug/kg	11	11 U	ug/kg	11	12 U	ug/kg	12	11 U	ug/kg	11
Trichlorofluoromethane	5 U	ug/kg	5	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,3-Dichlorobenzene	5 U	ug/kg	5	6 U	ug/kg	6	800 U	ug/kg	800	6 U	ug/kg	6
Acrolein	110 U	ug/kg	110	110 U	ug/kg	110	120 U	ug/kg	120	110 U	ug/kg	110
Iodomethane	11 U	ug/kg	11	11 U	ug/kg	11	12 U	ug/kg	12	11 U	ug/kg	11
1,4-Dichlorobenzene	720 U	ug/kg	720	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Acrylonitrile	110 U	ug/kg	110	110 U	ug/kg	110	120 U	ug/kg	120	110 U	ug/kg	110

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8793006				M8793007				M8793009				M8793010			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	25S00201				25S00301				25S00401				25S00401D			
Collect Date:	10-APR-95				10-APR-95				10-APR-95				10-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
1,2-Dichlorobenzene	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	740	U	ug/kg	740
2-Chloroethylvinyl ether	11	U	ug/kg	11	11	U	ug/kg	11	12	U	ug/kg	12	11	U	ug/kg	11
Ethyl methacrylate	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
1,2,3-Trichloropropane	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
Isobutyl alcohol	220	UJ	ug/kg	220	220	UJ	ug/kg	220	240	UJ	ug/kg	240	220	UJ	ug/kg	220
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11	11	U	ug/kg	11	12	U	ug/kg	12	11	U	ug/kg	11
1,2-Dibromoethane	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
1,4-Dioxane	220	R	ug/kg	220	220	R	ug/kg	220	240	R	ug/kg	240	220	R	ug/kg	220
3-Chloropropene	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
Acetonitrile	110	U	ug/kg	110	110	U	ug/kg	110	120	U	ug/kg	120	110	U	ug/kg	110
Chloroprene	220	U	ug/kg	220	220	U	ug/kg	220	240	U	ug/kg	240	220	U	ug/kg	220
Methacrylonitrile	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
Methyl methacrylate	11	U	ug/kg	11	11	U	ug/kg	11	12	U	ug/kg	12	11	U	ug/kg	11
Pentachloroethane	11	U	ug/kg	11	11	U	ug/kg	11	12	U	ug/kg	12	11	U	ug/kg	11
Propionitrile	110	U	ug/kg	110	110	U	ug/kg	110	120	U	ug/kg	120	110	U	ug/kg	110
Vinyl acetate	11	U	ug/kg	11	11	U	ug/kg	11	12	U	ug/kg	12	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		M8793008			M8793002			M8793003			M8793004		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		25S00501			25S00601			25S00701			25S00801		
Collect Date:		10-APR-95			10-APR-95			10-APR-95			10-APR-95		
		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	13 U	ug/kg	13	11 U	ug/kg	11	11 U	ug/kg	11
Bromomethane		11 U	ug/kg	11	13 U	ug/kg	13	11 U	ug/kg	11	11 U	ug/kg	11
Vinyl chloride		11 U	ug/kg	11	13 U	ug/kg	13	11 U	ug/kg	11	11 U	ug/kg	11
Chloroethane		11 U	ug/kg	11	13 U	ug/kg	13	11 U	ug/kg	11	11 U	ug/kg	11
Methylene chloride		16 U	ug/kg	16	13 U	ug/kg	13	10 U	ug/kg	10	15 U	ug/kg	15
Acetone		42 U	ug/kg	42	13 U	ug/kg	13	11 U	ug/kg	11	11 U	ug/kg	11
Carbon disulfide		6 U	ug/kg	6	7 U	ug/kg	7	1 J	ug/kg	5	3 J	ug/kg	6
1,1-Dichloroethane		6 U	ug/kg	6	7 U	ug/kg	7	5 U	ug/kg	5	6 U	ug/kg	6
1,1-Dichloroethene		6 U	ug/kg	6	7 U	ug/kg	7	5 U	ug/kg	5	6 U	ug/kg	6
1,2-Dichloroethene (total)		6 U	ug/kg	6	7 U	ug/kg	7	5 U	ug/kg	5	6 U	ug/kg	6
Chloroform		6 U	ug/kg	6	7 U	ug/kg	7	5 U	ug/kg	5	6 U	ug/kg	6
1,2-Dichloroethane		6 U	ug/kg	6	7 U	ug/kg	7	5 U	ug/kg	5	6 U	ug/kg	6
2-Butanone		10 J	ug/kg	11	13 U	ug/kg	13	11 U	ug/kg	11	4 J	ug/kg	11
1,1,1-Trichloroethane		6 U	ug/kg	6	7 U	ug/kg	7	5 U	ug/kg	5	6 U	ug/kg	6
Carbon tetrachloride		6 U	ug/kg	6	7 U	ug/kg	7	5 U	ug/kg	5	6 U	ug/kg	6
Bromodichloromethane		6 U	ug/kg	6	7 U	ug/kg	7	5 U	ug/kg	5	6 U	ug/kg	6
1,2-Dichloropropane		6 U	ug/kg	6	7 U	ug/kg	7	5 U	ug/kg	5	6 U	ug/kg	6
cis-1,3-Dichloropropene		6 U	ug/kg	6	7 U	ug/kg	7	5 U	ug/kg	5	6 U	ug/kg	6
Trichloroethene		6 U	ug/kg	6	7 U	ug/kg	7	5 U	ug/kg	5	6 U	ug/kg	6
Dibromochloromethane		6 U	ug/kg	6	7 U	ug/kg	7	5 U	ug/kg	5	6 U	ug/kg	6
1,1,2-Trichloroethane		6 U	ug/kg	6	7 U	ug/kg	7	5 U	ug/kg	5	6 U	ug/kg	6
Benzene		6 U	ug/kg	6	7 U	ug/kg	7	5 U	ug/kg	5	6 U	ug/kg	6
trans-1,3-Dichloropropene		6 U	ug/kg	6	7 U	ug/kg	7	5 U	ug/kg	5	6 U	ug/kg	6
Bromoform		6 U	ug/kg	6	7 U	ug/kg	7	5 U	ug/kg	5	6 U	ug/kg	6
4-Methyl-2-pentanone		11 U	ug/kg	11	13 U	ug/kg	13	11 U	ug/kg	11	11 U	ug/kg	11
2-Hexanone		11 U	ug/kg	11	13 U	ug/kg	13	11 U	ug/kg	11	11 U	ug/kg	11
Tetrachloroethene		6 U	ug/kg	6	7 U	ug/kg	7	5 U	ug/kg	5	6 U	ug/kg	6
1,1,2,2-Tetrachloroethane		6 U	ug/kg	6	7 U	ug/kg	7	5 U	ug/kg	5	6 U	ug/kg	6
Toluene		1 J	ug/kg	6	7 U	ug/kg	7	2 J	ug/kg	5	8	ug/kg	6
Chlorobenzene		6 U	ug/kg	6	7 U	ug/kg	7	5 U	ug/kg	5	6 U	ug/kg	6
Ethylbenzene		6 U	ug/kg	6	7 U	ug/kg	7	5 U	ug/kg	5	6 U	ug/kg	6
Styrene		6 U	ug/kg	6	7 U	ug/kg	7	5 U	ug/kg	5	6 U	ug/kg	6
Xylenes (total)		2 J	ug/kg	6	1 J	ug/kg	7	5 J	ug/kg	5	18	ug/kg	6
Dichlorodifluoromethane		11 U	ug/kg	11	13 U	ug/kg	13	11 U	ug/kg	11	11 U	ug/kg	11
Trichlorofluoromethane		6 U	ug/kg	6	7 U	ug/kg	7	5 U	ug/kg	5	6 U	ug/kg	6
1,3-Dichlorobenzene		6 U	ug/kg	6	7 U	ug/kg	7	5 U	ug/kg	5	740 U	ug/kg	740
Acrolein		110 UJ	ug/kg	110	130 U	ug/kg	130	110 U	ug/kg	110	110 U	ug/kg	110
Iodomethane		11 U	ug/kg	11	13 U	ug/kg	13	11 U	ug/kg	11	11 U	ug/kg	11
1,4-Dichlorobenzene		1900 U	ug/kg	1900	7 U	ug/kg	7	5 U	ug/kg	5	6 U	ug/kg	6
Acrylonitrile		110 UJ	ug/kg	110	130 U	ug/kg	130	110 U	ug/kg	110	110 U	ug/kg	110

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SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8793008				M8793002				M8793003				M8793004			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	25S00501				25S00601				25S00701				25S00801			
Collect Date:	10-APR-95				10-APR-95				10-APR-95				10-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	6	U	ug/kg	6	7	U	ug/kg	7	5	U	ug/kg	5	6	U	ug/kg	6
1,2-Dichlorobenzene	6	U	ug/kg	6	7	U	ug/kg	7	5	U	ug/kg	5	6	U	ug/kg	6
2-Chloroethylvinyl ether	11	U	ug/kg	11	13	U	ug/kg	13	11	U	ug/kg	11	11	U	ug/kg	11
Ethyl methacrylate	6	U	ug/kg	6	7	U	ug/kg	7	5	U	ug/kg	5	6	U	ug/kg	6
1,2,3-Trichloropropane	6	U	ug/kg	6	7	U	ug/kg	7	5	U	ug/kg	5	6	U	ug/kg	6
trans-1,4-Dichloro-2-butene	6	U	ug/kg	6	7	U	ug/kg	7	5	U	ug/kg	5	6	U	ug/kg	6
Isobutyl alcohol	230	U	ug/kg	230	270	UJ	ug/kg	270	220	UJ	ug/kg	220	220	UJ	ug/kg	220
1,1,1,2-Tetrachloroethane	6	U	ug/kg	6	7	U	ug/kg	7	5	U	ug/kg	5	6	U	ug/kg	6
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11	13	U	ug/kg	13	11	U	ug/kg	11	11	U	ug/kg	11
1,2-Dibromoethane	6	U	ug/kg	6	7	U	ug/kg	7	5	U	ug/kg	5	6	U	ug/kg	6
1,4-Dioxane	230	R	ug/kg	230	270	R	ug/kg	270	220	R	ug/kg	220	220	R	ug/kg	220
3-Chloropropene	6	U	ug/kg	6	7	U	ug/kg	7	5	U	ug/kg	5	6	U	ug/kg	6
Acetonitrile	110	U	ug/kg	110	130	U	ug/kg	130	110	U	ug/kg	110	110	U	ug/kg	110
Chloroprene	230	U	ug/kg	230	270	U	ug/kg	270	220	U	ug/kg	220	220	U	ug/kg	220
Methacrylonitrile	6	U	ug/kg	6	7	U	ug/kg	7	5	U	ug/kg	5	6	U	ug/kg	6
Methyl methacrylate	11	U	ug/kg	11	13	U	ug/kg	13	11	U	ug/kg	11	11	U	ug/kg	11
Pentachloroethane	11	U	ug/kg	11	13	U	ug/kg	13	11	U	ug/kg	11	11	U	ug/kg	11
Propionitrile	110	U	ug/kg	110	130	U	ug/kg	130	110	U	ug/kg	110	110	U	ug/kg	110
Vinyl acetate	11	U	ug/kg	11	13	U	ug/kg	13	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8793005				R9738002				R9738003				R9738001			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	25S00901				44S00101				44S00101D				44S00201			
Collect Date:	10-APR-95				05-APR-95				05-APR-95				05-APR-95			
	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	U	ug/kg	11	10	U	ug/kg	10
Bromomethane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10
Vinyl chloride	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10
Chloroethane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10
Methylene chloride	12	U	ug/kg	12	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Acetone	11	U	ug/kg	11	11	UJ	ug/kg	11	11	UJ	ug/kg	11	10	UJ	ug/kg	10
Carbon disulfide	4	J	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	11	U	ug/kg	11	11	UJ	ug/kg	11	11	U	ug/kg	11	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	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10
2-Hexanone	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	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	4	J	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)	4	J	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Dichlorodifluoromethane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10
Trichlorofluoromethane	5	U	ug/kg	5	2	J	ug/kg	5	2	J	ug/kg	5	5	U	ug/kg	5
1,3-Dichlorobenzene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	690	U	ug/kg	690
Acrolein	110	U	ug/kg	110	110	UJ	ug/kg	110	110	U	ug/kg	110	100	U	ug/kg	100
Iodomethane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10
1,4-Dichlorobenzene	1800	U	ug/kg	1800	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Acrylonitrile	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	100	U	ug/kg	100

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8793005				R9738002				R9738003				R9738001			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	25S00901				44S00101				44S00101D				44S00201			
Collect Date:	10-APR-95				05-APR-95				05-APR-95				05-APR-95			
	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	730	U	ug/kg	730	5	U	ug/kg	5	690	U	ug/kg	690
2-Chloroethylvinyl ether	11	U	ug/kg	11	11	UJ	ug/kg	11	11	UJ	ug/kg	11	10	UJ	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	220	UJ	ug/kg	220	220	R	ug/kg	220	91	J	ug/kg	220	210	R	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	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	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	220	R	ug/kg	220	220	R	ug/kg	220	220	R	ug/kg	220	210	R	ug/kg	210
3-Chloropropene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Acetonitrile	110	U	ug/kg	110	110	U	ug/kg	110	110	UJ	ug/kg	110	100	UJ	ug/kg	100
Chloroprene	220	U	ug/kg	220	220	U	ug/kg	220	220	U	ug/kg	220	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	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10
Pentachloroethane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10
Propionitrile	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	100	U	ug/kg	100
Vinyl acetate	11	U	ug/kg	11	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		R9738004			R9738005			R9738006			R9738007		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		44S00301			44S00401			44S00501			44S00601		
Collect Date:		05-APR-95			05-APR-95			05-APR-95			05-APR-95		
	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	10	U	ug/kg	10	11	U	ug/kg	11
Bromomethane		11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11
Vinyl chloride		11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11
Chloroethane		11	U	ug/kg	11	11	U	ug/kg	11	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		11	UJ	ug/kg	11	11	UJ	ug/kg	11	10	UJ	ug/kg	10	11	UJ	ug/kg	11
Carbon disulfide		5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,1-Dichloroethane		5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,1-Dichloroethene		5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloroethene (total)		5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Chloroform		5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloroethane		5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
2-Butanone		11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11
1,1,1-Trichloroethane		5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Carbon tetrachloride		5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Bromodichloromethane		5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloropropane		5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
cis-1,3-Dichloropropene		5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Trichloroethene		5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Dibromochloromethane		5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,1,2-Trichloroethane		5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Benzene		5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
trans-1,3-Dichloropropene		5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Bromoform		5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
4-Methyl-2-pentanone		11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11
2-Hexanone		11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11
Tetrachloroethene		5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,1,2,2-Tetrachloroethane		5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Toluene		5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Chlorobenzene		5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Ethylbenzene		5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Styrene		5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Xylenes (total)		5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Dichlorodifluoromethane		11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11
Trichlorofluoromethane		5	U	ug/kg	5	2	J	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,3-Dichlorobenzene		690	U	ug/kg	690	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Acrolein		110	U	ug/kg	110	110	U	ug/kg	110	100	U	ug/kg	100	110	U	ug/kg	110
Iodomethane		11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11
1,4-Dichlorobenzene		5	U	ug/kg	5	730	U	ug/kg	730	5	U	ug/kg	5	5	U	ug/kg	5
Acrylonitrile		110	U	ug/kg	110	110	U	ug/kg	110	100	U	ug/kg	100	110	U	ug/kg	110

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9738004				R9738005				R9738006				R9738007			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	44S00301				44S00401				44S00501				44S00601			
Collect Date:	05-APR-95				05-APR-95				05-APR-95				05-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichlorobenzene	5	U	ug/kg	5	730	U	ug/kg	730	5	U	ug/kg	5	700	U	ug/kg	700
2-Chloroethylvinyl ether	11	UJ	ug/kg	11	11	UJ	ug/kg	11	10	UJ	ug/kg	10	11	UJ	ug/kg	11
Ethyl methacrylate	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,2,3-Trichloropropane	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Isobutyl alcohol	210	R	ug/kg	210	220	R	ug/kg	220	210	R	ug/kg	210	210	R	ug/kg	210
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11
1,2-Dibromoethane	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,4-Dioxane	210	R	ug/kg	210	220	R	ug/kg	220	210	R	ug/kg	210	210	R	ug/kg	210
3-Chloropropene	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Acetonitrile	110	UJ	ug/kg	110	110	UJ	ug/kg	110	100	UJ	ug/kg	100	110	UJ	ug/kg	110
Chloroprene	210	U	ug/kg	210	220	U	ug/kg	220	210	U	ug/kg	210	210	U	ug/kg	210
Methacrylonitrile	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Methyl methacrylate	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11
Pentachloroethane	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11
Propionitrile	110	U	ug/kg	110	110	U	ug/kg	110	100	U	ug/kg	100	110	U	ug/kg	110
Vinyl acetate	11	U	ug/kg	11	11	U	ug/kg	11	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		R9738008				R9738009				R9738010				R9955017		
Site		GROUP111				GROUP111				GROUP111				GROUP111		
Locator		44S00701				44S00801				44S00901				44S01001		
Collect Date:		05-APR-95				05-APR-95				05-APR-95				24-MAY-95		
		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	11	U	ug/kg	11	11	U	ug/kg	11
Bromomethane		10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Vinyl chloride		10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Chloroethane		10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Methylene chloride		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7
Acetone		10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Carbon disulfide		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,1-Dichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,1-Dichloroethene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,2-Dichloroethene (total)		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Chloroform		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,2-Dichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
2-Butanone		10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
1,1,1-Trichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Carbon tetrachloride		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Bromodichloromethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,2-Dichloropropane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
cis-1,3-Dichloropropene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Trichloroethene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Dibromochloromethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,1,2-Trichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Benzene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
trans-1,3-Dichloropropene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Bromoform		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
4-Methyl-2-pentanone		10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
2-Hexanone		10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Tetrachloroethene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,1,2,2-Tetrachloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Toluene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Chlorobenzene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Ethylbenzene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Styrene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Xylenes (total)		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	1	J	ug/kg	6
Dichlorodifluoromethane		10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Trichlorofluoromethane		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,3-Dichlorobenzene		690	U	ug/kg	690	720	U	ug/kg	720	5	U	ug/kg	5	6	U	ug/kg	6
Acrolein		100	U	ug/kg	100	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Iodomethane		10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
1,4-Dichlorobenzene		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	710	U	ug/kg	710
Acrylonitrile		100	U	ug/kg	100	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9738008				R9738009				R9738010				R9955017			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	44S00701				44S00801				44S00901				44S01001			
Collect Date:	05-APR-95				05-APR-95				05-APR-95				24-MAY-95			
	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	6	U	ug/kg	6
1,2-Dichlorobenzene	5	U	ug/kg	5	720	U	ug/kg	720	5	U	ug/kg	5	6	U	ug/kg	6
2-Chloroethylvinyl ether	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Ethyl methacrylate	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,2,3-Trichloropropane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Isobutyl alcohol	210	R	ug/kg	210	220	R	ug/kg	220	210	R	ug/kg	210	220	U	ug/kg	220
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,2-Dibromo-3-chloropropane	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
1,2-Dibromoethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,4-Dioxane	210	R	ug/kg	210	220	R	ug/kg	220	210	R	ug/kg	210	220	R	ug/kg	220
3-Chloropropene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Acetonitrile	100	U	ug/kg	100	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Chloroprene	210	U	ug/kg	210	220	U	ug/kg	220	210	U	ug/kg	210	220	U	ug/kg	220
Methacrylonitrile	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Methyl methacrylate	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Pentachloroethane	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Propionitrile	100	U	ug/kg	100	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Vinyl acetate	10	U	ug/kg	10	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		R9712001			R9712002			R9712003			R9712004		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		45S00101			45S00101D			45S00201			45S00301		
Collect Date:		29-MAR-95			29-MAR-95			29-MAR-95			29-MAR-95		
	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	10	U	ug/kg	10	
Bromomethane	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10	
Vinyl chloride	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10	
Chloroethane	11	U	ug/kg	11	11	U	ug/kg	11	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	11	UJ	ug/kg	11	10	UJ	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	11	UJ	ug/kg	11	10	UJ	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	11	U	ug/kg	11	10	U	ug/kg	10	
2-Hexanone	11	U	ug/kg	11	11	U	ug/kg	11	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	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10	
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	5	U	ug/kg	5	
Acrolein	110	UJ	ug/kg	110	110	U	ug/kg	110	100	U	ug/kg	100	
Iodomethane	11	U	ug/kg	11	11	U	ug/kg	11	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	UJ	ug/kg	110	110	U	ug/kg	110	100	U	ug/kg	100	

	VALUE	QUAL	UNITS	DL
Chloromethane	10	U	ug/kg	10
Bromomethane	10	U	ug/kg	10
Vinyl chloride	10	U	ug/kg	10
Chloroethane	10	U	ug/kg	10
Methylene chloride	5	U	ug/kg	5
Acetone	10	UJ	ug/kg	10
Carbon disulfide	5	U	ug/kg	5
1,1-Dichloroethane	5	U	ug/kg	5
1,1-Dichloroethene	5	U	ug/kg	5
1,2-Dichloroethene (total)	5	U	ug/kg	5
Chloroform	5	U	ug/kg	5
1,2-Dichloroethane	5	U	ug/kg	5
2-Butanone	10	UJ	ug/kg	10
1,1,1-Trichloroethane	5	U	ug/kg	5
Carbon tetrachloride	5	U	ug/kg	5
Bromodichloromethane	5	U	ug/kg	5
1,2-Dichloropropane	5	U	ug/kg	5
cis-1,3-Dichloropropene	5	U	ug/kg	5
Trichloroethene	5	U	ug/kg	5
Dibromochloromethane	5	U	ug/kg	5
1,1,2-Trichloroethane	5	U	ug/kg	5
Benzene	5	U	ug/kg	5
trans-1,3-Dichloropropene	5	U	ug/kg	5
Bromoform	5	U	ug/kg	5
4-Methyl-2-pentanone	10	U	ug/kg	10
2-Hexanone	10	U	ug/kg	10
Tetrachloroethene	5	U	ug/kg	5
1,1,2,2-Tetrachloroethane	5	U	ug/kg	5
Toluene	5	U	ug/kg	5
Chlorobenzene	5	U	ug/kg	5
Ethylbenzene	5	U	ug/kg	5
Styrene	5	U	ug/kg	5
Xylenes (total)	5	U	ug/kg	5
Dichlorodifluoromethane	10	U	ug/kg	10
Trichlorofluoromethane	5	U	ug/kg	5
1,3-Dichlorobenzene	5	U	ug/kg	5
Acrolein	100	U	ug/kg	100
Iodomethane	10	U	ug/kg	10
1,4-Dichlorobenzene	5	U	ug/kg	5
Acrylonitrile	100	U	ug/kg	100

	VALUE	QUAL	UNITS	DL
Chloromethane	10	U	ug/kg	10
Bromomethane	10	U	ug/kg	10
Vinyl chloride	10	U	ug/kg	10
Chloroethane	10	U	ug/kg	10
Methylene chloride	5	U	ug/kg	5
Acetone	10	UJ	ug/kg	10
Carbon disulfide	5	U	ug/kg	5
1,1-Dichloroethane	5	U	ug/kg	5
1,1-Dichloroethene	5	U	ug/kg	5
1,2-Dichloroethene (total)	5	U	ug/kg	5
Chloroform	5	U	ug/kg	5
1,2-Dichloroethane	5	U	ug/kg	5
2-Butanone	10	UJ	ug/kg	10
1,1,1-Trichloroethane	5	U	ug/kg	5
Carbon tetrachloride	5	U	ug/kg	5
Bromodichloromethane	5	U	ug/kg	5
1,2-Dichloropropane	5	U	ug/kg	5
cis-1,3-Dichloropropene	5	U	ug/kg	5
Trichloroethene	5	U	ug/kg	5
Dibromochloromethane	5	U	ug/kg	5
1,1,2-Trichloroethane	5	U	ug/kg	5
Benzene	5	U	ug/kg	5
trans-1,3-Dichloropropene	5	U	ug/kg	5
Bromoform	5	U	ug/kg	5
4-Methyl-2-pentanone	10	U	ug/kg	10
2-Hexanone	10	U	ug/kg	10
Tetrachloroethene	5	U	ug/kg	5
1,1,2,2-Tetrachloroethane	5	U	ug/kg	5
Toluene	5	U	ug/kg	5
Chlorobenzene	5	U	ug/kg	5
Ethylbenzene	5	U	ug/kg	5
Styrene	5	U	ug/kg	5
Xylenes (total)	5	U	ug/kg	5
Dichlorodifluoromethane	10	U	ug/kg	10
Trichlorofluoromethane	5	U	ug/kg	5
1,3-Dichlorobenzene	340	U	ug/kg	340
Acrolein	100	U	ug/kg	100
Iodomethane	10	U	ug/kg	10
1,4-Dichlorobenzene	340	U	ug/kg	340
Acrylonitrile	100	U	ug/kg	100

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SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9712001				R9712002				R9712003				R9712004			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45S00101				45S001010				45S00201				45S00301			
Collect Date:	29-MAR-95				29-MAR-95				29-MAR-95				29-MAR-95			
	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	5	U	ug/kg	5	5	U	ug/kg	5
2-Chloroethylvinyl ether	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10	10	U	ug/kg	10
Ethyl methacrylate	5	UJ	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
1,2,3-Trichloropropane	5	UJ	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	UJ	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Isobutyl alcohol	210	R	ug/kg	210	210	R	ug/kg	210	210	R	ug/kg	210	200	R	ug/kg	200
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	11	U	ug/kg	11	11	UJ	ug/kg	11	10	UJ	ug/kg	10	10	UJ	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	210	R	ug/kg	210	210	R	ug/kg	210	200	R	ug/kg	200
3-Chloropropene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Acetonitrile	110	U	ug/kg	110	110	UJ	ug/kg	110	100	UJ	ug/kg	100	100	UJ	ug/kg	100
Chloroprene	210	U	ug/kg	210	210	U	ug/kg	210	210	U	ug/kg	210	200	U	ug/kg	200
Methacrylonitrile	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
Methyl methacrylate	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10	10	U	ug/kg	10
Pentachloroethane	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10	10	U	ug/kg	10
Propionitrile	110	U	ug/kg	110	110	UJ	ug/kg	110	100	UJ	ug/kg	100	100	UJ	ug/kg	100
Vinyl acetate	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		R9712005			R9712006			R9712007			R9712008		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		45S00401			45S00501			45S00601			45S00701		
Collect Date:		29-MAR-95			29-MAR-95			29-MAR-95			29-MAR-95		
		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	12 U	ug/kg	12	10 U	ug/kg	10
Bromomethane		11 U	ug/kg	11	11 U	ug/kg	11	12 U	ug/kg	12	10 U	ug/kg	10
Vinyl chloride		11 U	ug/kg	11	11 U	ug/kg	11	12 U	ug/kg	12	10 U	ug/kg	10
Chloroethane		11 U	ug/kg	11	11 U	ug/kg	11	12 U	ug/kg	12	10 U	ug/kg	10
Methylene chloride		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Acetone		11 UJ	ug/kg	11	11 UJ	ug/kg	11	12 UJ	ug/kg	12	10 UJ	ug/kg	10
Carbon disulfide		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
1,1-Dichloroethane		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
1,1-Dichloroethene		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
1,2-Dichloroethene (total)		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Chloroform		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
1,2-Dichloroethane		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
2-Butanone		11 UJ	ug/kg	11	11 UJ	ug/kg	11	12 UJ	ug/kg	12	10 UJ	ug/kg	10
1,1,1-Trichloroethane		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Carbon tetrachloride		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Bromodichloromethane		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
1,2-Dichloropropane		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
cis-1,3-Dichloropropene		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Trichloroethene		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Dibromochloromethane		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
1,1,2-Trichloroethane		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Benzene		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
trans-1,3-Dichloropropene		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Bromoform		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
4-Methyl-2-pentanone		11 U	ug/kg	11	11 U	ug/kg	11	12 U	ug/kg	12	10 U	ug/kg	10
2-Hexanone		11 U	ug/kg	11	11 U	ug/kg	11	12 U	ug/kg	12	10 U	ug/kg	10
Tetrachloroethene		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
1,1,2,2-Tetrachloroethane		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Toluene		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Chlorobenzene		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Ethylbenzene		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Styrene		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Xylenes (total)		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Dichlorodifluoromethane		11 U	ug/kg	11	11 U	ug/kg	11	12 U	ug/kg	12	10 U	ug/kg	10
Trichlorofluoromethane		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
1,3-Dichlorobenzene		5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Acrolein		110 U	ug/kg	110	110 U	ug/kg	110	120 U	ug/kg	120	100 U	ug/kg	100
Iodomethane		11 U	ug/kg	11	11 U	ug/kg	11	12 U	ug/kg	12	10 U	ug/kg	10
1,4-Dichlorobenzene		350 U	ug/kg	350	360 U	ug/kg	360	6 U	ug/kg	6	5 U	ug/kg	5
Acrylonitrile		110 U	ug/kg	110	110 U	ug/kg	110	120 U	ug/kg	120	100 U	ug/kg	100

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SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9712005				R9712006				R9712007				R9712008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45S00401				45S00501				45S00601				45S00701			
Collect Date:	29-MAR-95				29-MAR-95				29-MAR-95				29-MAR-95			
	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	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dichlorobenzene	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
2-Chloroethylvinyl ether	11	U	ug/kg	11	11	U	ug/kg	11	12	U	ug/kg	12	10	U	ug/kg	10
Ethyl methacrylate	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,2,3-Trichloropropane	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Isobutyl alcohol	210	R	ug/kg	210	220	R	ug/kg	220	230	R	ug/kg	230	210	R	ug/kg	210
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dibromo-3-chloropropane	11	UJ	ug/kg	11	11	UJ	ug/kg	11	12	UJ	ug/kg	12	10	UJ	ug/kg	10
1,2-Dibromoethane	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,4-Dioxane	210	R	ug/kg	210	220	R	ug/kg	220	230	R	ug/kg	230	210	R	ug/kg	210
3-Chloropropene	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Acetonitrile	110	UJ	ug/kg	110	110	UJ	ug/kg	110	120	UJ	ug/kg	120	100	UJ	ug/kg	100
Chloroprene	210	U	ug/kg	210	220	U	ug/kg	220	230	U	ug/kg	230	210	U	ug/kg	210
Methacrylonitrile	5	UJ	ug/kg	5	5	UJ	ug/kg	5	6	UJ	ug/kg	6	5	UJ	ug/kg	5
Methyl methacrylate	11	U	ug/kg	11	11	U	ug/kg	11	12	U	ug/kg	12	10	U	ug/kg	10
Pentachloroethane	11	U	ug/kg	11	11	U	ug/kg	11	12	U	ug/kg	12	10	U	ug/kg	10
Propionitrile	110	UJ	ug/kg	110	110	UJ	ug/kg	110	120	UJ	ug/kg	120	100	UJ	ug/kg	100
Vinyl acetate	11	U	ug/kg	11	11	U	ug/kg	11	12	U	ug/kg	12	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8994008				R9955015			
Site	GROUP111				GROUP111			
Locator	45S00801				45S01001			
Collect Date:	21-MAY-95				24-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES ug/kg								
Chloromethane	11	U	ug/kg	11	11	U	ug/kg	11
Bromomethane	11	U	ug/kg	11	11	UJ	ug/kg	11
Vinyl chloride	11	U	ug/kg	11	11	U	ug/kg	11
Chloroethane	11	U	ug/kg	11	11	U	ug/kg	11
Methylene chloride	8	U	ug/kg	8	5	U	ug/kg	5
Acetone	11	U	ug/kg	11	11	U	ug/kg	11
Carbon disulfide	5	U	ug/kg	5	2	J	ug/kg	5
1,1-Dichloroethane	5	U	ug/kg	5	5	U	ug/kg	5
1,1-Dichloroethene	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloroethene (total)	5	U	ug/kg	5	5	U	ug/kg	5
Chloroform	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloroethane	5	U	ug/kg	5	5	U	ug/kg	5
2-Butanone	11	U	ug/kg	11	11	U	ug/kg	11
1,1,1-Trichloroethane	5	U	ug/kg	5	5	U	ug/kg	5
Carbon tetrachloride	5	U	ug/kg	5	5	U	ug/kg	5
Bromodichloromethane	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloropropane	5	U	ug/kg	5	5	U	ug/kg	5
cis-1,3-Dichloropropene	5	U	ug/kg	5	5	U	ug/kg	5
Trichloroethene	5	U	ug/kg	5	5	U	ug/kg	5
Dibromochloromethane	5	U	ug/kg	5	5	U	ug/kg	5
1,1,2-Trichloroethane	5	U	ug/kg	5	5	U	ug/kg	5
Benzene	5	U	ug/kg	5	5	U	ug/kg	5
trans-1,3-Dichloropropene	5	U	ug/kg	5	5	U	ug/kg	5
Bromoform	5	U	ug/kg	5	5	U	ug/kg	5
4-Methyl-2-pentanone	11	U	ug/kg	11	11	U	ug/kg	11
2-Hexanone	11	U	ug/kg	11	11	U	ug/kg	11
Tetrachloroethene	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
Toluene	5	U	ug/kg	5	5	U	ug/kg	5
Chlorobenzene	5	U	ug/kg	5	5	U	ug/kg	5
Ethylbenzene	5	U	ug/kg	5	5	U	ug/kg	5
Styrene	5	U	ug/kg	5	5	U	ug/kg	5
Xylenes (total)	5	U	ug/kg	5	2	J	ug/kg	5
Dichlorodifluoromethane	11	U	ug/kg	11	11	U	ug/kg	11
Trichlorofluoromethane	5	U	ug/kg	5	5	U	ug/kg	5
1,3-Dichlorobenzene	5	U	ug/kg	5	730	U	ug/kg	730
Acrolein	110	U	ug/kg	110	110	U	ug/kg	110
Iodomethane	11	U	ug/kg	11	11	UJ	ug/kg	11
1,4-Dichlorobenzene	5	U	ug/kg	5	730	U	ug/kg	730
Acrylonitrile	110	U	ug/kg	110	110	U	ug/kg	110

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Lab Sample Number:	M8994008				R9955015			
Site	GROUP111				GROUP111			
Locator	45S00801				45S01001			
Collect Date:	21-MAY-95				24-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichlorobenzene	5	U	ug/kg	5	5	U	ug/kg	5
2-Chloroethylvinyl ether	11	U	ug/kg	11	11	U	ug/kg	11
Ethyl methacrylate	5	U	ug/kg	5	5	U	ug/kg	5
1,2,3-Trichloropropane	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
Isobutyl alcohol	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
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11	11	U	ug/kg	11
1,2-Dibromoethane	5	U	ug/kg	5	5	U	ug/kg	5
1,4-Dioxane	210	R	ug/kg	210	210	R	ug/kg	210
3-Chloropropene	5	U	ug/kg	5	5	U	ug/kg	5
Acetonitrile	110	U	ug/kg	110	110	U	ug/kg	110
Chloroprene	210	U	ug/kg	210	210	U	ug/kg	210
Methacrylonitrile	5	U	ug/kg	5	5	U	ug/kg	5
Methyl methacrylate	11	U	ug/kg	11	11	U	ug/kg	11
Pentachloroethane	11	U	ug/kg	11	11	U	ug/kg	11
Propionitrile	110	U	ug/kg	110	110	U	ug/kg	110
Vinyl acetate	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9861001				R9861002				R9861004				R9861006			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01S00101				01S00101D				01S00201				01S00301			
Collect Date:	03-MAY-95				03-MAY-95				03-MAY-95				03-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/kg																
N-Nitrosodimethylamine	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Phenol	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Aniline	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
bis(2-Chloroethyl) ether	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Benzyl Alcohol	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
2-Methylphenol	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
bis(2-Chloroisopropyl) ether	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
N-Nitroso-di-n-propylamine	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Hexachloroethane	730	UJ	ug/kg	730	730	UJ	ug/kg	730	700	R	ug/kg	700	690	UJ	ug/kg	690
Nitrobenzene	730	UJ	ug/kg	730	730	UJ	ug/kg	730	700	R	ug/kg	700	690	UJ	ug/kg	690
Isophorone	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
2-Nitrophenol	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
2,4-Dimethylphenol	730	UJ	ug/kg	730	730	UJ	ug/kg	730	700	R	ug/kg	700	690	UJ	ug/kg	690
Benzoic acid	3500	UJ	ug/kg	3500	3500	UJ	ug/kg	3500	3400	R	ug/kg	3400	3300	UJ	ug/kg	3300
bis(2-Chloroethoxy) methane	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
2,4-Dichlorophenol	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
1,2,4-Trichlorobenzene	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Naphthalene	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
4-Chloroaniline	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Hexachlorobutadiene	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
4-Chloro-3-methylphenol	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
2-Methylnaphthalene	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Hexachlorocyclopentadiene	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
2,4,6-Trichlorophenol	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Dimethylphthalate	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
2,4,5-Trichlorophenol	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	R	ug/kg	3400	3300	U	ug/kg	3300
2-Chloronaphthalene	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
2-Nitroaniline	3500	UJ	ug/kg	3500	3500	UJ	ug/kg	3500	3400	R	ug/kg	3400	3300	UJ	ug/kg	3300
Acenaphthylene	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
2,6-Dinitrotoluene	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
3-Nitroaniline	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	R	ug/kg	3400	3300	U	ug/kg	3300
Acenaphthene	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
2,4-Dinitrophenol	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	R	ug/kg	3400	3300	U	ug/kg	3300
4-Nitrophenol	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	R	ug/kg	3400	3300	U	ug/kg	3300
Dibenzofuran	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
2,4-Dinitrotoluene	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Diethylphthalate	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
4-Chlorophenyl-phenylether	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Fluorene	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
4-Nitroaniline	3500	UJ	ug/kg	3500	3500	UJ	ug/kg	3500	3400	R	ug/kg	3400	3300	UJ	ug/kg	3300
4,6-Dinitro-2-methylphenol	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	R	ug/kg	3400	3300	U	ug/kg	3300
N-Nitrosodiphenylamine (1)	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
1,2-Diphenylhydrazine	730	UJ	ug/kg	730	730	UJ	ug/kg	730	700	R	ug/kg	700	690	UJ	ug/kg	690
4-Bromophenyl-phenylether	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Hexachlorobenzene	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Pentachlorophenol	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	R	ug/kg	3400	3300	U	ug/kg	3300
Phenanthrene	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Anthracene	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Di-n-Butylphthalate	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Fluoranthene	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9861001				R9861002				R9861004				R9861006			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01S00101				01S00101D				01S00201				01S00301			
Collect Date:	03-MAY-95				03-MAY-95				03-MAY-95				03-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Pyrene	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Butylbenzylphthalate	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
3,3-Dichlorobenzidine	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1400	R	ug/kg	1400	1400	U	ug/kg	1400
Benzo (a) anthracene	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Chrysene	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
bis(2-Ethylhexyl) phthalate	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Di-n-octylphthalate	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Benzo (b) fluoranthene	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Benzo (k) fluoranthene	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Benzo (a) pyrene	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Indeno (1,2,3-cd) pyrene	730	UJ	ug/kg	730	730	UJ	ug/kg	730	700	R	ug/kg	700	690	UJ	ug/kg	690
Dibenz (a,h) anthracene	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Benzo (g,h,i) perylene	730	UJ	ug/kg	730	730	UJ	ug/kg	730	700	R	ug/kg	700	690	UJ	ug/kg	690
2-Picoline	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	R	ug/kg	3400	3300	U	ug/kg	3300
Methyl methanesulfonate	730	UJ	ug/kg	730	730	UJ	ug/kg	730	700	R	ug/kg	700	690	UJ	ug/kg	690
Ethyl methanesulfonate	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Acetophenone	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
N-Nitrosopiperidine	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Phenyl-tert-butylamine	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	R	ug/kg	3400	3300	U	ug/kg	3300
2,6-Dichlorophenol	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
N-Nitroso-di-n-butylamine	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
N-Nitrosodiethylamine	730	UJ	ug/kg	730	730	UJ	ug/kg	730	700	R	ug/kg	700	690	UJ	ug/kg	690
N-Nitrosopyrrolidine	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Benzidine	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	R	ug/kg	3400	3300	U	ug/kg	3300
1,2,4,5-Tetrachlorobenzene	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	R	ug/kg	3400	3300	U	ug/kg	3300
Pentachlorobenzene	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	R	ug/kg	3400	3300	U	ug/kg	3300
1-Naphthylamine	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	R	ug/kg	3400	3300	U	ug/kg	3300
2-Naphthylamine	3500	UJ	ug/kg	3500	3500	UJ	ug/kg	3500	3400	R	ug/kg	3400	3300	UJ	ug/kg	3300
2,3,4,6-Tetrachlorophenol	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Phenacetin	730	UJ	ug/kg	730	730	UJ	ug/kg	730	700	R	ug/kg	700	690	UJ	ug/kg	690
4-Aminobiphenyl	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	R	ug/kg	3400	3300	U	ug/kg	3300
Pentachloronitrobenzene	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	R	ug/kg	3400	3300	U	ug/kg	3300
Pronamide	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
p-(Dimethylamino)azobenzene	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
7,12-Dimethylbenz(A)Anthracene	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
3-Methylcholanthrene	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Pyridine	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	R	ug/kg	3400	3300	U	ug/kg	3300
N-Nitrosomethylethylamine	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
N-Nitrosomorpholine	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
o-Toluidine	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Hexachloropropene	3500	UJ	ug/kg	3500	3500	UJ	ug/kg	3500	3400	R	ug/kg	3400	3300	UJ	ug/kg	3300
p-Phenylenediamine	35000	U	ug/kg	35000	35000	U	ug/kg	35000	34000	R	ug/kg	34000	33000	U	ug/kg	33000
Safrole	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	R	ug/kg	3400	3300	U	ug/kg	3300
Isosafrole	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	R	ug/kg	3400	3300	U	ug/kg	3300
1,4-Naphthoquinone	73000	U	ug/kg	73000	73000	U	ug/kg	73000	70000	R	ug/kg	70000	69000	U	ug/kg	69000
1,3-Dinitrobenzene	730	UJ	ug/kg	730	730	UJ	ug/kg	730	700	R	ug/kg	700	690	UJ	ug/kg	690
5-Nitro-o-toluidine	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
1,3,5-Trinitrobenzene	730	UJ	ug/kg	730	730	UJ	ug/kg	730	700	R	ug/kg	700	690	UJ	ug/kg	690
4-Nitroquinoline-1-oxide	35000	R	ug/kg	35000	35000	R	ug/kg	35000	34000	R	ug/kg	34000	33000	R	ug/kg	33000
Methapyrilene	3500	UJ	ug/kg	3500	3500	UJ	ug/kg	3500	3400	R	ug/kg	3400	3300	UJ	ug/kg	3300
3,3-Dimethylbenzidine	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Hexachlorophene	35000	UJ	ug/kg	35000	35000	UJ	ug/kg	35000	34000	R	ug/kg	34000	33000	UJ	ug/kg	33000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9861001				R9861002				R9861004				R9861006			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01S00101				01S00101D				01S00201				01S00301			
Collect Date:	03-MAY-95				03-MAY-95				03-MAY-95				03-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Aramite	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3400	R	ug/kg	3400	3300	U	ug/kg	3300
2-Chlorophenol	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
3- & 4-Methylphenol (2)	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	690	U	ug/kg	690
Hexachloropropene	3500	UJ	ug/kg	3500	3500	UJ	ug/kg	3500	3400	R	ug/kg	3400	3300	UJ	ug/kg	3300
2-Acetylaminofluorene	730	U	ug/kg	730	730	U	ug/kg	730	700	R	ug/kg	700	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		R9861007				R9861010				R9861012				R9861015			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		01S00401				01S00501				01S00601				01S00701			
Collect Date:		03-MAY-95				03-MAY-95				03-MAY-95				03-MAY-95			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg																
N-Nitrosodimethylamine		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Phenol		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Aniline		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
bis(2-Chloroethyl) ether		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Benzyl Alcohol		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
2-Methylphenol		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
bis(2-Chloroisopropyl) ether		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
N-Nitroso-di-n-propylamine		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Hexachloroethane		690	UJ	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Nitrobenzene		690	UJ	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Isophorone		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
2-Nitrophenol		690	UJ	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
2,4-Dimethylphenol		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Benzoic acid		3400	UJ	ug/kg	3400	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
bis(2-Chloroethoxy) methane		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
2,4-Dichlorophenol		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
1,2,4-Trichlorobenzene		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Naphthalene		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
4-Chloroaniline		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Hexachlorobutadiene		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
4-Chloro-3-methylphenol		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
2-Methylnaphthalene		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Hexachlorocyclopentadiene		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
2,4,6-Trichlorophenol		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Dimethylphthalate		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
2,4,5-Trichlorophenol		3400	U	ug/kg	3400	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
2-Chloronaphthalene		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
2-Nitroaniline		3400	UJ	ug/kg	3400	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
Acenaphthylene		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
2,6-Dinitrotoluene		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
3-Nitroaniline		3400	U	ug/kg	3400	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
Acenaphthene		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
2,4-Dinitrophenol		3400	U	ug/kg	3400	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3500	UJ	ug/kg	3500
4-Nitrophenol		3400	U	ug/kg	3400	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
Dibenzofuran		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
2,4-Dinitrotoluene		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Diethylphthalate		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
4-Chlorophenyl-phenylether		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Fluorene		690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
4-Nitroaniline		3400	UJ	ug/kg	3400	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3500	UJ	ug/kg	3500

US Naval Station, Mayport, RCRA Faci , Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9861007				R9861010				R9861012				R9861015			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01S00401				01S00501				01S00601				01S00701			
Collect Date:	03-MAY-95				03-MAY-95				03-MAY-95				03-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
N-Nitrosodiphenylamine (1)	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
1,2-Diphenylhydrazine	690	UJ	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
4-Bromophenyl-phenylether	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Hexachlorobenzene	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Pentachlorophenol	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
Phenanthrene	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Anthracene	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Di-n-Butylphthalate	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Fluoranthene	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Pyrene	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Butylbenzylphthalate	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
3,3-Dichlorobenzidine	1400	U	ug/kg	1400	1400	U	ug/kg	1400	1400	U	ug/kg	1400	1500	U	ug/kg	1500
Benzo (a) anthracene	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Chrysene	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
bis(2-Ethylhexyl) phthalate	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Di-n-octylphthalate	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Benzo (b) fluoranthene	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Benzo (k) fluoranthene	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Benzo (a) pyrene	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Indeno (1,2,3-cd) pyrene	690	UJ	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Dibenz (a,h) anthracene	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Benzo (g,h,i) perylene	690	UJ	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
2-Picoline	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
Methyl methanesulfonate	690	UJ	ug/kg	690	690	UJ	ug/kg	690	690	UJ	ug/kg	690	730	UJ	ug/kg	730
Ethyl methanesulfonate	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Acetophenone	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
N-Nitrosopiperidine	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Phenyl-tert-butylamine	3400	U	ug/kg	3400	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3500	UJ	ug/kg	3500
2,6-Dichlorophenol	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
N-Nitroso-di-n-butylamine	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
N-Nitrosodiethylamine	690	UJ	ug/kg	690	690	UJ	ug/kg	690	690	UJ	ug/kg	690	730	UJ	ug/kg	730
N-Nitrosopyrrolidine	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Benzidine	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
1,2,4,5-Tetrachlorobenzene	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
Pentachlorobenzene	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
1-Naphthylamine	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
2-Naphthylamine	3400	UJ	ug/kg	3400	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3500	UJ	ug/kg	3500
2,3,4,6-Tetrachlorophenol	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Phenacetin	690	UJ	ug/kg	690	690	UJ	ug/kg	690	690	UJ	ug/kg	690	730	UJ	ug/kg	730
4-Aminobiphenyl	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
Pentachloronitrobenzene	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
Pronamide	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
p-(Dimethylamino)azobenzene	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
7,12-Dimethylbenz(A)Anthracene	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
3-Methylcholanthrene	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Pyridine	3400	U	ug/kg	3400	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3500	UJ	ug/kg	3500
N-Nitrosomethylethylamine	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
N-Nitrosomorpholine	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
o-Toluidine	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Hexachloropropene	3400	UJ	ug/kg	3400	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3500	UJ	ug/kg	3500
p-Phenylenediamine	34000	U	ug/kg	34000	33000	U	ug/kg	33000	33000	U	ug/kg	33000	35000	U	ug/kg	35000

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Lab Sample Number:	R9861007				R9861010				R9861012				R9861015			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01S00401				01S00501				01S00601				01S00701			
Collect Date:	03-MAY-95				03-MAY-95				03-MAY-95				03-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
Isosafrole	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
1,4-Naphthoquinone	69000	U	ug/kg	69000	69000	U	ug/kg	69000	69000	U	ug/kg	69000	73000	U	ug/kg	73000
1,3-Dinitrobenzene	690	UJ	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
5-Nitro-o-toluidine	690	U	ug/kg	690	690	UJ	ug/kg	690	690	UJ	ug/kg	690	730	UJ	ug/kg	730
1,3,5-Trinitrobenzene	690	UJ	ug/kg	690	690	UJ	ug/kg	690	690	UJ	ug/kg	690	730	UJ	ug/kg	730
4-Nitroquinoline-1-oxide	34000	R	ug/kg	34000	33000	R	ug/kg	33000	33000	R	ug/kg	33000	35000	R	ug/kg	35000
Methapyrilene	3400	UJ	ug/kg	3400	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3500	UJ	ug/kg	3500
3,3-Dimethylbenzidine	690	U	ug/kg	690	690	UJ	ug/kg	690	690	UJ	ug/kg	690	730	UJ	ug/kg	730
Hexachlorophene	34000	UJ	ug/kg	34000	33000	UJ	ug/kg	33000	33000	UJ	ug/kg	33000	35000	UJ	ug/kg	35000
Aramite	3400	U	ug/kg	3400	3300	R	ug/kg	3300	3300	R	ug/kg	3300	3500	R	ug/kg	3500
2-Chlorophenol	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
3- & 4-Methylphenol (2)	690	U	ug/kg	690	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Hexachloropropene	3400	UJ	ug/kg	3400	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3500	UJ	ug/kg	3500
2-Acetylaminofluorene	690	U	ug/kg	690	690	UJ	ug/kg	690	690	UJ	ug/kg	690	730	UJ	ug/kg	730

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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Lab Sample Number:		M8994010			R9743001			R9743002			R9743003		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		01S00801			23S00101			23S00201			23S00301		
Collect Date:		21-MAY-95			05-APR-95			05-APR-95			05-APR-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES	ug/kg												
N-Nitrosodimethylamine		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
Phenol		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
Aniline		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
bis(2-Chloroethyl) ether		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
Benzyl Alcohol		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
2-Methylphenol		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
bis(2-Chloroisopropyl) ether		350 U	ug/kg	350	690 UJ	ug/kg	690	710 UJ	ug/kg	710	680 UJ	ug/kg	680
N-Nitroso-di-n-propylamine		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
Hexachloroethane		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
Nitrobenzene		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
Isophorone		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
2-Nitrophenol		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
2,4-Dimethylphenol		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
Benzoic acid		1700 U	ug/kg	1700	3300 UJ	ug/kg	3300	3400 UJ	ug/kg	3400	3300 UJ	ug/kg	3300
bis(2-Chloroethoxy) methane		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
2,4-Dichlorophenol		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
1,2,4-Trichlorobenzene		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
Naphthalene		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
4-Chloroaniline		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
Hexachlorobutadiene		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
4-Chloro-3-methylphenol		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
2-Methylnaphthalene		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
Hexachlorocyclopentadiene		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
2,4,6-Trichlorophenol		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
Dimethylphthalate		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
2,4,5-Trichlorophenol		1700 U	ug/kg	1700	3300 U	ug/kg	3300	3400 U	ug/kg	3400	3300 U	ug/kg	3300
2-Chloronaphthalene		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
2-Nitroaniline		1700 U	ug/kg	1700	3300 UJ	ug/kg	3300	3400 UJ	ug/kg	3400	3300 UJ	ug/kg	3300
Acenaphthylene		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
2,6-Dinitrotoluene		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
3-Nitroaniline		1700 U	ug/kg	1700	3300 U	ug/kg	3300	3400 U	ug/kg	3400	3300 U	ug/kg	3300
Acenaphthene		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
2,4-Dinitrophenol		1700 U	ug/kg	1700	3300 UJ	ug/kg	3300	3400 UJ	ug/kg	3400	3300 UJ	ug/kg	3300
4-Nitrophenol		1700 U	ug/kg	1700	3300 UJ	ug/kg	3300	3400 UJ	ug/kg	3400	3300 UJ	ug/kg	3300
Dibenzofuran		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
2,4-Dinitrotoluene		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
Diethylphthalate		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
4-Chlorophenyl-phenylether		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
Fluorene		350 U	ug/kg	350	690 U	ug/kg	690	710 U	ug/kg	710	680 U	ug/kg	680
4-Nitroaniline		1700 U	ug/kg	1700	3300 UJ	ug/kg	3300	3400 UJ	ug/kg	3400	3300 UJ	ug/kg	3300

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SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8994010				R9743001				R9743002				R9743003			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01S00801				23S00101				23S00201				23S00301			
Collect Date:	21-MAY-95				05-APR-95				05-APR-95				05-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3400	U	ug/kg	[illegible]	3300	U	ug/kg	3300
N-Nitrosodiphenylamine (1)	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
1,2-Diphenylhydrazine	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
4-Bromophenyl-phenylether	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
Hexachlorobenzene	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
Pentachlorophenol	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
Phenanthrene	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
Anthracene	350	U	ug/kg	350	690	UJ	ug/kg	690	710	UJ	ug/kg	710	680	UJ	ug/kg	680
Di-n-Butylphthalate	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
Fluoranthene	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
Pyrene	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
Butylbenzylphthalate	350	U	ug/kg	350	690	UJ	ug/kg	690	710	UJ	ug/kg	710	680	UJ	ug/kg	680
3,3-Dichlorobenzidine	690	U	ug/kg	690	1400	U	ug/kg	1400	1400	U	ug/kg	1400	1400	U	ug/kg	1400
Benzo (a) anthracene	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
Chrysene	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
bis(2-Ethylhexyl) phthalate	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
Di-n-octylphthalate	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
Benzo (b) fluoranthene	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
Benzo (k) fluoranthene	350	UJ	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
Benzo (a) pyrene	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
Indeno (1,2,3-cd) pyrene	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
Dibenz (a,h) anthracene	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
Benzo (g,h,i) perylene	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
2-Picoline	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
Methyl methanesulfonate	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
Ethyl methanesulfonate	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
Acetophenone	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
N-Nitrosopiperidine	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
Phenyl-tert-butylamine	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
2,6-Dichlorophenol	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
N-Nitroso-di-n-butylamine	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
N-Nitrosodiethylamine	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
N-Nitrosopyrrolidine	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
Benzidine	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
1,2,4,5-Tetrachlorobenzene	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
Pentachlorobenzene	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
1-Naphthylamine	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
2-Naphthylamine	1700	U	ug/kg	1700	3300	UJ	ug/kg	3300	3400	UJ	ug/kg	3400	3300	UJ	ug/kg	3300
2,3,4,6-Tetrachlorophenol	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
Phenacetin	350	U	ug/kg	350	690	UJ	ug/kg	690	710	UJ	ug/kg	710	680	UJ	ug/kg	680
4-Aminobiphenyl	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
Pentachloronitrobenzene	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
Pronamide	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
p-(Dimethylamino)azobenzene	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
7,12-Dimethylbenz(A)Anthracene	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
3-Methylcholanthrene	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
Pyridine	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
N-Nitrosomethylethylamine	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
N-Nitrosomorpholine	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
o-Toluidine	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
Hexachloropropene	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
p-Phenylenediamine	17000	U	ug/kg	17000	33000	U	ug/kg	33000	34000	U	ug/kg	34000	33000	U	ug/kg	33000

US Naval Station, Mayport, RCRA Faci. Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8994010				R9743001				R9743002				R9743003			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01S00801				23S00101				23S00201				23S00301			
Collect Date:	21-MAY-95				05-APR-95				05-APR-95				05-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
Isosafrole	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
1,4-Naphthoquinone	35000	U	ug/kg	35000	69000	R	ug/kg	69000	71000	R	ug/kg	71000	68000	R	ug/kg	68000
1,3-Dinitrobenzene	350	U	ug/kg	350	690	UJ	ug/kg	690	710	UJ	ug/kg	710	680	UJ	ug/kg	680
5-Nitro-o-toluidine	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
1,3,5-Trinitrobenzene	350	U	ug/kg	350	690	UJ	ug/kg	690	710	UJ	ug/kg	710	680	UJ	ug/kg	680
4-Nitroquinoline-1-oxide	17000	R	ug/kg	17000	33000	R	ug/kg	33000	34000	R	ug/kg	34000	33000	R	ug/kg	33000
Methapyrilene	1700	U	ug/kg	1700	3300	UJ	ug/kg	3300	3400	UJ	ug/kg	3400	3300	UJ	ug/kg	3300
3,3-Dimethylbenzidine	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
Hexachlorophene	17000	U	ug/kg	17000	33000	R	ug/kg	33000	34000	R	ug/kg	34000	33000	R	ug/kg	33000
Aramite	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
2-Chlorophenol	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
3- & 4-Methylphenol (2)	350	U	ug/kg	350	690	U	ug/kg	690	710	U	ug/kg	710	680	U	ug/kg	680
Hexachloropropene	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
2-Acetylaminofluorene	350	U	ug/kg	350	690	UJ	ug/kg	690	710	UJ	ug/kg	710	680	UJ	ug/kg	680

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		R9743005			R9743004			R9743006			R9743007		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		23S00401			23S00501			23S00601			23S00701		
Collect Date:		05-APR-95			05-APR-95			05-APR-95			05-APR-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES	ug/kg												
N-Nitrosodimethylamine		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
Phenol		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
Aniline		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
bis(2-Chloroethyl) ether		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
Benzyl Alcohol		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
2-Methylphenol		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
bis(2-Chloroisopropyl) ether		670 UJ	ug/kg	670	670 UJ	ug/kg	670	670 UJ	ug/kg	670	750 UJ	ug/kg	750
N-Nitroso-di-n-propylamine		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
Hexachloroethane		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
Nitrobenzene		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
Isophorone		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
2-Nitrophenol		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
2,4-Dimethylphenol		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
Benzoic acid		3300 UJ	ug/kg	3300	3300 UJ	ug/kg	3300	3300 UJ	ug/kg	3300	3600 UJ	ug/kg	3600
bis(2-Chloroethoxy) methane		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
2,4-Dichlorophenol		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
1,2,4-Trichlorobenzene		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
Naphthalene		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
4-Chloroaniline		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
Hexachlorobutadiene		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
4-Chloro-3-methylphenol		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
2-Methylnaphthalene		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
Hexachlorocyclopentadiene		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
2,4,6-Trichlorophenol		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
Dimethylphthalate		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
2,4,5-Trichlorophenol		3300 U	ug/kg	3300	3300 U	ug/kg	3300	3300 U	ug/kg	3300	3600 U	ug/kg	3600
2-Chloronaphthalene		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
2-Nitroaniline		3300 UJ	ug/kg	3300	3300 UJ	ug/kg	3300	3300 UJ	ug/kg	3300	3600 UJ	ug/kg	3600
Acenaphthylene		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
2,6-Dinitrotoluene		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
3-Nitroaniline		3300 U	ug/kg	3300	3300 U	ug/kg	3300	3300 U	ug/kg	3300	3600 UJ	ug/kg	3600
Acenaphthene		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
2,4-Dinitrophenol		3300 UJ	ug/kg	3300	3300 UJ	ug/kg	3300	3300 UJ	ug/kg	3300	3600 U	ug/kg	3600
4-Nitrophenol		3300 UJ	ug/kg	3300	3300 UJ	ug/kg	3300	3300 UJ	ug/kg	3300	3600 UJ	ug/kg	3600
Dibenzofuran		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
2,4-Dinitrotoluene		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
Diethylphthalate		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
4-Chlorophenyl-phenylether		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
Fluorene		670 U	ug/kg	670	670 U	ug/kg	670	670 U	ug/kg	670	750 U	ug/kg	750
4-Nitroaniline		3300 UJ	ug/kg	3300	3300 UJ	ug/kg	3300	3300 UJ	ug/kg	3300	3600 UJ	ug/kg	3600

US Naval Station, Mayport, RCRA Facil.. Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9743005				R9743004				R9743006				R9743007			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S00401				23S00501				23S00601				23S00701			
Collect Date:	05-APR-95				05-APR-95				05-APR-95				05-APR-95			
	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	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3600	U	ug/kg	3600
N-Nitrosodiphenylamine (1)	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
1,2-Diphenylhydrazine	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
4-Bromophenyl-phenylether	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
Hexachlorobenzene	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
Pentachlorophenol	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3600	U	ug/kg	3600
Phenanthrene	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
Anthracene	670	UJ	ug/kg	670	670	UJ	ug/kg	670	670	UJ	ug/kg	670	750	UJ	ug/kg	750
Di-n-Butylphthalate	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
Fluoranthene	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	130	J	ug/kg	750
Pyrene	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	200	J	ug/kg	750
Butylbenzylphthalate	670	UJ	ug/kg	670	670	UJ	ug/kg	670	670	UJ	ug/kg	670	750	UJ	ug/kg	750
3,3-Dichlorobenzidine	1300	U	ug/kg	1300	1300	U	ug/kg	1300	1300	U	ug/kg	1300	1500	U	ug/kg	1500
Benzo (a) anthracene	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	90	J	ug/kg	750
Chrysene	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	130	J	ug/kg	750
bis(2-Ethylhexyl) phthalate	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	UJ	ug/kg	750
Di-n-octylphthalate	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
Benzo (b) fluoranthene	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	110	J	ug/kg	750
Benzo (k) fluoranthene	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	130	J	ug/kg	750
Benzo (a) pyrene	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	94	J	ug/kg	750
Indeno (1,2,3-cd) pyrene	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	UJ	ug/kg	750
Dibenz (a,h) anthracene	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
Benzo (g,h,i) perylene	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	UJ	ug/kg	750
2-Picoline	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3600	U	ug/kg	3600
Methyl methanesulfonate	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
Ethyl methanesulfonate	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
Acetophenone	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
N-Nitrosopiperidine	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
Phenyl-tert-butylamine	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3600	UJ	ug/kg	3600
2,6-Dichlorophenol	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
N-Nitroso-di-n-butylamine	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
N-Nitrosodiethylamine	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
N-Nitrosopyrrolidine	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
Benzidine	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3600	U	ug/kg	3600
1,2,4,5-Tetrachlorobenzene	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3600	U	ug/kg	3600
Pentachlorobenzene	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3600	U	ug/kg	3600
1-Naphthylamine	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3600	U	ug/kg	3600
2-Naphthylamine	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3600	UJ	ug/kg	3600
2,3,4,6-Tetrachlorophenol	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
Phenacetin	670	UJ	ug/kg	670	670	UJ	ug/kg	670	670	UJ	ug/kg	670	750	UJ	ug/kg	750
4-Aminobiphenyl	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3600	U	ug/kg	3600
Pentachloronitrobenzene	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3600	U	ug/kg	3600
Pronamide	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
p-(Dimethylamino)azobenzene	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
7,12-Dimethylbenz(A)Anthracene	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
3-Methylcholanthrene	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
Pyridine	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3600	U	ug/kg	3600
N-Nitrosomethylethylamine	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
N-Nitrosomorpholine	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
o-Toluidine	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
Hexachloropropene	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3600	U	ug/kg	3600
p-Phenylenediamine	33000	U	ug/kg	33000	33000	U	ug/kg	33000	33000	U	ug/kg	33000	36000	U	ug/kg	36000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9743005				R9743004				R9743006				R9743007			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S00401				23S00501				23S00601				23S00701			
Collect Date:	05-APR-95				05-APR-95				05-APR-95				05-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3600	U	ug/kg	3600
Isosafrole	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3600	U	ug/kg	3600
1,4-Naphthoquinone	67000	R	ug/kg	67000	67000	R	ug/kg	67000	67000	R	ug/kg	67000	75000	R	ug/kg	75000
1,3-Dinitrobenzene	670	UJ	ug/kg	670	670	UJ	ug/kg	670	670	UJ	ug/kg	670	750	UJ	ug/kg	750
5-Nitro-o-toluidine	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
1,3,5-Trinitrobenzene	670	UJ	ug/kg	670	670	UJ	ug/kg	670	670	UJ	ug/kg	670	750	UJ	ug/kg	750
4-Nitroquinoline-1-oxide	33000	R	ug/kg	33000	33000	R	ug/kg	33000	33000	R	ug/kg	33000	36000	R	ug/kg	36000
Methapyrilene	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3600	UJ	ug/kg	3600
3,3-Dimethylbenzidine	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
Hexachlorophene	33000	R	ug/kg	33000	33000	R	ug/kg	33000	33000	R	ug/kg	33000	36000	R	ug/kg	36000
Aramite	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3600	U	ug/kg	3600
2-Chlorophenol	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
3- & 4-Methylphenol (2)	670	U	ug/kg	670	670	U	ug/kg	670	670	U	ug/kg	670	750	U	ug/kg	750
Hexachloropropene	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3600	U	ug/kg	3600
2-Acetylaminofluorene	670	UJ	ug/kg	670	670	UJ	ug/kg	670	670	UJ	ug/kg	670	750	U	ug/kg	750

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.

US Naval Station, Mayport, RCRA Facil.., Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		R9743008				R9743009				R9743010				R9743011			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		23S00801				23S00801D				23S00901				23S01001			
Collect Date:		05-APR-95				05-APR-95				05-APR-95				05-APR-95			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg																
N-Nitrosodimethylamine		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Phenol		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Aniline		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
bis(2-Chloroethyl) ether		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Benzyl Alcohol		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
2-Methylphenol		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
bis(2-Chloroisopropyl) ether		770	UJ	ug/kg	770	770	UJ	ug/kg	770	690	UJ	ug/kg	690	700	UJ	ug/kg	700
N-Nitroso-di-n-propylamine		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Hexachloroethane		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Nitrobenzene		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Isophorone		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
2-Nitrophenol		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
2,4-Dimethylphenol		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Benzoic acid		3700	UJ	ug/kg	3700	3700	UJ	ug/kg	3700	3400	UJ	ug/kg	3400	3400	UJ	ug/kg	3400
bis(2-Chloroethoxy) methane		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
2,4-Dichlorophenol		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
1,2,4-Trichlorobenzene		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Naphthalene		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
4-Chloroaniline		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Hexachlorobutadiene		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
4-Chloro-3-methylphenol		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
2-Methylnaphthalene		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Hexachlorocyclopentadiene		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
2,4,6-Trichlorophenol		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Dimethylphthalate		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
2,4,5-Trichlorophenol		3700	U	ug/kg	3700	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
2-Chloronaphthalene		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
2-Nitroaniline		3700	UJ	ug/kg	3700	3700	UJ	ug/kg	3700	3400	UJ	ug/kg	3400	3400	UJ	ug/kg	3400
Acenaphthylene		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
2,6-Dinitrotoluene		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
3-Nitroaniline		3700	UJ	ug/kg	3700	3700	UJ	ug/kg	3700	3400	UJ	ug/kg	3400	3400	UJ	ug/kg	3400
Acenaphthene		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
2,4-Dinitrophenol		3700	U	ug/kg	3700	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
4-Nitrophenol		3700	UJ	ug/kg	3700	3700	UJ	ug/kg	3700	3400	UJ	ug/kg	3400	3400	UJ	ug/kg	3400
Dibenzofuran		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
2,4-Dinitrotoluene		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Diethylphthalate		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
4-Chlorophenyl-phenylether		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Fluorene		770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
4-Nitroaniline		3700	UJ	ug/kg	3700	3700	UJ	ug/kg	3700	3400	UJ	ug/kg	3400	3400	UJ	ug/kg	3400

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9743008				R9743009				R9743010				R9743011			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S00801				23S00801D				23S00901				23S01001			
Collect Date:	05-APR-95				05-APR-95				05-APR-95				05-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	3700	U	ug/kg	3700	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
N-Nitrosodiphenylamine (1)	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
1,2-Diphenylhydrazine	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
4-Bromophenyl-phenylether	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Hexachlorobenzene	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Pentachlorophenol	3700	U	ug/kg	3700	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Phenanthrene	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Anthracene	770	UJ	ug/kg	770	770	UJ	ug/kg	770	690	UJ	ug/kg	690	700	UJ	ug/kg	700
Di-n-Butylphthalate	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Fluoranthene	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Pyrene	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Butylbenzylphthalate	770	UJ	ug/kg	770	770	UJ	ug/kg	770	690	UJ	ug/kg	690	700	UJ	ug/kg	700
3,3-Dichlorobenzidine	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1400	U	ug/kg	1400	1400	U	ug/kg	1400
Benzo (a) anthracene	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Chrysene	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
bis(2-Ethylhexyl) phthalate	770	UJ	ug/kg	770	770	UJ	ug/kg	770	690	U	ug/kg	690	700	UJ	ug/kg	700
Di-n-octylphthalate	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Benzo (b) fluoranthene	770	UJ	ug/kg	770	770	UJ	ug/kg	770	690	UJ	ug/kg	690	700	UJ	ug/kg	700
Benzo (k) fluoranthene	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Benzo (a) pyrene	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Indeno (1,2,3-cd) pyrene	770	UJ	ug/kg	770	770	UJ	ug/kg	770	690	UJ	ug/kg	690	700	UJ	ug/kg	700
Dibenz (a,h) anthracene	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Benzo (g,h,i) perylene	770	UJ	ug/kg	770	770	UJ	ug/kg	770	690	UJ	ug/kg	690	700	UJ	ug/kg	700
2-Picoline	3700	U	ug/kg	3700	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Methyl methanesulfonate	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Ethyl methanesulfonate	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Acetophenone	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
N-Nitrosopiperidine	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Phenyl-tert-butylamine	3700	UJ	ug/kg	3700	3700	UJ	ug/kg	3700	3400	UJ	ug/kg	3400	3400	UJ	ug/kg	3400
2,6-Dichlorophenol	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
N-Nitroso-di-n-butylamine	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
N-Nitrosodiethylamine	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
N-Nitrosopyrrolidine	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Benzidine	3700	U	ug/kg	3700	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
1,2,4,5-Tetrachlorobenzene	3700	U	ug/kg	3700	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Pentachlorobenzene	3700	U	ug/kg	3700	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
1-Naphthylamine	3700	U	ug/kg	3700	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
2-Naphthylamine	3700	UJ	ug/kg	3700	3700	UJ	ug/kg	3700	3400	UJ	ug/kg	3400	3400	UJ	ug/kg	3400
2,3,4,6-Tetrachlorophenol	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Phenacetin	770	UJ	ug/kg	770	770	UJ	ug/kg	770	690	UJ	ug/kg	690	700	UJ	ug/kg	700
4-Aminobiphenyl	3700	U	ug/kg	3700	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Pentachloronitrobenzene	3700	U	ug/kg	3700	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Pronamide	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
p-(Dimethylamino)azobenzene	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
7,12-Dimethylbenz(A)Anthracene	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
3-Methylcholanthrene	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Pyridine	3700	U	ug/kg	3700	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
N-Nitrosomethylethylamine	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
N-Nitrosomorpholine	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
o-Toluidine	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Hexachloropropene	3700	U	ug/kg	3700	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
p-Phenylenediamine	37000	U	ug/kg	37000	37000	U	ug/kg	37000	34000	U	ug/kg	34000	34000	U	ug/kg	34000

US Naval Station, Mayport, RCRA Facil[illegible] Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9743008				R9743009				R9743010				R9743011			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S00801				23S00801D				23S00901				23S01001			
Collect Date:	05-APR-95				05-APR-95				05-APR-95				05-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	3700	U	ug/kg	3700	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Isosafrole	3700	U	ug/kg	3700	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
1,4-Naphthoquinone	77000	R	ug/kg	77000	77000	R	ug/kg	77000	69000	R	ug/kg	69000	70000	R	ug/kg	70000
1,3-Dinitrobenzene	770	UJ	ug/kg	770	770	UJ	ug/kg	770	690	UJ	ug/kg	690	700	UJ	ug/kg	700
5-Nitro-o-toluidine	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
1,3,5-Trinitrobenzene	770	UJ	ug/kg	770	770	UJ	ug/kg	770	690	UJ	ug/kg	690	700	UJ	ug/kg	700
4-Nitroquinoline-1-oxide	37000	R	ug/kg	37000	37000	R	ug/kg	37000	34000	R	ug/kg	34000	34000	R	ug/kg	34000
Methapyrilene	3700	UJ	ug/kg	3700	3700	UJ	ug/kg	3700	3400	UJ	ug/kg	3400	3400	UJ	ug/kg	3400
3,3-Dimethylbenzidine	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Hexachlorophene	37000	R	ug/kg	37000	37000	R	ug/kg	37000	34000	R	ug/kg	34000	34000	R	ug/kg	34000
Aramite	3700	U	ug/kg	3700	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
2-Chlorophenol	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
3- & 4-Methylphenol (2)	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700
Hexachloropropene	3700	U	ug/kg	3700	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
2-Acetylaminofluorene	770	U	ug/kg	770	770	U	ug/kg	770	690	U	ug/kg	690	700	U	ug/kg	700

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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SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9743015				R9743014				R9743016				R9743017			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S01101				23S01201				23S01301				23S01401			
Collect Date:	07-APR-95				07-APR-95				07-APR-95				07-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/kg																
N-Nitrosodimethylamine	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Phenol	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Aniline	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
bis(2-Chloroethyl) ether	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Benzyl Alcohol	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
2-Methylphenol	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
bis(2-Chloroisopropyl) ether	700	UJ	ug/kg	700	720	UJ	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
N-Nitroso-di-n-propylamine	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Hexachloroethane	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Nitrobenzene	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Isophorone	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
2-Nitrophenol	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
2,4-Dimethylphenol	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Benzoic acid	3400	UJ	ug/kg	3400	3500	UJ	ug/kg	3500	4100	U	ug/kg	4100	3900	U	ug/kg	3900
bis(2-Chloroethoxy) methane	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
2,4-Dichlorophenol	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
1,2,4-Trichlorobenzene	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Naphthalene	700	U	ug/kg	700	880		ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
4-Chloroaniline	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Hexachlorobutadiene	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
4-Chloro-3-methylphenol	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
2-Methylnaphthalene	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Hexachlorocyclopentadiene	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
2,4,6-Trichlorophenol	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Dimethylphthalate	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
2,4,5-Trichlorophenol	3400	U	ug/kg	3400	3500	U	ug/kg	3500	4100	U	ug/kg	4100	3900	U	ug/kg	3900
2-Chloronaphthalene	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
2-Nitroaniline	3400	UJ	ug/kg	3400	3500	UJ	ug/kg	3500	4100	U	ug/kg	4100	3900	U	ug/kg	3900
Acenaphthylene	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
2,6-Dinitrotoluene	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
3-Nitroaniline	3400	UJ	ug/kg	3400	3500	UJ	ug/kg	3500	4100	U	ug/kg	4100	3900	U	ug/kg	3900
Acenaphthene	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
2,4-Dinitrophenol	3400	U	ug/kg	3400	3500	U	ug/kg	3500	4100	U	ug/kg	4100	3900	U	ug/kg	3900
4-Nitrophenol	3400	UJ	ug/kg	3400	3500	UJ	ug/kg	3500	4100	U	ug/kg	4100	3900	U	ug/kg	3900
Dibenzofuran	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
2,4-Dinitrotoluene	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Diethylphthalate	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
4-Chlorophenyl-phenylether	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Fluorene	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
4-Nitroaniline	3400	UJ	ug/kg	3400	3500	UJ	ug/kg	3500	4100	U	ug/kg	4100	3900	U	ug/kg	3900

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9743015				R9743014				R9743016				R9743017			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S01101				23S01201				23S01301				23S01401			
Collect Date:	07-APR-95				07-APR-95				07-APR-95				07-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	3400	U	ug/kg	3400	3500	U	ug/kg	3500	4100	U	ug/kg	4100	3900	U	ug/kg	3900
N-Nitrosodiphenylamine (1)	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
1,2-Diphenylhydrazine	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
4-Bromophenyl-phenylether	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Hexachlorobenzene	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Pentachlorophenol	3400	U	ug/kg	3400	3500	U	ug/kg	3500	4100	U	ug/kg	4100	3900	U	ug/kg	3900
Phenanthrene	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	96	J	ug/kg	800
Anthracene	700	UJ	ug/kg	700	720	UJ	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Di-n-Butylphthalate	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Fluoranthene	700	U	ug/kg	700	720	U	ug/kg	720	210	J	ug/kg	850	330	J	ug/kg	800
Pyrene	700	U	ug/kg	700	720	U	ug/kg	720	240	J	ug/kg	850	520	J	ug/kg	800
Butylbenzylphthalate	700	UJ	ug/kg	700	720	UJ	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
3,3-Dichlorobenzidine	1400	U	ug/kg	1400	1400	U	ug/kg	1400	1700	U	ug/kg	1700	1600	U	ug/kg	1600
Benzo (a) anthracene	700	U	ug/kg	700	720	U	ug/kg	720	160	J	ug/kg	850	330	J	ug/kg	800
Chrysene	700	U	ug/kg	700	720	U	ug/kg	720	220	J	ug/kg	850	440	J	ug/kg	800
bis(2-Ethylhexyl) phthalate	700	UJ	ug/kg	700	720	UJ	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Di-n-octylphthalate	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Benzo (b) fluoranthene	700	UJ	ug/kg	700	720	UJ	ug/kg	720	240	J	ug/kg	850	450	J	ug/kg	800
Benzo (k) fluoranthene	700	U	ug/kg	700	720	U	ug/kg	720	220	J	ug/kg	850	500	J	ug/kg	800
Benzo (a) pyrene	700	U	ug/kg	700	720	U	ug/kg	720	160	J	ug/kg	850	430	J	ug/kg	800
Indeno (1,2,3-cd) pyrene	700	UJ	ug/kg	700	720	UJ	ug/kg	720	130	J	ug/kg	850	270	J	ug/kg	800
Dibenz (a,h) anthracene	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	96	J	ug/kg	800
Benzo (g,h,i) perylene	700	UJ	ug/kg	700	720	UJ	ug/kg	720	190	J	ug/kg	850	340	J	ug/kg	800
2-Picoline	3400	U	ug/kg	3400	3500	U	ug/kg	3500	4100	U	ug/kg	4100	3900	U	ug/kg	3900
Methyl methanesulfonate	700	U	ug/kg	700	720	U	ug/kg	720	850	UJ	ug/kg	850	800	UJ	ug/kg	800
Ethyl methanesulfonate	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Acetophenone	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
N-Nitrosopiperidine	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Phenyl-tert-butylamine	3400	UJ	ug/kg	3400	3500	UJ	ug/kg	3500	4100	U	ug/kg	4100	3900	U	ug/kg	3900
2,6-Dichlorophenol	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
N-Nitroso-di-n-butylamine	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
N-Nitrosodiethylamine	700	U	ug/kg	700	720	U	ug/kg	720	850	UJ	ug/kg	850	800	UJ	ug/kg	800
N-Nitrosopyrrolidine	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Benzidine	3400	U	ug/kg	3400	3500	U	ug/kg	3500	4100	U	ug/kg	4100	3900	U	ug/kg	3900
1,2,4,5-Tetrachlorobenzene	3400	U	ug/kg	3400	3500	U	ug/kg	3500	4100	U	ug/kg	4100	3900	U	ug/kg	3900
Pentachlorobenzene	3400	U	ug/kg	3400	3500	U	ug/kg	3500	4100	U	ug/kg	4100	3900	U	ug/kg	3900
1-Naphthylamine	3400	U	ug/kg	3400	3500	U	ug/kg	3500	4100	U	ug/kg	4100	3900	U	ug/kg	3900
2-Naphthylamine	3400	UJ	ug/kg	3400	3500	UJ	ug/kg	3500	4100	UJ	ug/kg	4100	3900	UJ	ug/kg	3900
2,3,4,6-Tetrachlorophenol	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Phenacetin	700	UJ	ug/kg	700	720	UJ	ug/kg	720	850	UJ	ug/kg	850	800	UJ	ug/kg	800
4-Aminobiphenyl	3400	U	ug/kg	3400	3500	U	ug/kg	3500	4100	U	ug/kg	4100	3900	U	ug/kg	3900
Pentachloronitrobenzene	3400	U	ug/kg	3400	3500	U	ug/kg	3500	4100	U	ug/kg	4100	3900	U	ug/kg	3900
Pronamide	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
p-(Dimethylamino)azobenzene	700	U	ug/kg	700	720	U	ug/kg	720	850	UJ	ug/kg	850	800	UJ	ug/kg	800
7,12-Dimethylbenz(A)Anthracene	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
3-Methylcholanthrene	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Pyridine	3400	U	ug/kg	3400	3500	U	ug/kg	3500	4100	U	ug/kg	4100	3900	U	ug/kg	3900
N-Nitrosomethylethylamine	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
N-Nitrosomorpholine	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
o-Toluidine	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Hexachloropropene	3400	U	ug/kg	3400	3500	U	ug/kg	3500	4100	U	ug/kg	4100	3900	U	ug/kg	3900
p-Phenylenediamine	34000	U	ug/kg	34000	35000	U	ug/kg	35000	41000	U	ug/kg	41000	39000	U	ug/kg	39000

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SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9743015				R9743014				R9743016				R9743017			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S01101				23S01201				23S01301				23S01401			
Collect Date:	07-APR-95				07-APR-95				07-APR-95				07-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	3400	U	ug/kg	3400	3500	U	ug/kg	3500	4100	U	ug/kg	4100	3900	U	ug/kg	3900
Isosafrole	3400	U	ug/kg	3400	3500	U	ug/kg	3500	4100	U	ug/kg	4100	3900	U	ug/kg	3900
1,4-Naphthoquinone	70000	R	ug/kg	70000	72000	R	ug/kg	72000	85000	R	ug/kg	85000	80000	R	ug/kg	80000
1,3-Dinitrobenzene	700	UJ	ug/kg	700	720	UJ	ug/kg	720	850	UJ	ug/kg	850	800	UJ	ug/kg	800
5-Nitro-o-toluidine	700	U	ug/kg	700	720	U	ug/kg	720	850	UJ	ug/kg	850	800	UJ	ug/kg	800
1,3,5-Trinitrobenzene	700	UJ	ug/kg	700	720	UJ	ug/kg	720	850	UJ	ug/kg	850	800	UJ	ug/kg	800
4-Nitroquinoline-1-oxide	34000	R	ug/kg	34000	35000	R	ug/kg	35000	41000	R	ug/kg	41000	39000	R	ug/kg	39000
Methapyrilene	3400	UJ	ug/kg	3400	3500	UJ	ug/kg	3500	4100	UJ	ug/kg	4100	3900	UJ	ug/kg	3900
3,3-Dimethylbenzidine	700	U	ug/kg	700	720	U	ug/kg	720	850	UJ	ug/kg	850	800	UJ	ug/kg	800
Hexachlorophene	34000	R	ug/kg	34000	35000	R	ug/kg	35000	41000	U	ug/kg	41000	39000	U	ug/kg	39000
Aramite	3400	U	ug/kg	3400	3500	U	ug/kg	3500	4100	R	ug/kg	4100	3900	R	ug/kg	3900
2-Chlorophenol	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
3- & 4-Methylphenol (2)	700	U	ug/kg	700	720	U	ug/kg	720	850	U	ug/kg	850	800	U	ug/kg	800
Hexachloropropene	3400	U	ug/kg	3400	3500	U	ug/kg	3500	4100	U	ug/kg	4100	3900	U	ug/kg	3900
2-Acetylaminofluorene	700	U	ug/kg	700	720	U	ug/kg	720	850	UJ	ug/kg	850	800	UJ	ug/kg	800

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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SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9743018			R9743019			R9743020			R9743021		
Site	GROUP111			GROUP111			GROUP111			GROUP111		
Locator	23S01501			23S01601			23S01701			23S01701D		
Collect Date:	07-APR-95			07-APR-95			07-APR-95			07-APR-95		
	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES ug/kg												
N-Nitrosodimethylamine	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
Phenol	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
Aniline	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
bis(2-Chloroethyl) ether	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
Benzyl Alcohol	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
2-Methylphenol	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
bis(2-Chloroisopropyl) ether	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
N-Nitroso-di-n-propylamine	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
Hexachloroethane	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
Nitrobenzene	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
Isophorone	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
2-Nitrophenol	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
2,4-Dimethylphenol	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
Benzoic acid	3600 U	ug/kg	3600	3700 U	ug/kg	3700	3400 U	ug/kg	3400	3400 U	ug/kg	3400
bis(2-Chloroethoxy) methane	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
2,4-Dichlorophenol	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
1,2,4-Trichlorobenzene	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
Naphthalene	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
4-Chloroaniline	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
Hexachlorobutadiene	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
4-Chloro-3-methylphenol	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
2-Methylnaphthalene	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
Hexachlorocyclopentadiene	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
2,4,6-Trichlorophenol	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
Dimethylphthalate	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
2,4,5-Trichlorophenol	3600 U	ug/kg	3600	3700 U	ug/kg	3700	3400 U	ug/kg	3400	3400 U	ug/kg	3400
2-Chloronaphthalene	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
2-Nitroaniline	3600 U	ug/kg	3600	3700 U	ug/kg	3700	3400 U	ug/kg	3400	3400 U	ug/kg	3400
Acenaphthylene	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
2,6-Dinitrotoluene	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
3-Nitroaniline	3600 U	ug/kg	3600	3700 U	ug/kg	3700	3400 U	ug/kg	3400	3400 U	ug/kg	3400
Acenaphthene	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
2,4-Dinitrophenol	3600 U	ug/kg	3600	3700 U	ug/kg	3700	3400 U	ug/kg	3400	3400 U	ug/kg	3400
4-Nitrophenol	3600 U	ug/kg	3600	3700 U	ug/kg	3700	3400 U	ug/kg	3400	3400 U	ug/kg	3400
Dibenzofuran	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
2,4-Dinitrotoluene	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
Diethylphthalate	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
4-Chlorophenyl-phenylether	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
Fluorene	750 U	ug/kg	750	760 U	ug/kg	760	710 U	ug/kg	710	710 U	ug/kg	710
4-Nitroaniline	3600 U	ug/kg	3600	3700 U	ug/kg	3700	3400 U	ug/kg	3400	3400 U	ug/kg	3400

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Lab Sample Number:	R9743018				R9743019				R9743020				R9743021			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S01501				23S01601				23S01701				23S01701D			
Collect Date:	07-APR-95				07-APR-95				07-APR-95				07-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	3600	U	ug/kg	3600	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
N-Nitrosodiphenylamine (1)	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
1,2-Diphenylhydrazine	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
4-Bromophenyl-phenylether	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
Hexachlorobenzene	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
Pentachlorophenol	3600	U	ug/kg	3600	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Phenanthrene	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
Anthracene	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
Di-n-Butylphthalate	79	J	ug/kg	750	200	J	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
Fluoranthene	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
Pyrene	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
Butylbenzylphthalate	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
3,3-Dichlorobenzidine	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1400	U	ug/kg	1400	1400	U	ug/kg	1400
Benzo (a) anthracene	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
Chrysene	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
bis(2-Ethylhexyl) phthalate	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
Di-n-octylphthalate	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
Benzo (b) fluoranthene	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
Benzo (k) fluoranthene	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
Benzo (a) pyrene	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
Indeno (1,2,3-cd) pyrene	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
Dibenz (a,h) anthracene	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
Benzo (g,h,i) perylene	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
2-Picoline	3600	U	ug/kg	3600	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Methyl methanesulfonate	750	UJ	ug/kg	750	760	UJ	ug/kg	760	710	UJ	ug/kg	710	710	UJ	ug/kg	710
Ethyl methanesulfonate	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
Acetophenone	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
N-Nitrosopiperidine	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
Phenyl-tert-butylamine	3600	U	ug/kg	3600	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
2,6-Dichlorophenol	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
N-Nitroso-di-n-butylamine	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
N-Nitrosodiethylamine	750	UJ	ug/kg	750	760	UJ	ug/kg	760	710	UJ	ug/kg	710	710	UJ	ug/kg	710
N-Nitrosopyrrolidine	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
Benzidine	3600	U	ug/kg	3600	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
1,2,4,5-Tetrachlorobenzene	3600	U	ug/kg	3600	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Pentachlorobenzene	3600	U	ug/kg	3600	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
1-Naphthylamine	3600	U	ug/kg	3600	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
2-Naphthylamine	3600	UJ	ug/kg	3600	3700	UJ	ug/kg	3700	3400	UJ	ug/kg	3400	3400	UJ	ug/kg	3400
2,3,4,6-Tetrachlorophenol	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
Phenacetin	750	UJ	ug/kg	750	760	UJ	ug/kg	760	710	UJ	ug/kg	710	710	UJ	ug/kg	710
4-Aminobiphenyl	3600	U	ug/kg	3600	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Pentachloronitrobenzene	3600	U	ug/kg	3600	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Pronamide	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
p-(Dimethylamino)azobenzene	750	UJ	ug/kg	750	760	UJ	ug/kg	760	710	UJ	ug/kg	710	710	UJ	ug/kg	710
7,12-Dimethylbenz(A)Anthracene	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
3-Methylcholanthrene	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
Pyridine	3600	U	ug/kg	3600	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
N-Nitrosomethylethylamine	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
N-Nitrosomorpholine	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
o-Toluidine	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
Hexachloropropene	3600	U	ug/kg	3600	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
p-Phenylenediamine	36000	U	ug/kg	36000	37000	U	ug/kg	37000	34000	U	ug/kg	34000	34000	U	ug/kg	34000

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Lab Sample Number:	R9743018				R9743019				R9743020				R9743021			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S01501				23S01601				23S01701				23S01701D			
Collect Date:	07-APR-95				07-APR-95				07-APR-95				07-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	3600	U	ug/kg	3600	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Isosafrole	3600	U	ug/kg	3600	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
1,4-Naphthoquinone	75000	R	ug/kg	75000	76000	R	ug/kg	76000	71000	R	ug/kg	71000	71000	R	ug/kg	71000
1,3-Dinitrobenzene	750	UJ	ug/kg	750	760	UJ	ug/kg	760	710	UJ	ug/kg	710	710	UJ	ug/kg	710
5-Nitro-o-toluidine	750	UJ	ug/kg	750	760	UJ	ug/kg	760	710	UJ	ug/kg	710	710	UJ	ug/kg	710
1,3,5-Trinitrobenzene	750	UJ	ug/kg	750	760	UJ	ug/kg	760	710	UJ	ug/kg	710	710	UJ	ug/kg	710
4-Nitroquinoline-1-oxide	36000	R	ug/kg	36000	37000	R	ug/kg	37000	34000	R	ug/kg	34000	34000	R	ug/kg	34000
Methapyrilene	3600	UJ	ug/kg	3600	3700	UJ	ug/kg	3700	3400	UJ	ug/kg	3400	3400	UJ	ug/kg	3400
3,3-Dimethylbenzidine	750	UJ	ug/kg	750	760	UJ	ug/kg	760	710	UJ	ug/kg	710	710	UJ	ug/kg	710
Hexachlorophene	36000	U	ug/kg	36000	37000	U	ug/kg	37000	34000	U	ug/kg	34000	34000	U	ug/kg	34000
Aramite	3600	R	ug/kg	3600	3700	R	ug/kg	3700	3400	R	ug/kg	3400	3400	R	ug/kg	3400
2-Chlorophenol	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
3- & 4-Methylphenol (2)	750	U	ug/kg	750	760	U	ug/kg	760	710	U	ug/kg	710	710	U	ug/kg	710
Hexachloropropene	3600	U	ug/kg	3600	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
2-Acetylaminofluorene	750	UJ	ug/kg	750	760	UJ	ug/kg	760	710	UJ	ug/kg	710	710	UJ	ug/kg	710

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9743022				M8775001				M8775002				M8780001			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S01801				23S01901				23S02001				23S02101			
Collect Date:	07-APR-95				07-APR-95				07-APR-95				08-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/kg																
N-Nitrosodimethylamine	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Phenol	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Aniline	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
bis(2-Chloroethyl) ether	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Benzyl Alcohol	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
2-Methylphenol	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
bis(2-Chloroisopropyl) ether	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
N-Nitroso-di-n-propylamine	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Hexachloroethane	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Nitrobenzene	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Isophorone	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
2-Nitrophenol	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
2,4-Dimethylphenol	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Benzoic acid	3500	U	ug/kg	3500	1800	U	ug/kg	1800	1900	U	ug/kg	1900	1900	UJ	ug/kg	1900
bis(2-Chloroethoxy) methane	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
2,4-Dichlorophenol	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
1,2,4-Trichlorobenzene	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Naphthalene	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
4-Chloroaniline	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Hexachlorobutadiene	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
4-Chloro-3-methylphenol	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
2-Methylnaphthalene	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Hexachlorocyclopentadiene	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
2,4,6-Trichlorophenol	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Dimethylphthalate	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
2,4,5-Trichlorophenol	3500	U	ug/kg	3500	1800	U	ug/kg	1800	1900	U	ug/kg	1900	1900	U	ug/kg	1900
2-Chloronaphthalene	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
2-Nitroaniline	3500	U	ug/kg	3500	1800	U	ug/kg	1800	1900	U	ug/kg	1900	1900	U	ug/kg	1900
Acenaphthylene	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
2,6-Dinitrotoluene	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
3-Nitroaniline	3500	U	ug/kg	3500	1800	U	ug/kg	1800	1900	U	ug/kg	1900	1900	U	ug/kg	1900
Acenaphthene	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
2,4-Dinitrophenol	3500	U	ug/kg	3500	1800	U	ug/kg	1800	1900	U	ug/kg	1900	1900	UJ	ug/kg	1900
4-Nitrophenol	3500	U	ug/kg	3500	1800	U	ug/kg	1800	1900	U	ug/kg	1900	1900	U	ug/kg	1900
Dibenzofuran	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
2,4-Dinitrotoluene	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Diethylphthalate	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
4-Chlorophenyl-phenylether	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Fluorene	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
4-Nitroaniline	3500	U	ug/kg	3500	1800	U	ug/kg	1800	1900	U	ug/kg	1900	1900	U	ug/kg	1900

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Lab Sample Number:	R9743022				M8775001				M8775002				M8780001			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S01801				23S01901				23S02001				23S02101			
Collect Date:	07-APR-95				07-APR-95				07-APR-95				08-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	3500	U	ug/kg	3500	1800	U	ug/kg	1800	1900	U	ug/kg	1900	1900	U	ug/kg	1900
N-Nitrosodiphenylamine (1)	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
1,2-Diphenylhydrazine	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
4-Bromophenyl-phenylether	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Hexachlorobenzene	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Pentachlorophenol	3500	U	ug/kg	3500	1800	U	ug/kg	1800	1900	U	ug/kg	1900	1900	U	ug/kg	1900
Phenanthrene	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Anthracene	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Di-n-Butylphthalate	730	U	ug/kg	730	30	J	ug/kg	370	44	J	ug/kg	380	380	U	ug/kg	380
Fluoranthene	730	U	ug/kg	730	370	U	ug/kg	370	29	J	ug/kg	380	380	U	ug/kg	380
Pyrene	730	U	ug/kg	730	370	U	ug/kg	370	21	J	ug/kg	380	20	J	ug/kg	380
Butylbenzylphthalate	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
3,3-Dichlorobenzidine	1500	U	ug/kg	1500	750	U	ug/kg	750	770	U	ug/kg	770	760	U	ug/kg	760
Benzo (a) anthracene	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Chrysene	730	U	ug/kg	730	370	U	ug/kg	370	21	J	ug/kg	380	34	J	ug/kg	380
bis(2-Ethylhexyl) phthalate	730	U	ug/kg	730	26	J	ug/kg	370	150	J	ug/kg	380	380	U	ug/kg	380
Di-n-octylphthalate	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Benzo (b) fluoranthene	730	U	ug/kg	730	370	U	ug/kg	370	24	J	ug/kg	380	380	U	ug/kg	380
Benzo (k) fluoranthene	730	U	ug/kg	730	370	UJ	ug/kg	370	27	J	ug/kg	380	380	U	ug/kg	380
Benzo (a) pyrene	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Indeno (1,2,3-cd) pyrene	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Dibenz (a,h) anthracene	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Benzo (g,h,i) perylene	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
2-Picoline	3500	U	ug/kg	3500	1800	U	ug/kg	1800	1900	U	ug/kg	1900	1900	U	ug/kg	1900
Methyl methanesulfonate	730	UJ	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Ethyl methanesulfonate	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Acetophenone	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
N-Nitrosopiperidine	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Phenyl-tert-butylamine	3500	U	ug/kg	3500	1800	U	ug/kg	1800	1900	U	ug/kg	1900	1900	U	ug/kg	1900
2,6-Dichlorophenol	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
N-Nitroso-di-n-butylamine	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
N-Nitrosodiethylamine	730	UJ	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
N-Nitrosopyrrolidine	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Benzidine	3500	U	ug/kg	3500	1800	U	ug/kg	1800	1900	U	ug/kg	1900	1900	U	ug/kg	1900
1,2,4,5-Tetrachlorobenzene	3500	U	ug/kg	3500	1800	U	ug/kg	1800	1900	U	ug/kg	1900	1900	U	ug/kg	1900
Pentachlorobenzene	3500	U	ug/kg	3500	1800	U	ug/kg	1800	1900	U	ug/kg	1900	1900	U	ug/kg	1900
1-Naphthylamine	3500	U	ug/kg	3500	1800	U	ug/kg	1800	1900	U	ug/kg	1900	1900	U	ug/kg	1900
2-Naphthylamine	3500	UJ	ug/kg	3500	1800	U	ug/kg	1800	1900	U	ug/kg	1900	1900	U	ug/kg	1900
2,3,4,6-Tetrachlorophenol	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Phenacetin	730	UJ	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
4-Aminobiphenyl	3500	U	ug/kg	3500	1800	U	ug/kg	1800	1900	U	ug/kg	1900	1900	U	ug/kg	1900
Pentachloronitrobenzene	3500	U	ug/kg	3500	1800	U	ug/kg	1800	1900	U	ug/kg	1900	1900	U	ug/kg	1900
Pronamide	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
p-(Dimethylamino)azobenzene	730	UJ	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
7,12-Dimethylbenz(A)Anthracene	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
3-Methylcholanthrene	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Pyridine	3500	U	ug/kg	3500	1800	U	ug/kg	1800	1900	U	ug/kg	1900	1900	U	ug/kg	1900
N-Nitrosomethylethylamine	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
N-Nitrosomorpholine	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
o-Toluidine	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Hexachloropropene	3500	U	ug/kg	3500	1800	U	ug/kg	1800	1900	U	ug/kg	1900	1900	U	ug/kg	1900
p-Phenylenediamine	35000	U	ug/kg	35000	18000	U	ug/kg	18000	19000	U	ug/kg	19000	19000	U	ug/kg	19000

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Lab Sample Number:	R9743022				M8775001				M8775002				M8780001			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S01801				23S01901				23S02001				23S02101			
Collect Date:	07-APR-95				07-APR-95				07-APR-95				08-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	3500	U	ug/kg	3500	1800	U	ug/kg	1800	1900	U	ug/kg	1900	1900	U	ug/kg	1900
Isosafrole	3500	U	ug/kg	3500	1800	U	ug/kg	1800	1900	U	ug/kg	1900	1900	U	ug/kg	1900
1,4-Naphthoquinone	73000	R	ug/kg	73000	37000	U	ug/kg	37000	38000	U	ug/kg	38000	38000	U	ug/kg	38000
1,3-Dinitrobenzene	730	UJ	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
5-Nitro-o-toluidine	730	UJ	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
1,3,5-Trinitrobenzene	730	UJ	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
4-Nitroquinoline-1-oxide	35000	R	ug/kg	35000	18000	U	ug/kg	18000	19000	U	ug/kg	19000	19000	U	ug/kg	19000
Methapyrilene	3500	UJ	ug/kg	3500	1800	U	ug/kg	1800	1900	U	ug/kg	1900	1900	U	ug/kg	1900
3,3-Dimethylbenzidine	730	UJ	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Hexachlorophene	35000	U	ug/kg	35000	18000	U	ug/kg	18000	19000	U	ug/kg	19000	19000	U	ug/kg	19000
Aramite	3500	R	ug/kg	3500	1800	U	ug/kg	1800	1900	U	ug/kg	1900	1900	U	ug/kg	1900
2-Chlorophenol	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
3- & 4-Methylphenol (2)	730	U	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380
Hexachloropropene	3500	U	ug/kg	3500	1800	U	ug/kg	1800	1900	U	ug/kg	1900	1900	U	ug/kg	1900
2-Acetylaminofluorene	730	UJ	ug/kg	730	370	U	ug/kg	370	380	U	ug/kg	380	380	U	ug/kg	380

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		M8780003				M8780002				M8775003				M8775004		
Site		GROUP111				GROUP111				GROUP111				GROUP111		
Locator		23S02201				23S02301				23S02401				23S02501		
Collect Date:		08-APR-95				08-APR-95				07-APR-95				07-APR-95		
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg																
N-Nitrosodimethylamine		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Phenol		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Aniline		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
bis(2-Chloroethyl) ether		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Benzyl Alcohol		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
2-Methylphenol		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
bis(2-Chloroisopropyl) ether		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
N-Nitroso-di-n-propylamine		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Hexachloroethane		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Nitrobenzene		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Isophorone		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
2-Nitrophenol		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
2,4-Dimethylphenol		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Benzoic acid		1900	UJ	ug/kg	1900	3600	U	ug/kg	3600	1800	U	ug/kg	1800	1800	U	ug/kg	1800
bis(2-Chloroethoxy) methane		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
2,4-Dichlorophenol		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
1,2,4-Trichlorobenzene		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Naphthalene		24	J	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
4-Chloroaniline		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Hexachlorobutadiene		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
4-Chloro-3-methylphenol		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
2-Methylnaphthalene		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Hexachlorocyclopentadiene		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
2,4,6-Trichlorophenol		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Dimethylphthalate		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
2,4,5-Trichlorophenol		1900	U	ug/kg	1900	3600	U	ug/kg	3600	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2-Chloronaphthalene		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
2-Nitroaniline		1900	U	ug/kg	1900	3600	U	ug/kg	3600	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Acenaphthylene		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
2,6-Dinitrotoluene		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
3-Nitroaniline		1900	U	ug/kg	1900	3600	U	ug/kg	3600	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Acenaphthene		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
2,4-Dinitrophenol		1900	UJ	ug/kg	1900	3600	U	ug/kg	3600	1800	U	ug/kg	1800	1800	U	ug/kg	1800
4-Nitrophenol		1900	U	ug/kg	1900	3600	U	ug/kg	3600	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Dibenzofuran		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
2,4-Dinitrotoluene		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Diethylphthalate		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
4-Chlorophenyl-phenylether		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Fluorene		380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
4-Nitroaniline		1900	U	ug/kg	1900	3600	U	ug/kg	3600	1800	U	ug/kg	1800	1800	U	ug/kg	1800

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8780003				M8780002				M8775003				M8775004			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S02201				23S02301				23S02401				23S02501			
Collect Date:	08-APR-95				08-APR-95				07-APR-95				07-APR-95			
	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	3600	U	ug/kg	3600	1800	U	ug/kg	1800	1800	U	ug/kg	1800
N-Nitrosodiphenylamine (1)	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
1,2-Diphenylhydrazine	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
4-Bromophenyl-phenylether	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Hexachlorobenzene	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Pentachlorophenol	1900	U	ug/kg	1900	3600	U	ug/kg	3600	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Phenanthrene	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Anthracene	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Di-n-Butylphthalate	20	J	ug/kg	380	720	U	ug/kg	720	41	J	ug/kg	360	29	J	ug/kg	360
Fluoranthene	380	U	ug/kg	380	42	J	ug/kg	720	360	U	ug/kg	360	28	J	ug/kg	360
Pyrene	380	U	ug/kg	380	62	J	ug/kg	720	360	U	ug/kg	360	28	J	ug/kg	360
Butylbenzylphthalate	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
3,3-Dichlorobenzidine	760	U	ug/kg	760	1400	U	ug/kg	1400	720	U	ug/kg	720	720	U	ug/kg	720
Benzo (a) anthracene	380	U	ug/kg	380	54	J	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Chrysene	380	U	ug/kg	380	80	J	ug/kg	720	360	U	ug/kg	360	21	J	ug/kg	360
bis(2-Ethylhexyl) phthalate	380	U	ug/kg	380	720	U	ug/kg	720	62	J	ug/kg	360	41	J	ug/kg	360
Di-n-octylphthalate	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Benzo (b) fluoranthene	380	U	ug/kg	380	65	J	ug/kg	720	360	U	ug/kg	360	22	J	ug/kg	360
Benzo (k) fluoranthene	380	U	ug/kg	380	69	J	ug/kg	720	19	J	ug/kg	360	35	J	ug/kg	360
Benzo (a) pyrene	380	U	ug/kg	380	74	J	ug/kg	720	360	U	ug/kg	360	24	J	ug/kg	360
Indeno (1,2,3-cd) pyrene	380	U	ug/kg	380	47	J	ug/kg	720	360	U	ug/kg	360	26	J	ug/kg	360
Dibenz (a,h) anthracene	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Benzo (g,h,i) perylene	380	U	ug/kg	380	55	J	ug/kg	720	360	U	ug/kg	360	43	J	ug/kg	360
2-Picoline	1900	U	ug/kg	1900	3600	U	ug/kg	3600	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Methyl methanesulfonate	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Ethyl methanesulfonate	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Acetophenone	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	28	J	ug/kg	360
N-Nitrosopiperidine	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Phenyl-tert-butylamine	1900	U	ug/kg	1900	3600	U	ug/kg	3600	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2,6-Dichlorophenol	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
N-Nitroso-di-n-butylamine	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
N-Nitrosodiethylamine	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
N-Nitrosopyrrolidine	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Benzidine	1900	U	ug/kg	1900	3600	U	ug/kg	3600	1800	U	ug/kg	1800	1800	U	ug/kg	1800
1,2,4,5-Tetrachlorobenzene	1900	U	ug/kg	1900	3600	U	ug/kg	3600	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Pentachlorobenzene	1900	U	ug/kg	1900	3600	U	ug/kg	3600	1800	U	ug/kg	1800	1800	U	ug/kg	1800
1-Naphthylamine	1900	U	ug/kg	1900	3600	U	ug/kg	3600	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2-Naphthylamine	1900	U	ug/kg	1900	3600	U	ug/kg	3600	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2,3,4,6-Tetrachlorophenol	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Phenacetin	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
4-Aminobiphenyl	1900	U	ug/kg	1900	3600	U	ug/kg	3600	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Pentachloronitrobenzene	1900	U	ug/kg	1900	3600	U	ug/kg	3600	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Pronamide	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
p-(Dimethylamino)azobenzene	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
7,12-Dimethylbenz(A)Anthracene	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
3-Methylcholanthrene	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Pyridine	1900	U	ug/kg	1900	3600	U	ug/kg	3600	1800	U	ug/kg	1800	1800	U	ug/kg	1800
N-Nitrosomethylethylamine	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
N-Nitrosomorpholine	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
o-Toluidine	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Hexachloropropene	1900	U	ug/kg	1900	3600	U	ug/kg	3600	1800	U	ug/kg	1800	1800	U	ug/kg	1800
p-Phenylenediamine	19000	U	ug/kg	19000	36000	U	ug/kg	36000	18000	U	ug/kg	18000	18000	U	ug/kg	18000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8780003				M8780002				M8775003				M8775004			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S02201				23S02301				23S02401				23S02501			
Collect Date:	08-APR-95				08-APR-95				07-APR-95				07-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	1900	U	ug/kg	1900	3600	U	ug/kg	3600	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Isosafrole	1900	U	ug/kg	1900	3600	U	ug/kg	3600	1800	U	ug/kg	1800	1800	U	ug/kg	1800
1,4-Naphthoquinone	38000	U	ug/kg	38000	72000	U	ug/kg	72000	36000	U	ug/kg	36000	36000	U	ug/kg	36000
1,3-Dinitrobenzene	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
5-Nitro-o-toluidine	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
1,3,5-Trinitrobenzene	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
4-Nitroquinoline-1-oxide	19000	U	ug/kg	19000	36000	U	ug/kg	36000	18000	U	ug/kg	18000	18000	U	ug/kg	18000
Methapyrilene	1900	U	ug/kg	1900	3600	U	ug/kg	3600	1800	U	ug/kg	1800	1800	U	ug/kg	1800
3,3-Dimethylbenzidine	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Hexachlorophene	19000	U	ug/kg	19000	36000	U	ug/kg	36000	18000	U	ug/kg	18000	18000	U	ug/kg	18000
Aramite	1900	U	ug/kg	1900	3600	U	ug/kg	3600	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2-Chlorophenol	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
3- & 4-Methylphenol (2)	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	360	U	ug/kg	360
Hexachloropropene	1900	U	ug/kg	1900	3600	U	ug/kg	3600	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2-Acetylaminofluorene	380	U	ug/kg	380	720	U	ug/kg	720	360	U	ug/kg	360	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8775005				M8775006				M8775007				M8775008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S02601				23S02701				23S02701D				23S02801			
Collect Date:	07-APR-95				07-APR-95				07-APR-95				07-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/kg																
N-Nitrosodimethylamine	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Phenol	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Aniline	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
bis(2-Chloroethyl) ether	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Benzyl Alcohol	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
2-Methylphenol	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
bis(2-Chloroisopropyl) ether	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
N-Nitroso-di-n-propylamine	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Hexachloroethane	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Nitrobenzene	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Isophorone	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
2-Nitrophenol	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
2,4-Dimethylphenol	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Benzoic acid	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	UJ	ug/kg	1800	1800	UJ	ug/kg	1800
bis(2-Chloroethoxy) methane	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
2,4-Dichlorophenol	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
1,2,4-Trichlorobenzene	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Naphthalene	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
4-Chloroaniline	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Hexachlorobutadiene	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
4-Chloro-3-methylphenol	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
2-Methylnaphthalene	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Hexachlorocyclopentadiene	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
2,4,6-Trichlorophenol	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Dimethylphthalate	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
2,4,5-Trichlorophenol	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2-Chloronaphthalene	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
2-Nitroaniline	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Acenaphthylene	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
2,6-Dinitrotoluene	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
3-Nitroaniline	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Acenaphthene	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
2,4-Dinitrophenol	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	UJ	ug/kg	1800	1800	UJ	ug/kg	1800
4-Nitrophenol	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Dibenzofuran	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
2,4-Dinitrotoluene	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Diethylphthalate	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
4-Chlorophenyl-phenylether	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Fluorene	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
4-Nitroaniline	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800

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Lab Sample Number:	M8775005				M8775006				M8775007				M8775008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S02601				23S02701				23S02701D				23S02801			
Collect Date:	07-APR-95				07-APR-95				07-APR-95				07-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
N-Nitrosodiphenylamine (1)	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
1,2-Diphenylhydrazine	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
4-Bromophenyl-phenylether	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Hexachlorobenzene	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Pentachlorophenol	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Phenanthrene	32	J	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Anthracene	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Di-n-Butylphthalate	19	J	ug/kg	350	38	J	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Fluoranthene	140	J	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Pyrene	130	J	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Butylbenzylphthalate	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
3,3-Dichlorobenzidine	690	U	ug/kg	690	720	U	ug/kg	720	720	U	ug/kg	720	740	U	ug/kg	740
Benzo (a) anthracene	100	J	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Chrysene	150	J	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
bis(2-Ethylhexyl) phthalate	91	J	ug/kg	350	35	J	ug/kg	360	360	U	ug/kg	360	34	J	ug/kg	370
Di-n-octylphthalate	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Benzo (b) fluoranthene	170	J	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Benzo (k) fluoranthene	270	J	ug/kg	350	24	J	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Benzo (a) pyrene	190	J	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Indeno (1,2,3-cd) pyrene	180	J	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Dibenz (a,h) anthracene	69	J	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Benzo (g,h,i) perylene	260	J	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
2-Picoline	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Methyl methanesulfonate	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Ethyl methanesulfonate	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Acetophenone	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
N-Nitrosopiperidine	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Phenyl-tert-butylamine	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2,6-Dichlorophenol	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
N-Nitroso-di-n-butylamine	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
N-Nitrosodiethylamine	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
N-Nitrosopyrrolidine	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Benzidine	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
1,2,4,5-Tetrachlorobenzene	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Pentachlorobenzene	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
1-Naphthylamine	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2-Naphthylamine	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2,3,4,6-Tetrachlorophenol	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Phenacetin	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
4-Aminobiphenyl	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Pentachloronitrobenzene	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Pronamide	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
p-(Dimethylamino)azobenzene	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
7,12-Dimethylbenz(A)Anthracene	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
3-Methylcholanthrene	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Pyridine	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
N-Nitrosomethylethylamine	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
N-Nitrosomorpholine	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
a-Toluidine	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Hexachloropropene	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
p-Phenylenediamine	17000	U	ug/kg	17000	18000	U	ug/kg	18000	18000	U	ug/kg	18000	18000	U	ug/kg	18000

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Lab Sample Number:	M8775005				M8775006				M8775007				M8775008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S02601				23S02701				23S02701D				23S02801			
Collect Date:	07-APR-95				07-APR-95				07-APR-95				07-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Isosafrole	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
1,4-Naphthoquinone	35000	U	ug/kg	35000	36000	U	ug/kg	36000	36000	U	ug/kg	36000	37000	U	ug/kg	37000
1,3-Dinitrobenzene	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
5-Nitro-o-toluidine	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
1,3,5-Trinitrobenzene	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
4-Nitroquinoline-1-oxide	17000	U	ug/kg	17000	18000	U	ug/kg	18000	18000	U	ug/kg	18000	18000	U	ug/kg	18000
Methapyrilene	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
3,3-Dimethylbenzidine	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Hexachlorophene	17000	U	ug/kg	17000	18000	U	ug/kg	18000	18000	U	ug/kg	18000	18000	U	ug/kg	18000
Aramite	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2-Chlorophenol	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
3- & 4-Methylphenol (2)	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	370	U	ug/kg	370
Hexachloropropene	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2-Acetylaminofluorene	350	U	ug/kg	350	360	U	ug/kg	360	360	U	ug/kg	360	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.

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SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		M8994003				M8994004				M8780004				M8780005			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		23S02901				23S02901D				24S00101				24S00201			
Collect Date:		20-MAY-95				20-MAY-95				08-APR-95				08-APR-95			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg																
N-Nitrosodimethylamine		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
Phenol		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
Aniline		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
bis(2-Chloroethyl) ether		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
Benzyl Alcohol		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
2-Methylphenol		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
bis(2-Chloroisopropyl) ether		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
N-Nitroso-di-n-propylamine		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
Hexachloroethane		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
Nitrobenzene		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
Isophorone		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
2-Nitrophenol		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
2,4-Dimethylphenol		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
Benzoic acid		8900	U	ug/kg	8900	8800	U	ug/kg	8800	1800	UJ	ug/kg	1800	2000	UJ	ug/kg	2000
bis(2-Chloroethoxy) methane		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
2,4-Dichlorophenol		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
1,2,4-Trichlorobenzene		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
Naphthalene		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
4-Chloroaniline		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
Hexachlorobutadiene		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
4-Chloro-3-methylphenol		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
2-Methylnaphthalene		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
Hexachlorocyclopentadiene		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
2,4,6-Trichlorophenol		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
Dimethylphthalate		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
2,4,5-Trichlorophenol		8900	U	ug/kg	8900	8800	U	ug/kg	8800	1800	U	ug/kg	1800	2000	U	ug/kg	2000
2-Chloronaphthalene		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
2-Nitroaniline		8900	U	ug/kg	8900	8800	U	ug/kg	8800	1800	U	ug/kg	1800	2000	U	ug/kg	2000
Acenaphthylene		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
2,6-Dinitrotoluene		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
3-Nitroaniline		8900	U	ug/kg	8900	8800	U	ug/kg	8800	1800	U	ug/kg	1800	2000	U	ug/kg	2000
Acenaphthene		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
2,4-Dinitrophenol		8900	U	ug/kg	8900	8800	U	ug/kg	8800	1800	UJ	ug/kg	1800	2000	UJ	ug/kg	2000
4-Nitrophenol		8900	U	ug/kg	8900	8800	U	ug/kg	8800	1800	U	ug/kg	1800	2000	U	ug/kg	2000
Dibenzofuran		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
2,4-Dinitrotoluene		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
Diethylphthalate		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
4-Chlorophenyl-phenylether		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
Fluorene		1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
4-Nitroaniline		8900	U	ug/kg	8900	8800	U	ug/kg	8800	1800	U	ug/kg	1800	2000	U	ug/kg	2000

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Lab Sample Number:	M8994003				M8994004				M8780004				M8780005			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S02901				23S02901D				24S00101				24S00201			
Collect Date:	20-MAY-95				20-MAY-95				08-APR-95				08-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	8900	U	ug/kg	8900	8800	U	ug/kg	8800	1800	U	ug/kg	1800	2000	U	ug/kg	2000
N-Nitrosodiphenylamine (1)	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
1,2-Diphenylhydrazine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
4-Bromophenyl-phenylether	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
Hexachlorobenzene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
Pentachlorophenol	8900	U	ug/kg	8900	8800	U	ug/kg	8800	1800	U	ug/kg	1800	2000	U	ug/kg	2000
Phenanthrene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	120	J	ug/kg	410
Anthracene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	36	J	ug/kg	410
Di-n-Butylphthalate	1800	U	ug/kg	1800	1800	U	ug/kg	1800	19	J	ug/kg	370	410	U	ug/kg	410
Fluoranthene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	430		ug/kg	410
Pyrene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	390	J	ug/kg	410
Butylbenzylphthalate	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
3,3-Dichlorobenzidine	3600	U	ug/kg	3600	3500	U	ug/kg	3500	740	U	ug/kg	740	820	U	ug/kg	820
Benzo (a) anthracene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	230	J	ug/kg	410
Chrysene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	250	J	ug/kg	410
bis(2-Ethylhexyl) phthalate	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
Di-n-octylphthalate	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
Benzo (b) fluoranthene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	190	J	ug/kg	410
Benzo (k) fluoranthene	1800	UJ	ug/kg	1800	1800	UJ	ug/kg	1800	370	U	ug/kg	370	200	J	ug/kg	410
Benzo (a) pyrene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	190	J	ug/kg	410
Indeno (1,2,3-cd) pyrene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	150	J	ug/kg	410
Dibenz (a,h) anthracene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	54	J	ug/kg	410
Benzo (g,h,i) perylene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	160	J	ug/kg	410
2-Picoline	8900	U	ug/kg	8900	8800	U	ug/kg	8800	1800	U	ug/kg	1800	2000	U	ug/kg	2000
Methyl methanesulfonate	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
Ethyl methanesulfonate	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
Acetophenone	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
N-Nitrosopiperidine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
Phenyl-tert-butylamine	8900	U	ug/kg	8900	8800	U	ug/kg	8800	1800	U	ug/kg	1800	2000	U	ug/kg	2000
2,6-Dichlorophenol	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
N-Nitroso-di-n-butylamine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
N-Nitrosodiethylamine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
N-Nitrosopyrrolidine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
Benzidine	8900	U	ug/kg	8900	8800	U	ug/kg	8800	1800	U	ug/kg	1800	2000	U	ug/kg	2000
1,2,4,5-Tetrachlorobenzene	8900	U	ug/kg	8900	8800	U	ug/kg	8800	1800	U	ug/kg	1800	2000	U	ug/kg	2000
Pentachlorobenzene	8900	U	ug/kg	8900	8800	U	ug/kg	8800	1800	U	ug/kg	1800	2000	U	ug/kg	2000
1-Naphthylamine	8900	U	ug/kg	8900	8800	U	ug/kg	8800	1800	U	ug/kg	1800	2000	U	ug/kg	2000
2-Naphthylamine	8900	U	ug/kg	8900	8800	U	ug/kg	8800	1800	U	ug/kg	1800	2000	U	ug/kg	2000
2,3,4,6-Tetrachlorophenol	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
Phenacetin	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
4-Aminobiphenyl	8900	U	ug/kg	8900	8800	U	ug/kg	8800	1800	U	ug/kg	1800	2000	U	ug/kg	2000
Pentachloronitrobenzene	8900	U	ug/kg	8900	8800	U	ug/kg	8800	1800	U	ug/kg	1800	2000	U	ug/kg	2000
Pronamide	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
p-(Dimethylamino)azobenzene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
7,12-Dimethylbenz(A)Anthracene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
3-Methylcholanthrene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
Pyridine	8900	U	ug/kg	8900	8800	U	ug/kg	8800	1800	U	ug/kg	1800	2000	U	ug/kg	2000
N-Nitrosomethylethylamine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
N-Nitrosomorpholine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
o-Toluidine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
Hexachloropropene	8900	U	ug/kg	8900	8800	U	ug/kg	8800	1800	U	ug/kg	1800	2000	U	ug/kg	2000
p-Phenylenediamine	89000	U	ug/kg	89000	88000	U	ug/kg	88000	18000	U	ug/kg	18000	20000	U	ug/kg	20000

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Lab Sample Number:	M8994003				M8994004				M8780004				M8780005			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S02901				23S02901D				24S00101				24S00201			
Collect Date:	20-MAY-95				20-MAY-95				08-APR-95				08-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	8900	U	ug/kg	8900	8800	U	ug/kg	8800	1800	U	ug/kg	1800	2000	U	ug/kg	2000
Isosafrole	8900	U	ug/kg	8900	8800	U	ug/kg	8800	1800	U	ug/kg	1800	2000	U	ug/kg	2000
1,4-Naphthoquinone	180000	U	ug/kg	180000	180000	U	ug/kg	180000	37000	U	ug/kg	37000	41000	U	ug/kg	41000
1,3-Dinitrobenzene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
5-Nitro-o-toluidine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
1,3,5-Trinitrobenzene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
4-Nitroquinoline-1-oxide	89000	R	ug/kg	89000	88000	R	ug/kg	88000	18000	U	ug/kg	18000	20000	U	ug/kg	20000
Methapyrilene	8900	U	ug/kg	8900	8800	U	ug/kg	8800	1800	U	ug/kg	1800	2000	U	ug/kg	2000
3,3-Dimethylbenzidine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
Hexachlorophene	89000	U	ug/kg	89000	88000	U	ug/kg	88000	18000	U	ug/kg	18000	20000	U	ug/kg	20000
Aramite	8900	U	ug/kg	8900	8800	U	ug/kg	8800	1800	U	ug/kg	1800	2000	U	ug/kg	2000
2-Chlorophenol	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
3- & 4-Methylphenol (2)	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410
Hexachloropropene	8900	U	ug/kg	8900	8800	U	ug/kg	8800	1800	U	ug/kg	1800	2000	U	ug/kg	2000
2-Acetylaminofluorene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	370	U	ug/kg	370	410	U	ug/kg	410

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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SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8780006				M8780007				M8780008				M8780009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	24S00301				24S00401				24S00401D				24S00501			
Collect Date:	08-APR-95				08-APR-95				08-APR-95				08-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/kg																
N-Nitrosodimethylamine	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
Phenol	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
Aniline	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
bis(2-Chloroethyl) ether	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
Benzyl Alcohol	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
2-Methylphenol	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
bis(2-Chloroisopropyl) ether	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
N-Nitroso-di-n-propylamine	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
Hexachloroethane	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
Nitrobenzene	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
Isophorone	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
2-Nitrophenol	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
2,4-Dimethylphenol	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
Benzoic acid	1800	UJ	ug/kg	1800	62	J	ug/kg	1800	1800	UJ	ug/kg	1800	1800	UJ	ug/kg	1800
bis(2-Chloroethoxy) methane	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
2,4-Dichlorophenol	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
1,2,4-Trichlorobenzene	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
Naphthalene	25	J	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
4-Chloroaniline	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
Hexachlorobutadiene	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
4-Chloro-3-methylphenol	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
2-Methylnaphthalene	22	J	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
Hexachlorocyclopentadiene	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
2,4,6-Trichlorophenol	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
Dimethylphthalate	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
2,4,5-Trichlorophenol	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2-Chloronaphthalene	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
2-Nitroaniline	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Acenaphthylene	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
2,6-Dinitrotoluene	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
3-Nitroaniline	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Acenaphthene	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
2,4-Dinitrophenol	1800	UJ	ug/kg	1800	1800	UJ	ug/kg	1800	1800	UJ	ug/kg	1800	1800	UJ	ug/kg	1800
4-Nitrophenol	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Dibenzofuran	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
2,4-Dinitrotoluene	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
Diethylphthalate	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
4-Chlorophenyl-phenylether	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
Fluorene	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
4-Nitroaniline	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800

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Lab Sample Number:	M8780006				M8780007				M8780008				M8780009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	24S00301				24S00401				24S00401D				24S00501			
Collect Date:	08-APR-95				08-APR-95				08-APR-95				08-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
N-Nitrosodiphenylamine (1)	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
1,2-Diphenylhydrazine	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
4-Bromophenyl-phenylether	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
Hexachlorobenzene	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
Pentachlorophenol	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Phenanthrene	370	U	ug/kg	370	45	J	ug/kg	360	120	J	ug/kg	370	42	J	ug/kg	370
Anthracene	370	U	ug/kg	370	360	U	ug/kg	360	19	J	ug/kg	370	370	U	ug/kg	370
Di-n-Butylphthalate	100	J	ug/kg	370	39	J	ug/kg	360	66	J	ug/kg	370	39	J	ug/kg	370
Fluoranthene	370	U	ug/kg	370	100	J	ug/kg	360	190	J	ug/kg	370	130	J	ug/kg	370
Pyrene	370	U	ug/kg	370	140	J	ug/kg	360	200	J	ug/kg	370	120	J	ug/kg	370
Butylbenzylphthalate	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
3,3-Dichlorobenzidine	750	U	ug/kg	750	720	U	ug/kg	720	730	U	ug/kg	730	750	U	ug/kg	750
Benzo (a) anthracene	370	U	ug/kg	370	91	J	ug/kg	360	110	J	ug/kg	370	50	J	ug/kg	370
Chrysene	370	U	ug/kg	370	130	J	ug/kg	360	170	J	ug/kg	370	97	J	ug/kg	370
bis(2-Ethylhexyl) phthalate	370	U	ug/kg	370	360	U	ug/kg	360	420	U	ug/kg	420	370	U	ug/kg	370
Di-n-octylphthalate	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
Benzo (b) fluoranthene	370	U	ug/kg	370	96	J	ug/kg	360	140	J	ug/kg	370	78	J	ug/kg	370
Benzo (k) fluoranthene	370	U	ug/kg	370	85	J	ug/kg	360	150	J	ug/kg	370	140	J	ug/kg	370
Benzo (a) pyrene	370	U	ug/kg	370	83	J	ug/kg	360	130	J	ug/kg	370	76	J	ug/kg	370
Indeno (1,2,3-cd) pyrene	370	U	ug/kg	370	66	J	ug/kg	360	99	J	ug/kg	370	43	J	ug/kg	370
Dibenz (a,h) anthracene	370	U	ug/kg	370	40	J	ug/kg	360	48	J	ug/kg	370	370	U	ug/kg	370
Benzo (g,h,i) perylene	370	U	ug/kg	370	82	J	ug/kg	360	120	J	ug/kg	370	37	J	ug/kg	370
2-Picoline	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Methyl methanesulfonate	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
Ethyl methanesulfonate	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
Acetophenone	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
N-Nitrosopiperidine	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
Phenyl-tert-butylamine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2,6-Dichlorophenol	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
N-Nitroso-di-n-butylamine	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
N-Nitrosodiethylamine	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
N-Nitrosopyrrolidine	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
Benzidine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
1,2,4,5-Tetrachlorobenzene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Pentachlorobenzene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
1-Naphthylamine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2-Naphthylamine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2,3,4,6-Tetrachlorophenol	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
Phenacetin	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
4-Aminobiphenyl	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Pentachloronitrobenzene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Pronamide	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
p-(Dimethylamino)azobenzene	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
7,12-Dimethylbenz(A)Anthracene	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
3-Methylcholanthrene	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
Pyridine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
N-Nitrosomethylethylamine	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
N-Nitrosomorpholine	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
o-Toluidine	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
Hexachloropropene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
p-Phenylenediamine	18000	U	ug/kg	18000	18000	U	ug/kg	18000	18000	U	ug/kg	18000	18000	U	ug/kg	18000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8780006				M8780007				M8780008				M8780009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	24S00301				24S00401				24S00401D				24S00501			
Collect Date:	08-APR-95				08-APR-95				08-APR-95				08-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Isosafrole	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
1,4-Naphthoquinone	37000	U	ug/kg	37000	36000	U	ug/kg	36000	37000	U	ug/kg	37000	37000	U	ug/kg	37000
1,3-Dinitrobenzene	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
5-Nitro-o-toluidine	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
1,3,5-Trinitrobenzene	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
4-Nitroquinoline-1-oxide	18000	U	ug/kg	18000	18000	U	ug/kg	18000	18000	U	ug/kg	18000	18000	U	ug/kg	18000
Methapyrilene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
3,3-Dimethylbenzidine	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
Hexachlorophene	18000	U	ug/kg	18000	18000	U	ug/kg	18000	18000	U	ug/kg	18000	18000	U	ug/kg	18000
Aramite	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2-Chlorophenol	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
3- & 4-Methylphenol (2)	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	370	U	ug/kg	370
Hexachloropropene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2-Acetylaminofluorene	370	U	ug/kg	370	360	U	ug/kg	360	370	U	ug/kg	370	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8867001				M8985001				M8985002				M8793001			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	24S00601				24S00701				24S00701D				25S00101			
Collect Date:	24-APR-95				19-MAY-95				19-MAY-95				10-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/kg																
N-Nitrosodimethylamine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Phenol	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Aniline	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
bis(2-Chloroethyl) ether	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Benzyl Alcohol	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
2-Methylphenol	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
bis(2-Chloroisopropyl) ether	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
N-Nitroso-di-n-propylamine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Hexachloroethane	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Nitrobenzene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Isophorone	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
2-Nitrophenol	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
2,4-Dimethylphenol	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Benzoic acid	8700	UJ	ug/kg	8700	8900	U	ug/kg	8900	8900	UJ	ug/kg	8900	1700	U	ug/kg	1700
bis(2-Chloroethoxy) methane	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
2,4-Dichlorophenol	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
1,2,4-Trichlorobenzene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Naphthalene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
4-Chloroaniline	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Hexachlorobutadiene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
4-Chloro-3-methylphenol	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
2-Methylnaphthalene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Hexachlorocyclopentadiene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
2,4,6-Trichlorophenol	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Dimethylphthalate	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
2,4,5-Trichlorophenol	8700	U	ug/kg	8700	8900	U	ug/kg	8900	8900	U	ug/kg	8900	1700	U	ug/kg	1700
2-Chloronaphthalene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
2-Nitroaniline	8700	U	ug/kg	8700	8900	U	ug/kg	8900	8900	U	ug/kg	8900	1700	U	ug/kg	1700
Acenaphthylene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
2,6-Dinitrotoluene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
3-Nitroaniline	8700	U	ug/kg	8700	8900	U	ug/kg	8900	8900	U	ug/kg	8900	1700	U	ug/kg	1700
Acenaphthene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
2,4-Dinitrophenol	8700	U	ug/kg	8700	8900	U	ug/kg	8900	8900	U	ug/kg	8900	1700	U	ug/kg	1700
4-Nitrophenol	8700	U	ug/kg	8700	8900	U	ug/kg	8900	8900	U	ug/kg	8900	1700	U	ug/kg	1700
Dibenzofuran	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
2,4-Dinitrotoluene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Diethylphthalate	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
4-Chlorophenyl-phenylether	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Fluorene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
4-Nitroaniline	8700	U	ug/kg	8700	8900	U	ug/kg	8900	8900	U	ug/kg	8900	1700	U	ug/kg	1700

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8867001				M8985001				M8985002				M8793001			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	24S00601				24S00701				24S00701D				25S00101			
Collect Date:	24-APR-95				19-MAY-95				19-MAY-95				10-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	8700	U	ug/kg	8700	8900	U	ug/kg	8900	8900	U	ug/kg	8900	1700	U	ug/kg	1700
N-Nitrosodiphenylamine (1)	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
1,2-Diphenylhydrazine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
4-Bromophenyl-phenylether	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Hexachlorobenzene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Pentachlorophenol	8700	U	ug/kg	8700	8900	U	ug/kg	8900	8900	U	ug/kg	8900	1700	U	ug/kg	1700
Phenanthrene	1800	U	ug/kg	1800	760	J	ug/kg	1800	650	J	ug/kg	1800	350	U	ug/kg	350
Anthracene	1800	U	ug/kg	1800	180	J	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Di-n-Butylphthalate	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	66	J	ug/kg	350
Fluoranthene	150	J	ug/kg	1800	1000	J	ug/kg	1800	1200	J	ug/kg	1800	350	U	ug/kg	350
Pyrene	130	J	ug/kg	1800	870	J	ug/kg	1800	1000	J	ug/kg	1800	350	U	ug/kg	350
Butylbenzylphthalate	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
3,3-Dichlorobenzidine	3500	U	ug/kg	3500	3600	U	ug/kg	3600	3600	U	ug/kg	3600	700	U	ug/kg	700
Benzo (a) anthracene	1800	U	ug/kg	1800	600	J	ug/kg	1800	580	J	ug/kg	1800	350	U	ug/kg	350
Chrysene	140	J	ug/kg	1800	720	J	ug/kg	1800	640	J	ug/kg	1800	350	U	ug/kg	350
bis(2-Ethylhexyl) phthalate	1800	U	ug/kg	1800	640	J	ug/kg	1800	670	J	ug/kg	1800	350	U	ug/kg	350
Di-n-octylphthalate	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Benzo (b) fluoranthene	130	J	ug/kg	1800	570	J	ug/kg	1800	520	J	ug/kg	1800	350	U	ug/kg	350
Benzo (k) fluoranthene	140	J	ug/kg	1800	560	J	ug/kg	1800	570	J	ug/kg	1800	350	U	ug/kg	350
Benzo (a) pyrene	120	J	ug/kg	1800	500	J	ug/kg	1800	510	J	ug/kg	1800	350	U	ug/kg	350
Indeno (1,2,3-cd) pyrene	100	J	ug/kg	1800	410	J	ug/kg	1800	350	J	ug/kg	1800	350	U	ug/kg	350
Dibenz (a,h) anthracene	1800	U	ug/kg	1800	270	J	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Benzo (g,h,i) perylene	130	J	ug/kg	1800	400	J	ug/kg	1800	330	J	ug/kg	1800	350	U	ug/kg	350
2-Picoline	8700	U	ug/kg	8700	8900	U	ug/kg	8900	8900	U	ug/kg	8900	1700	U	ug/kg	1700
Methyl methanesulfonate	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Ethyl methanesulfonate	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Acetophenone	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
N-Nitrosopiperidine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Phenyl-tert-butylamine	8700	U	ug/kg	8700	8900	U	ug/kg	8900	8900	U	ug/kg	8900	1700	U	ug/kg	1700
2,6-Dichlorophenol	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
N-Nitroso-di-n-butylamine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
N-Nitrosodiethylamine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
N-Nitrosopyrrolidine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Benzidine	8700	U	ug/kg	8700	8900	U	ug/kg	8900	8900	U	ug/kg	8900	1700	U	ug/kg	1700
1,2,4,5-Tetrachlorobenzene	8700	U	ug/kg	8700	8900	U	ug/kg	8900	8900	U	ug/kg	8900	1700	U	ug/kg	1700
Pentachlorobenzene	8700	U	ug/kg	8700	8900	U	ug/kg	8900	8900	U	ug/kg	8900	1700	U	ug/kg	1700
1-Naphthylamine	8700	U	ug/kg	8700	8900	U	ug/kg	8900	8900	U	ug/kg	8900	1700	U	ug/kg	1700
2-Naphthylamine	8700	U	ug/kg	8700	8900	U	ug/kg	8900	8900	U	ug/kg	8900	1700	U	ug/kg	1700
2,3,4,6-Tetrachlorophenol	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Phenacetin	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
4-Aminobiphenyl	8700	U	ug/kg	8700	8900	U	ug/kg	8900	8900	U	ug/kg	8900	1700	U	ug/kg	1700
Pentachloronitrobenzene	8700	U	ug/kg	8700	8900	U	ug/kg	8900	8900	U	ug/kg	8900	1700	U	ug/kg	1700
Pronamide	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
p-(Dimethylamino)azobenzene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
7,12-Dimethylbenz(A)Anthracene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
3-Methylcholanthrene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Pyridine	8700	U	ug/kg	8700	8900	U	ug/kg	8900	8900	U	ug/kg	8900	1700	U	ug/kg	1700
N-Nitrosomethylethylamine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
N-Nitrosomorpholine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
o-Toluidine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Hexachloropropene	8700	U	ug/kg	8700	8900	U	ug/kg	8900	8900	U	ug/kg	8900	1700	U	ug/kg	1700
p-Phenylenediamine	87000	UJ	ug/kg	87000	89000	U	ug/kg	89000	89000	U	ug/kg	89000	17000	U	ug/kg	17000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8867001				M8985001				M8985002				M8793001			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	24S00601				24S00701				24S00701D				25S00101			
Collect Date:	24-APR-95				19-MAY-95				19-MAY-95				10-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	8700	U	ug/kg	8700	8900	U	ug/kg	8900	8900	U	ug/kg	8900	1700	U	ug/kg	1700
Isosafrole	8700	U	ug/kg	8700	8900	U	ug/kg	8900	8900	U	ug/kg	8900	1700	U	ug/kg	1700
1,4-Naphthoquinone	180000	U	ug/kg	180000	180000	U	ug/kg	180000	180000	U	ug/kg	180000	35000	U	ug/kg	35000
1,3-Dinitrobenzene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
5-Nitro-o-toluidine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
1,3,5-Trinitrobenzene	1800	U	ug/kg	1800	1800	UJ	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
4-Nitroquinoline-1-oxide	87000	U	ug/kg	87000	89000	R	ug/kg	89000	89000	R	ug/kg	89000	17000	U	ug/kg	17000
Methapyrilene	8700	U	ug/kg	8700	8900	U	ug/kg	8900	8900	U	ug/kg	8900	1700	U	ug/kg	1700
3,3-Dimethylbenzidine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Hexachlorophene	87000	U	ug/kg	87000	89000	U	ug/kg	89000	89000	U	ug/kg	89000	17000	U	ug/kg	17000
Aramite	8700	U	ug/kg	8700	8900	U	ug/kg	8900	8900	U	ug/kg	8900	1700	U	ug/kg	1700
2-Chlorophenol	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
3- & 4-Methylphenol (2)	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	350	U	ug/kg	350
Hexachloropropene	8700	U	ug/kg	8700	8900	U	ug/kg	8900	8900	U	ug/kg	8900	1700	U	ug/kg	1700
2-Acetylaminofluorene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		M8793006			M8793007			M8793009			M8793010		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		25S00201			25S00301			25S00401			25S00401D		
Collect Date:		10-APR-95			10-APR-95			10-APR-95			10-APR-95		
		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	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
Phenol		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
Aniline		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
bis(2-Chloroethyl) ether		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
Benzyl Alcohol		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
2-Methylphenol		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
bis(2-Chloroisopropyl) ether		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
N-Nitroso-di-n-propylamine		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
Hexachloroethane		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
Nitrobenzene		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
Isophorone		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
2-Nitrophenol		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
2,4-Dimethylphenol		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
Benzoic acid		3600 U	ug/kg	3600	3700 U	ug/kg	3700	4000 U	ug/kg	4000	3700 U	ug/kg	3700
bis(2-Chloroethoxy) methane		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
2,4-Dichlorophenol		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
1,2,4-Trichlorobenzene		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
Naphthalene		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
4-Chloroaniline		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
Hexachlorobutadiene		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
4-Chloro-3-methylphenol		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
2-Methylnaphthalene		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
Hexachlorocyclopentadiene		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
2,4,6-Trichlorophenol		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
Dimethylphthalate		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
2,4,5-Trichlorophenol		3600 U	ug/kg	3600	3700 U	ug/kg	3700	4000 U	ug/kg	4000	3700 U	ug/kg	3700
2-Chloronaphthalene		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
2-Nitroaniline		3600 U	ug/kg	3600	3700 U	ug/kg	3700	4000 U	ug/kg	4000	3700 U	ug/kg	3700
Acenaphthylene		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
2,6-Dinitrotoluene		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
3-Nitroaniline		3600 U	ug/kg	3600	3700 U	ug/kg	3700	4000 U	ug/kg	4000	3700 U	ug/kg	3700
Acenaphthene		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
2,4-Dinitrophenol		3600 U	ug/kg	3600	3700 U	ug/kg	3700	4000 U	ug/kg	4000	3700 U	ug/kg	3700
4-Nitrophenol		3600 U	ug/kg	3600	3700 U	ug/kg	3700	4000 U	ug/kg	4000	3700 U	ug/kg	3700
Dibenzofuran		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
2,4-Dinitrotoluene		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
Diethylphthalate		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
4-Chlorophenyl-phenylether		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
Fluorene		720 U	ug/kg	720	750 U	ug/kg	750	800 U	ug/kg	800	740 U	ug/kg	740
4-Nitroaniline		3600 U	ug/kg	3600	3700 U	ug/kg	3700	4000 U	ug/kg	4000	3700 U	ug/kg	3700

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SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8793006				M8793007				M8793009				M8793010			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	25S00201				25S00301				25S00401				25S00401D			
Collect Date:	10-APR-95				10-APR-95				10-APR-95				10-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	3600	U	ug/kg	3600	3700	U	ug/kg	3700	4000	U	ug/kg	4000	3700	U	ug/kg	3700
N-Nitrosodiphenylamine (1)	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
1,2-Diphenylhydrazine	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
4-Bromophenyl-phenylether	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
Hexachlorobenzene	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
Pentachlorophenol	3600	U	ug/kg	3600	3700	U	ug/kg	3700	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Phenanthrene	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
Anthracene	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
Di-n-Butylphthalate	130	J	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
Fluoranthene	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
Pyrene	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
Butylbenzylphthalate	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
3,3-Dichlorobenzidine	1400	U	ug/kg	1400	1500	U	ug/kg	1500	1600	U	ug/kg	1600	1500	U	ug/kg	1500
Benzo (a) anthracene	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
Chrysene	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
bis(2-Ethylhexyl) phthalate	720	U	ug/kg	720	79	J	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
Di-n-octylphthalate	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
Benzo (b) fluoranthene	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
Benzo (k) fluoranthene	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
Benzo (a) pyrene	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
Indeno (1,2,3-cd) pyrene	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
Dibenz (a,h) anthracene	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
Benzo (g,h,i) perylene	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
2-Picoline	3600	U	ug/kg	3600	3700	U	ug/kg	3700	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Methyl methanesulfonate	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
Ethyl methanesulfonate	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
Acetophenone	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
N-Nitrosopiperidine	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
Phenyl-tert-butylamine	3600	U	ug/kg	3600	3700	U	ug/kg	3700	4000	U	ug/kg	4000	3700	U	ug/kg	3700
2,6-Dichlorophenol	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
N-Nitroso-di-n-butylamine	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
N-Nitrosodiethylamine	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
N-Nitrosopyrrolidine	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
Benzidine	3600	U	ug/kg	3600	3700	U	ug/kg	3700	4000	U	ug/kg	4000	3700	U	ug/kg	3700
1,2,4,5-Tetrachlorobenzene	3600	U	ug/kg	3600	3700	U	ug/kg	3700	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Pentachlorobenzene	3600	U	ug/kg	3600	3700	U	ug/kg	3700	4000	U	ug/kg	4000	3700	U	ug/kg	3700
1-Naphthylamine	3600	U	ug/kg	3600	3700	U	ug/kg	3700	4000	U	ug/kg	4000	3700	U	ug/kg	3700
2-Naphthylamine	3600	U	ug/kg	3600	3700	U	ug/kg	3700	4000	U	ug/kg	4000	3700	U	ug/kg	3700
2,3,4,6-Tetrachlorophenol	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
Phenacetin	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
4-Aminobiphenyl	3600	U	ug/kg	3600	3700	U	ug/kg	3700	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Pentachloronitrobenzene	3600	U	ug/kg	3600	3700	U	ug/kg	3700	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Pronamide	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
p-(Dimethylamino)azobenzene	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
7,12-Dimethylbenz(A)Anthracene	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
3-Methylcholanthrene	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
Pyridine	3600	U	ug/kg	3600	3700	U	ug/kg	3700	4000	U	ug/kg	4000	3700	U	ug/kg	3700
N-Nitrosomethylethylamine	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
N-Nitrosomorpholine	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
o-Toluidine	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
Hexachloropropene	3600	U	ug/kg	3600	3700	U	ug/kg	3700	4000	U	ug/kg	4000	3700	U	ug/kg	3700
p-Phenylenediamine	36000	U	ug/kg	36000	37000	U	ug/kg	37000	40000	U	ug/kg	40000	37000	U	ug/kg	37000

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SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8793006				M8793007				M8793009				M8793010			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	25S00201				25S00301				25S00401				25S00401D			
Collect Date:	10-APR-95				10-APR-95				10-APR-95				10-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	3600	U	ug/kg	3600	3700	U	ug/kg	3700	4000	U	ug/kg	4000	3700	U	ug/kg	3700
Isosafrole	3600	U	ug/kg	3600	3700	U	ug/kg	3700	4000	U	ug/kg	4000	3700	U	ug/kg	3700
1,4-Naphthoquinone	72000	U	ug/kg	72000	75000	U	ug/kg	75000	80000	U	ug/kg	80000	74000	U	ug/kg	74000
1,3-Dinitrobenzene	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
5-Nitro-o-toluidine	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
1,3,5-Trinitrobenzene	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
4-Nitroquinoline-1-oxide	36000	U	ug/kg	36000	37000	U	ug/kg	37000	40000	U	ug/kg	40000	37000	U	ug/kg	37000
Methapyrilene	3600	U	ug/kg	3600	3700	U	ug/kg	3700	4000	U	ug/kg	4000	3700	U	ug/kg	3700
3,3-Dimethylbenzidine	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
Hexachlorophene	36000	U	ug/kg	36000	37000	U	ug/kg	37000	40000	U	ug/kg	40000	37000	U	ug/kg	37000
Aramite	3600	U	ug/kg	3600	3700	U	ug/kg	3700	4000	U	ug/kg	4000	3700	U	ug/kg	3700
2-Chlorophenol	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
3- & 4-Methylphenol (2)	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740
Hexachloropropene	3600	U	ug/kg	3600	3700	U	ug/kg	3700	4000	U	ug/kg	4000	3700	U	ug/kg	3700
2-Acetylaminofluorene	720	U	ug/kg	720	750	U	ug/kg	750	800	U	ug/kg	800	740	U	ug/kg	740

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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SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8793008			M8793002			M8793003			M8793004		
Site	GROUP111			GROUP111			GROUP111			GROUP111		
Locator	25S00501			25S00601			25S00701			25S00801		
Collect Date:	10-APR-95			10-APR-95			10-APR-95			10-APR-95		
	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL
SEMIVOLATILES ug/kg												
N-Nitrosodimethylamine	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
Phenol	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
Aniline	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
bis(2-Chloroethyl) ether	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
Benzyl Alcohol	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
2-Methylphenol	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
bis(2-Chloroisopropyl) ether	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
N-Nitroso-di-n-propylamine	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
Hexachloroethane	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
Nitrobenzene	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
Isophorone	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
2-Nitrophenol	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
2,4-Dimethylphenol	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
Benzoic acid	9400	U ug/kg	9400	4400	U ug/kg	4400	1800	U ug/kg	1800	3700	U ug/kg	3700
bis(2-Chloroethoxy) methane	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
2,4-Dichlorophenol	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
1,2,4-Trichlorobenzene	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
Naphthalene	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
4-Chloroaniline	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
Hexachlorobutadiene	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
4-Chloro-3-methylphenol	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
2-Methylnaphthalene	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
Hexachlorocyclopentadiene	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
2,4,6-Trichlorophenol	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
Dimethylphthalate	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
2,4,5-Trichlorophenol	9400	U ug/kg	9400	4400	U ug/kg	4400	1800	U ug/kg	1800	3700	U ug/kg	3700
2-Chloronaphthalene	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
2-Nitroaniline	9400	U ug/kg	9400	4400	U ug/kg	4400	1800	U ug/kg	1800	3700	U ug/kg	3700
Acenaphthylene	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
2,6-Dinitrotoluene	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
3-Nitroaniline	9400	U ug/kg	9400	4400	U ug/kg	4400	1800	U ug/kg	1800	3700	U ug/kg	3700
Acenaphthene	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
2,4-Dinitrophenol	9400	U ug/kg	9400	4400	U ug/kg	4400	1800	U ug/kg	1800	3700	U ug/kg	3700
4-Nitrophenol	9400	U ug/kg	9400	4400	U ug/kg	4400	1800	U ug/kg	1800	3700	U ug/kg	3700
Dibenzofuran	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
2,4-Dinitrotoluene	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
Diethylphthalate	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
4-Chlorophenyl-phenylether	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
Fluorene	1900	U ug/kg	1900	890	U ug/kg	890	360	U ug/kg	360	740	U ug/kg	740
4-Nitroaniline	9400	U ug/kg	9400	4400	U ug/kg	4400	1800	U ug/kg	1800	3700	U ug/kg	3700

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SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8793008				M8793002				M8793003				M8793004			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	25S00501				25S00601				25S00701				25S00801			
Collect Date:	10-APR-95				10-APR-95				10-APR-95				10-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	9400	U	ug/kg	9400	4400	U	ug/kg	4400	1800	U	ug/kg	1800	3700	U	ug/kg	3700
N-Nitrosodiphenylamine (1)	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
1,2-Diphenylhydrazine	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
4-Bromophenyl-phenylether	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
Hexachlorobenzene	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
Pentachlorophenol	9400	U	ug/kg	9400	4400	U	ug/kg	4400	1800	U	ug/kg	1800	3700	U	ug/kg	3700
Phenanthrene	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
Anthracene	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
Di-n-Butylphthalate	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
Fluoranthene	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
Pyrene	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
Butylbenzylphthalate	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
3,3-Dichlorobenzidine	3800	U	ug/kg	3800	1800	U	ug/kg	1800	720	U	ug/kg	720	1500	U	ug/kg	1500
Benzo (a) anthracene	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
Chrysene	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
bis(2-Ethylhexyl) phthalate	120	J	ug/kg	1900	890	U	ug/kg	890	27	J	ug/kg	360	63	J	ug/kg	740
Di-n-octylphthalate	400	J	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
Benzo (b) fluoranthene	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
Benzo (k) fluoranthene	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
Benzo (a) pyrene	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
Indeno (1,2,3-cd) pyrene	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
Dibenz (a,h) anthracene	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
Benzo (g,h,i) perylene	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
2-Picoline	9400	U	ug/kg	9400	4400	U	ug/kg	4400	1800	U	ug/kg	1800	3700	U	ug/kg	3700
Methyl methanesulfonate	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
Ethyl methanesulfonate	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
Acetophenone	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
N-Nitrosopiperidine	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
Phenyl-tert-butylamine	9400	U	ug/kg	9400	4400	U	ug/kg	4400	1800	U	ug/kg	1800	3700	U	ug/kg	3700
2,6-Dichlorophenol	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
N-Nitroso-di-n-butylamine	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
N-Nitrosodiethylamine	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
N-Nitrosopyrrolidine	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
Benzidine	9400	U	ug/kg	9400	4400	U	ug/kg	4400	1800	U	ug/kg	1800	3700	U	ug/kg	3700
1,2,4,5-Tetrachlorobenzene	9400	U	ug/kg	9400	4400	U	ug/kg	4400	1800	U	ug/kg	1800	3700	U	ug/kg	3700
Pentachlorobenzene	9400	U	ug/kg	9400	4400	U	ug/kg	4400	1800	U	ug/kg	1800	3700	U	ug/kg	3700
1-Naphthylamine	9400	U	ug/kg	9400	4400	U	ug/kg	4400	1800	U	ug/kg	1800	3700	U	ug/kg	3700
2-Naphthylamine	9400	U	ug/kg	9400	4400	U	ug/kg	4400	1800	U	ug/kg	1800	3700	U	ug/kg	3700
2,3,4,6-Tetrachlorophenol	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
Phenacetin	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
4-Aminobiphenyl	9400	U	ug/kg	9400	4400	U	ug/kg	4400	1800	U	ug/kg	1800	3700	U	ug/kg	3700
Pentachloronitrobenzene	9400	U	ug/kg	9400	4400	U	ug/kg	4400	1800	U	ug/kg	1800	3700	U	ug/kg	3700
Pronamide	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
p-(Dimethylamino)azobenzene	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
7,12-Dimethylbenz(A)Anthracene	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
3-Methylcholanthrene	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
Pyridine	9400	U	ug/kg	9400	4400	U	ug/kg	4400	1800	U	ug/kg	1800	3700	U	ug/kg	3700
N-Nitrosomethylethylamine	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
N-Nitrosomorpholine	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
o-Toluidine	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
Hexachloropropene	9400	U	ug/kg	9400	4400	U	ug/kg	4400	1800	U	ug/kg	1800	3700	U	ug/kg	3700
p-Phenylenediamine	94000	U	ug/kg	94000	44000	U	ug/kg	44000	18000	U	ug/kg	18000	37000	U	ug/kg	37000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8793008				M8793002				M8793003				M8793004			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	25S00501				25S00601				25S00701				25S00801			
Collect Date:	10-APR-95				10-APR-95				10-APR-95				10-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	9400	U	ug/kg	9400	4400	U	ug/kg	4400	1800	U	ug/kg	1800	3700	U	ug/kg	3700
Isosafrole	9400	U	ug/kg	9400	4400	U	ug/kg	4400	1800	U	ug/kg	1800	3700	U	ug/kg	3700
1,4-Naphthoquinone	190000	U	ug/kg	190000	89000	U	ug/kg	89000	36000	U	ug/kg	36000	74000	U	ug/kg	74000
1,3-Dinitrobenzene	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
5-Nitro-o-toluidine	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
1,3,5-Trinitrobenzene	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
4-Nitroquinoline-1-oxide	94000	U	ug/kg	94000	44000	U	ug/kg	44000	18000	U	ug/kg	18000	37000	U	ug/kg	37000
Methapyrilene	9400	U	ug/kg	9400	4400	U	ug/kg	4400	1800	U	ug/kg	1800	3700	U	ug/kg	3700
3,3-Dimethylbenzidine	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
Hexachlorophene	94000	U	ug/kg	94000	44000	U	ug/kg	44000	18000	U	ug/kg	18000	37000	U	ug/kg	37000
Aramite	9400	U	ug/kg	9400	4400	U	ug/kg	4400	1800	U	ug/kg	1800	3700	U	ug/kg	3700
2-Chlorophenol	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
3- & 4-Methylphenol (2)	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740
Hexachloropropene	9400	U	ug/kg	9400	4400	U	ug/kg	4400	1800	U	ug/kg	1800	3700	U	ug/kg	3700
2-Acetylaminofluorene	1900	U	ug/kg	1900	890	U	ug/kg	890	360	U	ug/kg	360	740	U	ug/kg	740

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9738004				R9738005				R9738006				R9738007			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	44S00301				44S00401				44S00501				44S00601			
Collect Date:	05-APR-95				05-APR-95				05-APR-95				05-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3300	U	ug/kg	3300	3400	U	ug/kg	3400
N-Nitrosodiphenylamine (1)	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
1,2-Diphenylhydrazine	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
4-Bromophenyl-phenylether	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
Hexachlorobenzene	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
Pentachlorophenol	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3300	U	ug/kg	3300	3400	U	ug/kg	3400
Phenanthrene	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
Anthracene	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	100	J	ug/kg	700
Di-n-Butylphthalate	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
Fluoranthene	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
Pyrene	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
Butylbenzylphthalate	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
3,3-Dichlorobenzidine	1400	U	ug/kg	1400	1500	U	ug/kg	1500	1400	U	ug/kg	1400	1400	U	ug/kg	1400
Benzo (a) anthracene	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
Chrysene	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
bis(2-Ethylhexyl) phthalate	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
Di-n-octylphthalate	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
Benzo (b) fluoranthene	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
Benzo (k) fluoranthene	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
Benzo (a) pyrene	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
Indeno (1,2,3-cd) pyrene	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
Dibenz (a,h) anthracene	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
Benzo (g,h,i) perylene	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
2-Picoline	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3300	U	ug/kg	3300	3400	U	ug/kg	3400
Methyl methanesulfonate	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
Ethyl methanesulfonate	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
Acetophenone	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
N-Nitrosopiperidine	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
Phenyl-tert-butylamine	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3300	U	ug/kg	3300	3400	U	ug/kg	3400
2,6-Dichlorophenol	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
N-Nitroso-di-n-butylamine	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
N-Nitrosodiethylamine	690	UJ	ug/kg	690	730	UJ	ug/kg	730	680	UJ	ug/kg	680	700	UJ	ug/kg	700
N-Nitrosopyrrolidine	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
Benzidine	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3300	U	ug/kg	3300	3400	U	ug/kg	3400
1,2,4,5-Tetrachlorobenzene	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3300	U	ug/kg	3300	3400	U	ug/kg	3400
Pentachlorobenzene	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3300	U	ug/kg	3300	3400	U	ug/kg	3400
1-Naphthylamine	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3300	U	ug/kg	3300	3400	U	ug/kg	3400
2-Naphthylamine	3400	UJ	ug/kg	3400	3600	UJ	ug/kg	3600	3300	UJ	ug/kg	3300	3400	UJ	ug/kg	3400
2,3,4,6-Tetrachlorophenol	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
Phenacetin	690	UJ	ug/kg	690	730	UJ	ug/kg	730	680	UJ	ug/kg	680	700	UJ	ug/kg	700
4-Aminobiphenyl	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3300	U	ug/kg	3300	3400	U	ug/kg	3400
Pentachloronitrobenzene	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3300	U	ug/kg	3300	3400	U	ug/kg	3400
Pronamide	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
p-(Dimethylamino)azobenzene	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
7,12-Dimethylbenz(A)Anthracene	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
3-Methylcholanthrene	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
Pyridine	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3300	U	ug/kg	3300	3400	U	ug/kg	3400
N-Nitrosomethylethylamine	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
N-Nitrosomorpholine	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
o-Toluidine	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
Hexachloropropene	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3300	U	ug/kg	3300	3400	U	ug/kg	3400
p-Phenylenediamine	34000	UJ	ug/kg	34000	36000	UJ	ug/kg	36000	33000	UJ	ug/kg	33000	34000	UJ	ug/kg	34000

US Naval Station, Mayport, RCRA facil.., Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9738004				R9738005				R9738006				R9738007			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	44S00301				44S00401				44S00501				44S00601			
Collect Date:	05-APR-95				05-APR-95				05-APR-95				05-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3300	U	ug/kg	3300	3400	U	ug/kg	3400
Isosafrole	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3300	U	ug/kg	3300	3400	U	ug/kg	3400
1,4-Naphthoquinone	69000	U	ug/kg	69000	73000	U	ug/kg	73000	68000	U	ug/kg	68000	70000	U	ug/kg	70000
1,3-Dinitrobenzene	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
5-Nitro-o-toluidine	690	UJ	ug/kg	690	730	UJ	ug/kg	730	680	UJ	ug/kg	680	700	UJ	ug/kg	700
1,3,5-Trinitrobenzene	690	UJ	ug/kg	690	730	UJ	ug/kg	730	680	UJ	ug/kg	680	700	UJ	ug/kg	700
4-Nitroquinoline-1-oxide	34000	R	ug/kg	34000	36000	R	ug/kg	36000	33000	R	ug/kg	33000	34000	R	ug/kg	34000
Methapyrilene	3400	UJ	ug/kg	3400	3600	UJ	ug/kg	3600	3300	UJ	ug/kg	3300	3400	UJ	ug/kg	3400
3,3-Dimethylbenzidine	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
Hexachlorophene	34000	R	ug/kg	34000	36000	R	ug/kg	36000	33000	R	ug/kg	33000	34000	R	ug/kg	34000
Aramite	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3300	U	ug/kg	3300	3400	U	ug/kg	3400
2-Chlorophenol	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
3- & 4-Methylphenol (2)	690	U	ug/kg	690	730	U	ug/kg	730	680	U	ug/kg	680	700	U	ug/kg	700
Hexachloropropene	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3300	U	ug/kg	3300	3400	U	ug/kg	3400
2-Acetylaminofluorene	690	UJ	ug/kg	690	730	UJ	ug/kg	730	680	UJ	ug/kg	680	700	UJ	ug/kg	700

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		M8793005			R9738002			R9738003			R9738001		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		25S00901			44S00101			44S00101D			44S00201		
Collect Date:		10-APR-95			05-APR-95			05-APR-95			05-APR-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES	ug/kg												
N-Nitrosodimethylamine		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
Phenol		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
Aniline		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
bis(2-Chloroethyl) ether		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
Benzyl Alcohol		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
2-Methylphenol		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
bis(2-Chloroisopropyl) ether		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
N-Nitroso-di-n-propylamine		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
Hexachloroethane		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
Nitrobenzene		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
Isophorone		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
2-Nitrophenol		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
2,4-Dimethylphenol		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
Benzoic acid		8900 U	ug/kg	8900	3500 U	ug/kg	3500	3500 U	ug/kg	3500	3300 U	ug/kg	3300
bis(2-Chloroethoxy) methane		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
2,4-Dichlorophenol		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
1,2,4-Trichlorobenzene		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
Naphthalene		1800 U	ug/kg	1800	730 U	ug/kg	730	93 J	ug/kg	730	690 U	ug/kg	690
4-Chloroaniline		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
Hexachlorobutadiene		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
4-Chloro-3-methylphenol		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
2-Methylnaphthalene		1800 U	ug/kg	1800	240 J	ug/kg	730	340 J	ug/kg	730	690 U	ug/kg	690
Hexachlorocyclopentadiene		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
2,4,6-Trichlorophenol		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
Dimethylphthalate		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
2,4,5-Trichlorophenol		8900 U	ug/kg	8900	3500 U	ug/kg	3500	3500 U	ug/kg	3500	3300 U	ug/kg	3300
2-Chloronaphthalene		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
2-Nitroaniline		8900 U	ug/kg	8900	3500 UJ	ug/kg	3500	3500 UJ	ug/kg	3500	3300 UJ	ug/kg	3300
Acenaphthylene		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
2,6-Dinitrotoluene		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
3-Nitroaniline		8900 U	ug/kg	8900	3500 U	ug/kg	3500	3500 U	ug/kg	3500	3300 U	ug/kg	3300
Acenaphthene		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
2,4-Dinitrophenol		8900 U	ug/kg	8900	3500 U	ug/kg	3500	3500 U	ug/kg	3500	3300 U	ug/kg	3300
4-Nitrophenol		8900 U	ug/kg	8900	3500 UJ	ug/kg	3500	3500 UJ	ug/kg	3500	3300 UJ	ug/kg	3300
Dibenzofuran		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
2,4-Dinitrotoluene		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
Diethylphthalate		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
4-Chlorophenyl-phenylether		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	690 U	ug/kg	690
Fluorene		1800 U	ug/kg	1800	730 U	ug/kg	730	130 J	ug/kg	730	690 U	ug/kg	690
4-Nitroaniline		8900 U	ug/kg	8900	3500 U	ug/kg	3500	3500 U	ug/kg	3500	3300 U	ug/kg	3300

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Lab Sample Number:	M8793005				R9738002				R9738003				R9738001			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	25S00901				44S00101				44S00101D				44S00201			
Collect Date:	10-APR-95				05-APR-95				05-APR-95				05-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	8900	U	ug/kg	8900	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3300	U	ug/kg	3300
N-Nitrosodiphenylamine (1)	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
1,2-Diphenylhydrazine	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
4-Bromophenyl-phenylether	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
Hexachlorobenzene	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
Pentachlorophenol	8900	U	ug/kg	8900	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3300	U	ug/kg	3300
Phenanthrene	1800	U	ug/kg	1800	750		ug/kg	730	1100		ug/kg	730	690	U	ug/kg	690
Anthracene	1800	U	ug/kg	1800	300	J	ug/kg	730	270	J	ug/kg	730	690	U	ug/kg	690
Di-n-Butylphthalate	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
Fluoranthene	1800	U	ug/kg	1800	1400		ug/kg	730	1300		ug/kg	730	690	U	ug/kg	690
Pyrene	1800	U	ug/kg	1800	1300		ug/kg	730	1300		ug/kg	730	690	U	ug/kg	690
Butylbenzylphthalate	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
3,3-Dichlorobenzidine	3600	U	ug/kg	3600	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1400	U	ug/kg	1400
Benzo (a) anthracene	1800	U	ug/kg	1800	630	J	ug/kg	730	520	J	ug/kg	730	690	U	ug/kg	690
Chrysene	1800	U	ug/kg	1800	670	J	ug/kg	730	590	J	ug/kg	730	690	U	ug/kg	690
bis(2-Ethylhexyl) phthalate	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
Di-n-octylphthalate	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
Benzo (b) fluoranthene	1800	U	ug/kg	1800	700	J	ug/kg	730	500	J	ug/kg	730	690	U	ug/kg	690
Benzo (k) fluoranthene	1800	U	ug/kg	1800	680	J	ug/kg	730	640	J	ug/kg	730	690	U	ug/kg	690
Benzo (a) pyrene	1800	U	ug/kg	1800	440	J	ug/kg	730	350	J	ug/kg	730	690	U	ug/kg	690
Indeno (1,2,3-cd) pyrene	1800	U	ug/kg	1800	240	J	ug/kg	730	170	J	ug/kg	730	690	U	ug/kg	690
Dibenz (a,h) anthracene	1800	U	ug/kg	1800	100	J	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
Benzo (g,h,i) perylene	1800	U	ug/kg	1800	320	J	ug/kg	730	240	J	ug/kg	730	690	U	ug/kg	690
2-Picoline	8900	U	ug/kg	8900	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3300	U	ug/kg	3300
Methyl methanesulfonate	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
Ethyl methanesulfonate	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
Acetophenone	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
N-Nitrosopiperidine	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
Phenyl-tert-butylamine	8900	U	ug/kg	8900	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3300	U	ug/kg	3300
2,6-Dichlorophenol	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
N-Nitroso-di-n-butylamine	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
N-Nitrosodiethylamine	1800	U	ug/kg	1800	730	UJ	ug/kg	730	730	UJ	ug/kg	730	690	UJ	ug/kg	690
N-Nitrosopyrrolidine	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
Benzidine	8900	U	ug/kg	8900	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3300	U	ug/kg	3300
1,2,4,5-Tetrachlorobenzene	8900	U	ug/kg	8900	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3300	U	ug/kg	3300
Pentachlorobenzene	8900	U	ug/kg	8900	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3300	U	ug/kg	3300
1-Naphthylamine	8900	U	ug/kg	8900	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3300	U	ug/kg	3300
2-Naphthylamine	8900	U	ug/kg	8900	3500	UJ	ug/kg	3500	3500	UJ	ug/kg	3500	3300	UJ	ug/kg	3300
2,3,4,6-Tetrachlorophenol	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
Phenacetin	1800	U	ug/kg	1800	730	UJ	ug/kg	730	730	UJ	ug/kg	730	690	UJ	ug/kg	690
4-Aminobiphenyl	8900	U	ug/kg	8900	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3300	U	ug/kg	3300
Pentachloronitrobenzene	8900	U	ug/kg	8900	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3300	U	ug/kg	3300
Pronamide	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
p-(Dimethylamino)azobenzene	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
7,12-Dimethylbenz(A)Anthracene	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
3-Methylcholanthrene	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
Pyridine	8900	U	ug/kg	8900	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3300	U	ug/kg	3300
N-Nitrosomethylethylamine	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
N-Nitrosomorpholine	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
o-Toluidine	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
Hexachloropropene	8900	U	ug/kg	8900	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3300	U	ug/kg	3300
p-Phenylenediamine	89000	U	ug/kg	89000	35000	UJ	ug/kg	35000	35000	UJ	ug/kg	35000	33000	UJ	ug/kg	33000

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Lab Sample Number:	M8793005				R9738002				R9738003				R9738001			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	25S00901				44S00101				44S00101D				44S00201			
Collect Date:	10-APR-95				05-APR-95				05-APR-95				05-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	8900	U	ug/kg	8900	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3300	U	ug/kg	3300
Isosafrole	8900	U	ug/kg	8900	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3300	U	ug/kg	3300
1,4-Naphthoquinone	180000	U	ug/kg	180000	73000	U	ug/kg	73000	73000	U	ug/kg	73000	69000	U	ug/kg	69000
1,3-Dinitrobenzene	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
5-Nitro-o-toluidine	1800	U	ug/kg	1800	730	UJ	ug/kg	730	730	UJ	ug/kg	730	690	UJ	ug/kg	690
1,3,5-Trinitrobenzene	1800	U	ug/kg	1800	730	UJ	ug/kg	730	730	UJ	ug/kg	730	690	UJ	ug/kg	690
4-Nitroquinoline-1-oxide	89000	U	ug/kg	89000	35000	R	ug/kg	35000	35000	R	ug/kg	35000	33000	R	ug/kg	33000
Methapyrilene	8900	U	ug/kg	8900	3500	UJ	ug/kg	3500	3500	UJ	ug/kg	3500	3300	UJ	ug/kg	3300
3,3-Dimethylbenzidine	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
Hexachlorophene	89000	U	ug/kg	89000	35000	R	ug/kg	35000	35000	R	ug/kg	35000	33000	R	ug/kg	33000
Aramite	8900	U	ug/kg	8900	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3300	U	ug/kg	3300
2-Chlorophenol	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
3- & 4-Methylphenol (2)	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	690	U	ug/kg	690
Hexachloropropene	8900	U	ug/kg	8900	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3300	U	ug/kg	3300
2-Acetylaminofluorene	1800	U	ug/kg	1800	730	UJ	ug/kg	730	730	UJ	ug/kg	730	690	UJ	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.

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Lab Sample Number:		R9738004			R9738005			R9738006			R9738007		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		44S00301			44S00401			44S00501			44S00601		
Collect Date:		05-APR-95			05-APR-95			05-APR-95			05-APR-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES	ug/kg												
N-Nitrosodimethylamine		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
Phenol		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
Aniline		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
bis(2-Chloroethyl) ether		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
Benzyl Alcohol		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
2-Methylphenol		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
bis(2-Chloroisopropyl) ether		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
N-Nitroso-di-n-propylamine		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
Hexachloroethane		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
Nitrobenzene		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
Isophorone		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
2-Nitrophenol		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
2,4-Dimethylphenol		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
Benzoic acid		3400 U	ug/kg	3400	3600 U	ug/kg	3600	3300 U	ug/kg	3300	3400 U	ug/kg	3400
bis(2-Chloroethoxy) methane		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
2,4-Dichlorophenol		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
1,2,4-Trichlorobenzene		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
Naphthalene		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
4-Chloroaniline		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
Hexachlorobutadiene		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
4-Chloro-3-methylphenol		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
2-Methylnaphthalene		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
Hexachlorocyclopentadiene		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
2,4,6-Trichlorophenol		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
Dimethylphthalate		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
2,4,5-Trichlorophenol		3400 U	ug/kg	3400	3600 U	ug/kg	3600	3300 U	ug/kg	3300	3400 U	ug/kg	3400
2-Chloronaphthalene		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
2-Nitroaniline		3400 UJ	ug/kg	3400	3600 UJ	ug/kg	3600	3300 UJ	ug/kg	3300	3400 UJ	ug/kg	3400
Acenaphthylene		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
2,6-Dinitrotoluene		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
3-Nitroaniline		3400 U	ug/kg	3400	3600 U	ug/kg	3600	3300 U	ug/kg	3300	3400 U	ug/kg	3400
Acenaphthene		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
2,4-Dinitrophenol		3400 U	ug/kg	3400	3600 U	ug/kg	3600	3300 U	ug/kg	3300	3400 U	ug/kg	3400
4-Nitrophenol		3400 UJ	ug/kg	3400	3600 UJ	ug/kg	3600	3300 UJ	ug/kg	3300	3400 UJ	ug/kg	3400
Dibenzofuran		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
2,4-Dinitrotoluene		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
Diethylphthalate		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
4-Chlorophenyl-phenylether		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
Fluorene		690 U	ug/kg	690	730 U	ug/kg	730	680 U	ug/kg	680	700 U	ug/kg	700
4-Nitroaniline		3400 U	ug/kg	3400	3600 U	ug/kg	3600	3300 U	ug/kg	3300	3400 U	ug/kg	3400

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Lab Sample Number:		R9738008			R9738009			R9738010			R9955017		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		44S00701			44S00801			44S00901			44S01001		
Collect Date:		05-APR-95			05-APR-95			05-APR-95			24-MAY-95		
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/kg																
N-Nitrosodimethylamine	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Phenol	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Aniline	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
bis(2-Chloroethyl) ether	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Benzyl Alcohol	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
2-Methylphenol	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
bis(2-Chloroisopropyl) ether	690	U	ug/kg	690	720	U	ug/kg	720	700	UJ	ug/kg	700	710	U	ug/kg	710
N-Nitroso-di-n-propylamine	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Hexachloroethane	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Nitrobenzene	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Isophorone	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
2-Nitrophenol	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
2,4-Dimethylphenol	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Benzoic acid	3300	U	ug/kg	3300	3500	U	ug/kg	3500	3400	UJ	ug/kg	3400	3400	U	ug/kg	3400
bis(2-Chloroethoxy) methane	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
2,4-Dichlorophenol	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
1,2,4-Trichlorobenzene	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Naphthalene	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
4-Chloroaniline	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Hexachlorobutadiene	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
4-Chloro-3-methylphenol	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
2-Methylnaphthalene	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Hexachlorocyclopentadiene	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
2,4,6-Trichlorophenol	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Dimethylphthalate	92	J	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
2,4,5-Trichlorophenol	3300	U	ug/kg	3300	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3400	U	ug/kg	3400
2-Chloronaphthalene	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
2-Nitroaniline	3300	UJ	ug/kg	3300	3500	UJ	ug/kg	3500	3400	UJ	ug/kg	3400	3400	U	ug/kg	3400
Acenaphthylene	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
2,6-Dinitrotoluene	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
3-Nitroaniline	3300	U	ug/kg	3300	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Acenaphthene	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
2,4-Dinitrophenol	3300	U	ug/kg	3300	3500	U	ug/kg	3500	3400	UJ	ug/kg	3400	3400	U	ug/kg	3400
4-Nitrophenol	3300	UJ	ug/kg	3300	3500	UJ	ug/kg	3500	3400	UJ	ug/kg	3400	3400	U	ug/kg	3400
Dibenzofuran	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
2,4-Dinitrotoluene	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Diethylphthalate	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
4-Chlorophenyl-phenylether	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Fluorene	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
4-Nitroaniline	3300	U	ug/kg	3300	3500	U	ug/kg	3500	3400	UJ	ug/kg	3400	3400	U	ug/kg	3400

US Naval Station, Mayport, RCRA Faci , Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9738008				R9738009				R9738010				R9955017			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	44S00701				44S00801				44S00901				44S01001			
Collect Date:	05-APR-95				05-APR-95				05-APR-95				24-MAY-95			
	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	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3400	U	ug/kg	3400
N-Nitrosodiphenylamine (1)	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
1,2-Diphenylhydrazine	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
4-Bromophenyl-phenylether	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Hexachlorobenzene	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Pentachlorophenol	3300	U	ug/kg	3300	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Phenanthrene	690	U	ug/kg	690	130	J	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Anthracene	690	U	ug/kg	690	720	U	ug/kg	720	700	UJ	ug/kg	700	710	U	ug/kg	710
Di-n-Butylphthalate	690	U	ug/kg	690	83	J	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Fluoranthene	220	J	ug/kg	690	240	J	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Pyrene	200	J	ug/kg	690	160	J	ug/kg	720	75	J	ug/kg	700	710	U	ug/kg	710
Butylbenzylphthalate	690	U	ug/kg	690	720	U	ug/kg	720	700	UJ	ug/kg	700	710	U	ug/kg	710
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	140	J	ug/kg	690	140	J	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Chrysene	150	J	ug/kg	690	150	J	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
bis(2-Ethylhexyl) phthalate	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Di-n-octylphthalate	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Benzo (b) fluoranthene	240	J	ug/kg	690	150	J	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Benzo (k) fluoranthene	230	J	ug/kg	690	120	J	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Benzo (a) pyrene	170	J	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Indeno (1,2,3-cd) pyrene	120	J	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Dibenz (a,h) anthracene	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Benzo (g,h,i) perylene	170	J	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
2-Picoline	3300	U	ug/kg	3300	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Methyl methanesulfonate	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	UJ	ug/kg	710
Ethyl methanesulfonate	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Acetophenone	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
N-Nitrosopiperidine	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Phenyl-tert-butylamine	3300	U	ug/kg	3300	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3400	UJ	ug/kg	3400
2,6-Dichlorophenol	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	UJ	ug/kg	710
N-Nitroso-di-n-butylamine	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
N-Nitrosodiethylamine	690	UJ	ug/kg	690	720	UJ	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
N-Nitrosopyrrolidine	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Benzidine	3300	U	ug/kg	3300	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3400	UJ	ug/kg	3400
1,2,4,5-Tetrachlorobenzene	3300	U	ug/kg	3300	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3400	UJ	ug/kg	3400
Pentachlorobenzene	3300	U	ug/kg	3300	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3400	UJ	ug/kg	3400
1-Naphthylamine	3300	U	ug/kg	3300	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3400	U	ug/kg	3400
2-Naphthylamine	3300	UJ	ug/kg	3300	3500	UJ	ug/kg	3500	3400	UJ	ug/kg	3400	3400	U	ug/kg	3400
2,3,4,6-Tetrachlorophenol	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	UJ	ug/kg	710
Phenacetin	690	UJ	ug/kg	690	720	UJ	ug/kg	720	700	UJ	ug/kg	700	710	U	ug/kg	710
4-Aminobiphenyl	3300	U	ug/kg	3300	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Pentachloronitrobenzene	3300	U	ug/kg	3300	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3400	UJ	ug/kg	3400
Pronamide	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	UJ	ug/kg	710
p-(Dimethylamino)azobenzene	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	UJ	ug/kg	710
7,12-Dimethylbenz(A)Anthracene	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
3-Methylcholanthrene	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Pyridine	3300	U	ug/kg	3300	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3400	U	ug/kg	3400
N-Nitrosomethylethylamine	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
N-Nitrosomorpholine	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
o-Toluidine	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Hexachloropropene	3300	U	ug/kg	3300	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3400	U	ug/kg	3400
p-Phenylenediamine	33000	R	ug/kg	33000	35000	UJ	ug/kg	35000	34000	U	ug/kg	34000	34000	UJ	ug/kg	34000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9738008				R9738009				R9738010				R9955017			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	44S00701				44S00801				44S00901				44S01001			
Collect Date:	05-APR-95				05-APR-95				05-APR-95				24-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	3300	U	ug/kg	3300	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3400	UJ	ug/kg	3400
Isosafrole	3300	U	ug/kg	3300	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3400	U	ug/kg	3400
1,4-Naphthoquinone	69000	U	ug/kg	69000	72000	U	ug/kg	72000	70000	R	ug/kg	70000	71000	R	ug/kg	71000
1,3-Dinitrobenzene	690	U	ug/kg	690	720	U	ug/kg	720	700	UJ	ug/kg	700	710	U	ug/kg	710
5-Nitro-o-toluidine	690	UJ	ug/kg	690	720	UJ	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
1,3,5-Trinitrobenzene	690	UJ	ug/kg	690	720	UJ	ug/kg	720	700	UJ	ug/kg	700	710	U	ug/kg	710
4-Nitroquinoline-1-oxide	33000	R	ug/kg	33000	35000	R	ug/kg	35000	34000	R	ug/kg	34000	34000	UJ	ug/kg	34000
Methapyrilene	3300	UJ	ug/kg	3300	3500	UJ	ug/kg	3500	3400	UJ	ug/kg	3400	3400	UJ	ug/kg	3400
3,3-Dimethylbenzidine	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	UJ	ug/kg	710
Hexachlorophene	33000	R	ug/kg	33000	35000	R	ug/kg	35000	34000	R	ug/kg	34000	34000	UJ	ug/kg	34000
Aramite	3300	U	ug/kg	3300	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3400	U	ug/kg	3400
2-Chlorophenol	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
3- & 4-Methylphenol (2)	690	U	ug/kg	690	720	U	ug/kg	720	700	U	ug/kg	700	710	U	ug/kg	710
Hexachloropropene	3300	U	ug/kg	3300	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3400	U	ug/kg	3400
2-Acetylaminofluorene	690	UJ	ug/kg	690	720	UJ	ug/kg	720	700	UJ	ug/kg	700	710	UJ	ug/kg	710

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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SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9712001				R9712002				R9712003				R9712004			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45S00101				45S001010				45S00201				45S00301			
Collect Date:	29-MAR-95				29-MAR-95				29-MAR-95				29-MAR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/kg																
N-Nitrosodimethylamine	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Phenol	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Aniline	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
bis(2-Chloroethyl) ether	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Benzyl Alcohol	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
2-Methylphenol	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
bis(2-Chloroisopropyl) ether	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
N-Nitroso-di-n-propylamine	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Hexachloroethane	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Nitrobenzene	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Isophorone	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
2-Nitrophenol	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
2,4-Dimethylphenol	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Benzoic acid	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1600	U	ug/kg	1600
bis(2-Chloroethoxy) methane	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
2,4-Dichlorophenol	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
1,2,4-Trichlorobenzene	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Naphthalene	350	U	ug/kg	350	40	J	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
4-Chloroaniline	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Hexachlorobutadiene	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
4-Chloro-3-methylphenol	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
2-Methylnaphthalene	350	U	ug/kg	350	36	J	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Hexachlorocyclopentadiene	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
2,4,6-Trichlorophenol	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Dimethylphthalate	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
2,4,5-Trichlorophenol	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1600	U	ug/kg	1600
2-Chloronaphthalene	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
2-Nitroaniline	1700	UJ	ug/kg	1700	1700	UJ	ug/kg	1700	1700	UJ	ug/kg	1700	1600	UJ	ug/kg	1600
Acenaphthylene	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
2,6-Dinitrotoluene	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
3-Nitroaniline	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1600	U	ug/kg	1600
Acenaphthene	110	J	ug/kg	350	140	J	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
2,4-Dinitrophenol	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1600	U	ug/kg	1600
4-Nitrophenol	1700	UJ	ug/kg	1700	1700	UJ	ug/kg	1700	1700	UJ	ug/kg	1700	1600	UJ	ug/kg	1600
Dibenzofuran	350	U	ug/kg	350	140	J	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
2,4-Dinitrotoluene	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Diethylphthalate	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
4-Chlorophenyl-phenylether	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Fluorene	350	U	ug/kg	350	250	J	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
4-Nitroaniline	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1600	U	ug/kg	1600

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9712001				R9712002				R9712003				R9712004			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45S00101				45S00101D				45S00201				45S00301			
Collect Date:	29-MAR-95				29-MAR-95				29-MAR-95				29-MAR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1600	U	ug/kg	1600
N-Nitrosodiphenylamine (1)	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
1,2-Diphenylhydrazine	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	UJ	ug/kg	340
4-Bromophenyl-phenylether	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Hexachlorobenzene	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Pentachlorophenol	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1600	U	ug/kg	1600
Phenanthrene	730		ug/kg	350	1300		ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Anthracene	260	J	ug/kg	350	190	J	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Di-n-Butylphthalate	2300		ug/kg	350	440		ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Fluoranthene	1100		ug/kg	350	1100		ug/kg	350	340	U	ug/kg	340	45	J	ug/kg	340
Pyrene	910		ug/kg	350	670		ug/kg	350	340	U	ug/kg	340	41	J	ug/kg	340
Butylbenzylphthalate	350	U	ug/kg	350	88	J	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
3,3-Dichlorobenzidine	690	U	ug/kg	690	700	U	ug/kg	700	690	U	ug/kg	690	670	U	ug/kg	670
Benzo (a) anthracene	600		ug/kg	350	420		ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Chrysene	690		ug/kg	350	520		ug/kg	350	340	U	ug/kg	340	35	J	ug/kg	340
bis(2-Ethylhexyl) phthalate	350		ug/kg	350	700		ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Di-n-octylphthalate	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Benzo (b) fluoranthene	470		ug/kg	350	330	J	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Benzo (k) fluoranthene	560		ug/kg	350	430		ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Benzo (a) pyrene	460		ug/kg	350	270	J	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Indeno (1,2,3-cd) pyrene	230	J	ug/kg	350	140	J	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Dibenz (a,h) anthracene	130	J	ug/kg	350	87	J	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Benzo (g,h,i) perylene	230	J	ug/kg	350	150	J	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
2-Picoline	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1600	U	ug/kg	1600
Methyl methanesulfonate	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Ethyl methanesulfonate	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Acetophenone	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
N-Nitrosopiperidine	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Phenyl-tert-butylamine	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1600	U	ug/kg	1600
2,6-Dichlorophenol	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
N-Nitroso-di-n-butylamine	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
N-Nitrosodiethylamine	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
N-Nitrosopyrrolidine	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Benzidine	1700	UJ	ug/kg	1700	1700	UJ	ug/kg	1700	1700	UJ	ug/kg	1700	1600	UJ	ug/kg	1600
1,2,4,5-Tetrachlorobenzene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1600	U	ug/kg	1600
Pentachlorobenzene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1600	U	ug/kg	1600
1-Naphthylamine	1700	UJ	ug/kg	1700	1700	UJ	ug/kg	1700	1700	UJ	ug/kg	1700	1600	UJ	ug/kg	1600
2-Naphthylamine	1700	UJ	ug/kg	1700	1700	UJ	ug/kg	1700	1700	UJ	ug/kg	1700	1600	UJ	ug/kg	1600
2,3,4,6-Tetrachlorophenol	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Phenacetin	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
4-Aminobiphenyl	1700	UJ	ug/kg	1700	1700	UJ	ug/kg	1700	1700	UJ	ug/kg	1700	1600	UJ	ug/kg	1600
Pentachloronitrobenzene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1600	U	ug/kg	1600
Pronamide	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
p-(Dimethylamino)azobenzene	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
7,12-Dimethylbenz(A)Anthracene	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
3-Methylcholanthrene	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Pyridine	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1600	U	ug/kg	1600
N-Nitrosomethylethylamine	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
N-Nitrosomorpholine	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
o-Toluidine	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Hexachloropropene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1600	U	ug/kg	1600
p-Phenylenediamine	17000	U	ug/kg	17000	17000	U	ug/kg	17000	17000	U	ug/kg	17000	16000	U	ug/kg	16000

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Lab Sample Number:	R9712001				R9712002				R9712003				R9712004			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45S00101				45S00101D				45S00201				45S00301			
Collect Date:	29-MAR-95				29-MAR-95				29-MAR-95				29-MAR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1600	U	ug/kg	1600
Isosafrole	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1600	U	ug/kg	1600
1,4-Naphthoquinone	35000	UJ	ug/kg	35000	35000	UJ	ug/kg	35000	34000	UJ	ug/kg	34000	34000	UJ	ug/kg	34000
1,3-Dinitrobenzene	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
5-Nitro-o-toluidine	350	UJ	ug/kg	350	350	UJ	ug/kg	350	340	UJ	ug/kg	340	340	UJ	ug/kg	340
1,3,5-Trinitrobenzene	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
4-Nitroquinoline-1-oxide	17000	U	ug/kg	17000	17000	U	ug/kg	17000	17000	U	ug/kg	17000	16000	U	ug/kg	16000
Methapyrilene	1700	UJ	ug/kg	1700	1700	UJ	ug/kg	1700	1700	UJ	ug/kg	1700	1600	UJ	ug/kg	1600
3,3-Dimethylbenzidine	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Hexachlorophene	17000	R	ug/kg	17000	17000	R	ug/kg	17000	17000	R	ug/kg	17000	16000	R	ug/kg	16000
Aramite	1700	UJ	ug/kg	1700	1700	UJ	ug/kg	1700	1700	UJ	ug/kg	1700	1600	UJ	ug/kg	1600
2-Chlorophenol	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
3- & 4-Methylphenol (2)	350	U	ug/kg	350	350	U	ug/kg	350	340	U	ug/kg	340	340	U	ug/kg	340
Hexachloropropene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1600	U	ug/kg	1600
2-Acetylaminofluorene	350	U	ug/kg	350	350	U	ug/kg	350	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.

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Lab Sample Number:		R9712005				R9712006				R9712007				R9712008		
Site		GROUP111				GROUP111				GROUP111				GROUP111		
Locator		45S00401				45S00501				45S00601				45S00701		
Collect Date:		29-MAR-95				29-MAR-95				29-MAR-95				29-MAR-95		
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg																
N-Nitrosodimethylamine		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Phenol		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Aniline		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
bis(2-Chloroethyl) ether		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Benzyl Alcohol		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
2-Methylphenol		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
bis(2-Chloroisopropyl) ether		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
N-Nitroso-di-n-propylamine		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Hexachloroethane		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Nitrobenzene		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Isophorone		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
2-Nitrophenol		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
2,4-Dimethylphenol		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Benzoic acid		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1900	U	ug/kg	1900	1600	U	ug/kg	1600
bis(2-Chloroethoxy) methane		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
2,4-Dichlorophenol		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
1,2,4-Trichlorobenzene		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Naphthalene		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
4-Chloroaniline		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Hexachlorobutadiene		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
4-Chloro-3-methylphenol		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
2-Methylnaphthalene		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Hexachlorocyclopentadiene		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
2,4,6-Trichlorophenol		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Dimethylphthalate		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
2,4,5-Trichlorophenol		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1900	U	ug/kg	1900	1600	U	ug/kg	1600
2-Chloronaphthalene		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
2-Nitroaniline		1700	UJ	ug/kg	1700	1700	UJ	ug/kg	1700	1900	UJ	ug/kg	1900	1600	UJ	ug/kg	1600
Acenaphthylene		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
2,6-Dinitrotoluene		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
3-Nitroaniline		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1900	U	ug/kg	1900	1600	U	ug/kg	1600
Acenaphthene		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
2,4-Dinitrophenol		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1900	U	ug/kg	1900	1600	U	ug/kg	1600
4-Nitrophenol		1700	UJ	ug/kg	1700	1700	UJ	ug/kg	1700	1900	UJ	ug/kg	1900	1600	UJ	ug/kg	1600
Dibenzofuran		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
2,4-Dinitrotoluene		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Diethylphthalate		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
4-Chlorophenyl-phenylether		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Fluorene		350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
4-Nitroaniline		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1900	U	ug/kg	1900	1600	U	ug/kg	1600

US Naval Station, Mayport, RCRA Faci... Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9712005				R9712006				R9712007				R9712008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45S00401				45S00501				45S00601				45S00701			
Collect Date:	29-MAR-95				29-MAR-95				29-MAR-95				29-MAR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1900	U	ug/kg	1900	1600	U	ug/kg	1600
N-Nitrosodiphenylamine (1)	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
1,2-Diphenylhydrazine	350	UJ	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
4-Bromophenyl-phenylether	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Hexachlorobenzene	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Pentachlorophenol	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1900	U	ug/kg	1900	1600	U	ug/kg	1600
Phenanthrene	110	J	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Anthracene	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Di-n-Butylphthalate	400		ug/kg	350	360	U	ug/kg	360	48	J	ug/kg	380	340	U	ug/kg	340
Fluoranthene	150	J	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	100	J	ug/kg	340
Pyrene	130	J	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	83	J	ug/kg	340
Butylbenzylphthalate	350	U	ug/kg	350	360	U	ug/kg	360	72	J	ug/kg	380	340	U	ug/kg	340
3,3-Dichlorobenzidine	700	U	ug/kg	700	720	U	ug/kg	720	770	U	ug/kg	770	680	U	ug/kg	680
Benzo (a) anthracene	77	J	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	71	J	ug/kg	340
Chrysene	110	J	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	80	J	ug/kg	340
bis(2-Ethylhexyl) phthalate	65	J	ug/kg	350	360	U	ug/kg	360	360	J	ug/kg	380	52	J	ug/kg	340
Di-n-octylphthalate	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Benzo (b) fluoranthene	130	J	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	75	J	ug/kg	340
Benzo (k) fluoranthene	100	J	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	65	J	ug/kg	340
Benzo (a) pyrene	85	J	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	60	J	ug/kg	340
Indeno (1,2,3-cd) pyrene	55	J	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	39	J	ug/kg	340
Dibenz (a,h) anthracene	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Benzo (g,h,i) perylene	58	J	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	42	J	ug/kg	340
2-Picoline	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1900	U	ug/kg	1900	1600	U	ug/kg	1600
Methyl methanesulfonate	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Ethyl methanesulfonate	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Acetophenone	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
N-Nitrosopiperidine	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Phenyl-tert-butylamine	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1900	U	ug/kg	1900	1600	U	ug/kg	1600
2,6-Dichlorophenol	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
N-Nitroso-di-n-butylamine	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
N-Nitrosodiethylamine	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
N-Nitrosopyrrolidine	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Benzidine	1700	UJ	ug/kg	1700	1700	UJ	ug/kg	1700	1900	UJ	ug/kg	1900	1600	UJ	ug/kg	1600
1,2,4,5-Tetrachlorobenzene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1900	U	ug/kg	1900	1600	U	ug/kg	1600
Pentachlorobenzene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1900	U	ug/kg	1900	1600	U	ug/kg	1600
1-Naphthylamine	1700	UJ	ug/kg	1700	1700	UJ	ug/kg	1700	1900	UJ	ug/kg	1900	1600	UJ	ug/kg	1600
2-Naphthylamine	1700	UJ	ug/kg	1700	1700	UJ	ug/kg	1700	1900	UJ	ug/kg	1900	1600	UJ	ug/kg	1600
2,3,4,6-Tetrachlorophenol	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Phenacetin	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
4-Aminobiphenyl	1700	UJ	ug/kg	1700	1700	UJ	ug/kg	1700	1900	UJ	ug/kg	1900	1600	UJ	ug/kg	1600
Pentachloronitrobenzene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1900	U	ug/kg	1900	1600	U	ug/kg	1600
Pronamide	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
p-(Dimethylamino)azobenzene	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
7,12-Dimethylbenz(A)Anthracene	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
3-Methylcholanthrene	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Pyridine	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1900	U	ug/kg	1900	1600	U	ug/kg	1600
N-Nitrosomethylethylamine	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
N-Nitrosomorpholine	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
o-Toluidine	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Hexachloropropene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1900	U	ug/kg	1900	1600	U	ug/kg	1600
p-Phenylenediamine	17000	U	ug/kg	17000	17000	U	ug/kg	17000	19000	U	ug/kg	19000	16000	U	ug/kg	16000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9712005				R9712006				R9712007				R9712008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45S00401				45S00501				45S00601				45S00701			
Collect Date:	29-MAR-95				29-MAR-95				29-MAR-95				29-MAR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1900	U	ug/kg	1900	1600	U	ug/kg	1600
Isosafrole	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1900	U	ug/kg	1900	1600	U	ug/kg	1600
1,4-Naphthoquinone	35000	UJ	ug/kg	35000	36000	UJ	ug/kg	36000	38000	UJ	ug/kg	38000	34000	UJ	ug/kg	34000
1,3-Dinitrobenzene	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
5-Nitro-o-toluidine	350	UJ	ug/kg	350	360	UJ	ug/kg	360	380	UJ	ug/kg	380	340	UJ	ug/kg	340
1,3,5-Trinitrobenzene	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
4-Nitroquinoline-1-oxide	17000	U	ug/kg	17000	17000	U	ug/kg	17000	19000	U	ug/kg	19000	16000	U	ug/kg	16000
Methapyrilene	1700	UJ	ug/kg	1700	1700	UJ	ug/kg	1700	1900	UJ	ug/kg	1900	1600	UJ	ug/kg	1600
3,3-Dimethylbenzidine	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Hexachlorophene	17000	R	ug/kg	17000	17000	R	ug/kg	17000	19000	R	ug/kg	19000	16000	R	ug/kg	16000
Aramite	1700	UJ	ug/kg	1700	1700	UJ	ug/kg	1700	1900	UJ	ug/kg	1900	1600	UJ	ug/kg	1600
2-Chlorophenol	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
3- & 4-Methylphenol (2)	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	340	U	ug/kg	340
Hexachloropropene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1900	U	ug/kg	1900	1600	U	ug/kg	1600
2-Acetylaminofluorene	350	U	ug/kg	350	360	U	ug/kg	360	380	U	ug/kg	380	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8994008				R9955015				R9861004RE			
Site	GROUP111				GROUP111				GROUP111			
Locator	45S00801				45S01001				01S00201RE			
Collect Date:	21-MAY-95				24-MAY-95				03-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/kg												
N-Nitrosodimethylamine	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
Phenol	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
Aniline	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
bis(2-Chloroethyl) ether	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
Benzyl Alcohol	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
2-Methylphenol	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
bis(2-Chloroisopropyl) ether	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
N-Nitroso-di-n-propylamine	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
Hexachloroethane	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
Nitrobenzene	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
Isophorone	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
2-Nitrophenol	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
2,4-Dimethylphenol	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
Benzoic acid	1800	U	ug/kg	1800	3600	U	ug/kg	3600	3400	UJ	ug/kg	3400
bis(2-Chloroethoxy) methane	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
2,4-Dichlorophenol	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
1,2,4-Trichlorobenzene	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
Naphthalene	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
4-Chloroaniline	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
Hexachlorobutadiene	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
4-Chloro-3-methylphenol	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
2-Methylnaphthalene	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
Hexachlorocyclopentadiene	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
2,4,6-Trichlorophenol	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
Dimethylphthalate	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
2,4,5-Trichlorophenol	1800	U	ug/kg	1800	3600	U	ug/kg	3600	3400	UJ	ug/kg	3400
2-Chloronaphthalene	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
2-Nitroaniline	1800	U	ug/kg	1800	3600	U	ug/kg	3600	3400	UJ	ug/kg	3400
Acenaphthylene	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
2,6-Dinitrotoluene	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
3-Nitroaniline	1800	U	ug/kg	1800	3600	U	ug/kg	3600	3400	UJ	ug/kg	3400
Acenaphthene	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
2,4-Dinitrophenol	1800	U	ug/kg	1800	3600	U	ug/kg	3600	3400	UJ	ug/kg	3400
4-Nitrophenol	1800	U	ug/kg	1800	3600	U	ug/kg	3600	3400	UJ	ug/kg	3400
Dibenzofuran	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
2,4-Dinitrotoluene	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
Diethylphthalate	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
4-Chlorophenyl-phenylether	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
Fluorene	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
4-Nitroaniline	1800	U	ug/kg	1800	3600	U	ug/kg	3600	3400	UJ	ug/kg	3400

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8994008				R9955015				R9861004RE			
Site	GROUP111				GROUP111				GROUP111			
Locator	45S00801				45S01001				01S00201RE			
Collect Date:	21-MAY-95				24-MAY-95				03-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	1800	U	ug/kg	1800	3600	U	ug/kg	3600	3400	UJ	ug/kg	3400
N-Nitrosodiphenylamine (1)	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
1,2-Diphenylhydrazine	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
4-Bromophenyl-phenylether	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
Hexachlorobenzene	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
Pentachlorophenol	1800	U	ug/kg	1800	3600	U	ug/kg	3600	3400	UJ	ug/kg	3400
Phenanthrene	350	U	ug/kg	350	170	J	ug/kg	730	400	J	ug/kg	700
Anthracene	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
Di-n-Butylphthalate	350	U	ug/kg	350	470	J	ug/kg	730	700	UJ	ug/kg	700
Fluoranthene	41	J	ug/kg	350	420	J	ug/kg	730	390	J	ug/kg	700
Pyrene	36	J	ug/kg	350	410	J	ug/kg	730	250	J	ug/kg	700
Butylbenzylphthalate	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
3,3-Dichlorobenzidine	710	U	ug/kg	710	1500	U	ug/kg	1500	1400	UJ	ug/kg	1400
Benzo (a) anthracene	350	U	ug/kg	350	200	J	ug/kg	730	100	J	ug/kg	700
Chrysene	350	U	ug/kg	350	260	J	ug/kg	730	130	J	ug/kg	700
bis(2-Ethylhexyl) phthalate	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
Di-n-octylphthalate	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
Benzo (b) fluoranthene	350	U	ug/kg	350	310	J	ug/kg	730	120	J	ug/kg	700
Benzo (k) fluoranthene	350	UJ	ug/kg	350	320	J	ug/kg	730	130	J	ug/kg	700
Benzo (a) pyrene	350	U	ug/kg	350	250	J	ug/kg	730	96	J	ug/kg	700
Indeno (1,2,3-cd) pyrene	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
Dibenz (a,h) anthracene	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
Benzo (g,h,i) perylene	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
2-Picoline	1800	U	ug/kg	1800	3600	U	ug/kg	3600	3400	UJ	ug/kg	3400
Methyl methanesulfonate	350	U	ug/kg	350	730	UJ	ug/kg	730	700	UJ	ug/kg	700
Ethyl methanesulfonate	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
Acetophenone	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
N-Nitrosopiperidine	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
Phenyl-tert-butylamine	1800	U	ug/kg	1800	3600	UJ	ug/kg	3600	3400	UJ	ug/kg	3400
2,6-Dichlorophenol	350	U	ug/kg	350	730	UJ	ug/kg	730	700	UJ	ug/kg	700
N-Nitroso-di-n-butylamine	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
N-Nitrosodiethylamine	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
N-Nitrosopyrrolidine	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
Benzidine	1800	U	ug/kg	1800	3600	UJ	ug/kg	3600	3400	UJ	ug/kg	3400
1,2,4,5-Tetrachlorobenzene	1800	U	ug/kg	1800	3600	UJ	ug/kg	3600	3400	UJ	ug/kg	3400
Pentachlorobenzene	1800	U	ug/kg	1800	3600	UJ	ug/kg	3600	3400	UJ	ug/kg	3400
1-Naphthylamine	1800	U	ug/kg	1800	3600	U	ug/kg	3600	3400	UJ	ug/kg	3400
2-Naphthylamine	1800	U	ug/kg	1800	3600	U	ug/kg	3600	3400	UJ	ug/kg	3400
2,3,4,6-Tetrachlorophenol	350	U	ug/kg	350	730	UJ	ug/kg	730	700	UJ	ug/kg	700
Phenacetin	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
4-Aminobiphenyl	1800	U	ug/kg	1800	3600	U	ug/kg	3600	3400	UJ	ug/kg	3400
Pentachloronitrobenzene	1800	U	ug/kg	1800	3600	UJ	ug/kg	3600	3400	UJ	ug/kg	3400
Pronamide	350	U	ug/kg	350	730	UJ	ug/kg	730	700	UJ	ug/kg	700
p-(Dimethylamino)azobenzene	350	U	ug/kg	350	730	UJ	ug/kg	730	700	UJ	ug/kg	700
7,12-Dimethylbenz(A)Anthracene	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
3-Methylcholanthrene	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
Pyridine	1800	U	ug/kg	1800	3600	U	ug/kg	3600	3400	UJ	ug/kg	3400
N-Nitrosomethylethylamine	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
N-Nitrosomorpholine	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
o-Toluidine	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
Hexachloropropene	1800	U	ug/kg	1800	3600	U	ug/kg	3600	3400	UJ	ug/kg	3400
p-Phenylenediamine	18000	U	ug/kg	18000	36000	UJ	ug/kg	36000	34000	UJ	ug/kg	34000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8994008				R9955015				R9861004RE			
Site	GROUP111				GROUP111				GROUP111			
Locator	45S00801				45S01001				01S00201RE			
Collect Date:	21-MAY-95				24-MAY-95				03-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	1800	U	ug/kg	1800	3600	UJ	ug/kg	3600	3400	UJ	ug/kg	3400
Isosafrole	1800	U	ug/kg	1800	3600	U	ug/kg	3600	3400	UJ	ug/kg	3400
1,4-Naphthoquinone	35000	U	ug/kg	35000	73000	R	ug/kg	73000	70000	UJ	ug/kg	70000
1,3-Dinitrobenzene	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
5-Nitro-o-toluidine	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
1,3,5-Trinitrobenzene	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
4-Nitroquinoline-1-oxide	18000	R	ug/kg	18000	36000	UJ	ug/kg	36000	34000	UJ	ug/kg	34000
Methapyrilene	1800	U	ug/kg	1800	3600	UJ	ug/kg	3600	3400	UJ	ug/kg	3400
3,3-Dimethylbenzidine	350	U	ug/kg	350	730	UJ	ug/kg	730	700	UJ	ug/kg	700
Hexachlorophene	18000	U	ug/kg	18000	36000	UJ	ug/kg	36000	34000	UJ	ug/kg	34000
Aramite	1800	U	ug/kg	1800	3600	U	ug/kg	3600	3400	UJ	ug/kg	3400
2-Chlorophenol	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
3- & 4-Methylphenol (2)	350	U	ug/kg	350	730	U	ug/kg	730	700	UJ	ug/kg	700
Hexachloropropene	1800	U	ug/kg	1800	3600	U	ug/kg	3600	3400	UJ	ug/kg	3400
2-Acetylaminofluorene	350	U	ug/kg	350	730	UJ	ug/kg	730	700	UJ	ug/kg	700

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		R9861001				R9861002				R9861004				R9861006			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		01S00101				01S00101D				01S00201				01S00301			
Collect Date:		03-MAY-95				03-MAY-95				03-MAY-95				03-MAY-95			
		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	.73	U	ug/kg	.73	.71	U	ug/kg	.71	.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	1.3	U	ug/kg	1.3
delta-BHC		.73	U	ug/kg	.73	.73	U	ug/kg	.73	.71	U	ug/kg	.71	.7	U	ug/kg	.7
gamma-BHC (Lindane)		.73	U	ug/kg	.73	.73	U	ug/kg	.73	.71	U	ug/kg	.71	.7	U	ug/kg	.7
Heptachlor		.73	U	ug/kg	.73	.73	U	ug/kg	.73	.71	U	ug/kg	.71	.7	U	ug/kg	.7
Aldrin		.73	U	ug/kg	.73	.73	U	ug/kg	.73	.71	U	ug/kg	.71	.7	U	ug/kg	.7
Heptachlor epoxide		.73	U	ug/kg	.73	.73	U	ug/kg	.73	.71	U	ug/kg	.71	.7	U	ug/kg	.7
Endosulfan I		.73	U	ug/kg	.73	.73	U	ug/kg	.73	.71	U	ug/kg	.71	.7	U	ug/kg	.7
Dieldrin		.73	U	ug/kg	.73	.73	U	ug/kg	.73	.71	U	ug/kg	.71	.7	U	ug/kg	.7
4,4-DDE		1.9	J	ug/kg	.73	1.9	J	ug/kg	.73	.71	U	ug/kg	.71	1.9		ug/kg	.7
Endrin		1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.3	U	ug/kg	1.3
Endosulfan II		1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.3	U	ug/kg	1.3
4,4-DDD		1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.3	U	ug/kg	1.3
Endosulfan sulfate		1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.3	U	ug/kg	1.3
4,4-DDT		1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.5		ug/kg	1.3
Methoxychlor		3	U	ug/kg	3	3	U	ug/kg	3	2.9	U	ug/kg	2.9	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	1.3	U	ug/kg	1.3
Endrin ketone		1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.3	U	ug/kg	1.3
Chlordane		7.3	U	ug/kg	7.3	7.3	U	ug/kg	7.3	7.1	U	ug/kg	7.1	7	U	ug/kg	7
Chlorobenzilate		22	U	ug/kg	22	22	U	ug/kg	22	21	U	ug/kg	21	21	U	ug/kg	21
Diallate		44	U	ug/kg	44	44	U	ug/kg	44	43	U	ug/kg	43	42	U	ug/kg	42
Toxaphene		36	U	ug/kg	36	36	U	ug/kg	36	35	U	ug/kg	35	34	U	ug/kg	34
Isodrin		.73	U	ug/kg	.73	.73	U	ug/kg	.73	.71	U	ug/kg	.71	.7	U	ug/kg	.7
Kepone		44	UJ	ug/kg	44	44	UJ	ug/kg	44	43	UJ	ug/kg	43	42	UJ	ug/kg	42
Aroclor-1016		36	U	ug/kg	36	36	U	ug/kg	36	35	U	ug/kg	35	34	U	ug/kg	34
Aroclor-1221		73	U	ug/kg	73	73	U	ug/kg	73	71	U	ug/kg	71	70	U	ug/kg	70
Aroclor-1232		73	U	ug/kg	73	73	U	ug/kg	73	71	U	ug/kg	71	70	U	ug/kg	70
Aroclor-1242		36	U	ug/kg	36	36	U	ug/kg	36	35	U	ug/kg	35	34	U	ug/kg	34
Aroclor-1248		36	U	ug/kg	36	36	U	ug/kg	36	35	U	ug/kg	35	34	U	ug/kg	34
Aroclor-1254		18	U	ug/kg	18	18	U	ug/kg	18	17	U	ug/kg	17	17	U	ug/kg	17
Aroclor-1260		100	J	ug/kg	18	150		ug/kg	18	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.

US Naval Station, Mayport, RCRA Faci[illegible] Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		R9861007			R9861010			R9861012			R9861015		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		01S00401			01S00501			01S00601			01S00701		
Collect Date:		03-MAY-95			03-MAY-95			03-MAY-95			03-MAY-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg												
alpha-BHC		.71 U	ug/kg	.71	.7 U	ug/kg	.7	.7 U	ug/kg	.7	.74 U	ug/kg	.74
beta-BHC		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3	1.4 U	ug/kg	1.4
delta-BHC		.71 U	ug/kg	.71	.7 U	ug/kg	.7	.7 U	ug/kg	.7	.74 U	ug/kg	.74
gamma-BHC (Lindane)		.71 U	ug/kg	.71	.7 U	ug/kg	.7	.7 U	ug/kg	.7	.74 U	ug/kg	.74
Heptachlor		.71 U	ug/kg	.71	.7 U	ug/kg	.7	.7 U	ug/kg	.7	.74 U	ug/kg	.74
Aldrin		.71 U	ug/kg	.71	.7 U	ug/kg	.7	.7 U	ug/kg	.7	.74 U	ug/kg	.74
Heptachlor epoxide		.71 U	ug/kg	.71	.7 U	ug/kg	.7	.7 U	ug/kg	.7	.74 U	ug/kg	.74
Endosulfan I		.71 U	ug/kg	.71	.7 U	ug/kg	.7	.7 U	ug/kg	.7	.74 U	ug/kg	.74
Dieldrin		.71 U	ug/kg	.71	.7 U	ug/kg	.7	.7 U	ug/kg	.7	.74 U	ug/kg	.74
4,4-DDE		2.3 J	ug/kg	.71	.93 J	ug/kg	.7	.98 J	ug/kg	.7	.74 U	ug/kg	.74
Endrin		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3	1.4 U	ug/kg	1.4
Endosulfan II		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3	1.4 U	ug/kg	1.4
4,4-DDD		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3	1.4 U	ug/kg	1.4
Endosulfan sulfate		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3	1.4 U	ug/kg	1.4
4,4-DDT		2.6 J	ug/kg	1.4	4.6 J	ug/kg	1.4	1.3 U	ug/kg	1.3	1.4 U	ug/kg	1.4
Methoxychlor		2.9 U	ug/kg	2.9	2.8 U	ug/kg	2.8	2.8 U	ug/kg	2.8	3 U	ug/kg	3
Endrin aldehyde		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3	1.4 U	ug/kg	1.4
Endrin ketone		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3	1.4 U	ug/kg	1.4
Chlordane		7.1 U	ug/kg	7.1	7 U	ug/kg	7	7 U	ug/kg	7	7.4 U	ug/kg	7.4
Chlorobenzilate		21 U	ug/kg	21	21 U	ug/kg	21	21 U	ug/kg	21	22 U	ug/kg	22
Dialiate		42 U	ug/kg	42	42 U	ug/kg	42	41 U	ug/kg	41	44 U	ug/kg	44
Toxaphene		35 U	ug/kg	35	34 U	ug/kg	34	34 U	ug/kg	34	36 U	ug/kg	36
Isodrin		.71 U	ug/kg	.71	.7 U	ug/kg	.7	.7 U	ug/kg	.7	.74 U	ug/kg	.74
Kepone		42 UJ	ug/kg	42	42 UJ	ug/kg	42	41 UJ	ug/kg	41	44 UJ	ug/kg	44
Aroclor-1016		35 U	ug/kg	35	34 U	ug/kg	34	34 U	ug/kg	34	36 U	ug/kg	36
Aroclor-1221		71 U	ug/kg	71	70 U	ug/kg	70	70 U	ug/kg	70	74 U	ug/kg	74
Aroclor-1232		71 U	ug/kg	71	70 U	ug/kg	70	70 U	ug/kg	70	74 U	ug/kg	74
Aroclor-1242		35 U	ug/kg	35	34 U	ug/kg	34	34 U	ug/kg	34	36 U	ug/kg	36
Aroclor-1248		35 U	ug/kg	35	34 U	ug/kg	34	34 U	ug/kg	34	36 U	ug/kg	36
Aroclor-1254		17 U	ug/kg	17	17 U	ug/kg	17	17 U	ug/kg	17	18 U	ug/kg	18
Aroclor-1260		55 J	ug/kg	17	84 J	ug/kg	17	32 J	ug/kg	17	18 U	ug/kg	18

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		M8994010			R9743001			R9743002			R9743003		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		01S00801			23S00101			23S00201			23S00301		
Collect Date:		21-MAY-95			05-APR-95			05-APR-95			05-APR-95		
		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	.7 U	ug/kg	.7	.72 U	ug/kg	.72	.69 U	ug/kg	.69
beta-BHC		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3
delta-BHC		.7 U	ug/kg	.7	.7 U	ug/kg	.7	.72 U	ug/kg	.72	.69 U	ug/kg	.69
gamma-BHC (Lindane)		.7 U	ug/kg	.7	.7 U	ug/kg	.7	.72 U	ug/kg	.72	.69 U	ug/kg	.69
Heptachlor		.7 U	ug/kg	.7	.7 U	ug/kg	.7	.72 U	ug/kg	.72	.69 U	ug/kg	.69
Aldrin		.7 U	ug/kg	.7	.7 U	ug/kg	.7	.72 U	ug/kg	.72	.69 U	ug/kg	.69
Heptachlor epoxide		.7 U	ug/kg	.7	.7 U	ug/kg	.7	.72 U	ug/kg	.72	.69 U	ug/kg	.69
Endosulfan I		.7 U	ug/kg	.7	.7 U	ug/kg	.7	.72 U	ug/kg	.72	.69 U	ug/kg	.69
Dieldrin		.7 U	ug/kg	.7	.7 U	ug/kg	.7	.72 U	ug/kg	.72	.69 U	ug/kg	.69
4,4-DDE		.7 U	ug/kg	.7	.7 U	ug/kg	.7	.72 U	ug/kg	.72	.69 U	ug/kg	.69
Endrin		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3
Endosulfan II		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3
4,4-DDD		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3
Endosulfan sulfate		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3
4,4-DDT		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3
Methoxychlor		2.8 U	ug/kg	2.8	2.8 U	ug/kg	2.8	2.9 U	ug/kg	2.9	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	1.3 U	ug/kg	1.3
Endrin ketone		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3
Chlordane		7 U	ug/kg	7	7 U	ug/kg	7	7.2 U	ug/kg	7.2	6.9 U	ug/kg	6.9
Chlorobenzilate		21 U	ug/kg	21	21 U	ug/kg	21	22 U	ug/kg	22	21 U	ug/kg	21
Diallate		42 U	ug/kg	42	42 U	ug/kg	42	43 U	ug/kg	43	41 U	ug/kg	41
Toxaphene		34 U	ug/kg	34	34 U	ug/kg	34	36 U	ug/kg	36	34 U	ug/kg	34
Isodrin		.7 U	ug/kg	.7	.7 U	ug/kg	.7	.72 U	ug/kg	.72	.69 U	ug/kg	.69
Kepone		42 U	ug/kg	42	42 UJ	ug/kg	42	43 UJ	ug/kg	43	41 UJ	ug/kg	41
Aroclor-1016		34 U	ug/kg	34	34 U	ug/kg	34	36 U	ug/kg	36	34 U	ug/kg	34
Aroclor-1221		70 U	ug/kg	70	70 U	ug/kg	70	72 U	ug/kg	72	69 U	ug/kg	69
Aroclor-1232		70 U	ug/kg	70	70 U	ug/kg	70	72 U	ug/kg	72	69 U	ug/kg	69
Aroclor-1242		34 U	ug/kg	34	34 U	ug/kg	34	36 U	ug/kg	36	34 U	ug/kg	34
Aroclor-1248		34 U	ug/kg	34	34 U	ug/kg	34	36 U	ug/kg	36	34 U	ug/kg	34
Aroclor-1254		18 UJ	ug/kg	18	17 U	ug/kg	17	17 U	ug/kg	17	17 U	ug/kg	17
Aroclor-1260		18 U	ug/kg	18	17 U	ug/kg	17	17 U	ug/kg	17	17 U	ug/kg	17

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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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		R9743005				R9743004				R9743006				R9743007			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		23S00401				23S00501				23S00601				23S00701			
Collect Date:		05-APR-95				05-APR-95				05-APR-95				05-APR-95			
		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	.68	U	ug/kg	.68	.69	U	ug/kg	.69	.76	U	ug/kg	.76
beta-BHC		1.3	U	ug/kg	1.3	1.3	U	ug/kg	1.3	1.3	U	ug/kg	1.3	1.5	U	ug/kg	1.5
delta-BHC		.69	U	ug/kg	.69	.68	U	ug/kg	.68	.69	U	ug/kg	.69	.76	U	ug/kg	.76
gamma-BHC (Lindane)		.69	U	ug/kg	.69	.68	U	ug/kg	.68	.69	U	ug/kg	.69	.76	U	ug/kg	.76
Heptachlor		.69	U	ug/kg	.69	.68	U	ug/kg	.68	.69	U	ug/kg	.69	.76	U	ug/kg	.76
Aldrin		.69	U	ug/kg	.69	.68	U	ug/kg	.68	.69	U	ug/kg	.69	.76	U	ug/kg	.76
Heptachlor epoxide		.69	U	ug/kg	.69	.68	U	ug/kg	.68	.69	U	ug/kg	.69	.76	U	ug/kg	.76
Endosulfan I		.69	U	ug/kg	.69	.68	U	ug/kg	.68	.69	U	ug/kg	.69	.76	U	ug/kg	.76
Dieldrin		.69	U	ug/kg	.69	.68	U	ug/kg	.68	.69	U	ug/kg	.69	.76	U	ug/kg	.76
4,4-DDE		.69	U	ug/kg	.69	.68	U	ug/kg	.68	.69	U	ug/kg	.69	.76	U	ug/kg	.76
Endrin		1.3	U	ug/kg	1.3	1.3	U	ug/kg	1.3	1.3	U	ug/kg	1.3	1.5	U	ug/kg	1.5
Endosulfan II		1.3	U	ug/kg	1.3	1.3	U	ug/kg	1.3	1.3	U	ug/kg	1.3	1.5	U	ug/kg	1.5
4,4-DDD		1.3	U	ug/kg	1.3	1.3	U	ug/kg	1.3	1.3	U	ug/kg	1.3	1.5	U	ug/kg	1.5
Endosulfan sulfate		1.3	U	ug/kg	1.3	1.3	U	ug/kg	1.3	1.3	U	ug/kg	1.3	1.5	U	ug/kg	1.5
4,4-DDT		1.3	U	ug/kg	1.3	1.3	U	ug/kg	1.3	1.3	U	ug/kg	1.3	1.5	U	ug/kg	1.5
Methoxychlor		2.8	U	ug/kg	2.8	2.7	U	ug/kg	2.7	2.8	U	ug/kg	2.8	190	J	ug/kg	3.1
Endrin aldehyde		1.3	U	ug/kg	1.3	1.3	U	ug/kg	1.3	1.3	U	ug/kg	1.3	1.5	U	ug/kg	1.5
Endrin ketone		1.3	U	ug/kg	1.3	1.3	U	ug/kg	1.3	1.3	U	ug/kg	1.3	22	J	ug/kg	1.5
Chlordane		6.9	U	ug/kg	6.9	6.8	U	ug/kg	6.8	6.9	U	ug/kg	6.9	7.6	U	ug/kg	7.6
Chlorobenzilate		20	U	ug/kg	20	20	U	ug/kg	20	21	U	ug/kg	21	23	U	ug/kg	23
Diallate		41	U	ug/kg	41	41	U	ug/kg	41	41	U	ug/kg	41	45	U	ug/kg	45
Toxaphene		34	U	ug/kg	34	34	U	ug/kg	34	34	U	ug/kg	34	38	U	ug/kg	38
Isodrin		.69	U	ug/kg	.69	.68	U	ug/kg	.68	.69	U	ug/kg	.69	.76	U	ug/kg	.76
Kepone		41	UJ	ug/kg	41	41	UJ	ug/kg	41	41	UJ	ug/kg	41	45	UJ	ug/kg	45
Aroclor-1016		34	U	ug/kg	34	34	U	ug/kg	34	34	U	ug/kg	34	38	U	ug/kg	38
Aroclor-1221		69	U	ug/kg	69	68	U	ug/kg	68	69	U	ug/kg	69	76	U	ug/kg	76
Aroclor-1232		69	U	ug/kg	69	68	U	ug/kg	68	69	U	ug/kg	69	76	U	ug/kg	76
Aroclor-1242		34	U	ug/kg	34	34	U	ug/kg	34	34	U	ug/kg	34	38	U	ug/kg	38
Aroclor-1248		34	U	ug/kg	34	34	U	ug/kg	34	34	U	ug/kg	34	38	U	ug/kg	38
Aroclor-1254		16	U	ug/kg	16	16	U	ug/kg	16	16	U	ug/kg	16	18	U	ug/kg	18
Aroclor-1260		16	U	ug/kg	16	16	U	ug/kg	16	16	U	ug/kg	16	18	U	ug/kg	18

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		R9743008			R9743009			R9743010			R9743011		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		23S00801			23S00801D			23S00901			23S01001		
Collect Date:		05-APR-95			05-APR-95			05-APR-95			05-APR-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg												
alpha-BHC		.78 U	ug/kg	.78	.78 U	ug/kg	.78	.71 U	ug/kg	.71	.71 U	ug/kg	.71
beta-BHC		1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4
delta-BHC		.78 U	ug/kg	.78	.78 U	ug/kg	.78	.71 U	ug/kg	.71	.71 U	ug/kg	.71
gamma-BHC (Lindane)		.78 U	ug/kg	.78	.78 U	ug/kg	.78	.71 U	ug/kg	.71	.71 U	ug/kg	.71
Heptachlor		.78 U	ug/kg	.78	.78 U	ug/kg	.78	.71 U	ug/kg	.71	.71 U	ug/kg	.71
Aldrin		.78 U	ug/kg	.78	.78 U	ug/kg	.78	.71 U	ug/kg	.71	.71 U	ug/kg	.71
Heptachlor epoxide		.78 U	ug/kg	.78	.78 U	ug/kg	.78	.71 U	ug/kg	.71	.71 U	ug/kg	.71
Endosulfan I		.78 U	ug/kg	.78	.78 U	ug/kg	.78	.71 U	ug/kg	.71	.71 U	ug/kg	.71
Dieldrin		.78 U	ug/kg	.78	.78 U	ug/kg	.78	.71 U	ug/kg	.71	.71 U	ug/kg	.71
4,4-DDE		1.8 J	ug/kg	.78	1.9 J	ug/kg	.78	.71 U	ug/kg	.71	.71 U	ug/kg	.71
Endrin		1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4
Endosulfan II		1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4
4,4-DDD		1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4
Endosulfan sulfate		1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4
4,4-DDT		2.2	ug/kg	1.5	2.6 J	ug/kg	1.5	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4
Methoxychlor		3.1 U	ug/kg	3.1	3.1 U	ug/kg	3.1	4.8	ug/kg	2.8	2.9 U	ug/kg	2.9
Endrin aldehyde		1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4
Endrin ketone		1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4
Chlordane		7.8 U	ug/kg	7.8	7.8 U	ug/kg	7.8	7 U	ug/kg	7	7.1 U	ug/kg	7.1
Chlorobenzilate		23 U	ug/kg	23	23 U	ug/kg	23	23 U	ug/kg	23	21 U	ug/kg	21
Diallate		47 U	ug/kg	47	47 U	ug/kg	47	47 U	ug/kg	47	43 U	ug/kg	43
Toxaphene		38 U	ug/kg	38	38 U	ug/kg	38	35 U	ug/kg	35	35 U	ug/kg	35
Isodrin		.78 U	ug/kg	.78	.78 U	ug/kg	.78	.78 U	ug/kg	.78	.71 U	ug/kg	.71
Kepone		47 UJ	ug/kg	47	47 UJ	ug/kg	47	42 UJ	ug/kg	42	43 UJ	ug/kg	43
Aroclor-1016		38 U	ug/kg	38	38 U	ug/kg	38	35 U	ug/kg	35	35 U	ug/kg	35
Aroclor-1221		78 U	ug/kg	78	78 U	ug/kg	78	70 U	ug/kg	70	71 U	ug/kg	71
Aroclor-1232		78 U	ug/kg	78	78 U	ug/kg	78	70 U	ug/kg	70	71 U	ug/kg	71
Aroclor-1242		38 U	ug/kg	38	38 U	ug/kg	38	35 U	ug/kg	35	35 U	ug/kg	35
Aroclor-1248		38 U	ug/kg	38	38 U	ug/kg	38	35 U	ug/kg	35	35 U	ug/kg	35
Aroclor-1254		19 U	ug/kg	19	19 U	ug/kg	19	17 U	ug/kg	17	130	ug/kg	17
Aroclor-1260		19 U	ug/kg	19	19 U	ug/kg	19	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.

US Naval Station, Mayport, RCRA Faci...y Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		R9743015			R9743014			R9743016			R9743017		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		23S01101			23S01201			23S01301			23S01401		
Collect Date:		07-APR-95			07-APR-95			07-APR-95			07-APR-95		
		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	.73 U	ug/kg	.73	.86 U	ug/kg	.86	.82 U	ug/kg	.82
beta-BHC		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.7 U	ug/kg	1.7	1.6 U	ug/kg	1.6
delta-BHC		.72 U	ug/kg	.72	.73 U	ug/kg	.73	.86 U	ug/kg	.86	.82 U	ug/kg	.82
gamma-BHC (Lindane)		.72 U	ug/kg	.72	.73 U	ug/kg	.73	.86 U	ug/kg	.86	.82 U	ug/kg	.82
Heptachlor		.72 U	ug/kg	.72	.73 U	ug/kg	.73	.86 U	ug/kg	.86	.82 U	ug/kg	.82
Aldrin		.72 U	ug/kg	.72	.73 U	ug/kg	.73	.86 U	ug/kg	.86	.82 U	ug/kg	.82
Heptachlor epoxide		.72 U	ug/kg	.72	.73 U	ug/kg	.73	.86 U	ug/kg	.86	.82 U	ug/kg	.82
Endosulfan I		.72 U	ug/kg	.72	.73 U	ug/kg	.73	.86 U	ug/kg	.86	.82 U	ug/kg	.82
Dieldrin		.72 U	ug/kg	.72	.73 U	ug/kg	.73	.86 U	ug/kg	.86	.82 U	ug/kg	.82
4,4-DDE		1.2	ug/kg	.72	.73 U	ug/kg	.73	2.2	ug/kg	.86	1.2	ug/kg	.82
Endrin		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.7 U	ug/kg	1.7	1.6 U	ug/kg	1.6
Endosulfan II		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.7 U	ug/kg	1.7	12	ug/kg	1.6
4,4-DDD		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.7 U	ug/kg	1.7	1.6 U	ug/kg	1.6
Endosulfan sulfate		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.7 U	ug/kg	1.7	1.6 U	ug/kg	1.6
4,4-DDT		3.8	ug/kg	1.4	1.4 U	ug/kg	1.4	1.7 U	ug/kg	1.7	1.6 U	ug/kg	1.6
Methoxychlor		2.9	ug/kg	2.9	2.9 U	ug/kg	2.9	3.5 U	ug/kg	3.5	3.3 U	ug/kg	3.3
Endrin aldehyde		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.7 U	ug/kg	1.7	1.6 U	ug/kg	1.6
Endrin ketone		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.7 U	ug/kg	1.7	1.6 U	ug/kg	1.6
Chlordane		7.2 U	ug/kg	7.2	7.3 U	ug/kg	7.3	8.6 U	ug/kg	8.6	8.2 U	ug/kg	8.2
Chlorobenzilate		21 U	ug/kg	21	22 U	ug/kg	22	26 U	ug/kg	26	24 U	ug/kg	24
Diallate		43 U	ug/kg	43	43 U	ug/kg	43	51 U	ug/kg	51	49 U	ug/kg	49
Toxaphene		35 U	ug/kg	35	36 U	ug/kg	36	42 U	ug/kg	42	40 U	ug/kg	40
Isodrin		.72 U	ug/kg	.72	.73 U	ug/kg	.73	.86 U	ug/kg	.86	.82 U	ug/kg	.82
Kepone		43 UJ	ug/kg	43	43 UJ	ug/kg	43	51 UJ	ug/kg	51	49 UJ	ug/kg	49
Aroclor-1016		35 U	ug/kg	35	36 U	ug/kg	36	42 U	ug/kg	42	40 U	ug/kg	40
Aroclor-1221		72 U	ug/kg	72	73 U	ug/kg	73	86 U	ug/kg	86	82 U	ug/kg	82
Aroclor-1232		72 U	ug/kg	72	73 U	ug/kg	73	86 U	ug/kg	86	82 U	ug/kg	82
Aroclor-1242		35 U	ug/kg	35	36 U	ug/kg	36	42 U	ug/kg	42	40 U	ug/kg	40
Aroclor-1248		35 U	ug/kg	35	36 U	ug/kg	36	42 U	ug/kg	42	40 U	ug/kg	40
Aroclor-1254		17 U	ug/kg	17	70	ug/kg	17	21 U	ug/kg	21	20 U	ug/kg	20
Aroclor-1260		17 U	ug/kg	17	17 U	ug/kg	17	21 U	ug/kg	21	20 U	ug/kg	20

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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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9743018				R9743019				R9743020				R9743021			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S01501				23S01601				23S01701				23S01701D			
Collect Date:	07-APR-95				07-APR-95				07-APR-95				07-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs ug/kg																
alpha-BHC	.76	U	ug/kg	.76	.77	U	ug/kg	.77	.72	U	ug/kg	.72	.72	U	ug/kg	.72
beta-BHC	1.5	U	ug/kg	1.5	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
delta-BHC	.76	U	ug/kg	.76	.77	U	ug/kg	.77	.72	U	ug/kg	.72	.72	U	ug/kg	.72
gamma-BHC (Lindane)	.76	U	ug/kg	.76	.77	U	ug/kg	.77	.72	U	ug/kg	.72	.72	U	ug/kg	.72
Heptachlor	.76	U	ug/kg	.76	.77	U	ug/kg	.77	.72	U	ug/kg	.72	.72	U	ug/kg	.72
Aldrin	.76	U	ug/kg	.76	.77	U	ug/kg	.77	.72	U	ug/kg	.72	.72	U	ug/kg	.72
Heptachlor epoxide	.76	U	ug/kg	.76	.77	U	ug/kg	.77	.72	U	ug/kg	.72	.72	U	ug/kg	.72
Endosulfan I	.76	U	ug/kg	.76	.77	U	ug/kg	.77	.72	U	ug/kg	.72	.72	U	ug/kg	.72
Dieldrin	.76	U	ug/kg	.76	.77	U	ug/kg	.77	.72	U	ug/kg	.72	.72	U	ug/kg	.72
4,4-DDE	1.3	J	ug/kg	.76	8.3		ug/kg	.77	.72	U	ug/kg	.72	.72	U	ug/kg	.72
Endrin	1.5	U	ug/kg	1.5	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endosulfan II	1.5	U	ug/kg	1.5	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
4,4-DDD	1.5	U	ug/kg	1.5	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endosulfan sulfate	1.5	U	ug/kg	1.5	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
4,4-DDT	2		ug/kg	1.5	28		ug/kg	1.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Methoxychlor	3.1	U	ug/kg	3.1	3.1	U	ug/kg	3.1	2.9	U	ug/kg	2.9	2.9	U	ug/kg	2.9
Endrin aldehyde	1.5	U	ug/kg	1.5	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endrin ketone	1.5	U	ug/kg	1.5	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Chlordane	7.6	U	ug/kg	7.6	7.7	U	ug/kg	7.7	7.2	U	ug/kg	7.2	7.2	U	ug/kg	7.2
Chlorobenzilate	23	U	ug/kg	23	23	U	ug/kg	23	21	U	ug/kg	21	22	U	ug/kg	22
Diallate	45	U	ug/kg	45	46	U	ug/kg	46	43	U	ug/kg	43	43	U	ug/kg	43
Toxaphene	38	U	ug/kg	38	38	U	ug/kg	38	35	U	ug/kg	35	36	U	ug/kg	36
Isodrin	.76	U	ug/kg	.76	.77	U	ug/kg	.77	.72	U	ug/kg	.72	.72	U	ug/kg	.72
Kepone	45	UJ	ug/kg	45	46	UJ	ug/kg	46	43	UJ	ug/kg	43	43	UJ	ug/kg	43
Aroclor-1016	38	U	ug/kg	38	38	U	ug/kg	38	35	U	ug/kg	35	36	U	ug/kg	36
Aroclor-1221	76	U	ug/kg	76	77	U	ug/kg	77	72	U	ug/kg	72	72	U	ug/kg	72
Aroclor-1232	76	U	ug/kg	76	77	U	ug/kg	77	72	U	ug/kg	72	72	U	ug/kg	72
Aroclor-1242	38	U	ug/kg	38	38	U	ug/kg	38	35	U	ug/kg	35	36	U	ug/kg	36
Aroclor-1248	38	U	ug/kg	38	38	U	ug/kg	38	35	U	ug/kg	35	36	U	ug/kg	36
Aroclor-1254	18	U	ug/kg	18	18	U	ug/kg	18	17	U	ug/kg	17	17	U	ug/kg	17
Aroclor-1260	18	U	ug/kg	18	380		ug/kg	18	17	U	ug/kg	17	17	U	ug/kg	17

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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.

US Naval Station, Mayport, RCRA Faci..., Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		R9743022			M8775001			M8775002			M8780001		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		23S01801			23S01901			23S02001			23S02101		
Collect Date:		07-APR-95			07-APR-95			07-APR-95			08-APR-95		
		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	.75 U	ug/kg	.75	.77 U	ug/kg	.77	3.8 U	ug/kg	3.8
beta-BHC		1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	7.4 U	ug/kg	7.4
delta-BHC		.73 U	ug/kg	.73	.75 U	ug/kg	.75	.77 U	ug/kg	.77	3.8 U	ug/kg	3.8
gamma-BHC (Lindane)		.73 U	ug/kg	.73	.75 U	ug/kg	.75	.77 U	ug/kg	.77	3.8 U	ug/kg	3.8
Heptachlor		.73 U	ug/kg	.73	.75 U	ug/kg	.75	.77 U	ug/kg	.77	3.8 U	ug/kg	3.8
Aldrin		.73 U	ug/kg	.73	.75 U	ug/kg	.75	.77 U	ug/kg	.77	3.8 U	ug/kg	3.8
Heptachlor epoxide		.73 U	ug/kg	.73	.75 U	ug/kg	.75	.77 U	ug/kg	.77	3.8 U	ug/kg	3.8
Endosulfan I		.73 U	ug/kg	.73	.75 U	ug/kg	.75	.77 U	ug/kg	.77	3.8 U	ug/kg	3.8
Dieldrin		.73 U	ug/kg	.73	.75 U	ug/kg	.75	.77 U	ug/kg	.77	3.8 U	ug/kg	3.8
4,4-DDE		.73 U	ug/kg	.73	.75 U	ug/kg	.75	.77 U	ug/kg	.77	3.8 U	ug/kg	3.8
Endrin		1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	7.4 U	ug/kg	7.4
Endosulfan II		1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	7.4 U	ug/kg	7.4
4,4-DDD		1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	7.4 U	ug/kg	7.4
Endosulfan sulfate		1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	7.4 U	ug/kg	7.4
4,4-DDT		1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	7.4 U	ug/kg	7.4
Methoxychlor		3 U	ug/kg	3	3 U	ug/kg	3	3.1 U	ug/kg	3.1	15 U	ug/kg	15
Endrin aldehyde		1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	7.4 U	ug/kg	7.4
Endrin ketone		1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	7.4 U	ug/kg	7.4
Chlordane		7.3 U	ug/kg	7.3	7.5 U	ug/kg	7.5	7.7 U	ug/kg	7.7	38 U	ug/kg	38
Chlorobenzilate		22 U	ug/kg	22	22 U	ug/kg	22	23 U	ug/kg	23	110 U	ug/kg	110
Diallate		43 U	ug/kg	43	45 U	ug/kg	45	46 U	ug/kg	46	230 U	ug/kg	230
Toxaphene		36 U	ug/kg	36	37 U	ug/kg	37	38 U	ug/kg	38	190 U	ug/kg	190
Isodrin		.73 U	ug/kg	.73	.75 U	ug/kg	.75	.77 U	ug/kg	.77	3.8 U	ug/kg	3.8
Kepone		44 UJ	ug/kg	44	45 UJ	ug/kg	45	46 UJ	ug/kg	46	45 UJ	ug/kg	45
Aroclor-1016		36 U	ug/kg	36	37 U	ug/kg	37	38 U	ug/kg	38	190 U	ug/kg	190
Aroclor-1221		73 U	ug/kg	73	75 U	ug/kg	75	77 U	ug/kg	77	380 U	ug/kg	380
Aroclor-1232		73 U	ug/kg	73	75 U	ug/kg	75	77 U	ug/kg	77	380 U	ug/kg	380
Aroclor-1242		36 U	ug/kg	36	37 U	ug/kg	37	38 U	ug/kg	38	190 U	ug/kg	190
Aroclor-1248		36 U	ug/kg	36	37 U	ug/kg	37	38 U	ug/kg	38	190 U	ug/kg	190
Aroclor-1254		18 U	ug/kg	18	19 U	ug/kg	19	20 U	ug/kg	20	97 U	ug/kg	97
Aroclor-1260		18 U	ug/kg	18	26	ug/kg	19	46 J	ug/kg	20	97 U	ug/kg	97

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US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8780003				M8780002				M8775003				M8775004			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S02201				23S02301				23S02401				23S02501			
Collect Date:	08-APR-95				08-APR-95				07-APR-95				07-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs ug/kg																
alpha-BHC	3.8	U	ug/kg	3.8	7.3	U	ug/kg	7.3	1.4	U	ug/kg	1.4	3.6	U	ug/kg	3.6
beta-BHC	7.4	U	ug/kg	7.4	14	U	ug/kg	14	2.8	U	ug/kg	2.8	7	U	ug/kg	7
delta-BHC	3.8	U	ug/kg	3.8	7.3	U	ug/kg	7.3	1.4	U	ug/kg	1.4	3.6	U	ug/kg	3.6
gamma-BHC (Lindane)	3.8	U	ug/kg	3.8	7.3	U	ug/kg	7.3	1.4	U	ug/kg	1.4	3.6	U	ug/kg	3.6
Heptachlor	3.8	U	ug/kg	3.8	7.3	U	ug/kg	7.3	1.4	U	ug/kg	1.4	3.6	U	ug/kg	3.6
Aldrin	3.8	U	ug/kg	3.8	7.3	U	ug/kg	7.3	1.4	U	ug/kg	1.4	3.6	U	ug/kg	3.6
Heptachlor epoxide	3.8	U	ug/kg	3.8	7.3	U	ug/kg	7.3	1.4	U	ug/kg	1.4	3.6	U	ug/kg	3.6
Endosulfan I	3.8	U	ug/kg	3.8	7.3	U	ug/kg	7.3	1.4	U	ug/kg	1.4	3.6	U	ug/kg	3.6
Dieldrin	3.8	U	ug/kg	3.8	7.3	U	ug/kg	7.3	1.4	U	ug/kg	1.4	3.6	U	ug/kg	3.6
4,4-DDE	3.8	U	ug/kg	3.8	7.3	U	ug/kg	7.3	1.4	U	ug/kg	1.4	3.6	U	ug/kg	3.6
Endrin	7.3	U	ug/kg	7.3	14	U	ug/kg	14	2.8	U	ug/kg	2.8	7	U	ug/kg	7
Endosulfan II	7.3	U	ug/kg	7.3	14	U	ug/kg	14	2.8	U	ug/kg	2.8	7	U	ug/kg	7
4,4-DDD	7.3	U	ug/kg	7.3	14	U	ug/kg	14	2.8	U	ug/kg	2.8	7	U	ug/kg	7
Endosulfan sulfate	7.3	U	ug/kg	7.3	14	U	ug/kg	14	2.8	U	ug/kg	2.8	7	U	ug/kg	7
4,4-DDT	7.3	U	ug/kg	7.3	14	U	ug/kg	14	2.8	U	ug/kg	2.8	7	U	ug/kg	7
Methoxychlor	15	U	ug/kg	15	29	U	ug/kg	29	5.8	U	ug/kg	5.8	14	U	ug/kg	14
Endrin aldehyde	7.3	U	ug/kg	7.3	14	U	ug/kg	14	2.8	U	ug/kg	2.8	7	U	ug/kg	7
Endrin ketone	7.3	U	ug/kg	7.3	14	U	ug/kg	14	2.8	U	ug/kg	2.8	7	U	ug/kg	7
Chlordane	38	U	ug/kg	38	73	U	ug/kg	73	29	J	ug/kg	14	36	U	ug/kg	36
Chlorobenzilate	110	U	ug/kg	110	220	U	ug/kg	220	43	U	ug/kg	43	110	U	ug/kg	110
Diallate	230	U	ug/kg	230	430	U	ug/kg	430	86	U	ug/kg	86	210	U	ug/kg	210
Toxaphene	190	U	ug/kg	190	360	U	ug/kg	360	71	U	ug/kg	71	180	U	ug/kg	180
Isodrin	3.8	U	ug/kg	3.8	7.3	U	ug/kg	7.3	1.4	U	ug/kg	1.4	3.6	U	ug/kg	3.6
Kepone	45	UJ	ug/kg	45	43	UJ	ug/kg	43	43	UJ	ug/kg	43	43	UJ	ug/kg	43
Aroclor-1016	190	U	ug/kg	190	360	U	ug/kg	360	71	U	ug/kg	71	180	U	ug/kg	180
Aroclor-1221	380	U	ug/kg	380	730	U	ug/kg	730	140	U	ug/kg	140	360	U	ug/kg	360
Aroclor-1232	380	U	ug/kg	380	730	U	ug/kg	730	140	U	ug/kg	140	360	U	ug/kg	360
Aroclor-1242	190	U	ug/kg	190	360	U	ug/kg	360	71	U	ug/kg	71	180	U	ug/kg	180
Aroclor-1248	190	U	ug/kg	190	360	U	ug/kg	360	71	U	ug/kg	71	180	U	ug/kg	180
Aroclor-1254	97	U	ug/kg	97	220	J	ug/kg	180	37	U	ug/kg	37	91	U	ug/kg	91
Aroclor-1260	97	U	ug/kg	97	180	U	ug/kg	180	37	U	ug/kg	37	91	U	ug/kg	91

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		M8775005				M8775006				M8775007				M8775008			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		23S02601				23S02701				23S02701D				23S02801			
Collect Date:		07-APR-95				07-APR-95				07-APR-95				07-APR-95			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg																
alpha-BHC		3.5	U	ug/kg	3.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.5	U	ug/kg	1.5
beta-BHC		6.8	U	ug/kg	6.8	2.8	U	ug/kg	2.8	2.8	U	ug/kg	2.8	2.9	U	ug/kg	2.9
delta-BHC		3.5	U	ug/kg	3.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.5	U	ug/kg	1.5
gamma-BHC (Lindane)		3.5	U	ug/kg	3.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.5	U	ug/kg	1.5
Heptachlor		3.5	U	ug/kg	3.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.5	U	ug/kg	1.5
Aldrin		3.5	U	ug/kg	3.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.5	U	ug/kg	1.5
Heptachlor epoxide		3.5	U	ug/kg	3.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.5	U	ug/kg	1.5
Endosulfan I		3.5	U	ug/kg	3.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.5	U	ug/kg	1.5
Dieldrin		3.5	U	ug/kg	3.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.5	U	ug/kg	1.5
4,4-DDE		3.5	U	ug/kg	3.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.5	U	ug/kg	1.5
Endrin		6.8	U	ug/kg	6.8	2.8	U	ug/kg	2.8	2.8	U	ug/kg	2.8	2.9	U	ug/kg	2.9
Endosulfan II		6.8	U	ug/kg	6.8	2.8	U	ug/kg	2.8	2.8	U	ug/kg	2.8	2.9	U	ug/kg	2.9
4,4-DDD		6.8	U	ug/kg	6.8	2.8	U	ug/kg	2.8	2.8	U	ug/kg	2.8	2.9	U	ug/kg	2.9
Endosulfan sulfate		6.8	U	ug/kg	6.8	2.8	U	ug/kg	2.8	2.8	U	ug/kg	2.8	2.9	U	ug/kg	2.9
4,4-DDT		6.8	U	ug/kg	6.8	2.8	U	ug/kg	2.8	2.8	U	ug/kg	2.8	2.9	U	ug/kg	2.9
Methoxychlor		14	U	ug/kg	14	5.8	U	ug/kg	5.8	5.8	U	ug/kg	5.8	6	U	ug/kg	6
Endrin aldehyde		6.8	U	ug/kg	6.8	2.8	U	ug/kg	2.8	2.8	U	ug/kg	2.8	2.9	U	ug/kg	2.9
Endrin ketone		6.8	U	ug/kg	6.8	2.8	U	ug/kg	2.8	2.8	U	ug/kg	2.8	2.9	U	ug/kg	2.9
Chlordane		35	U	ug/kg	35	14	U	ug/kg	14	14	U	ug/kg	14	15	U	ug/kg	15
Chlorobenzilate		100	U	ug/kg	100	43	U	ug/kg	43	43	U	ug/kg	43	44	U	ug/kg	44
Dialiate		210	U	ug/kg	210	86	U	ug/kg	86	86	U	ug/kg	86	89	U	ug/kg	89
Toxaphene		170	U	ug/kg	170	71	U	ug/kg	71	71	U	ug/kg	71	73	U	ug/kg	73
Isodrin		3.5	U	ug/kg	3.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.5	U	ug/kg	1.5
Kepone		42	UJ	ug/kg	42	43	UJ	ug/kg	43	43	UJ	ug/kg	43	44	UJ	ug/kg	44
Aroclor-1016		170	U	ug/kg	170	71	U	ug/kg	71	71	U	ug/kg	71	73	U	ug/kg	73
Aroclor-1221		350	U	ug/kg	350	140	U	ug/kg	140	140	U	ug/kg	140	150	U	ug/kg	150
Aroclor-1232		350	U	ug/kg	350	140	U	ug/kg	140	140	U	ug/kg	140	150	U	ug/kg	150
Aroclor-1242		170	U	ug/kg	170	71	U	ug/kg	71	71	U	ug/kg	71	73	U	ug/kg	73
Aroclor-1248		170	U	ug/kg	170	71	U	ug/kg	71	71	U	ug/kg	71	73	U	ug/kg	73
Aroclor-1254		89	U	ug/kg	89	37	U	ug/kg	37	37	U	ug/kg	37	38	U	ug/kg	38
Aroclor-1260		89	U	ug/kg	89	37	U	ug/kg	37	37	U	ug/kg	37	38	U	ug/kg	38

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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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8994003				M8994004				M8780004				M8780005			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S02901				23S02901D				24S00101				24S00201			
Collect Date:	20-MAY-95				20-MAY-95				08-APR-95				08-APR-95			
	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	1.8	U	ug/kg	1.8	1.9	U	ug/kg	1.9	.83	U	ug/kg	.83
beta-BHC	3.5	U	ug/kg	3.5	3.5	U	ug/kg	3.5	3.6	U	ug/kg	3.6	1.6	U	ug/kg	1.6
delta-BHC	1.8	U	ug/kg	1.8	1.8	U	ug/kg	1.8	1.9	U	ug/kg	1.9	.83	U	ug/kg	.83
gamma-BHC (Lindane)	1.8	U	ug/kg	1.8	1.8	U	ug/kg	1.8	1.9	U	ug/kg	1.9	.83	U	ug/kg	.83
Heptachlor	1.8	U	ug/kg	1.8	1.8	U	ug/kg	1.8	1.9	U	ug/kg	1.9	.83	U	ug/kg	.83
Aldrin	1.8	U	ug/kg	1.8	1.8	U	ug/kg	1.8	1.9	U	ug/kg	1.9	1.1		ug/kg	.83
Heptachlor epoxide	1.8	U	ug/kg	1.8	1.8	U	ug/kg	1.8	1.9	U	ug/kg	1.9	.83	U	ug/kg	.83
Endosulfan I	1.8	U	ug/kg	1.8	1.8	U	ug/kg	1.8	1.9	U	ug/kg	1.9	.83	U	ug/kg	.83
Dieldrin	1.8	U	ug/kg	1.8	1.8	U	ug/kg	1.8	1.9	U	ug/kg	1.9	3.4		ug/kg	.83
4,4-DDE	1.8	U	ug/kg	1.8	1.8	U	ug/kg	1.8	1.9	U	ug/kg	1.9	.83	U	ug/kg	.83
Endrin	3.5	U	ug/kg	3.5	3.5	U	ug/kg	3.5	3.6	U	ug/kg	3.6	1.6	U	ug/kg	1.6
Endosulfan II	3.5	U	ug/kg	3.5	3.5	U	ug/kg	3.5	3.6	U	ug/kg	3.6	1.6	U	ug/kg	1.6
4,4-DDD	3.5	U	ug/kg	3.5	3.5	U	ug/kg	3.5	3.6	U	ug/kg	3.6	1.6	U	ug/kg	1.6
Endosulfan sulfate	3.5	U	ug/kg	3.5	3.5	U	ug/kg	3.5	3.6	U	ug/kg	3.6	1.6	U	ug/kg	1.6
4,4-DDT	3.5	U	ug/kg	3.5	3.5	U	ug/kg	3.5	3.6	U	ug/kg	3.6	1.6	U	ug/kg	1.6
Methoxychlor	7.3	U	ug/kg	7.3	7.2	U	ug/kg	7.2	7.5	U	ug/kg	7.5	3.3	U	ug/kg	3.3
Endrin aldehyde	3.5	U	ug/kg	3.5	3.5	U	ug/kg	3.5	3.6	U	ug/kg	3.6	1.6	U	ug/kg	1.6
Endrin ketone	3.5	U	ug/kg	3.5	3.5	U	ug/kg	3.5	3.6	U	ug/kg	3.6	1.6	U	ug/kg	1.6
Chlordane	18	U	ug/kg	18	18	U	ug/kg	18	72		ug/kg	19	8.3	U	ug/kg	8.3
Chlorobenzilate	54	U	ug/kg	54	53	U	ug/kg	53	56	U	ug/kg	56	25	U	ug/kg	25
Diallate	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	49	U	ug/kg	49
Toxaphene	89	U	ug/kg	89	88	U	ug/kg	88	92	U	ug/kg	92	41	U	ug/kg	41
Isodrin	1.8	U	ug/kg	1.8	1.8	U	ug/kg	1.8	1.9	U	ug/kg	1.9	.83	U	ug/kg	.83
Kepone	110	U	ug/kg	110	110	U	ug/kg	110	44	UJ	ug/kg	44	49	UJ	ug/kg	49
Aroclor-1016	89	U	ug/kg	89	88	U	ug/kg	88	92	U	ug/kg	92	41	U	ug/kg	41
Aroclor-1221	180	U	ug/kg	180	180	U	ug/kg	180	190	U	ug/kg	190	83	U	ug/kg	83
Aroclor-1232	180	U	ug/kg	180	180	U	ug/kg	180	190	U	ug/kg	190	83	U	ug/kg	83
Aroclor-1242	89	U	ug/kg	89	88	U	ug/kg	88	92	U	ug/kg	92	41	U	ug/kg	41
Aroclor-1248	89	U	ug/kg	89	88	U	ug/kg	88	92	U	ug/kg	92	41	U	ug/kg	41
Aroclor-1254	280	J	ug/kg	45	390	J	ug/kg	44	47	U	ug/kg	47	21	U	ug/kg	21
Aroclor-1260	100		ug/kg	45	140		ug/kg	44	140		ug/kg	47	21	U	ug/kg	21

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		M8780006			M8780007			M8780008			M8780009		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		24S00301			24S00401			24S00401D			24S00501		
Collect Date:		08-APR-95			08-APR-95			08-APR-95			08-APR-95		
		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	3.6 U	ug/kg	3.6	3.7 U	ug/kg	3.7	1.9 U	ug/kg	1.9
beta-BHC		2.9 U	ug/kg	2.9	7 U	ug/kg	7	7.1 U	ug/kg	7.1	3.7 U	ug/kg	3.7
delta-BHC		1.5 U	ug/kg	1.5	3.6 U	ug/kg	3.6	3.7 U	ug/kg	3.7	1.9 U	ug/kg	1.9
gamma-BHC (Lindane)		1.5 U	ug/kg	1.5	3.6 U	ug/kg	3.6	3.7 U	ug/kg	3.7	1.9 U	ug/kg	1.9
Heptachlor		1.5 U	ug/kg	1.5	3.6 U	ug/kg	3.6	3.7 U	ug/kg	3.7	1.9 U	ug/kg	1.9
Aldrin		1.5 U	ug/kg	1.5	3.6 U	ug/kg	3.6	3.7 U	ug/kg	3.7	1.9 U	ug/kg	1.9
Heptachlor epoxide		1.5 U	ug/kg	1.5	3.6 U	ug/kg	3.6	3.7 U	ug/kg	3.7	1.9 U	ug/kg	1.9
Endosulfan I		1.5 U	ug/kg	1.5	3.6 U	ug/kg	3.6	3.7 U	ug/kg	3.7	1.9 U	ug/kg	1.9
Dieldrin		1.5 U	ug/kg	1.5	3.6 U	ug/kg	3.6	3.7 U	ug/kg	3.7	6.3 J	ug/kg	1.9
4,4-DDE		1.5 U	ug/kg	1.5	3.6 U	ug/kg	3.6	3.7 U	ug/kg	3.7	3.7 U	ug/kg	3.7
Endrin		2.9 U	ug/kg	2.9	7.3 U	ug/kg	7.3	7.1 U	ug/kg	7.1	3.7 U	ug/kg	3.7
Endosulfan II		2.9 U	ug/kg	2.9	7 U	ug/kg	7	7.1 U	ug/kg	7.1	3.7 U	ug/kg	3.7
4,4-DDD		2.9 U	ug/kg	2.9	7 U	ug/kg	7	7.1 U	ug/kg	7.1	3.7 U	ug/kg	3.7
Endosulfan sulfate		2.9 U	ug/kg	2.9	7 U	ug/kg	7	7.1 U	ug/kg	7.1	3.7 U	ug/kg	3.7
4,4-DDT		2.9 U	ug/kg	2.9	7 U	ug/kg	7	7.1 U	ug/kg	7.1	3.9 UJ	ug/kg	3.9
Methoxychlor		6.1 U	ug/kg	6.1	15 U	ug/kg	15	15 U	ug/kg	15	7.6 U	ug/kg	7.6
Endrin aldehyde		2.9 U	ug/kg	2.9	7 U	ug/kg	7	7.1 U	ug/kg	7.1	3.7 U	ug/kg	3.7
Endrin ketone		2.9 U	ug/kg	2.9	7 U	ug/kg	7	7.1 U	ug/kg	7.1	3.7 U	ug/kg	3.7
Chlordane		15 U	ug/kg	15	36 U	ug/kg	36	37 U	ug/kg	37	23	ug/kg	19
Chlorobenzilate		45 U	ug/kg	45	110 U	ug/kg	110	110 U	ug/kg	110	56 U	ug/kg	56
Diallate		90 U	ug/kg	90	220 U	ug/kg	220	220 U	ug/kg	220	110 U	ug/kg	110
Toxaphene		74 U	ug/kg	74	180 U	ug/kg	180	180 U	ug/kg	180	93 U	ug/kg	93
Isodrin		1.5 U	ug/kg	1.5	3.6 U	ug/kg	3.6	3.7 U	ug/kg	3.7	1.9 U	ug/kg	1.9
Kepone		45 UJ	ug/kg	45	43 UJ	ug/kg	43	44 UJ	ug/kg	44	45 UJ	ug/kg	45
Aroclor-1016		74 U	ug/kg	74	180 U	ug/kg	180	180 U	ug/kg	180	93 U	ug/kg	93
Aroclor-1221		150 U	ug/kg	150	360 U	ug/kg	360	370 U	ug/kg	370	190 U	ug/kg	190
Aroclor-1232		150 U	ug/kg	150	360 U	ug/kg	360	370 U	ug/kg	370	190 U	ug/kg	190
Aroclor-1242		74 U	ug/kg	74	180 U	ug/kg	180	180 U	ug/kg	180	93 U	ug/kg	93
Aroclor-1248		74 U	ug/kg	74	180 U	ug/kg	180	180 U	ug/kg	180	93 U	ug/kg	93
Aroclor-1254		38 U	ug/kg	38	91 U	ug/kg	91	93 U	ug/kg	93	93 UJ	ug/kg	93
Aroclor-1260		38 U	ug/kg	38	91 U	ug/kg	91	93 U	ug/kg	93	93 UJ	ug/kg	93

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US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8867001				M8985001				M8985002				M8793001			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	24S00601				24S00701				24S00701D				25S00101			
Collect Date:	24-APR-95				19-MAY-95				19-MAY-95				10-APR-95			
	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	7.2	U	ug/kg	7.2	3.6	U	ug/kg	3.6	1.4	U	ug/kg	1.4
beta-BHC	2.7	U	ug/kg	2.7	14	U	ug/kg	14	7	U	ug/kg	7	2.7	U	ug/kg	2.7
delta-BHC	1.4	U	ug/kg	1.4	7.2	U	ug/kg	7.2	3.6	U	ug/kg	3.6	1.4	U	ug/kg	1.4
gamma-BHC (Lindane)	1.4	U	ug/kg	1.4	7.2	U	ug/kg	7.2	3.6	U	ug/kg	3.6	1.4	U	ug/kg	1.4
Heptachlor	1.4	U	ug/kg	1.4	7.2	U	ug/kg	7.2	3.6	U	ug/kg	3.6	1.4	U	ug/kg	1.4
Aldrin	1.4	U	ug/kg	1.4	7.2	U	ug/kg	7.2	3.6	U	ug/kg	3.6	1.4	U	ug/kg	1.4
Heptachlor epoxide	1.4	U	ug/kg	1.4	7.2	U	ug/kg	7.2	3.6	U	ug/kg	3.6	1.4	U	ug/kg	1.4
Endosulfan I	1.4	U	ug/kg	1.4	7.2	U	ug/kg	7.2	3.6	U	ug/kg	3.6	1.4	U	ug/kg	1.4
Dieldrin	1.4	U	ug/kg	1.4	7.2	U	ug/kg	7.2	3.6	U	ug/kg	3.6	1.4	U	ug/kg	1.4
4,4-DDE	1.4	U	ug/kg	1.4	7.2	U	ug/kg	7.2	3.6	U	ug/kg	3.6	1.4	U	ug/kg	1.4
Endrin	2.7	U	ug/kg	2.7	14	U	ug/kg	14	7	U	ug/kg	7	2.7	U	ug/kg	2.7
Endosulfan II	2.7	U	ug/kg	2.7	14	U	ug/kg	14	7	U	ug/kg	7	2.7	U	ug/kg	2.7
4,4-DDD	2.7	U	ug/kg	2.7	14	U	ug/kg	14	7	U	ug/kg	7	2.7	U	ug/kg	2.7
Endosulfan sulfate	2.7	U	ug/kg	2.7	14	U	ug/kg	14	7	U	ug/kg	7	2.7	U	ug/kg	2.7
4,4-DDT	2.7	U	ug/kg	2.7	14	U	ug/kg	14	7	U	ug/kg	7	2.7	U	ug/kg	2.7
Methoxychlor	5.7	U	ug/kg	5.7	29	U	ug/kg	29	15	U	ug/kg	15	5.7	U	ug/kg	5.7
Endrin aldehyde	2.7	U	ug/kg	2.7	14	U	ug/kg	14	7	U	ug/kg	7	2.7	U	ug/kg	2.7
Endrin ketone	2.7	U	ug/kg	2.7	14	U	ug/kg	14	7	U	ug/kg	7	2.7	U	ug/kg	2.7
Chlordane	14	U	ug/kg	14	480		ug/kg	72	270		ug/kg	36	24		ug/kg	14
Chlorobenzilate	42	U	ug/kg	42	220	U	ug/kg	220	110	U	ug/kg	110	42	U	ug/kg	42
Diallate	84	U	ug/kg	84	230	U	ug/kg	230	220	U	ug/kg	220	84	U	ug/kg	84
Toxaphene	69	U	ug/kg	69	350	U	ug/kg	350	180	U	ug/kg	180	69	U	ug/kg	69
Isodrin	1.4	U	ug/kg	1.4	7.2	U	ug/kg	7.2	3.6	U	ug/kg	3.6	1.4	U	ug/kg	1.4
Kepone	84	U	ug/kg	84	430	U	ug/kg	430	430	U	ug/kg	430	84	UJ	ug/kg	84
Aroclor-1016	69	U	ug/kg	69	350	U	ug/kg	350	180	U	ug/kg	180	69	U	ug/kg	69
Aroclor-1221	140	U	ug/kg	140	720	U	ug/kg	720	360	U	ug/kg	360	140	U	ug/kg	140
Aroclor-1232	140	U	ug/kg	140	720	U	ug/kg	720	360	U	ug/kg	360	140	U	ug/kg	140
Aroclor-1242	69	U	ug/kg	69	350	U	ug/kg	350	180	U	ug/kg	180	69	U	ug/kg	69
Aroclor-1248	69	U	ug/kg	69	350	U	ug/kg	350	180	U	ug/kg	180	69	U	ug/kg	69
Aroclor-1254	36	U	ug/kg	36	180	UJ	ug/kg	180	91	UJ	ug/kg	91	36	U	ug/kg	36
Aroclor-1260	36	U	ug/kg	36	180	U	ug/kg	180	91	U	ug/kg	91	72	UJ	ug/kg	72

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		M8793006			M8793007			M8793009			M8793010		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		25S00201			25S00301			25S00401			25S00401D		
Collect Date:		10-APR-95			10-APR-95			10-APR-95			10-APR-95		
		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	1.5 U	ug/kg	1.5	1.6 U	ug/kg	1.6	1.5 U	ug/kg	1.5
beta-BHC		2.8 U	ug/kg	2.8	2.9 U	ug/kg	2.9	3.1 U	ug/kg	3.1	2.9 U	ug/kg	2.9
delta-BHC		1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.6 U	ug/kg	1.6	1.5 U	ug/kg	1.5
gamma-BHC (Lindane)		1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.6 U	ug/kg	1.6	1.5 U	ug/kg	1.5
Heptachlor		1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.6 U	ug/kg	1.6	1.5 U	ug/kg	1.5
Aldrin		1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.6 U	ug/kg	1.6	1.5 U	ug/kg	1.5
Heptachlor epoxide		1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.6 U	ug/kg	1.6	1.5 U	ug/kg	1.5
Endosulfan I		1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.6 U	ug/kg	1.6	1.5 U	ug/kg	1.5
Dieldrin		1.5 U	ug/kg	1.5	6.2	ug/kg	1.5	1.6 U	ug/kg	1.6	1.5 U	ug/kg	1.5
4,4-DDE		1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.6 U	ug/kg	1.6	1.5 U	ug/kg	1.5
Endrin		2.8 U	ug/kg	2.8	2.9 U	ug/kg	2.9	3.1 U	ug/kg	3.1	2.9 U	ug/kg	2.9
Endosulfan II		2.8 U	ug/kg	2.8	2.9 U	ug/kg	2.9	3.1 U	ug/kg	3.1	2.9 U	ug/kg	2.9
4,4-DDD		2.8 U	ug/kg	2.8	2.9 U	ug/kg	2.9	3.1 U	ug/kg	3.1	2.9 U	ug/kg	2.9
Endosulfan sulfate		2.8 U	ug/kg	2.8	2.9 U	ug/kg	2.9	3.1 U	ug/kg	3.1	2.9 U	ug/kg	2.9
4,4-DDT		2.8 U	ug/kg	2.8	2.9 U	ug/kg	2.9	3.1 U	ug/kg	3.1	2.9 U	ug/kg	2.9
Methoxychlor		5.9 U	ug/kg	5.9	6.1 U	ug/kg	6.1	6.5 U	ug/kg	6.5	6 U	ug/kg	6
Endrin aldehyde		2.8 U	ug/kg	2.8	2.9 U	ug/kg	2.9	3.1 U	ug/kg	3.1	2.9 U	ug/kg	2.9
Endrin ketone		2.8 U	ug/kg	2.8	2.9 U	ug/kg	2.9	3.1 U	ug/kg	3.1	2.9 U	ug/kg	2.9
Chlordane		14 U	ug/kg	14	15 U	ug/kg	15	16 U	ug/kg	16	15	ug/kg	15
Chlorobenzilate		43 U	ug/kg	43	45 U	ug/kg	45	48 U	ug/kg	48	44 U	ug/kg	44
Diallate		87 U	ug/kg	87	90 U	ug/kg	90	96 U	ug/kg	96	89 U	ug/kg	89
Toxaphene		72 U	ug/kg	72	74 U	ug/kg	74	80 U	ug/kg	80	73 U	ug/kg	73
Isodrin		1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.6 U	ug/kg	1.6	1.5 U	ug/kg	1.5
Kepone		43 UJ	ug/kg	43	45 UJ	ug/kg	45	48 UJ	ug/kg	48	44 UJ	ug/kg	44
Aroclor-1016		72 U	ug/kg	72	74 U	ug/kg	74	80 U	ug/kg	80	73 U	ug/kg	73
Aroclor-1221		150 U	ug/kg	150	150 U	ug/kg	150	160 U	ug/kg	160	150 U	ug/kg	150
Aroclor-1232		150 U	ug/kg	150	150 U	ug/kg	150	160 U	ug/kg	160	150 U	ug/kg	150
Aroclor-1242		72 U	ug/kg	72	74 U	ug/kg	74	80 U	ug/kg	80	73 U	ug/kg	73
Aroclor-1248		72 U	ug/kg	72	74 U	ug/kg	74	80 U	ug/kg	80	73 U	ug/kg	73
Aroclor-1254		37 U	ug/kg	37	38 U	ug/kg	38	41 U	ug/kg	41	38 U	ug/kg	38
Aroclor-1260		37 U	ug/kg	37	38 U	ug/kg	38	41 U	ug/kg	41	38 U	ug/kg	38

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8793008				M8793002				M8793003				M8793004			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	25S00501				25S00601				25S00701				25S00801			
Collect Date:	10-APR-95				10-APR-95				10-APR-95				10-APR-95			
	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	1.8	U	ug/kg	1.8	73	U	ug/kg	73	1.5	U	ug/kg	1.5
beta-BHC	3	U	ug/kg	3	3.5	U	ug/kg	3.5	140	U	ug/kg	140	2.9	U	ug/kg	2.9
delta-BHC	1.5	U	ug/kg	1.5	1.8	U	ug/kg	1.8	73	U	ug/kg	73	1.5	U	ug/kg	1.5
gamma-BHC (Lindane)	1.5	U	ug/kg	1.5	1.8	U	ug/kg	1.8	73	U	ug/kg	73	1.5	U	ug/kg	1.5
Heptachlor	1.5	U	ug/kg	1.5	1.8	U	ug/kg	1.8	73	U	ug/kg	73	1.5	U	ug/kg	1.5
Aldrin	2.7		ug/kg	1.5	1.8	U	ug/kg	1.8	73	U	ug/kg	73	1.5	U	ug/kg	1.5
Heptachlor epoxide	1.5	U	ug/kg	1.5	1.8	U	ug/kg	1.8	73	U	ug/kg	73	1.5	U	ug/kg	1.5
Endosulfan I	1.5	U	ug/kg	1.5	1.8	U	ug/kg	1.8	73	U	ug/kg	73	1.5	U	ug/kg	1.5
Dieldrin	1.5	U	ug/kg	1.5	2.3	J	ug/kg	1.8	2200		ug/kg	73	4.5	J	ug/kg	1.5
4,4-DDE	1.5	U	ug/kg	1.5	1.8	U	ug/kg	1.8	73	U	ug/kg	73	2.5		ug/kg	1.5
Endrin	3	U	ug/kg	3	3.5	U	ug/kg	3.5	140	U	ug/kg	140	2.9	U	ug/kg	2.9
Endosulfan II	3	U	ug/kg	3	3.5	U	ug/kg	3.5	140	U	ug/kg	140	2.9	U	ug/kg	2.9
4,4-DDD	3	U	ug/kg	3	3.5	U	ug/kg	3.5	140	U	ug/kg	140	2.9	U	ug/kg	2.9
Endosulfan sulfate	3	U	ug/kg	3	3.5	U	ug/kg	3.5	140	U	ug/kg	140	2.9	U	ug/kg	2.9
4,4-DDT	3	U	ug/kg	3	3.5	U	ug/kg	3.5	140	U	ug/kg	140	2.9	U	ug/kg	2.9
Methoxychlor	6.1	U	ug/kg	6.1	7.2	U	ug/kg	7.2	290	U	ug/kg	290	6	U	ug/kg	6
Endrin aldehyde	3	U	ug/kg	3	3.5	U	ug/kg	3.5	140	U	ug/kg	140	2.9	U	ug/kg	2.9
Endrin ketone	3	U	ug/kg	3	3.5	U	ug/kg	3.5	140	U	ug/kg	140	2.9	U	ug/kg	2.9
Chlordane	15	U	ug/kg	15	24	J	ug/kg	18	730	U	ug/kg	730	15	U	ug/kg	15
Chlorobenzilate	45	U	ug/kg	45	53	U	ug/kg	53	2200	U	ug/kg	2200	44	U	ug/kg	44
Diallate	91	U	ug/kg	91	110	U	ug/kg	110	4300	U	ug/kg	4300	89	U	ug/kg	89
Toxaphene	75	U	ug/kg	75	88	U	ug/kg	88	3600	U	ug/kg	3600	73	U	ug/kg	73
Isodrin	1.5	U	ug/kg	1.5	1.8	U	ug/kg	1.8	73	U	ug/kg	73	1.5	U	ug/kg	1.5
Kepone	45	UJ	ug/kg	45	110	UJ	ug/kg	110	220	UJ	ug/kg	220	44	UJ	ug/kg	44
Aroclor-1016	75	U	ug/kg	75	88	U	ug/kg	88	3600	U	ug/kg	3600	73	U	ug/kg	73
Aroclor-1221	150	U	ug/kg	150	180	U	ug/kg	180	7300	U	ug/kg	7300	150	U	ug/kg	150
Aroclor-1232	150	U	ug/kg	150	180	U	ug/kg	180	7300	U	ug/kg	7300	150	U	ug/kg	150
Aroclor-1242	75	U	ug/kg	75	88	U	ug/kg	88	3600	U	ug/kg	3600	73	U	ug/kg	73
Aroclor-1248	75	U	ug/kg	75	88	U	ug/kg	88	3600	U	ug/kg	3600	73	U	ug/kg	73
Aroclor-1254	39	U	ug/kg	39	45	U	ug/kg	45	1800	U	ug/kg	1800	38	U	ug/kg	38
Aroclor-1260	39	U	ug/kg	39	45	U	ug/kg	45	1800	U	ug/kg	1800	38	U	ug/kg	38

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		M8793005			R9738002			R9738003			R9738001		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		25S00901			44S00101			44S00101D			44S00201		
Collect Date:		10-APR-95			05-APR-95			05-APR-95			05-APR-95		
	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	.74	U	ug/kg	.74	.74	U	ug/kg	.74	.7	U	ug/kg	.7
beta-BHC		2.8	U	ug/kg	2.8	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	.74	U	ug/kg	.74	.74	U	ug/kg	.74	.7	U	ug/kg	.7
gamma-BHC (Lindane)		1.4	U	ug/kg	1.4	.74	U	ug/kg	.74	.74	U	ug/kg	.74	.7	U	ug/kg	.7
Heptachlor		1.4	U	ug/kg	1.4	.74	U	ug/kg	.74	.74	U	ug/kg	.74	.7	U	ug/kg	.7
Aldrin		1.4	U	ug/kg	1.4	.74	U	ug/kg	.74	.74	U	ug/kg	.74	.7	U	ug/kg	.7
Heptachlor epoxide		1.6		ug/kg	1.4	24	J	ug/kg	.74	4.2	J	ug/kg	.74	.7	U	ug/kg	.7
Endosulfan I		1.4	U	ug/kg	1.4	.74	U	ug/kg	.74	.74	U	ug/kg	.74	.7	U	ug/kg	.7
Dieldrin		1.4	U	ug/kg	1.4	.74	U	ug/kg	.74	.74	U	ug/kg	.74	.7	U	ug/kg	.7
4,4-DDE		1.4	U	ug/kg	1.4	.74	U	ug/kg	.74	.74	U	ug/kg	.74	.7	U	ug/kg	.7
Endrin		2.8	U	ug/kg	2.8	40	J	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endosulfan II		2.8	U	ug/kg	2.8	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
4,4-DDD		2.8	U	ug/kg	2.8	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endosulfan sulfate		2.8	U	ug/kg	2.8	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
4,4-DDT		2.8	U	ug/kg	2.8	140	J	ug/kg	1.4	65		ug/kg	1.4	2.2		ug/kg	1.4
Methoxychlor		5.8	U	ug/kg	5.8	3	U	ug/kg	3	29	J	ug/kg	3	2.8	U	ug/kg	2.8
Endrin aldehyde		2.8	U	ug/kg	2.8	63		ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endrin ketone		2.8	U	ug/kg	2.8	1.4	U	ug/kg	1.4	14	J	ug/kg	1.4	1.4	U	ug/kg	1.4
Chlordane		38		ug/kg	14	7.4	U	ug/kg	7.4	7.4	U	ug/kg	7.4	7	U	ug/kg	7
Chlorobenzilate		43	U	ug/kg	43	22	U	ug/kg	22	22	U	ug/kg	22	21	U	ug/kg	21
Diallate		86	U	ug/kg	86	44	U	ug/kg	44	44	U	ug/kg	44	42	U	ug/kg	42
Toxaphene		71	U	ug/kg	71	36	U	ug/kg	36	36	U	ug/kg	36	34	U	ug/kg	34
Isodrin		1.4	U	ug/kg	1.4	.74	U	ug/kg	.74	.74	U	ug/kg	.74	.87		ug/kg	.7
Kepone		43	UJ	ug/kg	43	44	UJ	ug/kg	44	44	UJ	ug/kg	44	42	UJ	ug/kg	42
Aroclor-1016		71	U	ug/kg	71	36	U	ug/kg	36	36	U	ug/kg	36	34	U	ug/kg	34
Aroclor-1221		140	U	ug/kg	140	74	U	ug/kg	74	74	U	ug/kg	74	70	U	ug/kg	70
Aroclor-1232		140	U	ug/kg	140	74	U	ug/kg	74	74	U	ug/kg	74	70	U	ug/kg	70
Aroclor-1242		71	U	ug/kg	71	36	U	ug/kg	36	36	U	ug/kg	36	34	U	ug/kg	34
Aroclor-1248		71	U	ug/kg	71	36	U	ug/kg	36	36	U	ug/kg	36	34	U	ug/kg	34
Aroclor-1254		37	U	ug/kg	37	18	U	ug/kg	18	18	U	ug/kg	18	17	U	ug/kg	17
Aroclor-1260		37	U	ug/kg	37	18	U	ug/kg	18	18	U	ug/kg	18	17	U	ug/kg	17

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9738004				R9738005				R9738006				R9738007			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	44S00301				44S00401				44S00501				44S00601			
Collect Date:	05-APR-95				05-APR-95				05-APR-95				05-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs ug/kg																
alpha-BHC	.71	U	ug/kg	.71	.74	U	ug/kg	.74	.69	U	ug/kg	.69	.71	U	ug/kg	.71
beta-BHC	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.3	U	ug/kg	1.3	1.4	U	ug/kg	1.4
delta-BHC	.71	U	ug/kg	.71	.74	U	ug/kg	.74	.69	U	ug/kg	.69	.71	U	ug/kg	.71
gamma-BHC (Lindane)	.71	U	ug/kg	.71	.74	U	ug/kg	.74	.69	U	ug/kg	.69	.71	U	ug/kg	.71
Heptachlor	.71	U	ug/kg	.71	.74	U	ug/kg	.74	.69	U	ug/kg	.69	.71	U	ug/kg	.71
Aldrin	.71	U	ug/kg	.71	.74	U	ug/kg	.74	.69	U	ug/kg	.69	.71	U	ug/kg	.71
Heptachlor epoxide	.71	U	ug/kg	.71	.74	U	ug/kg	.74	.69	U	ug/kg	.69	.71	U	ug/kg	.71
Endosulfan I	.71	U	ug/kg	.71	.74	U	ug/kg	.74	.69	U	ug/kg	.69	.71	U	ug/kg	.71
Dieldrin	1.1	J	ug/kg	.71	1.6	J	ug/kg	.74	.69	U	ug/kg	.69	.71	U	ug/kg	.71
4,4-DDE	.71	U	ug/kg	.71	2.5		ug/kg	.74	.69	U	ug/kg	.69	.71	U	ug/kg	.71
Endrin	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.3	U	ug/kg	1.3	1.4	U	ug/kg	1.4
Endosulfan II	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.3	U	ug/kg	1.3	1.4	U	ug/kg	1.4
4,4-DDD	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.3	U	ug/kg	1.3	1.4	U	ug/kg	1.4
Endosulfan sulfate	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.3	U	ug/kg	1.3	1.4	U	ug/kg	1.4
4,4-DDT	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.3	U	ug/kg	1.3	3.5	J	ug/kg	1.4
Methoxychlor	2.9	U	ug/kg	2.9	3	U	ug/kg	3	2.8	U	ug/kg	2.8	2.9	U	ug/kg	2.9
Endrin aldehyde	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.3	U	ug/kg	1.3	1.4	U	ug/kg	1.4
Endrin ketone	1.4	U	ug/kg	1.4	1.7	J	ug/kg	1.4	1.3	U	ug/kg	1.3	1.5		ug/kg	1.4
Chlordane	7.1	U	ug/kg	7.1	7.4	U	ug/kg	7.4	6.9	U	ug/kg	6.9	7.1	U	ug/kg	7.1
Chlorobenzilate	21	U	ug/kg	21	22	U	ug/kg	22	21	U	ug/kg	21	20	U	ug/kg	20
Diallate	42	U	ug/kg	42	44	U	ug/kg	44	41	U	ug/kg	41	42	U	ug/kg	42
Toxaphene	35	U	ug/kg	35	36	U	ug/kg	36	34	U	ug/kg	34	35	U	ug/kg	35
Isodrin	.71	U	ug/kg	.71	.74	U	ug/kg	.74	.69	U	ug/kg	.69	.76		ug/kg	.71
Kepone	42	UJ	ug/kg	42	44	UJ	ug/kg	44	41	UJ	ug/kg	41	42	UJ	ug/kg	42
Aroclor-1016	35	U	ug/kg	35	36	U	ug/kg	36	34	U	ug/kg	34	35	U	ug/kg	35
Aroclor-1221	71	U	ug/kg	71	74	U	ug/kg	74	69	U	ug/kg	69	71	U	ug/kg	71
Aroclor-1232	71	U	ug/kg	71	74	U	ug/kg	74	69	U	ug/kg	69	71	U	ug/kg	71
Aroclor-1242	35	U	ug/kg	35	36	U	ug/kg	36	34	U	ug/kg	34	35	U	ug/kg	35
Aroclor-1248	35	U	ug/kg	35	36	U	ug/kg	36	34	U	ug/kg	34	35	U	ug/kg	35
Aroclor-1254	17	U	ug/kg	17	18	U	ug/kg	18	17	U	ug/kg	17	17	U	ug/kg	17
Aroclor-1260	17	U	ug/kg	17	18	U	ug/kg	18	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.

US Naval Station, Mayport, RCRA Faci[illegible] Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		R9738008			R9738009			R9738010			R9955017		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		44S00701			44S00801			44S00901			44S01001		
Collect Date:		05-APR-95			05-APR-95			05-APR-95			24-MAY-95		
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	
PESTICIDES/PCBs	ug/kg												
alpha-BHC		.7	U	ug/kg	.7	.73	U	ug/kg	.73	.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		.7	U	ug/kg	.7	.73	U	ug/kg	.73	.71	U	ug/kg	.71	.72	U	ug/kg	.72
gamma-BHC (Lindane)		.7	U	ug/kg	.7	.73	U	ug/kg	.73	.71	U	ug/kg	.71	.72	U	ug/kg	.72
Heptachlor		.7	U	ug/kg	.7	.73	U	ug/kg	.73	.71	U	ug/kg	.71	.72	U	ug/kg	.72
Aldrin		.7	U	ug/kg	.7	.73	U	ug/kg	.73	.71	U	ug/kg	.71	.72	U	ug/kg	.72
Heptachlor epoxide		.7	U	ug/kg	.7	.73	U	ug/kg	.73	.71	U	ug/kg	.71	.72	U	ug/kg	.72
Endosulfan I		.7	U	ug/kg	.7	.73	U	ug/kg	.73	.71	U	ug/kg	.71	.72	U	ug/kg	.72
Dieldrin		.7	U	ug/kg	.7	3.3		ug/kg	.73	.71	U	ug/kg	.71	2.1		ug/kg	.72
4,4-DDE		.7	U	ug/kg	.7	2	J	ug/kg	.73	2.5		ug/kg	.71	.72		ug/kg	.72
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	7.5		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		1.5	J	ug/kg	1.4	2.7		ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Methoxychlor		2.8	U	ug/kg	2.8	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	U	ug/kg	7	7.3	U	ug/kg	7.3	7.1	U	ug/kg	7.1	7.2	U	ug/kg	7.2
Chlorobenzilate		21	U	ug/kg	21	22	U	ug/kg	22	21	U	ug/kg	21	22	U	ug/kg	22
Dialiate		42	U	ug/kg	42	43	U	ug/kg	43	43	U	ug/kg	43	43	U	ug/kg	43
Toxaphene		34	U	ug/kg	34	36	U	ug/kg	36	35	U	ug/kg	35	36	U	ug/kg	36
Isodrin		.7	U	ug/kg	.7	.73	U	ug/kg	.73	.71	U	ug/kg	.71	.72	U	ug/kg	.72
Kepone		42	UJ	ug/kg	42	43	UJ	ug/kg	43	43	UJ	ug/kg	43	43	U	ug/kg	43
Aroclor-1016		34	U	ug/kg	34	36	U	ug/kg	36	35	U	ug/kg	35	36	U	ug/kg	36
Aroclor-1221		70	U	ug/kg	70	73	U	ug/kg	73	71	U	ug/kg	71	72	U	ug/kg	72
Aroclor-1232		70	U	ug/kg	70	73	U	ug/kg	73	71	U	ug/kg	71	72	U	ug/kg	72
Aroclor-1242		34	U	ug/kg	34	36	U	ug/kg	36	35	U	ug/kg	35	36	U	ug/kg	36
Aroclor-1248		34	U	ug/kg	34	36	U	ug/kg	36	35	U	ug/kg	35	36	U	ug/kg	36
Aroclor-1254		17	U	ug/kg	17	17	U	ug/kg	17	17	U	ug/kg	17	17	U	ug/kg	17
Aroclor-1260		17	U	ug/kg	17	17	U	ug/kg	17	17	U	ug/kg	17	17	U	ug/kg	17

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9712001				R9712002				R9712003				R9712004			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45S00101				45S00101D				45S00201				45S00301			
Collect Date:	29-MAR-95				29-MAR-95				29-MAR-95				29-MAR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs ug/kg																
alpha-BHC	.71	U	ug/kg	.71	.71	U	ug/kg	.71	.7	U	ug/kg	.7	.68	U	ug/kg	.68
beta-BHC	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.3	U	ug/kg	1.3	1.3	U	ug/kg	1.3
delta-BHC	.71	U	ug/kg	.71	.71	U	ug/kg	.71	.7	U	ug/kg	.7	.68	U	ug/kg	.68
gamma-BHC (Lindane)	.71	U	ug/kg	.71	.71	U	ug/kg	.71	.7	U	ug/kg	.7	.68	U	ug/kg	.68
Heptachlor	.71	U	ug/kg	.71	.71	U	ug/kg	.71	.7	U	ug/kg	.7	.68	U	ug/kg	.68
Aldrin	.71	U	ug/kg	.71	.71	U	ug/kg	.71	.7	U	ug/kg	.7	.68	U	ug/kg	.68
Heptachlor epoxide	.71	U	ug/kg	.71	.71	U	ug/kg	.71	.7	U	ug/kg	.7	.68	U	ug/kg	.68
Endosulfan I	.71	U	ug/kg	.71	.71	U	ug/kg	.71	.7	U	ug/kg	.7	.68	U	ug/kg	.68
Dieldrin	1		ug/kg	.71	.71	U	ug/kg	.71	.7	U	ug/kg	.7	.68	U	ug/kg	.68
4,4-DDE	11		ug/kg	.71	9.3		ug/kg	.71	9		ug/kg	.7	12		ug/kg	.68
Endrin	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.3	U	ug/kg	1.3	1.3	U	ug/kg	1.3
Endosulfan II	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.3	U	ug/kg	1.3	1.3	U	ug/kg	1.3
4,4-DDD	1.4	U	ug/kg	1.4	1.4		ug/kg	1.4	1.3	U	ug/kg	1.3	1.3	U	ug/kg	1.3
Endosulfan sulfate	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.3	U	ug/kg	1.3	1.3	U	ug/kg	1.3
4,4-DDT	5		ug/kg	1.4	4.7		ug/kg	1.4	5		ug/kg	1.3	5.7	J	ug/kg	1.3
Methoxychlor	2.8	U	ug/kg	2.8	2.9	U	ug/kg	2.9	2.8	U	ug/kg	2.8	14	J	ug/kg	2.7
Endrin aldehyde	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.3	U	ug/kg	1.3	1.3	U	ug/kg	1.3
Endrin ketone	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.3	U	ug/kg	1.3	1.8	J	ug/kg	1.3
Chlordane	7.1	U	ug/kg	7.1	7.1	U	ug/kg	7.1	7	U	ug/kg	7	6.8	U	ug/kg	6.8
Chlorobenzilate	21	U	ug/kg	21	21	U	ug/kg	21	21	U	ug/kg	21	20	U	ug/kg	20
Diallate	42	U	ug/kg	42	43	U	ug/kg	43	41	U	ug/kg	41	41	U	ug/kg	41
Toxaphene	35	U	ug/kg	35	35	U	ug/kg	35	34	U	ug/kg	34	34	U	ug/kg	34
Isodrin	.71	U	ug/kg	.71	.71	U	ug/kg	.71	.7	U	ug/kg	.7	.68	U	ug/kg	.68
Kepone	42	U	ug/kg	42	43	U	ug/kg	43	41	U	ug/kg	41	41	U	ug/kg	41
Aroclor-1016	35	U	ug/kg	35	35	U	ug/kg	35	34	U	ug/kg	34	34	U	ug/kg	34
Aroclor-1221	71	U	ug/kg	71	71	U	ug/kg	71	70	U	ug/kg	70	68	U	ug/kg	68
Aroclor-1232	71	U	ug/kg	71	71	U	ug/kg	71	70	U	ug/kg	70	68	U	ug/kg	68
Aroclor-1242	35	U	ug/kg	35	35	U	ug/kg	35	34	U	ug/kg	34	34	U	ug/kg	34
Aroclor-1248	35	U	ug/kg	35	35	U	ug/kg	35	34	U	ug/kg	34	34	U	ug/kg	34
Aroclor-1254	17	U	ug/kg	17	17	U	ug/kg	17	17	U	ug/kg	17	16	U	ug/kg	16
Aroclor-1260	17	U	ug/kg	17	17	U	ug/kg	17	17	U	ug/kg	17	16	U	ug/kg	16

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.

US Naval Station, Mayport, RCRA Facil.., Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		R9712005			R9712006			R9712007			R9712008		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		45S00401			45S00501			45S00601			45S00701		
Collect Date:		29-MAR-95			29-MAR-95			29-MAR-95			29-MAR-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg												
alpha-BHC		.71 U	ug/kg	.71	.73 U	ug/kg	.73	.78 U	ug/kg	.78	.69 U	ug/kg	.69
beta-BHC		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4
delta-BHC		.71 U	ug/kg	.71	.73 U	ug/kg	.73	.78 U	ug/kg	.78	.69 U	ug/kg	.69
gamma-BHC (Lindane)		.71 U	ug/kg	.71	.73 U	ug/kg	.73	.78 U	ug/kg	.78	.69 U	ug/kg	.69
Heptachlor		.71 U	ug/kg	.71	.73 U	ug/kg	.73	.78 U	ug/kg	.78	.69 U	ug/kg	.69
Aldrin		.71 U	ug/kg	.71	.73 U	ug/kg	.73	.78 U	ug/kg	.78	.69 U	ug/kg	.69
Heptachlor epoxide		.71 U	ug/kg	.71	.73 U	ug/kg	.73	1.1 J	ug/kg	.78	.69 U	ug/kg	.69
Endosulfan I		.71 U	ug/kg	.71	.73 U	ug/kg	.73	.78 U	ug/kg	.78	.69 U	ug/kg	.69
Dieldrin		1.2	ug/kg	.71	.73 U	ug/kg	.73	25	ug/kg	.78	.69 U	ug/kg	.69
4,4-DDE		5.7	ug/kg	.71	.73 U	ug/kg	.73	.78 U	ug/kg	.78	.69 U	ug/kg	.69
Endrin		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4
Endosulfan II		3.3	ug/kg	1.4	1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4
4,4-DDD		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4
Endosulfan sulfate		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4
4,4-DDT		4.3	ug/kg	1.4	1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4
Methoxychlor		2.9 U	ug/kg	2.9	2.9 U	ug/kg	2.9	3.1 U	ug/kg	3.1	2.8 U	ug/kg	2.8
Endrin aldehyde		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4
Endrin ketone		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4
Chlordane		7.1 U	ug/kg	7.1	7.3 U	ug/kg	7.3	540	ug/kg	7.8	6.9 U	ug/kg	6.9
Chlorobenzilate		21 U	ug/kg	21	22 U	ug/kg	22	23 U	ug/kg	23	21 U	ug/kg	21
Diallate		42 U	ug/kg	42	43 U	ug/kg	43	47 U	ug/kg	47	41 U	ug/kg	41
Toxaphene		35 U	ug/kg	35	36 U	ug/kg	36	38 U	ug/kg	38	34 U	ug/kg	34
Isodrin		.71 U	ug/kg	.71	.73 U	ug/kg	.73	.78 U	ug/kg	.78	.69 U	ug/kg	.69
Kepone		42 U	ug/kg	42	43 U	ug/kg	43	47 U	ug/kg	47	41 U	ug/kg	41
Aroclor-1016		35 U	ug/kg	35	36 U	ug/kg	36	38 U	ug/kg	38	34 U	ug/kg	34
Aroclor-1221		71 U	ug/kg	71	73 U	ug/kg	73	78 U	ug/kg	78	69 U	ug/kg	69
Aroclor-1232		71 U	ug/kg	71	73 U	ug/kg	73	78 U	ug/kg	78	69 U	ug/kg	69
Aroclor-1242		35 U	ug/kg	35	36 U	ug/kg	36	38 U	ug/kg	38	34 U	ug/kg	34
Aroclor-1248		35 U	ug/kg	35	36 U	ug/kg	36	38 U	ug/kg	38	34 U	ug/kg	34
Aroclor-1254		17 U	ug/kg	17	17 U	ug/kg	17	19 U	ug/kg	19	17 U	ug/kg	17
Aroclor-1260		17 U	ug/kg	17	17 U	ug/kg	17	320 J	ug/kg	19	17 U	ug/kg	17

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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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8994008				R9955015				R9738002RE			
Site	GROUP111				GROUP111				GROUP111			
Locator	45S00801				45S01001				44S00101RE			
Collect Date:	21-MAY-95				24-MAY-95				05-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs ug/kg												
alpha-BHC	.71	U	ug/kg	.71	.74	U	ug/kg	.74	.74	UJ	ug/kg	.74
beta-BHC	1.4	U	ug/kg	1.4	2.6	J	ug/kg	1.4	1.4	UJ	ug/kg	1.4
delta-BHC	.71	U	ug/kg	.71	.74	U	ug/kg	.74	.74	UJ	ug/kg	.74
gamma-BHC (Lindane)	.71	U	ug/kg	.71	.74	U	ug/kg	.74	.74	UJ	ug/kg	.74
Heptachlor	.71	U	ug/kg	.71	.74	U	ug/kg	.74	.74	UJ	ug/kg	.74
Aldrin	.71	U	ug/kg	.71	.74	U	ug/kg	.74	.74	UJ	ug/kg	.74
Heptachlor epoxide	.71	U	ug/kg	.71	.74	U	ug/kg	.74	3.9	J	ug/kg	.74
Endosulfan I	.71	U	ug/kg	.71	.74	U	ug/kg	.74	.74	UJ	ug/kg	.74
Dieldrin	.71	U	ug/kg	.71	3.9	J	ug/kg	.74	23	J	ug/kg	.74
4,4-DDE	.71	U	ug/kg	.71	1.8	J	ug/kg	.74	.74	UJ	ug/kg	.74
Endrin	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	UJ	ug/kg	1.4
Endosulfan II	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	UJ	ug/kg	1.4
4,4-DDD	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	20	J	ug/kg	1.4
Endosulfan sulfate	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	UJ	ug/kg	1.4
4,4-DDT	1.4	U	ug/kg	1.4	2.5	J	ug/kg	1.4	59	J	ug/kg	1.4
Methoxychlor	2.9	U	ug/kg	2.9	3	U	ug/kg	3	3	UJ	ug/kg	3
Endrin aldehyde	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	UJ	ug/kg	1.4
Endrin ketone	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	UJ	ug/kg	1.4
Chlordane	7.1	U	ug/kg	7.1	120	J	ug/kg	7.4	7.4	UJ	ug/kg	7.4
Chlorobenzilate	21	U	ug/kg	21	22	U	ug/kg	22	22	UJ	ug/kg	22
Diallate	43	U	ug/kg	43	44	U	ug/kg	44	44	UJ	ug/kg	44
Toxaphene	35	U	ug/kg	35	37	U	ug/kg	37	36	UJ	ug/kg	36
Isodrin	.71	U	ug/kg	.71	.74	U	ug/kg	.74	.74	UJ	ug/kg	.74
Kepone	43	U	ug/kg	43	44	UJ	ug/kg	44	-		ug/kg	
Aroclor-1016	35	U	ug/kg	35	37	U	ug/kg	37	36	UJ	ug/kg	36
Aroclor-1221	71	U	ug/kg	71	74	U	ug/kg	74	74	UJ	ug/kg	74
Aroclor-1232	71	U	ug/kg	71	74	U	ug/kg	74	74	UJ	ug/kg	74
Aroclor-1242	35	U	ug/kg	35	37	U	ug/kg	37	36	UJ	ug/kg	36
Aroclor-1248	35	U	ug/kg	35	37	U	ug/kg	37	36	UJ	ug/kg	36
Aroclor-1254	18	UJ	ug/kg	18	18	U	ug/kg	18	18	UJ	ug/kg	18
Aroclor-1260	18	U	ug/kg	18	18	U	ug/kg	18	18	UJ	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		R9861001				R9861002				R9861004				R9861006			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		01S00101				01S00101D				01S00201				01S00301			
Collect Date:		03-MAY-95				03-MAY-95				03-MAY-95				03-MAY-95			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg																
Antimony		3.2	J	mg/kg	5	4.5	J	mg/kg	5	1.2	J	mg/kg	5	3.5	J	mg/kg	5
Arsenic		1.5	J	mg/kg	.6	1.1	J	mg/kg	.6	.94	J	mg/kg	.6	.96	J	mg/kg	.6
Barium		7.4	J	mg/kg	.24	7.5	J	mg/kg	.24	4.4	J	mg/kg	.23	9.7	J	mg/kg	.23
Beryllium		.12	J	mg/kg	.066	.08	J	mg/kg	.066	.08	J	mg/kg	.064	.06	U	mg/kg	.06
Cadmium		.37	J	mg/kg	.26	.38	J	mg/kg	.26	.26	U	mg/kg	.26	.25	U	mg/kg	.25
Chromium		9.5		mg/kg	.37	9.6		mg/kg	.37	3.9		mg/kg	.36	2.6		mg/kg	.35
Cobalt		.68	U	mg/kg	.68	.97	J	mg/kg	.68	.71	J	mg/kg	.66	.64	U	mg/kg	.64
Copper		24.2		mg/kg	.22	28.1		mg/kg	.22	4.2	UJ	mg/kg	4.2	9.4		mg/kg	.21
Cyanide		.46	J	mg/kg	1	.15	J	mg/kg	1	.12	J	mg/kg	1	.18	J	mg/kg	1
Lead		33.7		mg/kg	2	24.3		mg/kg	2	4.6		mg/kg	.4	24.1		mg/kg	2
Mercury		.1		mg/kg	.1	.06	J	mg/kg	.1	.03	U	mg/kg	.03	.04	J	mg/kg	.1
Nickel		6.8	J	mg/kg	1.3	9.4		mg/kg	1.2	1.7	J	mg/kg	1.2	2.2	J	mg/kg	1.2
Selenium		.55	UJ	mg/kg	.55	.55	UJ	mg/kg	.55	.53	UJ	mg/kg	.53	.52	UJ	mg/kg	.52
Silver		.37	UJ	mg/kg	.37	.37	UJ	mg/kg	.37	.37	UJ	mg/kg	.37	.37	UJ	mg/kg	.37
Thallium		.13	U	mg/kg	.13	.13	U	mg/kg	.13	.13	U	mg/kg	.13	.12	U	mg/kg	.12
Tin		4.36	UJ	mg/kg	4.36	4.36	UJ	mg/kg	4.36	2.9	U	mg/kg	2.9	5.7	UJ	mg/kg	5.7
Vanadium		12		mg/kg	.26	10.3	J	mg/kg	.26	4.3	J	mg/kg	.26	5.1	J	mg/kg	.25
Zinc		77.2	J	mg/kg	.46	98.9	J	mg/kg	.46	16.6	J	mg/kg	.45	46.1	J	mg/kg	.44

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9861007				R9861010				R9861012				R9861015			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01S00401				01S00501				01S00601				01S00701			
Collect Date:	03-MAY-95				03-MAY-95				03-MAY-95				03-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	2.3	J	mg/kg	5	.03	J	mg/kg	5	.02	J	mg/kg	5	.01	U	mg/kg	.01
Arsenic	3.4		mg/kg	.6	.87	J	mg/kg	.6	1	J	mg/kg	.6	.92	J	mg/kg	.6
Barium	23	J	mg/kg	.23	11.7	J	mg/kg	.23	7.2	J	mg/kg	.23	13.7	J	mg/kg	.24
Beryllium	.65	J	mg/kg	.063	.07	J	mg/kg	.062	.17	J	mg/kg	.062	.13	J	mg/kg	.066
Cadmium	1	J	mg/kg	.25	.68	J	mg/kg	.25	.25	U	mg/kg	.25	.3	J	mg/kg	.26
Chromium	11		mg/kg	.36	6.4		mg/kg	.35	2.4		mg/kg	.35	7.8		mg/kg	.37
Cobalt	3.8	J	mg/kg	.66	1.2	J	mg/kg	.65	.64	U	mg/kg	.64	.68	U	mg/kg	.68
Copper	84.3		mg/kg	.21	18.3		mg/kg	.21	6.5	UJ	mg/kg	6.5	3.5	UJ	mg/kg	3.5
Cyanide	.18	J	mg/kg	1	.15	J	mg/kg	1	.11	J	mg/kg	1	.09	J	mg/kg	1
Lead	37.3		mg/kg	2	86.8		mg/kg	4	11.6		mg/kg	4	1.9	J	mg/kg	2
Mercury	.06	J	mg/kg	.1	.4		mg/kg	.1	.11		mg/kg	.1	.04	J	mg/kg	.1
Nickel	12.2		mg/kg	1.2	5.5	J	mg/kg	1.2	3	J	mg/kg	1.2	3.1	J	mg/kg	1.3
Selenium	.53	UJ	mg/kg	.53	.52	UJ	mg/kg	.52	.52	UJ	mg/kg	.52	.55	UJ	mg/kg	.55
Silver	.37	UJ	mg/kg	.37	.37	UJ	mg/kg	.37	.37	UJ	mg/kg	.37	.37	UJ	mg/kg	.37
Thallium	.13	U	mg/kg	.13	.12	U	mg/kg	.12	.12	U	mg/kg	.12	.13	U	mg/kg	.13
Tin	13.9	UJ	mg/kg	13.9	9.1	UJ	mg/kg	9.1	6.2	UJ	mg/kg	6.2	3	U	mg/kg	3
Vanadium	6.6	J	mg/kg	.25	9.6	J	mg/kg	.25	7.6	J	mg/kg	.25	7	J	mg/kg	.26
Zinc	575	J	mg/kg	.44	169	J	mg/kg	.44	28.6	J	mg/kg	.44	10.5	J	mg/kg	.46

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.

US Naval Station, Mayport, RCRA Facil..., Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		MB994010			R9743001			R9743002			R9743003		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		01S00801			23S00101			23S00201			23S00301		
Collect Date:		21-MAY-95			05-APR-95			05-APR-95			05-APR-95		
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg															
Antimony	.77	J	mg/kg	.44	1	U	mg/kg	1	1.1	U	mg/kg	1.1	1	U	mg/kg	1
Arsenic	.33	J	mg/kg	.16	.75	J	mg/kg	.7	1	J	mg/kg	.7	.7	J	mg/kg	.7
Barium	3	J	mg/kg	.084	4.2	J	mg/kg	.083	5.8	J	mg/kg	.086	6.6	J	mg/kg	.083
Beryllium	.06	J	mg/kg	.029	.08	J	mg/kg	.042	.1	J	mg/kg	.043	.08	J	mg/kg	.041
Cadmium	.61	U	mg/kg	.61	.27	UJ	mg/kg	.27	.33	J	mg/kg	.28	.27	UJ	mg/kg	.27
Chromium	2.5		mg/kg	1.2	.56	J	mg/kg	.44	3.3	J	mg/kg	.45	3	J	mg/kg	.43
Cobalt	.78	U	mg/kg	.78	.56	U	mg/kg	.56	.78	J	mg/kg	.58	.56	U	mg/kg	.56
Copper	2.2	J	mg/kg	.34	7.3	UJ	mg/kg	7.3	6.3	UJ	mg/kg	6.3	12.2	J	mg/kg	.31
Cyanide	.11	U	mg/kg	.11	.13	J	mg/kg	1	.28	J	mg/kg	1	.07	J	mg/kg	1
Lead	4.5		mg/kg	.26	2.4	J	mg/kg	.5	9.5	J	mg/kg	.5	4	J	mg/kg	.5
Mercury	.06	U	mg/kg	.06	.03	U	mg/kg	.03	.03	U	mg/kg	.03	.03	U	mg/kg	.03
Nickel	1.5	U	mg/kg	1.5	1.5	J	mg/kg	1.1	1.2	J	mg/kg	1.1	5.4	J	mg/kg	1.1
Selenium	.23	UJ	mg/kg	.23	.12	U	mg/kg	.12	.13	U	mg/kg	.13	.12	U	mg/kg	.12
Silver	.38	U	mg/kg	.38	.48	U	mg/kg	.48	.5	U	mg/kg	.5	.48	U	mg/kg	.48
Thallium	.36	U	mg/kg	.36	.12	U	mg/kg	.12	.13	U	mg/kg	.13	.12	U	mg/kg	.12
Tin	1.9	U	mg/kg	1.9	2	U	mg/kg	2	2.1	U	mg/kg	2.1	2	U	mg/kg	2
Vanadium	2.6	J	mg/kg	.42	3.4	J	mg/kg	.31	3.6	J	mg/kg	.32	2.7	J	mg/kg	.31
Zinc	11.7		mg/kg	.29	5.7	J	mg/kg	.25	20.2	J	mg/kg	.26	44	J	mg/kg	.25

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.

US Naval Station, Mayport, RCRA Facility Investigation Group [1] Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9743005				R9743004				R9743006				R9743007			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S00401				23S00501				23S00601				23S00701			
Collect Date:	05-APR-95				05-APR-95				05-APR-95				05-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	1	U	mg/kg	1	1	U	mg/kg	1	1	U	mg/kg	1	1.1	U	mg/kg	1.1
Arsenic	1.1	J	mg/kg	.7	1.3	J	mg/kg	.7	1	J	mg/kg	.7	7.2	J	mg/kg	.7
Barium	8.1	J	mg/kg	.082	6.7	J	mg/kg	.081	4.1	J	mg/kg	.082	97.6		mg/kg	.091
Beryllium	.09	J	mg/kg	.041	.05	J	mg/kg	.041	.05	J	mg/kg	.041	.43	J	mg/kg	.045
Cadmium	.28	J	mg/kg	.27	.26	UJ	mg/kg	.26	.27	UJ	mg/kg	.27	.3	UJ	mg/kg	.3
Chromium	4.5	J	mg/kg	.43	1.2	J	mg/kg	.43	1.2	J	mg/kg	.43	8.3	J	mg/kg	.48
Cobalt	.55	U	mg/kg	.55	.55	U	mg/kg	.55	.55	U	mg/kg	.55	1.9	J	mg/kg	.61
Copper	10.2	UJ	mg/kg	10.2	5	UJ	mg/kg	5	3.3	UJ	mg/kg	3.3	25.4	J	mg/kg	.34
Cyanide	.1	J	mg/kg	1	.13	J	mg/kg	1	.1	J	mg/kg	1	.11	J	mg/kg	1
Lead	16	J	mg/kg	1	3	J	mg/kg	.5	2.2	J	mg/kg	.5	32.3	J	mg/kg	2.5
Mercury	.03	U	mg/kg	.03	.03	U	mg/kg	.03	.03	U	mg/kg	.03	.03	U	mg/kg	.03
Nickel	3	J	mg/kg	1.1	1.1	U	mg/kg	1.1	1.1	U	mg/kg	1.1	6	J	mg/kg	1.2
Selenium	.12	U	mg/kg	.12	.12	U	mg/kg	.12	.12	U	mg/kg	.12	.14	U	mg/kg	.14
Silver	.47	U	mg/kg	.47	.47	U	mg/kg	.47	.47	U	mg/kg	.47	.52	U	mg/kg	.52
Thallium	.12	U	mg/kg	.12	.12	U	mg/kg	.12	.12	U	mg/kg	.12	.14	J	mg/kg	.6
Tin	2.2	J	mg/kg	2	2	U	mg/kg	2	2	U	mg/kg	2	2.2	U	mg/kg	2.2
Vanadium	4.5	J	mg/kg	.31	2.9	J	mg/kg	.31	2.6	J	mg/kg	.31	12.5		mg/kg	.34
Zinc	45.8	J	mg/kg	.25	12	J	mg/kg	.24	12.2	J	mg/kg	.25	53.9	J	mg/kg	.27

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		R9743008			R9743009			R9743010			R9743011		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		23S00801			23S00801D			23S00901			23S01001		
Collect Date:		05-APR-95			05-APR-95			05-APR-95			05-APR-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg												
Antimony		1.2 U	mg/kg	1.2	1.2 U	mg/kg	1.2	1.1 U	mg/kg	1.1	14.8 J	mg/kg	5
Arsenic		4.5 J	mg/kg	.7	6.9 J	mg/kg	.7	1.1 J	mg/kg	.7	1.8 J	mg/kg	.7
Barium		79.6	mg/kg	.093	78.8	mg/kg	.093	12.2 J	mg/kg	.084	24 J	mg/kg	.085
Beryllium		.29 J	mg/kg	.046	.44 J	mg/kg	.047	.1 J	mg/kg	.042	.18 J	mg/kg	.043
Cadmium		3 J	mg/kg	.3	2.9 J	mg/kg	.3	.53 J	mg/kg	.27	1.2 J	mg/kg	.28
Chromium		10.9 J	mg/kg	.49	12.1 J	mg/kg	.49	6.1 J	mg/kg	.44	18.2 J	mg/kg	.45
Cobalt		1.9 J	mg/kg	.63	1.6 J	mg/kg	.63	.57 U	mg/kg	.57	1.2 J	mg/kg	.58
Copper		39.4 J	mg/kg	.35	40.5 J	mg/kg	.35	13 J	mg/kg	.32	28.5 J	mg/kg	.32
Cyanide		.22 J	mg/kg	1	.15 J	mg/kg	1	.14 J	mg/kg	1	.07 J	mg/kg	1
Lead		28.9 J	mg/kg	2.5	90.5 J	mg/kg	5	48.4 J	mg/kg	5	225 J	mg/kg	25
Mercury		.03 U	mg/kg	.03	.03 U	mg/kg	.03	.14	mg/kg	.1	.03 U	mg/kg	.03
Nickel		7.1 J	mg/kg	1.2	13.3	mg/kg	1.2	3.4 J	mg/kg	1.1	8.7	mg/kg	1.1
Selenium		.14 U	mg/kg	.14	.14 UJ	mg/kg	.14	.13 U	mg/kg	.13	.13 U	mg/kg	.13
Silver		.53 U	mg/kg	.53	.54 U	mg/kg	.54	.48 U	mg/kg	.48	.49 U	mg/kg	.49
Thallium		.14 J	mg/kg	.6	.19 J	mg/kg	.6	.13 U	mg/kg	.13	.13 U	mg/kg	.13
Tin		2.3 U	mg/kg	2.3	2.6 J	mg/kg	2.3	2.1 U	mg/kg	2.1	3.3 J	mg/kg	2.1
Vanadium		11.4 J	mg/kg	.35	12.7	mg/kg	.35	4.5 J	mg/kg	.32	7.3 J	mg/kg	.32
Zinc		62.3 J	mg/kg	.28	115 J	mg/kg	.28	87.8 J	mg/kg	.25	307 J	mg/kg	.26

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9743015				R9743014				R9743016				R9743017			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S01101				23S01201				23S01301				23S01401			
Collect Date:	07-APR-95				07-APR-95				07-APR-95				07-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	1.1	U	mg/kg	1.1	1.9	J	mg/kg	5	1.5	J	mg/kg	5	1.2	U	mg/kg	1.2
Arsenic	.79	J	mg/kg	.7	1.3	J	mg/kg	.7	13.9	J	mg/kg	.7	7.7	J	mg/kg	.7
Barium	8.4	J	mg/kg	.086	11.1	J	mg/kg	.087	107		mg/kg	.1	90.7		mg/kg	.098
Beryllium	.05	J	mg/kg	.043	.08	J	mg/kg	.043	.51	J	mg/kg	.051	.64	J	mg/kg	.049
Cadmium	.45	J	mg/kg	.28	.52	J	mg/kg	.28	1.4	J	mg/kg	.33	.75	J	mg/kg	.32
Chromium	4.3	J	mg/kg	.45	12.4	J	mg/kg	.45	38.6	J	mg/kg	.54	16.3	J	mg/kg	.51
Cobalt	.58	U	mg/kg	.58	.58	U	mg/kg	.58	3.9	UJ	mg/kg	3.9	2.5	UJ	mg/kg	2.5
Copper	3.1	J	mg/kg	.32	20.5	J	mg/kg	.32	456	J	mg/kg	.38	38.9	J	mg/kg	.37
Cyanide	.07	J	mg/kg	1	.1	J	mg/kg	1	.21	J	mg/kg	1	.16	J	mg/kg	1
Lead	7.9	J	mg/kg	.5	116	J	mg/kg	5	82.9	J	mg/kg	5	37.3	J	mg/kg	2.5
Mercury	.03	U	mg/kg	.03	.03	U	mg/kg	.03	.04	J	mg/kg	.1	.03	U	mg/kg	.03
Nickel	2.1	J	mg/kg	1.1	6.4	J	mg/kg	1.1	81.3		mg/kg	1.3	12.2		mg/kg	1.3
Selenium	.13	U	mg/kg	.13	.13	U	mg/kg	.13	.15	UJ	mg/kg	.15	.15	UJ	mg/kg	.15
Silver	.49	U	mg/kg	.49	.5	U	mg/kg	.5	.59	U	mg/kg	.59	.56	U	mg/kg	.56
Thallium	.13	U	mg/kg	.13	.13	U	mg/kg	.13	.15	U	mg/kg	.15	.15	U	mg/kg	.15
Tin	2.1	U	mg/kg	2.1	2.1	U	mg/kg	2.1	31.9		mg/kg	2.5	3.2	J	mg/kg	2.4
Vanadium	4.9	J	mg/kg	.32	4.9	J	mg/kg	.32	16.4		mg/kg	.38	17.9		mg/kg	.37
Zinc	17.8	J	mg/kg	.26	254	J	mg/kg	.26	161	J	mg/kg	.31	55.9	J	mg/kg	.29

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		R9743018			R9743019			R9743020			R9743021		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		23S01501			23S01601			23S01701			23S01701D		
Collect Date:		07-APR-95			07-APR-95			07-APR-95			07-APR-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg												
Antimony		2.4 J	mg/kg	5	2.6 J	mg/kg	5	1.1 U	mg/kg	1.1	1.1 U	mg/kg	1.1
Arsenic		1.7 J	mg/kg	.7	1.4 J	mg/kg	.7	.97 J	mg/kg	.7	1.1 J	mg/kg	.7
Barium		27.9 J	mg/kg	.091	9.9 J	mg/kg	.092	15.3 J	mg/kg	.086	12.8 J	mg/kg	.086
Beryllium		.2 J	mg/kg	.046	.17 J	mg/kg	.046	.19 J	mg/kg	.043	.15 J	mg/kg	.043
Cadmium		1.1 J	mg/kg	.3	.43 J	mg/kg	.3	.28 UJ	mg/kg	.28	.34 J	mg/kg	.28
Chromium		12.2 J	mg/kg	.48	22.3 J	mg/kg	.48	4.8 J	mg/kg	.45	5.7 J	mg/kg	.45
Cobalt		1.6 UJ	mg/kg	1.6	1.4 UJ	mg/kg	1.4	.58 U	mg/kg	.58	.58 U	mg/kg	.58
Copper		22 J	mg/kg	.34	51.2 J	mg/kg	.34	11.4 J	mg/kg	.32	12.1 J	mg/kg	.32
Cyanide		.11 J	mg/kg	1	.11 J	mg/kg	1	.05 U	mg/kg	.05	.05 U	mg/kg	.05
Lead		79.8 J	mg/kg	5	44.4 J	mg/kg	2.5	11.2 J	mg/kg	.5	13.1 J	mg/kg	.5
Mercury		.03 U	mg/kg	.03	.03 U	mg/kg	.03	.03 U	mg/kg	.03	.03 U	mg/kg	.03
Nickel		5.1 J	mg/kg	1.2	40.7	mg/kg	1.2	2.2 J	mg/kg	1.1	3.9 J	mg/kg	1.1
Selenium		.14 UJ	mg/kg	.14	.14 UJ	mg/kg	.14	.13 U	mg/kg	.13	.13 U	mg/kg	.13
Silver		.52 U	mg/kg	.52	.53 U	mg/kg	.53	.49 U	mg/kg	.49	.5 U	mg/kg	.5
Thallium		.14 UJ	mg/kg	.14	.14 J	mg/kg	.6	.13 U	mg/kg	.13	.13 U	mg/kg	.13
Tin		3 J	mg/kg	2.2	2.7 J	mg/kg	2.2	2.1 U	mg/kg	2.1	2.1 U	mg/kg	2.1
Vanadium		6.9 J	mg/kg	.34	10.2 J	mg/kg	.34	4.4 J	mg/kg	.32	3.8 J	mg/kg	.32
Zinc		354 J	mg/kg	.27	95.6 J	mg/kg	.27	47.1 J	mg/kg	.26	62.1 J	mg/kg	.26

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9743022				M8775001				M8775002				M8780001			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S01801				23S01901				23S02001				23S02101			
Collect Date:	07-APR-95				07-APR-95				07-APR-95				08-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	1.2	J	mg/kg	5	.73	J	mg/kg	.47	6.9	J	mg/kg	.48	.84	UJ	mg/kg	.84
Arsenic	.42	J	mg/kg	.7	.35	J	mg/kg	.17	3.2		mg/kg	.17	.17	U	mg/kg	.17
Barium	17.4	J	mg/kg	.088	14.2	J	mg/kg	.12	13.9	J	mg/kg	.13	3	J	mg/kg	.12
Beryllium	.16	J	mg/kg	.044	.06	J	mg/kg	.028	.1	J	mg/kg	.029	.08	J	mg/kg	.028
Cadmium	.62	J	mg/kg	.28	1.3		mg/kg	.56	6.3		mg/kg	.57	.55	U	mg/kg	.55
Chromium	9.3	J	mg/kg	.46	8.2		mg/kg	.52	9.4		mg/kg	.54	10.2		mg/kg	.52
Cobalt	.77	UJ	mg/kg	.77	1.1	U	mg/kg	1.1	2.6	J	mg/kg	1.1	1	U	mg/kg	1
Copper	24.3	J	mg/kg	.33	40.4		mg/kg	.54	2930		mg/kg	.55	3.1	J	mg/kg	.53
Cyanide	.05	U	mg/kg	.05	.11	U	mg/kg	.11	.11	U	mg/kg	.11	.11	U	mg/kg	.11
Lead	10.5	J	mg/kg	.5	47		mg/kg	1.4	831		mg/kg	28.1	7.3		mg/kg	.27
Mercury	.03	U	mg/kg	.03	.27		mg/kg	.031	.09		mg/kg	.033	.03	U	mg/kg	.03
Nickel	2.6	J	mg/kg	1.1	9.7		mg/kg	1.1	55.6		mg/kg	1.2	1.7	J	mg/kg	1.1
Selenium	.13	UJ	mg/kg	.13	.24	U	mg/kg	.24	.25	U	mg/kg	.25	.24	U	mg/kg	.24
Silver	.5	U	mg/kg	.5	.51	U	mg/kg	.51	5.2		mg/kg	.52	.51	U	mg/kg	.51
Thallium	.13	U	mg/kg	.13	.38	U	mg/kg	.38	.39	U	mg/kg	.39	.37	U	mg/kg	.37
Tin	3.2	J	mg/kg	2.1	10	J	mg/kg	1.7	196		mg/kg	1.7	1.7	U	mg/kg	1.7
Vanadium	10.8	J	mg/kg	.33	3.1	J	mg/kg	.41	4.9		mg/kg	.42	7.4		mg/kg	.4
Zinc	32.7	J	mg/kg	.26	124		mg/kg	.15	5910		mg/kg	.15	9		mg/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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		M8780003			M8780002			M8775003			M8775004		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		23S02201			23S02301			23S02401			23S02501		
Collect Date:		08-APR-95			08-APR-95			07-APR-95			07-APR-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg												
Antimony		.84 UJ	mg/kg	.84	3.3 UJ	mg/kg	3.3	3.2 J	mg/kg	.45	.45 U	mg/kg	.45
Arsenic		1.7 J	mg/kg	.17	2.5	mg/kg	.16	.88 J	mg/kg	.16	.2 J	mg/kg	.16
Barium		8 J	mg/kg	.12	28 J	mg/kg	.12	126	mg/kg	.12	15.3 J	mg/kg	.12
Beryllium		.11 J	mg/kg	.028	.14 J	mg/kg	.027	1.9	mg/kg	.027	.14 J	mg/kg	.027
Cadmium		.56 U	mg/kg	.56	2.6	mg/kg	.54	1.5	mg/kg	.54	.54 U	mg/kg	.54
Chromium		10	mg/kg	.53	30	mg/kg	.5	28.3	mg/kg	.5	10.9	mg/kg	.51
Cobalt		1.1 U	mg/kg	1.1	1.2 J	mg/kg	1	8.4 J	mg/kg	1	1 U	mg/kg	1
Copper		2.3 J	mg/kg	.54	236	mg/kg	.52	52.5	mg/kg	.52	15.6	mg/kg	.52
Cyanide		.11 U	mg/kg	.11	.11 U	mg/kg	.11	.11 U	mg/kg	.11	.11 U	mg/kg	.11
Lead		4.5	mg/kg	.28	136	mg/kg	6.6	41.8	mg/kg	2.6	16.9	mg/kg	.8
Mercury		.03 U	mg/kg	.03	.08	mg/kg	.03	.03 U	mg/kg	.03	.04 U	mg/kg	.04
Nickel		2.7 J	mg/kg	1.1	37.6	mg/kg	1.1	19.3	mg/kg	1.1	1.9 J	mg/kg	1.1
Selenium		.24 UJ	mg/kg	.24	.23 U	mg/kg	.23	.23 U	mg/kg	.23	.24 U	mg/kg	.24
Silver		.52 U	mg/kg	.52	1.5 J	mg/kg	.49	.49 U	mg/kg	.49	.5 U	mg/kg	.5
Thallium		.38 U	mg/kg	.38	.36 U	mg/kg	.36	.36 U	mg/kg	.36	.37 U	mg/kg	.37
Tin		1.7 U	mg/kg	1.7	7.9 J	mg/kg	1.6	4.5 J	mg/kg	1.6	2.4 J	mg/kg	1.6
Vanadium		11.8	mg/kg	.41	13.2	mg/kg	.39	23.4	mg/kg	.39	4 J	mg/kg	.4
Zinc		7.3	mg/kg	.15	815	mg/kg	.14	301	mg/kg	.14	91.2	mg/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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8775005				M8775006				M8775007				M8775008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23S02601				23S02701				23S02701D				23S02801			
Collect Date:	07-APR-95				07-APR-95				07-APR-95				07-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	1	J	mg/kg	.43	.76	J	mg/kg	.45	.45	U	mg/kg	.45	.99	J	mg/kg	.47
Arsenic	.74	J	mg/kg	.16	.67	J	mg/kg	.16	.67	J	mg/kg	.16	1.1	J	mg/kg	.17
Barium	60.4		mg/kg	.12	9.8	J	mg/kg	.12	9.4	J	mg/kg	.12	14	J	mg/kg	.12
Beryllium	.88	J	mg/kg	.026	.19	J	mg/kg	.027	.2	J	mg/kg	.027	.24	J	mg/kg	.028
Cadmium	.52	U	mg/kg	.52	.53	U	mg/kg	.53	.54	U	mg/kg	.54	.56	U	mg/kg	.56
Chromium	31.2		mg/kg	.49	7.7		mg/kg	.5	7.9		mg/kg	.5	12.8		mg/kg	.52
Cobalt	5.1	J	mg/kg	.98	1	U	mg/kg	1	1	U	mg/kg	1	1.4	J	mg/kg	1
Copper	46.3		mg/kg	.5	6.7		mg/kg	.52	4.3	J	mg/kg	.52	10.3		mg/kg	.54
Cyanide	.1	U	mg/kg	.1	.11	U	mg/kg	.11	.11	U	mg/kg	.11	.11	U	mg/kg	.11
Lead	91.9		mg/kg	5.1	27.4		mg/kg	1.3	17.5		mg/kg	.79	39.6		mg/kg	2.7
Mercury	.03	U	mg/kg	.03	.03	U	mg/kg	.03	.03	U	mg/kg	.03	.03	U	mg/kg	.03
Nickel	22.8		mg/kg	1.1	2.2	J	mg/kg	1.1	4.3	J	mg/kg	1.1	9.9		mg/kg	1.1
Selenium	.23	U	mg/kg	.23	.23	U	mg/kg	.23	.23	U	mg/kg	.23	.24	U	mg/kg	.24
Silver	.48	U	mg/kg	.48	.49	U	mg/kg	.49	.49	U	mg/kg	.49	.51	U	mg/kg	.51
Thallium	.35	U	mg/kg	.35	.36	U	mg/kg	.36	.36	U	mg/kg	.36	.38	U	mg/kg	.38
Tin	3.6	J	mg/kg	1.6	2.5	J	mg/kg	1.6	2.3	J	mg/kg	1.6	1.7	U	mg/kg	1.7
Vanadium	10.7		mg/kg	.38	4.5		mg/kg	.39	5.4		mg/kg	.39	7.1		mg/kg	.41
Zinc	1080		mg/kg	.13	85.2		mg/kg	.14	92.8		mg/kg	.14	108		mg/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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		MB994003			MB994004			MB780004			MB780005		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		23S02901			23S02901D			24S00101			24S00201		
Collect Date:		20-MAY-95			20-MAY-95			08-APR-95			08-APR-95		
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	
INORGANICS (SOIL)	mg/kg												
Antimony	6.2		mg/kg	.44	4.9		mg/kg	.44	1	UJ	mg/kg	1	.84 UJ mg/kg .84
Arsenic	1.1	J	mg/kg	.16	1.8	J	mg/kg	.16	.76	UJ	mg/kg	.76	1.7 J mg/kg .17
Barium	14	J	mg/kg	.085	16.1	J	mg/kg	.085	24.6	J	mg/kg	.12	13.5 J mg/kg .13
Beryllium	.34	J	mg/kg	.03	.43	J	mg/kg	.03	.47	J	mg/kg	.028	.12 J mg/kg .029
Cadmium	1.1		mg/kg	.61	.87	J	mg/kg	.62	.55	U	mg/kg	.55	.57 U mg/kg .57
Chromium	40.4		mg/kg	1.2	44		mg/kg	1.3	9.4		mg/kg	.51	5.1 mg/kg .53
Cobalt	2.3	J	mg/kg	.78	2.8	J	mg/kg	.79	1.8	J	mg/kg	1	1.1 U mg/kg 1.1
Copper	25.4		mg/kg	.34	22.6		mg/kg	.34	63.7		mg/kg	.53	12.1 mg/kg .55
Cyanide	.11	U	mg/kg	.11	.11	U	mg/kg	.11	.11	U	mg/kg	.11	1.1 J mg/kg .11
Lead	216		mg/kg	10.4	204		mg/kg	5.2	34.2		mg/kg	1.6	44.5 mg/kg 2.8
Mercury	.07	U	mg/kg	.07	.1	J	mg/kg	.066	.03	U	mg/kg	.03	.03 U mg/kg .03
Nickel	6.5	J	mg/kg	1.5	8.5		mg/kg	1.5	9.1		mg/kg	1.1	2 J mg/kg 1.2
Selenium	.41	J	mg/kg	.23	.38	J	mg/kg	.23	.24	U	mg/kg	.24	.25 U mg/kg .25
Silver	.38	U	mg/kg	.38	.38	U	mg/kg	.38	.5	U	mg/kg	.5	.52 U mg/kg .52
Thallium	.36	U	mg/kg	.36	.36	U	mg/kg	.36	.37	U	mg/kg	.37	.38 U mg/kg .38
Tin	1.9	U	mg/kg	1.9	19.5		mg/kg	1.9	13		mg/kg	1.7	2.2 J mg/kg 1.7
Vanadium	10.3	J	mg/kg	.42	11.9		mg/kg	.43	7.9		mg/kg	.4	4 J mg/kg .41
Zinc	445		mg/kg	.3	442		mg/kg	.3	173		mg/kg	.14	58.5 mg/kg .15

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8780006				M8780007				M8780008				M8780009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	24S00301				24S00401				24S00401D				24S00501			
Collect Date:	08-APR-95				08-APR-95				08-APR-95				08-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	.84	UJ	mg/kg	.84	11.3	J	mg/kg	.88	6.2	J	mg/kg	.44	.84	UJ	mg/kg	.84
Arsenic	.76	UJ	mg/kg	.76	2	J	mg/kg	.16	2	J	mg/kg	.16	.55	UJ	mg/kg	.55
Barium	11	J	mg/kg	.12	17.3	J	mg/kg	.12	42.7		mg/kg	.12	9.8	J	mg/kg	.13
Beryllium	.13	J	mg/kg	.028	.14	J	mg/kg	.026	.21	J	mg/kg	.027	.11	J	mg/kg	.029
Cadmium	.55	U	mg/kg	.55	.52	U	mg/kg	.52	.53	U	mg/kg	.53	.58	U	mg/kg	.58
Chromium	4.9		mg/kg	.52	4.4		mg/kg	.49	7.4		mg/kg	.49	9.2		mg/kg	.54
Cobalt	1	U	mg/kg	1	.99	U	mg/kg	.99	1.2	J	mg/kg	.99	1.1	U	mg/kg	1.1
Copper	6.5		mg/kg	.54	78.2		mg/kg	.51	138		mg/kg	.51	28.9		mg/kg	.56
Cyanide	.11	U	mg/kg	.11	.1	U	mg/kg	.1	.11	U	mg/kg	.11	.12	U	mg/kg	.12
Lead	18		mg/kg	.82	29.3		mg/kg	1.5	34.9		mg/kg	2.6	19.6		mg/kg	1.1
Mercury	.03	U	mg/kg	.03	.03	U	mg/kg	.03	.03	U	mg/kg	.03	.03	U	mg/kg	.03
Nickel	2.3	J	mg/kg	1.1	2.1	J	mg/kg	1.1	4.2	J	mg/kg	1.1	3	J	mg/kg	1.2
Selenium	.24	U	mg/kg	.24	.23	U	mg/kg	.23	.92	U	mg/kg	.92	.25	UJ	mg/kg	.25
Silver	.51	U	mg/kg	.51	.58	J	mg/kg	.48	.79	J	mg/kg	.48	.53	U	mg/kg	.53
Thallium	.37	U	mg/kg	.37	.35	U	mg/kg	.35	.36	U	mg/kg	.36	.39	U	mg/kg	.39
Tin	3.8	J	mg/kg	1.7	6.4	J	mg/kg	1.6	12.1		mg/kg	1.6	1.9	J	mg/kg	1.8
Vanadium	5.4		mg/kg	.4	7.4		mg/kg	.38	9.7		mg/kg	.38	5.4		mg/kg	.42
Zinc	34.5		mg/kg	.14	51.8		mg/kg	.14	117		mg/kg	.14	53.7		mg/kg	.15

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		M8867001			M8985001			M8985002			M8793001		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		24S00601			24S00701			24S00701D			25S00101		
Collect Date:		24-APR-95			19-MAY-95			19-MAY-95			10-APR-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg												
Antimony		.62 UJ	mg/kg	.62	.45 U	mg/kg	.45	1.3	mg/kg	.45	.95 J	mg/kg	.44
Arsenic		.69 J	mg/kg	.16	2.7	mg/kg	.16	2.8	mg/kg	.16	.96 J	mg/kg	.16
Barium		13 J	mg/kg	.084	95.8	mg/kg	.086	120	mg/kg	.086	14.9 J	mg/kg	.12
Beryllium		.06 J	mg/kg	.029	1.2	mg/kg	.03	1.3	mg/kg	.03	.18 J	mg/kg	.026
Cadmium		.61 U	mg/kg	.61	.93 J	mg/kg	.62	1 J	mg/kg	.62	.52 U	mg/kg	.52
Chromium		3.6	mg/kg	1.2	37.4	mg/kg	1.3	44.1	mg/kg	1.3	9.9 J	mg/kg	.49
Cobalt		.77 U	mg/kg	.77	14	mg/kg	.8	16	mg/kg	.79	1.6 J	mg/kg	.99
Copper		8.2	mg/kg	.33	411	mg/kg	.34	449	mg/kg	.34	23.9 J	mg/kg	.51
Cyanide		.1 UJ	mg/kg	.1	.22 UJ	mg/kg	.22	.11 U	mg/kg	.11	.1 U	mg/kg	.1
Lead		16.6	mg/kg	1	109	mg/kg	6.6	93.1	mg/kg	2.6	39.2 J	mg/kg	1
Mercury		.04 U	mg/kg	.04	.24 J	mg/kg	.067	.1 J	mg/kg	.067	.04 U	mg/kg	.04
Nickel		1.5 U	mg/kg	1.5	18.1	mg/kg	1.5	20.4	mg/kg	1.5	4 J	mg/kg	1.1
Selenium		.23 U	mg/kg	.23	.54 J	mg/kg	.23	.67 J	mg/kg	.23	.23 U	mg/kg	.23
Silver		.38 U	mg/kg	.38	.39 U	mg/kg	.39	.39 U	mg/kg	.39	.48 U	mg/kg	.48
Thallium		.35 U	mg/kg	.35	.36 U	mg/kg	.36	.36 U	mg/kg	.36	.35 U	mg/kg	.35
Tin		2.6 J	mg/kg	1.9	9.2 J	mg/kg	1.9	9.6 J	mg/kg	1.9	4.3 J	mg/kg	1.6
Vanadium		2.6 J	mg/kg	.42	19.6	mg/kg	.43	22.6	mg/kg	.43	4.3 J	mg/kg	.38
Zinc		35.7	mg/kg	.29	1450	mg/kg	.3	1430	mg/kg	.3	428 J	mg/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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8793006				M8793007				M8793009				M8793010			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	25S00201				25S00301				25S00401				25S00401D			
Collect Date:	10-APR-95				10-APR-95				10-APR-95				10-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	.46	R	mg/kg	.46	.46	R	mg/kg	.46	.53	R	mg/kg	.53	.53	R	mg/kg	.53
Arsenic	.93	J	mg/kg	.17	.79	J	mg/kg	.17	.53	J	mg/kg	.19	1.1	J	mg/kg	.19
Barium	19.8	J	mg/kg	1.2	8.6	J	mg/kg	.12	6.9	J	mg/kg	.14	10.8	J	mg/kg	.14
Beryllium	.3	J	mg/kg	.27	.13	J	mg/kg	.028	.08	J	mg/kg	.032	.16	J	mg/kg	.032
Cadmium	5.4	U	mg/kg	5.4	.55	U	mg/kg	.55	.64	U	mg/kg	.64	.63	U	mg/kg	.63
Chromium	16	J	mg/kg	5.1	5.5	J	mg/kg	.52	3.9	J	mg/kg	.6	3.9	J	mg/kg	.59
Cobalt	10.2	U	mg/kg	10.2	1.2	J	mg/kg	1	1.2	U	mg/kg	1.2	1.2	U	mg/kg	1.2
Copper	10.4	J	mg/kg	5.3	7.6	J	mg/kg	.54	8.1	J	mg/kg	.62	10.8	J	mg/kg	.61
Cyanide	.11	U	mg/kg	.11	.13	J	mg/kg	.11	.13	U	mg/kg	.13	1.1	J	mg/kg	.12
Lead	17.6	J	mg/kg	1.1	6.6	J	mg/kg	.27	9.6	J	mg/kg	.63	9.4	J	mg/kg	.62
Mercury	.03	U	mg/kg	.03	.03	U	mg/kg	.03	.03	U	mg/kg	.03	.03	U	mg/kg	.03
Nickel	12.1	J	mg/kg	11.1	2.8	J	mg/kg	1.1	2.2	J	mg/kg	1.3	2.5	J	mg/kg	1.3
Selenium	.24	U	mg/kg	.24	.24	U	mg/kg	.24	.28	U	mg/kg	.28	.27	U	mg/kg	.27
Silver	5	U	mg/kg	5	.51	U	mg/kg	.51	.59	U	mg/kg	.59	.58	U	mg/kg	.58
Thallium	.37	U	mg/kg	.37	.37	U	mg/kg	.37	.43	U	mg/kg	.43	.43	U	mg/kg	.43
Tin	16.6	U	mg/kg	16.6	1.7	U	mg/kg	1.7	1.9	U	mg/kg	1.9	2.4	J	mg/kg	1.9
Vanadium	16.6	J	mg/kg	4	5.9	J	mg/kg	.4	3.1	J	mg/kg	.46	4.1	J	mg/kg	.46
Zinc	63.4	J	mg/kg	1.4	25.9	J	mg/kg	.14	21.8	J	mg/kg	.17	33.1	J	mg/kg	.16

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		M8793008				M8793002				M8793003				M8793004		
Site		GROUP111				GROUP111				GROUP111				GROUP111		
Locator		25S00501				25S00601				25S00701				25S00801		
Collect Date:		10-APR-95				10-APR-95				10-APR-95				10-APR-95		
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg																
Antimony		.47	R	mg/kg	.47	.77	J	mg/kg	.59	.45	R	mg/kg	.45	.46	J	mg/kg	.46
Arsenic		.6	J	mg/kg	.17	.61	J	mg/kg	.22	1.3	J	mg/kg	.16	.75	J	mg/kg	.17
Barium		14.1	J	mg/kg	.12	9.6	J	mg/kg	.16	9	J	mg/kg	.12	15.9	J	mg/kg	1.2
Beryllium		.26	J	mg/kg	.028	.09	J	mg/kg	.036	.1	J	mg/kg	.027	.29	U	mg/kg	.29
Cadmium		.56	U	mg/kg	.56	.71	U	mg/kg	.71	.54	U	mg/kg	.54	5.5	U	mg/kg	5.5
Chromium		11	J	mg/kg	.52	4.7	J	mg/kg	.67	4.1	J	mg/kg	.5	14.2	J	mg/kg	5.2
Cobalt		1.4	J	mg/kg	1	1.3	U	mg/kg	1.3	1	U	mg/kg	1	10.4	U	mg/kg	10.4
Copper		34.4	J	mg/kg	.54	10.1	J	mg/kg	.69	7.2	J	mg/kg	.52	16.9	J	mg/kg	5.3
Cyanide		.11	U	mg/kg	.11	.14	U	mg/kg	.14	.11	U	mg/kg	.11	.11	U	mg/kg	.11
Lead		9.8	J	mg/kg	.27	5.6	J	mg/kg	.35	5.8	J	mg/kg	.26	9.5	J	mg/kg	.27
Mercury		.03	U	mg/kg	.03	.04	U	mg/kg	.04	.03	U	mg/kg	.03	.04	U	mg/kg	.04
Nickel		4.3	J	mg/kg	1.1	1.4	U	mg/kg	1.4	1.9	J	mg/kg	1.1	11.2	U	mg/kg	11.2
Selenium		.27	J	mg/kg	.24	.31	U	mg/kg	.31	.23	U	mg/kg	.23	.24	U	mg/kg	.24
Silver		.51	U	mg/kg	.51	.65	U	mg/kg	.65	.49	U	mg/kg	.49	5.8	J	mg/kg	5.1
Thallium		.38	U	mg/kg	.38	.48	U	mg/kg	.48	.36	U	mg/kg	.36	.37	U	mg/kg	.37
Tin		5.8	J	mg/kg	1.7	2.4	J	mg/kg	2.2	3	J	mg/kg	1.6	16.8	U	mg/kg	16.8
Vanadium		8	J	mg/kg	.41	4.8	J	mg/kg	.52	3.8	J	mg/kg	.39	13.9	J	mg/kg	4
Zinc		86.6	J	mg/kg	.14	19	J	mg/kg	.18	24.7	J	mg/kg	.14	31	J	mg/kg	1.4

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	M8793005				R9738002				R9738003				R9738001			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	25S00901				44S00101				44S00101D				44S00201			
Collect Date:	10-APR-95				05-APR-95				05-APR-95				05-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	.45	R	mg/kg	.45	2.5	J	mg/kg	5	2.8	J	mg/kg	5	1.9	J	mg/kg	5
Arsenic	.92	J	mg/kg	.16	1.3	J	mg/kg	.7	1.4	J	mg/kg	.7	1	J	mg/kg	.7
Barium	10.5	J	mg/kg	.12	97.2		mg/kg	.088	35.1	J	mg/kg	.088	9.2	J	mg/kg	.083
Beryllium	.1	J	mg/kg	.027	.11	J	mg/kg	.044	.08	J	mg/kg	.044	.11	J	mg/kg	.042
Cadmium	.54	U	mg/kg	.54	1.5		mg/kg	.29	1.4		mg/kg	.29	.7	J	mg/kg	.27
Chromium	6.6	J	mg/kg	.5	21.8		mg/kg	.46	27.7		mg/kg	.46	9.9		mg/kg	.44
Cobalt	1	U	mg/kg	1	1.7	UJ	mg/kg	1.7	1.7	UJ	mg/kg	1.7	1.2	UJ	mg/kg	1.2
Copper	4.1	J	mg/kg	.52	242		mg/kg	.33	292		mg/kg	.33	34.4		mg/kg	.31
Cyanide	.11	U	mg/kg	.11	.11	J	mg/kg	1	.25	J	mg/kg	1	.07	J	mg/kg	1
Lead	5.9	J	mg/kg	.26	61.6		mg/kg	5	66.6		mg/kg	5	59.7		mg/kg	5
Mercury	.03	U	mg/kg	.03	7.9		mg/kg	1	5.9		mg/kg	.1	.08		mg/kg	.1
Nickel	2.6	J	mg/kg	1.1	11		mg/kg	1.1	11.7		mg/kg	1.1	2.7	J	mg/kg	1.1
Selenium	.23	U	mg/kg	.23	.13	U	mg/kg	.13	.13	U	mg/kg	.13	.12	U	mg/kg	.12
Silver	.49	U	mg/kg	.49	23.9	J	mg/kg	.51	21.7	J	mg/kg	.51	.48	UJ	mg/kg	.48
Thallium	.36	U	mg/kg	.36	.13	U	mg/kg	.13	.13	U	mg/kg	.13	.12	U	mg/kg	.12
Tin	1.7	J	mg/kg	1.6	11.9	J	mg/kg	2.2	11.7	J	mg/kg	2.2	5.8	UJ	mg/kg	5.8
Vanadium	10.4	J	mg/kg	.39	9	J	mg/kg	.33	8.9	J	mg/kg	.33	4.7	J	mg/kg	.31
Zinc	35.3	J	mg/kg	.14	396		mg/kg	.26	386		mg/kg	.26	136		mg/kg	.25

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.

US Naval Station, Mayport, RCRA Facil..., Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		R9738004			R9738005			R9738006			R9738007		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		44S00301			44S00401			44S00501			44S00601		
Collect Date:		05-APR-95			05-APR-95			05-APR-95			05-APR-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg												
Antimony		1.1 J	mg/kg	5	1.1 U	mg/kg	1.1	1 U	mg/kg	1	1.9 J	mg/kg	5
Arsenic		.68 J	mg/kg	.7	.8 J	mg/kg	.7	.7 J	mg/kg	.7	.61 J	mg/kg	.7
Barium		11 J	mg/kg	.084	9.1 J	mg/kg	.088	5.8 J	mg/kg	.083	7.8 J	mg/kg	.085
Beryllium		.07 J	mg/kg	.042	.08 J	mg/kg	.044	.07 J	mg/kg	.041	.06 J	mg/kg	.042
Cadmium		.52 J	mg/kg	.27	.29 U	mg/kg	.29	.27 U	mg/kg	.27	.39 J	mg/kg	.28
Chromium		5	mg/kg	.44	3.4	mg/kg	.46	2.9	mg/kg	.43	23.6	mg/kg	.44
Cobalt		.78 UJ	mg/kg	.78	.98 UJ	mg/kg	.98	.89 UJ	mg/kg	.89	.73 UJ	mg/kg	.73
Copper		29.8	mg/kg	.32	16.4	mg/kg	.33	10	mg/kg	.31	17.1	mg/kg	.32
Cyanide		.1 J	mg/kg	1	.21 J	mg/kg	1	.07 J	mg/kg	1	.2 J	mg/kg	1
Lead		26.7	mg/kg	2.5	20.1	mg/kg	2.5	13	mg/kg	2.5	23.7	mg/kg	2.5
Mercury		.16	mg/kg	.1	.12	mg/kg	.1	.03 UJ	mg/kg	.03	.07	mg/kg	.1
Nickel		3.6 J	mg/kg	1.1	3.1 J	mg/kg	1.2	1.7 J	mg/kg	1.1	2.8 J	mg/kg	1.1
Selenium		.13 UJ	mg/kg	.13	.13 U	mg/kg	.13	.12 U	mg/kg	.12	.13 U	mg/kg	.13
Silver		.86 J	mg/kg	.49	.51 J	mg/kg	.51	.48 UJ	mg/kg	.48	.49 UJ	mg/kg	.49
Thallium		.13 U	mg/kg	.13	.13 U	mg/kg	.13	.12 U	mg/kg	.12	.13 U	mg/kg	.13
Tin		2.7 UJ	mg/kg	2.7	2.3 UJ	mg/kg	2.3	2 U	mg/kg	2	2.1 U	mg/kg	2.1
Vanadium		3.5 J	mg/kg	.32	8.5 J	mg/kg	.33	3.8 J	mg/kg	.31	5.8 J	mg/kg	.32
Zinc		85.2	mg/kg	.25	59.6	mg/kg	.27	36.1	mg/kg	.25	107	mg/kg	.25

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9738008				R9738009				R9738010				R9955017			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	44S00701				44S00801				44S00901				44S01001			
Collect Date:	05-APR-95				05-APR-95				05-APR-95				24-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	1.7	J	mg/kg	5	2.6	J	mg/kg	5	1.1	U	mg/kg	1.1	1.1	U	mg/kg	1.1
Arsenic	.79	J	mg/kg	.7	1	J	mg/kg	.7	1.1	J	mg/kg	.7	.65	J	mg/kg	.6
Barium	12.5	J	mg/kg	.083	29.1	J	mg/kg	.087	8	J	mg/kg	.085	11.9	J	mg/kg	.24
Beryllium	.11	J	mg/kg	.042	.11	J	mg/kg	.043	.17	J	mg/kg	.043	.09	J	mg/kg	.065
Cadmium	.47	J	mg/kg	.27	.73	J	mg/kg	.28	2.2		mg/kg	.28	.44	J	mg/kg	.26
Chromium	7.4		mg/kg	.44	8.7		mg/kg	.46	5		mg/kg	.45	2.8		mg/kg	.37
Cobalt	1.1	UJ	mg/kg	1.1	1.1	UJ	mg/kg	1.1	.87	UJ	mg/kg	.87	.9	J	mg/kg	.67
Copper	26.4		mg/kg	.31	193		mg/kg	.33	13.2		mg/kg	.32	218		mg/kg	.22
Cyanide	.17	J	mg/kg	1	.21	J	mg/kg	1	.07	J	mg/kg	1	.09	J	mg/kg	1
Lead	60.6		mg/kg	5	38.4		mg/kg	5	25.6		mg/kg	2.5	5.9		mg/kg	.4
Mercury	.25		mg/kg	.1	.39		mg/kg	.1	.03	UJ	mg/kg	.03	.04	J	mg/kg	.1
Nickel	3.8	J	mg/kg	1.1	11.5		mg/kg	1.1	2.2	J	mg/kg	1.1	45		mg/kg	1.2
Selenium	.12	U	mg/kg	.12	.15	UJ	mg/kg	.15	.13	U	mg/kg	.13	.11	U	mg/kg	.11
Silver	1	J	mg/kg	.48	2.6	J	mg/kg	.5	.49	UJ	mg/kg	.49	.3	U	mg/kg	.3
Thallium	.12	U	mg/kg	.12	.13	U	mg/kg	.13	.13	U	mg/kg	.13	.13	U	mg/kg	.13
Tin	3.7	UJ	mg/kg	3.7	5.9	UJ	mg/kg	5.9	2.1	U	mg/kg	2.1	5	J	mg/kg	2.9
Vanadium	5.7	J	mg/kg	.31	8.4	J	mg/kg	.33	5.9	J	mg/kg	.32	3	J	mg/kg	.26
Zinc	98.1		mg/kg	.25	129		mg/kg	.26	983		mg/kg	.26	79.9		mg/kg	.45

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.

US Naval Station, Mayport, RCRA Facil..y Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		R9712001				R9712002				R9712003				R9712004			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		45S00101				45S00101D				45S00201				45S00301			
Collect Date:		29-MAR-95				29-MAR-95				29-MAR-95				29-MAR-95			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg																
Antimony		5.3	UJ	mg/kg	5.3	5.3	UJ	mg/kg	5.3	5.2	UJ	mg/kg	5.2	5.1	UJ	mg/kg	5.1
Arsenic		.97	J	mg/kg	.7	.85	J	mg/kg	.7	1.2	J	mg/kg	.7	1.5	J	mg/kg	.7
Barium		34.3	J	mg/kg	.084	36.6	J	mg/kg	.085	9.1	J	mg/kg	.083	10.3	J	mg/kg	.081
Beryllium		.07	J	mg/kg	.042	.07	J	mg/kg	.043	.14	J	mg/kg	.041	.07	J	mg/kg	.041
Cadmium		1	J	mg/kg	.27	1	J	mg/kg	.28	.27	U	mg/kg	.27	.26	U	mg/kg	.26
Chromium		8		mg/kg	.44	6.7		mg/kg	.45	7.5		mg/kg	.44	3.8		mg/kg	.43
Cobalt		1.2	J	mg/kg	.57	1.2	J	mg/kg	.58	1	J	mg/kg	.56	.9	J	mg/kg	.55
Copper		727		mg/kg	.32	777		mg/kg	.32	17.9		mg/kg	.31	28.4		mg/kg	.3
Cyanide		.12	J	mg/kg	1	.18	J	mg/kg	1	.12	J	mg/kg	1	.05	J	mg/kg	1
Lead		17.9		mg/kg	2.5	20.3		mg/kg	2.5	23.1		mg/kg	2.5	19.6		mg/kg	2.5
Mercury		.49		mg/kg	.1	.51		mg/kg	.1	.1		mg/kg	.1	.13		mg/kg	.1
Nickel		41.4		mg/kg	1.1	38.7		mg/kg	1.1	7.5	J	mg/kg	1.1	4	J	mg/kg	1.1
Selenium		.13	UJ	mg/kg	.13	.13	UJ	mg/kg	.13	.12	UJ	mg/kg	.12	.12	UJ	mg/kg	.12
Silver		1.3	J	mg/kg	.49	2.1		mg/kg	.49	.48	U	mg/kg	.48	.47	U	mg/kg	.47
Thallium		.13	U	mg/kg	.13	.13	U	mg/kg	.13	.12	U	mg/kg	.12	.12	U	mg/kg	.12
Tin		5.7	J	mg/kg	2.1	9.2	J	mg/kg	2.1	2	U	mg/kg	2	4.4	J	mg/kg	2
Vanadium		4.4	J	mg/kg	.32	4.5	J	mg/kg	.32	10.3	J	mg/kg	.31	12		mg/kg	.3
Zinc		131		mg/kg	.25	151		mg/kg	.26	45		mg/kg	.25	71.1		mg/kg	.24

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:	R9712005				R9712006				R9712007				R9712008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45S00401				45S00501				45S00601				45S00701			
Collect Date:	29-MAR-95				29-MAR-95				29-MAR-95				29-MAR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	5.9	J	mg/kg	25	5.4	UJ	mg/kg	5.4	5.8	UJ	mg/kg	5.8	5.2	UJ	mg/kg	5.2
Arsenic	2	J	mg/kg	.7	.28	J	mg/kg	.7	.99	J	mg/kg	.7	1.7	J	mg/kg	.7
Barium	23.4	J	mg/kg	.085	4.3	J	mg/kg	.087	79.2		mg/kg	.092	13.1	J	mg/kg	.083
Beryllium	.24	J	mg/kg	.042	.07	J	mg/kg	.043	.12	J	mg/kg	.046	.11	J	mg/kg	.041
Cadmium	.93	J	mg/kg	.28	.28	U	mg/kg	.28	2.1		mg/kg	.3	.27	U	mg/kg	.27
Chromium	7.4		mg/kg	.45	4		mg/kg	.46	13.5		mg/kg	.49	3.7		mg/kg	.43
Cobalt	1.4	J	mg/kg	.57	.61	J	mg/kg	.59	1.5	J	mg/kg	.62	.56	U	mg/kg	.56
Copper	128		mg/kg	.32	5.3	J	mg/kg	.33	397		mg/kg	.35	53.6		mg/kg	.31
Cyanide	.15	J	mg/kg	1	.06	J	mg/kg	1	.2	J	mg/kg	1	.15	J	mg/kg	1
Lead	54.6		mg/kg	5	3.3		mg/kg	.5	59		mg/kg	5	5.9		mg/kg	.5
Mercury	.37		mg/kg	.1	.05	J	mg/kg	.1	2		mg/kg	.2	.09		mg/kg	.1
Nickel	15.2		mg/kg	1.1	1.5	J	mg/kg	1.1	20.9		mg/kg	1.2	4	J	mg/kg	1.1
Selenium	.13	UJ	mg/kg	.13	.13	UJ	mg/kg	.13	.58	J	mg/kg	.6	.14	J	mg/kg	.6
Silver	1.2	J	mg/kg	.49	.5	U	mg/kg	.5	19.3		mg/kg	.53	.85	J	mg/kg	.48
Thallium	.13	U	mg/kg	.13	.15	J	mg/kg	.6	.14	U	mg/kg	.14	.12	J	mg/kg	.6
Tin	5.7	J	mg/kg	2.1	2.1	U	mg/kg	2.1	32.6		mg/kg	2.3	3.3	J	mg/kg	2
Vanadium	17.7		mg/kg	.32	3.8	J	mg/kg	.33	5	J	mg/kg	.35	3.8	J	mg/kg	.31
Zinc	177		mg/kg	.25	4.7		mg/kg	.26	277		mg/kg	.28	25.4		mg/kg	.25

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Surface Soil Data

Lab Sample Number:		M8994008			R9955015		
Site		GROUP111			GROUP111		
Locator		45S00801			45S01001		
Collect Date:		21-MAY-95			24-MAY-95		
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg							
Antimony	.75	J	mg/kg	.45	2.6	J	mg/kg	5
Arsenic	.62	J	mg/kg	.16	1.5	J	mg/kg	.6
Barium	5.4	J	mg/kg	.085	56.7		mg/kg	.24
Beryllium	.07	J	mg/kg	.03	.18	J	mg/kg	.067
Cadmium	.62	U	mg/kg	.62	1.6		mg/kg	.27
Chromium	3.1		mg/kg	1.3	19.5		mg/kg	.38
Cobalt	.79	U	mg/kg	.79	1.4	J	mg/kg	.69
Copper	5.4		mg/kg	.34	337		mg/kg	.22
Cyanide	.11	U	mg/kg	.11	.12	J	mg/kg	1
Lead	5.4		mg/kg	.26	67		mg/kg	2
Mercury	.07	U	mg/kg	.07	.41		mg/kg	.1
Nickel	3	J	mg/kg	1.5	16.4		mg/kg	1.3
Selenium	.23	UJ	mg/kg	.23	.27	J	mg/kg	.5
Silver	.38	U	mg/kg	.38	5.8		mg/kg	.31
Thallium	.36	U	mg/kg	.36	.13	J	mg/kg	.6
Tin	1.9	U	mg/kg	1.9	18		mg/kg	3
Vanadium	4.1	J	mg/kg	.43	6.9	J	mg/kg	.27
Zinc	23.8		mg/kg	.3	258		mg/kg	.47

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Target Range Surface Soil Data

Lab Sample Number:		RA082008				RA082009				RA082010				RA082010RE			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		TRS00101				TRS00101D				TRS00201				TRS00201RE			
Collect Date:		27-JUN-95				27-JUN-95				27-JUN-95				27-JUN-95			
		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	11	UJ	ug/kg	11	11	UJ	ug/kg	11
Bromomethane		10	U	ug/kg	10	10	U	ug/kg	10	11	UJ	ug/kg	11	11	UJ	ug/kg	11
Vinyl chloride		10	U	ug/kg	10	10	U	ug/kg	10	11	UJ	ug/kg	11	11	UJ	ug/kg	11
Chloroethane		10	U	ug/kg	10	10	U	ug/kg	10	11	UJ	ug/kg	11	11	UJ	ug/kg	11
Methylene chloride		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
Acetone		10	U	ug/kg	10	10	U	ug/kg	10	11	UJ	ug/kg	11	11	UJ	ug/kg	11
Carbon disulfide		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
1,1-Dichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
1,1-Dichloroethene		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
1,2-Dichloroethene (total)		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
Chloroform		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
1,2-Dichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
2-Butanone		10	R	ug/kg	10	10	R	ug/kg	10	11	R	ug/kg	11	11	R	ug/kg	11
1,1,1-Trichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
Carbon tetrachloride		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
Bromodichloromethane		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
1,2-Dichloropropane		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
cis-1,3-Dichloropropene		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
Trichloroethene		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
Dibromochloromethane		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
1,1,2-Trichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
Benzene		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
trans-1,3-Dichloropropene		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
Bromoform		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
4-Methyl-2-pentanone		10	U	ug/kg	10	10	U	ug/kg	10	11	UJ	ug/kg	11	11	UJ	ug/kg	11
2-Hexanone		10	U	ug/kg	10	10	U	ug/kg	10	11	UJ	ug/kg	11	11	UJ	ug/kg	11
Tetrachloroethene		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
1,1,2,2-Tetrachloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
Toluene		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
Chlorobenzene		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
Ethylbenzene		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
Styrene		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
Xylenes (total)		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
Dichlorodifluoromethane		10	U	ug/kg	10	10	U	ug/kg	10	11	UJ	ug/kg	11	11	UJ	ug/kg	11
Trichlorofluoromethane		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
1,3-Dichlorobenzene		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
Acrolein		100	U	ug/kg	100	100	U	ug/kg	100	110	UJ	ug/kg	110	110	UJ	ug/kg	110
Iodomethane		10	U	ug/kg	10	10	U	ug/kg	10	11	UJ	ug/kg	11	11	UJ	ug/kg	11
1,4-Dichlorobenzene		5	U	ug/kg	5	690	U	ug/kg	690	730	U	ug/kg	730	5	UJ	ug/kg	5
Acrylonitrile		100	U	ug/kg	100	100	U	ug/kg	100	110	UJ	ug/kg	110	110	UJ	ug/kg	110
Dibromomethane		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
1,2-Dichlorobenzene		690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730	5	UJ	ug/kg	5
2-Chloroethylvinyl ether		10	UJ	ug/kg	10	10	UJ	ug/kg	10	11	UJ	ug/kg	11	11	UJ	ug/kg	11
Ethyl methacrylate		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
1,2,3-Trichloropropane		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
trans-1,4-Dichloro-2-butene		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
Isobutyl alcohol		210	R	ug/kg	210	210	R	ug/kg	210	220	R	ug/kg	220	220	R	ug/kg	220
1,1,1,2-Tetrachloroethane		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
1,2-Dibromo-3-chloropropane		10	UJ	ug/kg	10	10	UJ	ug/kg	10	11	UJ	ug/kg	11	11	UJ	ug/kg	11
1,2-Dibromoethane		5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Target Range Surface Soil Data

Lab Sample Number:	RA082008				RA082009				RA082010				RA082010RE			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	TRS00101				TRS00101D				TRS00201				TRS00201RE			
Collect Date:	27-JUN-95				27-JUN-95				27-JUN-95				27-JUN-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	210	R	ug/kg	210	210	R	ug/kg	210	220	R	ug/kg	220	220	R	ug/kg	220
3-Chloropropene	5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
Acetonitrile	100	UJ	ug/kg	100	100	UJ	ug/kg	100	110	UJ	ug/kg	110	110	UJ	ug/kg	110
Chloroprene	210	U	ug/kg	210	210	U	ug/kg	210	220	UJ	ug/kg	220	220	UJ	ug/kg	220
Methacrylonitrile	5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5
Methyl methacrylate	10	U	ug/kg	10	10	U	ug/kg	10	11	UJ	ug/kg	11	11	UJ	ug/kg	11
Pentachloroethane	10	U	ug/kg	10	10	U	ug/kg	10	11	UJ	ug/kg	11	11	UJ	ug/kg	11
Propionitrile	100	U	ug/kg	100	100	U	ug/kg	100	110	UJ	ug/kg	110	110	UJ	ug/kg	110
Vinyl acetate	10	U	ug/kg	10	10	U	ug/kg	10	11	UJ	ug/kg	11	11	UJ	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Target Range Surface Soil Data

Lab Sample Number:	RA082008				RA082009				RA082010			
Site	GROUP111				GROUP111				GROUP111			
Locator	TRS00101				TRS00101D				TRS00201			
Collect Date:	27-JUN-95				27-JUN-95				27-JUN-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/kg												
N-Nitrosodimethylamine	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Phenol	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Aniline	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
bis(2-Chloroethyl) ether	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Benzyl Alcohol	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
2-Methylphenol	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
bis(2-Chloroisopropyl) ether	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
N-Nitroso-di-n-propylamine	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Hexachloroethane	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Nitrobenzene	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Isophorone	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
2-Nitrophenol	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
2,4-Dimethylphenol	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Benzoic acid	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3500	UJ	ug/kg	3500
bis(2-Chloroethoxy) methane	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
2,4-Dichlorophenol	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
1,2,4-Trichlorobenzene	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Naphthalene	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
4-Chloroaniline	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Hexachlorobutadiene	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
4-Chloro-3-methylphenol	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
2-Methylnaphthalene	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Hexachlorocyclopentadiene	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
2,4,6-Trichlorophenol	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Dimethylphthalate	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
2,4,5-Trichlorophenol	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
2-Chloronaphthalene	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
2-Nitroaniline	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
Acenaphthylene	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
2,6-Dinitrotoluene	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
3-Nitroaniline	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
Acenaphthene	690	U	ug/kg	690	330	J	ug/kg	690	730	U	ug/kg	730
2,4-Dinitrophenol	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3500	UJ	ug/kg	3500
4-Nitrophenol	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
Dibenzofuran	690	U	ug/kg	690	85	J	ug/kg	690	730	U	ug/kg	730
2,4-Dinitrotoluene	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Diethylphthalate	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
4-Chlorophenyl-phenylether	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Fluorene	690	U	ug/kg	690	240	J	ug/kg	690	730	U	ug/kg	730
4-Nitroaniline	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
4,6-Dinitro-2-methylphenol	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
N-Nitrosodiphenylamine (1)	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
1,2-Diphenylhydrazine	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
4-Bromophenyl-phenylether	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Hexachlorobenzene	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Pentachlorophenol	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
Phenanthrene	690	U	ug/kg	690	3800		ug/kg	690	730	U	ug/kg	730
Anthracene	690	U	ug/kg	690	740		ug/kg	690	730	U	ug/kg	730
Di-n-Butylphthalate	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Fluoranthene	690	U	ug/kg	690	10000		ug/kg	690	730	U	ug/kg	730

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Target Range Surface Soil Data

Lab Sample Number:	RA082008				RA082009				RA082010			
Site	GROUP111				GROUP111				GROUP111			
Locator	TRS00101				TRS00101D				TRS00201			
Collect Date:	27-JUN-95				27-JUN-95				27-JUN-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Pyrene	690	U	ug/kg	690	7600		ug/kg	690	730	U	ug/kg	730
Butylbenzylphthalate	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
3,3-Dichlorobenzidine	1400	U	ug/kg	1400	1400	U	ug/kg	1400	1500	U	ug/kg	1500
Benzo (a) anthracene	690	U	ug/kg	690	4200		ug/kg	690	730	U	ug/kg	730
Chrysene	690	U	ug/kg	690	4600		ug/kg	690	730	U	ug/kg	730
bis(2-Ethylhexyl) phthalate	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Di-n-octylphthalate	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Benzo (b) fluoranthene	690	U	ug/kg	690	4800		ug/kg	690	730	U	ug/kg	730
Benzo (k) fluoranthene	690	U	ug/kg	690	4300		ug/kg	690	730	U	ug/kg	730
Benzo (a) pyrene	690	U	ug/kg	690	4200		ug/kg	690	730	U	ug/kg	730
Indeno (1,2,3-cd) pyrene	690	U	ug/kg	690	1700		ug/kg	690	730	U	ug/kg	730
Dibenz (a,h) anthracene	690	U	ug/kg	690	920		ug/kg	690	730	U	ug/kg	730
Benzo (g,h,i) perylene	690	U	ug/kg	690	1800		ug/kg	690	730	U	ug/kg	730
2-Picoline	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
Methyl methanesulfonate	690	UJ	ug/kg	690	690	UJ	ug/kg	690	730	UJ	ug/kg	730
Ethyl methanesulfonate	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Acetophenone	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
N-Nitrosopiperidine	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Phenyl-tert-butylamine	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3500	UJ	ug/kg	3500
2,6-Dichlorophenol	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
N-Nitroso-di-n-butylamine	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
N-Nitrosodiethylamine	690	UJ	ug/kg	690	690	UJ	ug/kg	690	730	UJ	ug/kg	730
N-Nitrosopyrrolidine	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Benzidine	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
1,2,4,5-Tetrachlorobenzene	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
Pentachlorobenzene	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
1-Naphthylamine	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3500	UJ	ug/kg	3500
2-Naphthylamine	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3500	UJ	ug/kg	3500
2,3,4,6-Tetrachlorophenol	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Phenacetin	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
4-Aminobiphenyl	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3500	UJ	ug/kg	3500
Pentachloronitrobenzene	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
Pronamide	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
p-(Dimethylamino)azobenzene	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
7,12-Dimethylbenz(A)Anthracene	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
3-Methylcholanthrene	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Pyridine	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
N-Nitrosomethylethylamine	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
N-Nitrosomorpholine	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
o-Toluidine	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Hexachloropropene	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3500	UJ	ug/kg	3500
p-Phenylenediamine	33000	UJ	ug/kg	33000	33000	UJ	ug/kg	33000	35000	UJ	ug/kg	35000
Safrole	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
Isosafrole	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
1,4-Naphthoquinone	69000	R	ug/kg	69000	69000	R	ug/kg	69000	73000	R	ug/kg	73000
1,3-Dinitrobenzene	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
5-Nitro-o-toluidine	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
1,3,5-Trinitrobenzene	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
4-Nitroquinoline-1-oxide	33000	R	ug/kg	33000	33000	R	ug/kg	33000	35000	R	ug/kg	35000
Methapyrilene	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3500	UJ	ug/kg	3500
3,3-Dimethylbenzidine	690	UJ	ug/kg	690	690	UJ	ug/kg	690	730	UJ	ug/kg	730
Hexachlorophene	33000	R	ug/kg	33000	33000	R	ug/kg	33000	35000	R	ug/kg	35000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Target Range Surface Soil Data

Lab Sample Number:	RA082008				RA082009				RA082010			
Site	GROUP111				GROUP111				GROUP111			
Locator	TRS00101				TRS00101D				TRS00201			
Collect Date:	27-JUN-95				27-JUN-95				27-JUN-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Aramite	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3500	U	ug/kg	3500
2-Chlorophenol	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
3- & 4-Methylphenol (2)	690	U	ug/kg	690	690	U	ug/kg	690	730	U	ug/kg	730
Hexachloropropene	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3500	UJ	ug/kg	3500
2-Acetylaminofluorene	690	UJ	ug/kg	690	690	UJ	ug/kg	690	730	UJ	ug/kg	730

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.

US Naval Station, Mayport, RCRA Facil.., Investigation Group III Report
Target Range Surface Soil Data

Lab Sample Number:		RA082008			RA082009			RA082010			RA082010DL		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		TRS00101			TRS00101D			TRS00201			TRS00201DL		
Collect Date:		27-JUN-95			27-JUN-95			27-JUN-95			27-JUN-95		
		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	.7	U ug/kg	.7	.74	U ug/kg	.74	-	ug/kg	
beta-BHC		1.4	U ug/kg	1.4	1.4	U ug/kg	1.4	1.4	U ug/kg	1.4	-	ug/kg	
delta-BHC		.7	U ug/kg	.7	.7	U ug/kg	.7	.74	U ug/kg	.74	-	ug/kg	
gamma-BHC (Lindane)		.7	U ug/kg	.7	.7	U ug/kg	.7	.74	U ug/kg	.74	-	ug/kg	
Heptachlor		.7	U ug/kg	.7	.7	U ug/kg	.7	.74	U ug/kg	.74	-	ug/kg	
Aldrin		.7	U ug/kg	.7	.7	U ug/kg	.7	.74	U ug/kg	.74	-	ug/kg	
Heptachlor epoxide		.7	U ug/kg	.7	.7	U ug/kg	.7	.74	U ug/kg	.74	-	ug/kg	
Endosulfan I		.7	U ug/kg	.7	.7	U ug/kg	.7	.74	U ug/kg	.74	-	ug/kg	
Dieldrin		.7	U ug/kg	.7	.7	U ug/kg	.7	11	J ug/kg	.74	-	ug/kg	
4,4-DDE		.7	U ug/kg	.7	.7	U ug/kg	.7	1.4	J ug/kg	1.4	-	ug/kg	
Endrin		1.4	U ug/kg	1.4	1.4	U ug/kg	1.4	1.4	U ug/kg	1.4	-	ug/kg	
Endosulfan II		1.4	U ug/kg	1.4	1.4	U ug/kg	1.4	1.4	U ug/kg	1.4	-	ug/kg	
4,4-DDD		1.4	U ug/kg	1.4	1.4	U ug/kg	1.4	1.4	U ug/kg	1.4	-	ug/kg	
Endosulfan sulfate		1.4	U ug/kg	1.4	1.4	U ug/kg	1.4	1.4	U ug/kg	1.4	-	ug/kg	
4,4-DDT		1.4	U ug/kg	1.4	1.4	U ug/kg	1.4	1.4	U ug/kg	1.4	-	ug/kg	
Methoxychlor		2.8	U ug/kg	2.8	2.8	U ug/kg	2.8	3	U ug/kg	3	-	ug/kg	
Endrin aldehyde		1.4	U ug/kg	1.4	1.4	U ug/kg	1.4	1.4	U ug/kg	1.4	-	ug/kg	
Endrin ketone		1.4	U ug/kg	1.4	1.4	U ug/kg	1.4	1.4	U ug/kg	1.4	-	ug/kg	
Chlordane		7	U ug/kg	7	7	U ug/kg	7	-	ug/kg		1100	ug/kg	74
Chlorobenzilate		21	U ug/kg	21	21	U ug/kg	21	22	U ug/kg	22	-	ug/kg	
Dialiate		42	U ug/kg	42	42	U ug/kg	42	44	U ug/kg	44	-	ug/kg	
Toxaphene		34	U ug/kg	34	35	U ug/kg	35	36	U ug/kg	36	-	ug/kg	
Isodrin		.7	U ug/kg	.7	.7	U ug/kg	.7	.74	U ug/kg	.74	-	ug/kg	
Kepone		42	UJ ug/kg	42	42	UJ ug/kg	42	44	UJ ug/kg	44	-	ug/kg	
Aroclor-1016		34	U ug/kg	34	35	U ug/kg	35	36	U ug/kg	36	-	ug/kg	
Aroclor-1221		69	U ug/kg	69	70	U ug/kg	70	74	U ug/kg	74	-	ug/kg	
Aroclor-1232		69	U ug/kg	69	70	U ug/kg	70	74	U ug/kg	74	-	ug/kg	
Aroclor-1242		34	U ug/kg	34	35	U ug/kg	35	36	U ug/kg	36	-	ug/kg	
Aroclor-1248		34	U ug/kg	34	35	U ug/kg	35	36	U ug/kg	36	-	ug/kg	
Aroclor-1254		17	U ug/kg	17	17	U ug/kg	17	18	U ug/kg	18	-	ug/kg	
Aroclor-1260		17	U ug/kg	17	17	U ug/kg	17	18	U ug/kg	18	-	ug/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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Target Range Surface Soil Data

Lab Sample Number:	RA082008				RA082009				RA082010			
Site	GROUP111				GROUP111				GROUP111			
Locator	TRS00101				TRS00101D				TRS00201			
Collect Date:	27-JUN-95				27-JUN-95				27-JUN-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg												
Antimony	1	U	mg/kg	1	1	U	mg/kg	1	1.1	U	mg/kg	1.1
Arsenic	.75	J	mg/kg	.6	.54	J	mg/kg	.6	.51	J	mg/kg	.6
Barium	4.7	J	mg/kg	.23	4.7	J	mg/kg	.23	5.4	J	mg/kg	.24
Beryllium	.08	J	mg/kg	.063	.08	J	mg/kg	.063	.07	U	mg/kg	.07
Cadmium	.25	U	mg/kg	.25	.25	U	mg/kg	.25	.26	U	mg/kg	.26
Chromium	.71	J	mg/kg	.35	1.4	J	mg/kg	.36	1.7	J	mg/kg	.38
Cobalt	.72	J	mg/kg	.65	.65	U	mg/kg	.65	.68	U	mg/kg	.68
Copper	1	UJ	mg/kg	1	1.8	J	mg/kg	.21	3.2	J	mg/kg	.22
Cyanide	.1	J	mg/kg	1.5	.08	U	mg/kg	.08	.14	J	mg/kg	1.5
Lead	4		mg/kg	.4	3.7		mg/kg	.4	3.8		mg/kg	.4
Mercury	.03	UJ	mg/kg	.03	.03	UJ	mg/kg	.03	.03	UJ	mg/kg	.03
Nickel	1.2	U	mg/kg	1.2	1.2	U	mg/kg	1.2	1.3	U	mg/kg	1.3
Selenium	.1	UJ	mg/kg	.1	.1	U	mg/kg	.1	.11	U	mg/kg	.11
Silver	.29	U	mg/kg	.29	.29	U	mg/kg	.29	.31	U	mg/kg	.31
Thallium	.13	U	mg/kg	.13	.13	U	mg/kg	.13	.13	U	mg/kg	.13
Tin	2.8	U	mg/kg	2.8	2.8	U	mg/kg	2.8	3	U	mg/kg	3
Vanadium	2.7	J	mg/kg	.25	3.2	J	mg/kg	.25	1.5	J	mg/kg	.26
Zinc	4.9		mg/kg	.44	6.6		mg/kg	.44	7.1		mg/kg	.46

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

SUBSURFACE SOIL SAMPLE ANALYSES, SWMUs 1, 23, 24, 25, 44, AND 45

US Naval Station, Mayport, RCRA F[illegible]ty Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:	R9861003				R9861005				R9861008				R9861009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01B00109				01B00208				01B00308				01B00409			
Collect Date:	03-MAY-95				03-MAY-95				03-MAY-95				03-MAY-95			
	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	11	U	ug/kg	11	11	U	ug/kg	11
Bromomethane	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Vinyl chloride	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Chloroethane	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Methylene chloride	12	U	ug/kg	12	9	U	ug/kg	9	8	U	ug/kg	8	8	U	ug/kg	8
Acetone	12	U	ug/kg	12	13	U	ug/kg	13	11	U	ug/kg	11	20	U	ug/kg	20
Carbon disulfide	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,1-Dichloroethane	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,1-Dichloroethene	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,2-Dichloroethene (total)	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Chloroform	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,2-Dichloroethane	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
2-Butanone	12	U	ug/kg	12	11	U	ug/kg	11	2	J	ug/kg	11	11	U	ug/kg	11
1,1,1-Trichloroethane	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Carbon tetrachloride	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Bromodichloromethane	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,2-Dichloropropane	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
cis-1,3-Dichloropropene	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Trichloroethene	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Dibromochloromethane	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,1,2-Trichloroethane	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Benzene	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
trans-1,3-Dichloropropene	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Bromoform	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
4-Methyl-2-pentanone	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
2-Hexanone	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Tetrachloroethene	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,1,2,2-Tetrachloroethane	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Toluene	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Chlorobenzene	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Ethylbenzene	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Styrene	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Xylenes (total)	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Dichlorodifluoromethane	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Trichlorofluoromethane	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,3-Dichlorobenzene	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Acrolein	120	UJ	ug/kg	120	110	UJ	ug/kg	110	110	UJ	ug/kg	110	110	UJ	ug/kg	110
Iodomethane	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
1,4-Dichlorobenzene	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Acrylonitrile	120	U	ug/kg	120	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Dibromomethane	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,2-Dichlorobenzene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
2-Chloroethylvinyl ether	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Ethyl methacrylate	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,2,3-Trichloropropane	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
trans-1,4-Dichloro-2-butene	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Isobutyl alcohol	240	U	ug/kg	240	220	U	ug/kg	220	220	U	ug/kg	220	220	U	ug/kg	220
1,1,1,2-Tetrachloroethane	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,2-Dibromo-3-chloropropane	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
1,2-Dibromoethane	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:	R9861003				R9861005				R9861008				R9861009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01B00109				01B00208				01B00308				01B00409			
Collect Date:	03-MAY-95				03-MAY-95				03-MAY-95				03-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	240	R	ug/kg	240	220	R	ug/kg	220	220	R	ug/kg	220	220	R	ug/kg	220
3-Chloropropene	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Acetonitrile	120	U	ug/kg	120	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Chloroprene	240	U	ug/kg	240	220	U	ug/kg	220	220	U	ug/kg	220	220	U	ug/kg	220
Methacrylonitrile	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Methyl methacrylate	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Pentachloroethane	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Propionitrile	120	U	ug/kg	120	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Vinyl acetate	12	U	ug/kg	12	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:		R9861011				R9861013				R9861014				R9861016			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		01B00508				01B00608				01B00608D				01B00708			
Collect Date:		03-MAY-95				03-MAY-95				03-MAY-95				03-MAY-95			
		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	12	U	ug/kg	12	-		ug/kg	
Bromomethane		11	UJ	ug/kg	11	11	U	ug/kg	11	12	U	ug/kg	12	-		ug/kg	
Vinyl chloride		11	U	ug/kg	11	11	U	ug/kg	11	12	U	ug/kg	12	-		ug/kg	
Chloroethane		11	U	ug/kg	11	11	U	ug/kg	11	12	U	ug/kg	12	-		ug/kg	
Methylene chloride		10	U	ug/kg	10	14	U	ug/kg	14	16	U	ug/kg	16	-		ug/kg	
Acetone		15	U	ug/kg	15	24	U	ug/kg	24	25	U	ug/kg	25	-		ug/kg	
Carbon disulfide		2	J	ug/kg	5	2	J	ug/kg	6	1	J	ug/kg	6	-		ug/kg	
1,1-Dichloroethane		5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
1,1-Dichloroethene		5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
1,2-Dichloroethene (total)		5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
Chloroform		5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
1,2-Dichloroethane		5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
2-Butanone		11	U	ug/kg	11	11	U	ug/kg	11	12	U	ug/kg	12	-		ug/kg	
1,1,1-Trichloroethane		5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
Carbon tetrachloride		5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
Bromodichloromethane		5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
1,2-Dichloropropane		5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
cis-1,3-Dichloropropene		5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
Trichloroethene		5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
Dibromochloromethane		5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
1,1,2-Trichloroethane		5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
Benzene		5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
trans-1,3-Dichloropropene		5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
Bromoform		5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
4-Methyl-2-pentanone		11	U	ug/kg	11	11	U	ug/kg	11	12	U	ug/kg	12	-		ug/kg	
2-Hexanone		11	U	ug/kg	11	11	U	ug/kg	11	12	U	ug/kg	12	-		ug/kg	
Tetrachloroethene		5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
1,1,2,2-Tetrachloroethane		5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
Toluene		5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
Chlorobenzene		5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
Ethylbenzene		5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
Styrene		5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
Xylenes (total)		4	J	ug/kg	5	1	J	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
Dichlorodifluoromethane		11	U	ug/kg	11	11	U	ug/kg	11	12	U	ug/kg	12	-		ug/kg	
Trichlorofluoromethane		5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
1,3-Dichlorobenzene		5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	700	R	ug/kg	700
Acrolein		110	UJ	ug/kg	110	110	UJ	ug/kg	110	120	UJ	ug/kg	120	-		ug/kg	
Iodomethane		11	U	ug/kg	11	11	U	ug/kg	11	12	U	ug/kg	12	-		ug/kg	
1,4-Dichlorobenzene		5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	700	R	ug/kg	700
Acrylonitrile		110	U	ug/kg	110	110	U	ug/kg	110	120	U	ug/kg	120	-		ug/kg	

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:	R9861011				R9861013				R9861014				R9861016			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01B00508				01B00608				01B00608D				01B00708			
Collect Date:	03-MAY-95				03-MAY-95				03-MAY-95				03-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
1,2-Dichlorobenzene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
2-Chloroethylvinyl ether	11	U	ug/kg	11	11	U	ug/kg	11	12	U	ug/kg	12	-		ug/kg	
Ethyl methacrylate	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
1,2,3-Trichloropropane	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
Isobutyl alcohol	210	UJ	ug/kg	210	230	U	ug/kg	230	240	U	ug/kg	240	-		ug/kg	
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11	11	U	ug/kg	11	12	U	ug/kg	12	-		ug/kg	
1,2-Dibromoethane	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
1,4-Dioxane	210	R	ug/kg	210	230	R	ug/kg	230	240	R	ug/kg	240	-		ug/kg	
3-Chloropropene	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
Acetonitrile	110	U	ug/kg	110	110	U	ug/kg	110	120	U	ug/kg	120	-		ug/kg	
Chloroprene	210	U	ug/kg	210	230	U	ug/kg	230	240	U	ug/kg	240	-		ug/kg	
Methacrylonitrile	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
Methyl methacrylate	11	U	ug/kg	11	11	U	ug/kg	11	12	U	ug/kg	12	-		ug/kg	
Pentachloroethane	11	U	ug/kg	11	11	U	ug/kg	11	12	U	ug/kg	12	-		ug/kg	
Propionitrile	110	U	ug/kg	110	110	U	ug/kg	110	120	U	ug/kg	120	-		ug/kg	
Vinyl acetate	11	U	ug/kg	11	11	U	ug/kg	11	12	U	ug/kg	12	-		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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:	R9861016			M8994011			M8985004			M8985006		
Site	GROUP111			GROUP111			GROUP111			GROUP111		
Locator	01B00708			01B00807			23B00105			23B00406		
Collect Date:	03-MAY-95			21-MAY-95			19-MAY-95			19-MAY-95		
	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	12 U	ug/kg	12	11 U	ug/kg	11
Bromomethane	11 U	ug/kg	11	10 U	ug/kg	10	12 UJ	ug/kg	12	11 UJ	ug/kg	11
Vinyl chloride	11 U	ug/kg	11	10 U	ug/kg	10	12 U	ug/kg	12	11 U	ug/kg	11
Chloroethane	11 U	ug/kg	11	10 U	ug/kg	10	12 U	ug/kg	12	11 U	ug/kg	11
Methylene chloride	8 U	ug/kg	8	8 U	ug/kg	8	16 U	ug/kg	16	14 U	ug/kg	14
Acetone	11 U	ug/kg	11	10 U	ug/kg	10	12 U	ug/kg	12	11 U	ug/kg	11
Carbon disulfide	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
1,1-Dichloroethane	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
1,1-Dichloroethene	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
1,2-Dichloroethene (total)	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Chloroform	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
1,2-Dichloroethane	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
2-Butanone	11 U	ug/kg	11	10 U	ug/kg	10	12 U	ug/kg	12	11 U	ug/kg	11
1,1,1-Trichloroethane	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Carbon tetrachloride	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Bromodichloromethane	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
1,2-Dichloropropane	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
cis-1,3-Dichloropropene	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Trichloroethene	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Dibromochloromethane	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
1,1,2-Trichloroethane	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Benzene	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
trans-1,3-Dichloropropene	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Bromoform	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
4-Methyl-2-pentanone	11 U	ug/kg	11	10 U	ug/kg	10	12 U	ug/kg	12	11 U	ug/kg	11
2-Hexanone	11 U	ug/kg	11	10 U	ug/kg	10	12 U	ug/kg	12	11 U	ug/kg	11
Tetrachloroethene	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
1,1,2,2-Tetrachloroethane	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Toluene	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Chlorobenzene	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Ethylbenzene	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Styrene	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Xylenes (total)	1 J	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Dichlorodifluoromethane	11 U	ug/kg	11	10 U	ug/kg	10	12 U	ug/kg	12	11 U	ug/kg	11
Trichlorofluoromethane	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
1,3-Dichlorobenzene	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Acrolein	110 UJ	ug/kg	110	100 U	ug/kg	100	120 U	ug/kg	120	110 U	ug/kg	110
Iodomethane	11 U	ug/kg	11	10 U	ug/kg	10	12 U	ug/kg	12	11 U	ug/kg	11
1,4-Dichlorobenzene	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5
Acrylonitrile	110 U	ug/kg	110	100 U	ug/kg	100	120 U	ug/kg	120	110 U	ug/kg	110

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:	R9861016				M8994011				M8985004				M8985006			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01B00708				01B00807				23B00105				23B00406			
Collect Date:	03-MAY-95				21-MAY-95				19-MAY-95				19-MAY-95			
	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	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dichlorobenzene	5	U	ug/kg	5	350	U	ug/kg	350	6	U	ug/kg	6	5	U	ug/kg	5
2-Chloroethylvinyl ether	11	U	ug/kg	11	10	U	ug/kg	10	12	U	ug/kg	12	11	U	ug/kg	11
Ethyl methacrylate	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,2,3-Trichloropropane	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Isobutyl alcohol	210	U	ug/kg	210	210	U	ug/kg	210	240	U	ug/kg	240	220	U	ug/kg	220
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11	10	U	ug/kg	10	12	U	ug/kg	12	11	U	ug/kg	11
1,2-Dibromoethane	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
1,4-Dioxane	210	R	ug/kg	210	210	R	ug/kg	210	240	R	ug/kg	240	220	R	ug/kg	220
3-Chloropropene	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Acetonitrile	110	U	ug/kg	110	100	U	ug/kg	100	120	U	ug/kg	120	110	U	ug/kg	110
Chloroprene	210	U	ug/kg	210	210	U	ug/kg	210	240	U	ug/kg	240	220	U	ug/kg	220
Methacrylonitrile	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5
Methyl methacrylate	11	U	ug/kg	11	10	U	ug/kg	10	12	U	ug/kg	12	11	U	ug/kg	11
Pentachloroethane	11	U	ug/kg	11	10	U	ug/kg	10	12	U	ug/kg	12	11	U	ug/kg	11
Propionitrile	110	U	ug/kg	110	100	U	ug/kg	100	120	U	ug/kg	120	110	U	ug/kg	110
Vinyl acetate	11	U	ug/kg	11	10	U	ug/kg	10	12	U	ug/kg	12	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:		M8985007			M8994006			M8994001			M8994002		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		23B01606			23B02108			23B02407			23B02807		
Collect Date:		19-MAY-95			20-MAY-95			20-MAY-95			20-MAY-95		
	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	U	ug/kg	11	
Bromomethane	11	UJ	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	
Vinyl chloride	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	
Chloroethane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	
Methylene chloride	14	U	ug/kg	14	10	U	ug/kg	10	9	U	ug/kg	9	
Acetone	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	
Carbon disulfide	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
1,1-Dichloroethane	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
1,1-Dichloroethene	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
1,2-Dichloroethene (total)	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
Chloroform	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
1,2-Dichloroethane	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
2-Butanone	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	
1,1,1-Trichloroethane	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
Carbon tetrachloride	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
Bromodichloromethane	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
1,2-Dichloropropane	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
cis-1,3-Dichloropropene	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
Trichloroethene	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
Dibromochloromethane	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
1,1,2-Trichloroethane	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
Benzene	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
trans-1,3-Dichloropropene	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
Bromoform	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
4-Methyl-2-pentanone	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	
2-Hexanone	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	
Tetrachloroethene	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
1,1,2,2-Tetrachloroethane	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
Toluene	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
Chlorobenzene	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
Ethylbenzene	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
Styrene	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
Xylenes (total)	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
Dichlorodifluoromethane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	
Trichlorofluoromethane	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
1,3-Dichlorobenzene	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
Acrolein	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	
Iodomethane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	
1,4-Dichlorobenzene	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	
Acrylonitrile	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	

	VALUE	QUAL	UNITS	DL
Chloromethane	11	U	ug/kg	11
Bromomethane	11	U	ug/kg	11
Vinyl chloride	11	U	ug/kg	11
Chloroethane	11	U	ug/kg	11
Methylene chloride	6	U	ug/kg	6
Acetone	11	U	ug/kg	11
Carbon disulfide	5	U	ug/kg	5
1,1-Dichloroethane	5	U	ug/kg	5
1,1-Dichloroethene	5	U	ug/kg	5
1,2-Dichloroethene (total)	5	U	ug/kg	5
Chloroform	5	U	ug/kg	5
1,2-Dichloroethane	5	U	ug/kg	5
2-Butanone	11	U	ug/kg	11
1,1,1-Trichloroethane	5	U	ug/kg	5
Carbon tetrachloride	5	U	ug/kg	5
Bromodichloromethane	5	U	ug/kg	5
1,2-Dichloropropane	5	U	ug/kg	5
cis-1,3-Dichloropropene	5	U	ug/kg	5
Trichloroethene	5	U	ug/kg	5
Dibromochloromethane	5	U	ug/kg	5
1,1,2-Trichloroethane	5	U	ug/kg	5
Benzene	5	U	ug/kg	5
trans-1,3-Dichloropropene	5	U	ug/kg	5
Bromoform	5	U	ug/kg	5
4-Methyl-2-pentanone	11	U	ug/kg	11
2-Hexanone	11	U	ug/kg	11
Tetrachloroethene	5	U	ug/kg	5
1,1,2,2-Tetrachloroethane	5	U	ug/kg	5
Toluene	5	U	ug/kg	5
Chlorobenzene	5	U	ug/kg	5
Ethylbenzene	5	U	ug/kg	5
Styrene	5	U	ug/kg	5
Xylenes (total)	5	U	ug/kg	5
Dichlorodifluoromethane	11	U	ug/kg	11
Trichlorofluoromethane	5	U	ug/kg	5
1,3-Dichlorobenzene	420	U	ug/kg	420
Acrolein	110	U	ug/kg	110
Iodomethane	11	U	ug/kg	11
1,4-Dichlorobenzene	420	U	ug/kg	420
Acrylonitrile	110	U	ug/kg	110

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SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:	M8985007				M8994006				M8994001				M8994002			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23B01606				23B02108				23B02407				23B02807			
Collect Date:	19-MAY-95				20-MAY-95				20-MAY-95				20-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dichlorobenzene	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
2-Chloroethylvinyl ether	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Ethyl methacrylate	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,2,3-Trichloropropane	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Isobutyl alcohol	210	U	ug/kg	210	230	U	ug/kg	230	220	U	ug/kg	220	220	U	ug/kg	220
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
1,2-Dibromoethane	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,4-Dioxane	210	R	ug/kg	210	230	R	ug/kg	230	220	R	ug/kg	220	220	R	ug/kg	220
3-Chloropropene	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Acetonitrile	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Chloroprene	210	U	ug/kg	210	230	U	ug/kg	230	220	U	ug/kg	220	220	U	ug/kg	220
Methacrylonitrile	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Methyl methacrylate	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Pentachloroethane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Propionitrile	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Vinyl acetate	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:		M8994005			M8985003			M8985005			M8994007		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		23B02908			24B00707			44B00107			44B00908		
Collect Date:		20-MAY-95			19-MAY-95			19-MAY-95			20-MAY-95		
		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	11 U	ug/kg	11	11 U	ug/kg	11
Bromomethane		10 U	ug/kg	10	11 UJ	ug/kg	11	11 UJ	ug/kg	11	11 U	ug/kg	11
Vinyl chloride		10 U	ug/kg	10	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Chloroethane		10 U	ug/kg	10	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Methylene chloride		6 U	ug/kg	6	17 U	ug/kg	17	16 U	ug/kg	16	7 U	ug/kg	7
Acetone		10 U	ug/kg	10	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Carbon disulfide		5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
1,1-Dichloroethane		5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
1,1-Dichloroethene		5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
1,2-Dichloroethene (total)		5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Chloroform		5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
1,2-Dichloroethane		5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
2-Butanone		10 U	ug/kg	10	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
1,1,1-Trichloroethane		5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Carbon tetrachloride		5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Bromodichloromethane		5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
1,2-Dichloropropane		5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
cis-1,3-Dichloropropene		5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Trichloroethene		5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Dibromochloromethane		5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
1,1,2-Trichloroethane		5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Benzene		5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
trans-1,3-Dichloropropene		5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Bromoform		5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
4-Methyl-2-pentanone		10 U	ug/kg	10	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
2-Hexanone		10 U	ug/kg	10	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Tetrachloroethene		5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
1,1,2,2-Tetrachloroethane		5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Toluene		5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Chlorobenzene		5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Ethylbenzene		5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Styrene		5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Xylenes (total)		5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Dichlorodifluoromethane		10 U	ug/kg	10	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Trichlorofluoromethane		5 U	ug/kg	5	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
1,3-Dichlorobenzene		5 U	ug/kg	5	6 U	ug/kg	6	370 U	ug/kg	370	5 U	ug/kg	5
Acrolein		100 U	ug/kg	100	110 U	ug/kg	110	110 U	ug/kg	110	110 U	ug/kg	110
Iodomethane		10 U	ug/kg	10	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
1,4-Dichlorobenzene		5 U	ug/kg	5	370 U	ug/kg	370	370 U	ug/kg	370	5 U	ug/kg	5
Acrylonitrile		100 U	ug/kg	100	110 U	ug/kg	110	110 U	ug/kg	110	110 U	ug/kg	110

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Lab Sample Number:	M8994005				M8985003				M8985005				M8994007			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23B02908				24B00707				44B00107				44B00908			
Collect Date:	20-MAY-95				19-MAY-95				19-MAY-95				20-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichlorobenzene	350	U	ug/kg	350	6	U	ug/kg	6	370	U	ug/kg	370	5	U	ug/kg	5
2-Chloroethylvinyl ether	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Ethyl methacrylate	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,2,3-Trichloropropane	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Isobutyl alcohol	210	U	ug/kg	210	220	U	ug/kg	220	220	U	ug/kg	220	220	U	ug/kg	220
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dibromo-3-chloropropane	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
1,2-Dibromoethane	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,4-Dioxane	210	R	ug/kg	210	220	R	ug/kg	220	220	R	ug/kg	220	220	R	ug/kg	220
3-Chloropropene	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Acetonitrile	100	U	ug/kg	100	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Chloroprene	210	U	ug/kg	210	220	U	ug/kg	220	220	U	ug/kg	220	220	U	ug/kg	220
Methacrylonitrile	5	U	ug/kg	5	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Methyl methacrylate	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Pentachloroethane	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Propionitrile	100	U	ug/kg	100	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Vinyl acetate	10	U	ug/kg	10	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.

US Naval Station, Mayport, RCRA Facil.., Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:		R9955018			M8994009			R9955016			R9861016RE		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		44B01006			45B00805			45B01005			01B00708RE		
Collect Date:		24-MAY-95			21-MAY-95			24-MAY-95			03-MAY-95		
	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	12	U	ug/kg	12	-	ug/kg	
Bromomethane	12	UJ	ug/kg	12	11	U	ug/kg	11	12	UJ	ug/kg	12	-	ug/kg	
Vinyl chloride	12	U	ug/kg	12	11	U	ug/kg	11	12	U	ug/kg	12	-	ug/kg	
Chloroethane	12	U	ug/kg	12	11	U	ug/kg	11	12	U	ug/kg	12	-	ug/kg	
Methylene chloride	6	U	ug/kg	6	8	U	ug/kg	8	6	U	ug/kg	6	-	ug/kg	
Acetone	12	U	ug/kg	12	11	U	ug/kg	11	12	U	ug/kg	12	-	ug/kg	
Carbon disulfide	2	J	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-	ug/kg	
1,1-Dichloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-	ug/kg	
1,1-Dichloroethene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-	ug/kg	
1,2-Dichloroethene (total)	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-	ug/kg	
Chloroform	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-	ug/kg	
1,2-Dichloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-	ug/kg	
2-Butanone	12	U	ug/kg	12	11	U	ug/kg	11	12	U	ug/kg	12	-	ug/kg	
1,1,1-Trichloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-	ug/kg	
Carbon tetrachloride	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-	ug/kg	
Bromodichloromethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-	ug/kg	
1,2-Dichloropropane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-	ug/kg	
cis-1,3-Dichloropropene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-	ug/kg	
Trichloroethene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-	ug/kg	
Dibromochloromethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-	ug/kg	
1,1,2-Trichloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-	ug/kg	
Benzene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-	ug/kg	
trans-1,3-Dichloropropene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-	ug/kg	
Bromoform	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-	ug/kg	
4-Methyl-2-pentanone	12	U	ug/kg	12	11	U	ug/kg	11	12	U	ug/kg	12	-	ug/kg	
2-Hexanone	12	U	ug/kg	12	11	U	ug/kg	11	12	U	ug/kg	12	-	ug/kg	
Tetrachloroethene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-	ug/kg	
1,1,2,2-Tetrachloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-	ug/kg	
Toluene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-	ug/kg	
Chlorobenzene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-	ug/kg	
Ethylbenzene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-	ug/kg	
Styrene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-	ug/kg	
Xylenes (total)	1	J	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-	ug/kg	
Dichlorodifluoromethane	12	U	ug/kg	12	11	U	ug/kg	11	12	U	ug/kg	12	-	ug/kg	
Trichlorofluoromethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-	ug/kg	
1,3-Dichlorobenzene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	700	UJ	ug/kg	700
Acrolein	120	U	ug/kg	120	110	U	ug/kg	110	120	U	ug/kg	120	-	ug/kg	
Iodomethane	12	UJ	ug/kg	12	11	U	ug/kg	11	12	UJ	ug/kg	12	-	ug/kg	
1,4-Dichlorobenzene	710	U	ug/kg	710	6	U	ug/kg	6	6	U	ug/kg	6	700	UJ	ug/kg	700
Acrylonitrile	120	U	ug/kg	120	110	U	ug/kg	110	120	U	ug/kg	120	-	ug/kg	

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Lab Sample Number:	R9955018				M8994009				R9955016				R9861016RE			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	44B01006				45B00805				45B01005				01B00708RE			
Collect Date:	24-MAY-95				21-MAY-95				24-MAY-95				03-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
1,2-Dichlorobenzene	6	U	ug/kg	6	6	U	ug/kg	6	770	U	ug/kg	770	700	UJ	ug/kg	700
2-Chloroethylvinyl ether	12	U	ug/kg	12	11	U	ug/kg	11	12	U	ug/kg	12	-		ug/kg	
Ethyl methacrylate	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
1,2,3-Trichloropropane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
trans-1,4-Dichloro-2-butene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
Isobutyl alcohol	240	U	ug/kg	240	220	U	ug/kg	220	240	U	ug/kg	240	-		ug/kg	
1,1,1,2-Tetrachloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
1,2-Dibromo-3-chloropropane	12	U	ug/kg	12	11	U	ug/kg	11	12	U	ug/kg	12	-		ug/kg	
1,2-Dibromoethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
1,4-Dioxane	240	R	ug/kg	240	220	R	ug/kg	220	240	R	ug/kg	240	-		ug/kg	
3-Chloropropene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
Acetonitrile	120	U	ug/kg	120	110	U	ug/kg	110	120	U	ug/kg	120	-		ug/kg	
Chloroprene	240	U	ug/kg	240	220	U	ug/kg	220	240	U	ug/kg	240	-		ug/kg	
Methacrylonitrile	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	-		ug/kg	
Methyl methacrylate	12	U	ug/kg	12	11	U	ug/kg	11	12	U	ug/kg	12	-		ug/kg	
Pentachloroethane	12	U	ug/kg	12	11	U	ug/kg	11	12	U	ug/kg	12	-		ug/kg	
Propionitrile	120	U	ug/kg	120	110	U	ug/kg	110	120	U	ug/kg	120	-		ug/kg	
Vinyl acetate	12	U	ug/kg	12	11	U	ug/kg	11	12	U	ug/kg	12	-		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.

US Naval Station, Mayport, RCRA Faci , Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:	R9861003				R9861005				R9861008				R9861009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01B00109				01B00208				01B00308				01B00409			
Collect Date:	03-MAY-95				03-MAY-95				03-MAY-95				03-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/kg																
N-Nitrosodimethylamine	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Phenol	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Aniline	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
bis(2-Chloroethyl) ether	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Benzyl Alcohol	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
2-Methylphenol	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
bis(2-Chloroisopropyl) ether	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
N-Nitroso-di-n-propylamine	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Hexachloroethane	800	UJ	ug/kg	800	720	UJ	ug/kg	720	690	UJ	ug/kg	690	790	U	ug/kg	790
Nitrobenzene	800	UJ	ug/kg	800	720	UJ	ug/kg	720	690	UJ	ug/kg	690	790	U	ug/kg	790
Isophorone	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
2-Nitrophenol	800	U	ug/kg	800	720	U	ug/kg	720	690	UJ	ug/kg	690	790	U	ug/kg	790
2,4-Dimethylphenol	800	UJ	ug/kg	800	720	UJ	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Benzoic acid	3900	UJ	ug/kg	3900	3500	UJ	ug/kg	3500	3400	UJ	ug/kg	3400	3800	U	ug/kg	3800
bis(2-Chloroethoxy) methane	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
2,4-Dichlorophenol	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
1,2,4-Trichlorobenzene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Naphthalene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
4-Chloroaniline	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Hexachlorobutadiene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
4-Chloro-3-methylphenol	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
2-Methylnaphthalene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Hexachlorocyclopentadiene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
2,4,6-Trichlorophenol	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Dimethylphthalate	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
2,4,5-Trichlorophenol	3900	U	ug/kg	3900	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3800	U	ug/kg	3800
2-Chloronaphthalene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
2-Nitroaniline	3900	UJ	ug/kg	3900	3500	UJ	ug/kg	3500	3400	UJ	ug/kg	3400	3800	U	ug/kg	3800
Acenaphthylene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
2,6-Dinitrotoluene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
3-Nitroaniline	3900	U	ug/kg	3900	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3800	U	ug/kg	3800
Acenaphthene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
2,4-Dinitrophenol	3900	U	ug/kg	3900	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3800	UJ	ug/kg	3800
4-Nitrophenol	3900	U	ug/kg	3900	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3800	U	ug/kg	3800
Dibenzofuran	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
2,4-Dinitrotoluene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Diethylphthalate	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
4-Chlorophenyl-phenylether	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Fluorene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
4-Nitroaniline	3900	UJ	ug/kg	3900	3500	UJ	ug/kg	3500	3400	UJ	ug/kg	3400	3800	UJ	ug/kg	3800
4,6-Dinitro-2-methylphenol	3900	U	ug/kg	3900	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3800	U	ug/kg	3800
N-Nitrosodiphenylamine (1)	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
1,2-Diphenylhydrazine	800	UJ	ug/kg	800	720	UJ	ug/kg	720	690	UJ	ug/kg	690	790	U	ug/kg	790
4-Bromophenyl-phenylether	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Hexachlorobenzene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Pentachlorophenol	3900	U	ug/kg	3900	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3800	U	ug/kg	3800
Phenanthrene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Anthracene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Di-n-Butylphthalate	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Fluoranthene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790

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SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:	R9861003				R9861005				R9861008				R9861009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01B00109				01B00208				01B00308				01B00409			
Collect Date:	03-MAY-95				03-MAY-95				03-MAY-95				03-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Pyrene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Butylbenzylphthalate	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
3,3-Dichlorobenzidine	1600	U	ug/kg	1600	1400	U	ug/kg	1400	1400	U	ug/kg	1400	1600	U	ug/kg	1600
Benzo (a) anthracene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Chrysene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
bis(2-Ethylhexyl) phthalate	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Di-n-octylphthalate	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Benzo (b) fluoranthene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Benzo (k) fluoranthene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Benzo (a) pyrene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Indeno (1,2,3-cd) pyrene	800	UJ	ug/kg	800	720	UJ	ug/kg	720	690	UJ	ug/kg	690	790	U	ug/kg	790
Dibenz (a,h) anthracene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Benzo (g,h,i) perylene	800	UJ	ug/kg	800	720	UJ	ug/kg	720	690	UJ	ug/kg	690	790	U	ug/kg	790
2-Picoline	3900	U	ug/kg	3900	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3800	U	ug/kg	3800
Methyl methanesulfonate	800	UJ	ug/kg	800	720	UJ	ug/kg	720	690	UJ	ug/kg	690	790	UJ	ug/kg	790
Ethyl methanesulfonate	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Acetophenone	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
N-Nitrosopiperidine	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Phenyl-tert-butylamine	3900	U	ug/kg	3900	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3800	UJ	ug/kg	3800
2,6-Dichlorophenol	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
N-Nitroso-di-n-butylamine	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
N-Nitrosodiethylamine	800	UJ	ug/kg	800	720	UJ	ug/kg	720	690	UJ	ug/kg	690	790	UJ	ug/kg	790
N-Nitrosopyrrolidine	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Benzidine	3900	U	ug/kg	3900	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3800	U	ug/kg	3800
1,2,4,5-Tetrachlorobenzene	3900	U	ug/kg	3900	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3800	U	ug/kg	3800
Pentachlorobenzene	3900	U	ug/kg	3900	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3800	U	ug/kg	3800
1-Naphthylamine	3900	U	ug/kg	3900	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3800	U	ug/kg	3800
2-Naphthylamine	3900	UJ	ug/kg	3900	3500	UJ	ug/kg	3500	3400	UJ	ug/kg	3400	3800	UJ	ug/kg	3800
2,3,4,6-Tetrachlorophenol	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Phenacetin	800	UJ	ug/kg	800	720	UJ	ug/kg	720	690	UJ	ug/kg	690	790	UJ	ug/kg	790
4-Aminobiphenyl	3900	U	ug/kg	3900	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3800	U	ug/kg	3800
Pentachloronitrobenzene	3900	U	ug/kg	3900	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3800	U	ug/kg	3800
Pronamide	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
p-(Dimethylamino)azobenzene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
7,12-Dimethylbenz(A)Anthracene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
3-Methylcholanthrene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Pyridine	3900	U	ug/kg	3900	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3800	UJ	ug/kg	3800
N-Nitrosomethylethylamine	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
N-Nitrosomorpholine	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
o-Toluidine	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Hexachloropropene	3900	UJ	ug/kg	3900	3500	UJ	ug/kg	3500	3400	UJ	ug/kg	3400	3800	UJ	ug/kg	3800
p-Phenylenediamine	39000	U	ug/kg	39000	35000	U	ug/kg	35000	34000	U	ug/kg	34000	38000	U	ug/kg	38000
Safrole	3900	U	ug/kg	3900	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3800	U	ug/kg	3800
Isosafrole	3900	U	ug/kg	3900	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3800	U	ug/kg	3800
1,4-Naphthoquinone	80000	U	ug/kg	80000	72000	U	ug/kg	72000	69000	U	ug/kg	69000	79000	U	ug/kg	79000
1,3-Dinitrobenzene	800	UJ	ug/kg	800	720	UJ	ug/kg	720	690	UJ	ug/kg	690	790	U	ug/kg	790
5-Nitro-o-toluidine	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	UJ	ug/kg	790
1,3,5-Trinitrobenzene	800	UJ	ug/kg	800	720	UJ	ug/kg	720	690	UJ	ug/kg	690	790	UJ	ug/kg	790
4-Nitroquinoline-1-oxide	39000	R	ug/kg	39000	35000	R	ug/kg	35000	34000	R	ug/kg	34000	38000	R	ug/kg	38000
Methapyrilene	3900	UJ	ug/kg	3900	3500	UJ	ug/kg	3500	3400	UJ	ug/kg	3400	3800	UJ	ug/kg	3800
3,3-Dimethylbenzidine	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	UJ	ug/kg	790
Hexachlorophene	39000	UJ	ug/kg	39000	35000	UJ	ug/kg	35000	34000	UJ	ug/kg	34000	38000	UJ	ug/kg	38000

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SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:	R9861003				R9861005				R9861008				R9861009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01B00109				01B00208				01B00308				01B00409			
Collect Date:	03-MAY-95				03-MAY-95				03-MAY-95				03-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Aramite	3900	U	ug/kg	3900	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3800	R	ug/kg	3800
2-Chlorophenol	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
3- & 4-Methylphenol (2)	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	U	ug/kg	790
Hexachloropropene	3900	UJ	ug/kg	3900	3500	UJ	ug/kg	3500	3400	UJ	ug/kg	3400	3800	UJ	ug/kg	3800
2-Acetylaminofluorene	800	U	ug/kg	800	720	U	ug/kg	720	690	U	ug/kg	690	790	UJ	ug/kg	790

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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Lab Sample Number:	R9861011				R9861013				R9861014				R9861016			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01B00508				01B00608				01B00608D				01B00708			
Collect Date:	03-MAY-95				03-MAY-95				03-MAY-95				03-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/kg																
N-Nitrosodimethylamine	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Phenol	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Aniline	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
bis(2-Chloroethyl) ether	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Benzyl Alcohol	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
2-Methylphenol	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
bis(2-Chloroisopropyl) ether	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
N-Nitroso-di-n-propylamine	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Hexachloroethane	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Nitrobenzene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Isophorone	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
2-Nitrophenol	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
2,4-Dimethylphenol	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Benzoic acid	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3600	U	ug/kg	3600	3400	R	ug/kg	3400
bis(2-Chloroethoxy) methane	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
2,4-Dichlorophenol	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
1,2,4-Trichlorobenzene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Naphthalene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
4-Chloroaniline	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Hexachlorobutadiene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
4-Chloro-3-methylphenol	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
2-Methylnaphthalene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Hexachlorocyclopentadiene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
2,4,6-Trichlorophenol	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Dimethylphthalate	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
2,4,5-Trichlorophenol	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3600	U	ug/kg	3600	3400	R	ug/kg	3400
2-Chloronaphthalene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
2-Nitroaniline	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3600	U	ug/kg	3600	3400	R	ug/kg	3400
Acenaphthylene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
2,6-Dinitrotoluene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
3-Nitroaniline	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3600	U	ug/kg	3600	3400	R	ug/kg	3400
Acenaphthene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
2,4-Dinitrophenol	3400	UJ	ug/kg	3400	3600	UJ	ug/kg	3600	3600	UJ	ug/kg	3600	3400	R	ug/kg	3400
4-Nitrophenol	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3600	U	ug/kg	3600	3400	R	ug/kg	3400
Dibenzofuran	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
2,4-Dinitrotoluene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Diethylphthalate	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
4-Chlorophenyl-phenylether	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Fluorene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
4-Nitroaniline	3400	UJ	ug/kg	3400	3600	UJ	ug/kg	3600	3600	UJ	ug/kg	3600	3400	R	ug/kg	3400

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SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:	R9861011				R9861013				R9861014				R9861016			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01B00508				01B00608				01B00608D				01B00708			
Collect Date:	03-MAY-95				03-MAY-95				03-MAY-95				03-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3600	U	ug/kg	3600	3400	R	ug/kg	3400
N-Nitrosodiphenylamine (1)	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
1,2-Diphenylhydrazine	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
4-Bromophenyl-phenylether	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Hexachlorobenzene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Pentachlorophenol	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3600	U	ug/kg	3600	3400	R	ug/kg	3400
Phenanthrene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Anthracene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Di-n-Butylphthalate	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Fluoranthene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Pyrene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Butylbenzylphthalate	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
3,3-Dichlorobenzidine	1400	U	ug/kg	1400	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1400	R	ug/kg	1400
Benzo (a) anthracene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Chrysene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
bis(2-Ethylhexyl) phthalate	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Di-n-octylphthalate	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Benzo (b) fluoranthene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Benzo (k) fluoranthene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Benzo (a) pyrene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Indeno (1,2,3-cd) pyrene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Dibenz (a,h) anthracene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Benzo (g,h,i) perylene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
2-Picoline	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3600	U	ug/kg	3600	3400	R	ug/kg	3400
Methyl methanesulfonate	700	UJ	ug/kg	700	730	UJ	ug/kg	730	750	UJ	ug/kg	750	700	R	ug/kg	700
Ethyl methanesulfonate	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Acetophenone	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
N-Nitrosopiperidine	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Phenyl-tert-butylamine	3400	UJ	ug/kg	3400	3600	UJ	ug/kg	3600	3600	UJ	ug/kg	3600	3400	R	ug/kg	3400
2,6-Dichlorophenol	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
N-Nitroso-di-n-butylamine	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
N-Nitrosodiethylamine	700	UJ	ug/kg	700	730	UJ	ug/kg	730	750	UJ	ug/kg	750	700	R	ug/kg	700
N-Nitrosopyrrolidine	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Benzidine	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3600	U	ug/kg	3600	3400	R	ug/kg	3400
1,2,4,5-Tetrachlorobenzene	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3600	U	ug/kg	3600	3400	R	ug/kg	3400
Pentachlorobenzene	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3600	U	ug/kg	3600	3400	R	ug/kg	3400
1-Naphthylamine	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3600	U	ug/kg	3600	3400	R	ug/kg	3400
2-Naphthylamine	3400	UJ	ug/kg	3400	3600	UJ	ug/kg	3600	3600	UJ	ug/kg	3600	3400	R	ug/kg	3400
2,3,4,6-Tetrachlorophenol	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Phenacetin	700	UJ	ug/kg	700	730	UJ	ug/kg	730	750	UJ	ug/kg	750	700	R	ug/kg	700
4-Aminobiphenyl	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3600	U	ug/kg	3600	3400	R	ug/kg	3400
Pentachloronitrobenzene	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3600	U	ug/kg	3600	3400	R	ug/kg	3400
Pronamide	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
p-(Dimethylamino)azobenzene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
7,12-Dimethylbenz(A)Anthracene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
3-Methylcholanthrene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Pyridine	3400	UJ	ug/kg	3400	3600	UJ	ug/kg	3600	3600	UJ	ug/kg	3600	3400	R	ug/kg	3400
N-Nitrosomethylethylamine	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
N-Nitrosomorpholine	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
o-Toluidine	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Hexachloropropene	3400	UJ	ug/kg	3400	3600	UJ	ug/kg	3600	3600	UJ	ug/kg	3600	3400	R	ug/kg	3400
p-Phenylenediamine	34000	U	ug/kg	34000	36000	U	ug/kg	36000	36000	U	ug/kg	36000	34000	R	ug/kg	34000

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Lab Sample Number:	R9861011				R9861013				R9861014				R9861016			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01B00508				01B00608				01B00608D				01B00708			
Collect Date:	03-MAY-95				03-MAY-95				03-MAY-95				03-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3600	U	ug/kg	3600	3400	R	ug/kg	3400
Isosafrole	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3600	U	ug/kg	3600	3400	R	ug/kg	3400
1,4-Naphthoquinone	70000	U	ug/kg	70000	73000	U	ug/kg	73000	75000	U	ug/kg	75000	70000	R	ug/kg	70000
1,3-Dinitrobenzene	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
5-Nitro-o-toluidine	700	UJ	ug/kg	700	730	UJ	ug/kg	730	750	UJ	ug/kg	750	700	R	ug/kg	700
1,3,5-Trinitrobenzene	700	UJ	ug/kg	700	730	UJ	ug/kg	730	750	UJ	ug/kg	750	700	R	ug/kg	700
4-Nitroquinoline-1-oxide	34000	R	ug/kg	34000	36000	R	ug/kg	36000	36000	R	ug/kg	36000	34000	R	ug/kg	34000
Methapyrilene	3400	UJ	ug/kg	3400	3600	UJ	ug/kg	3600	3600	UJ	ug/kg	3600	3400	R	ug/kg	3400
3,3-Dimethylbenzidine	700	UJ	ug/kg	700	730	UJ	ug/kg	730	750	UJ	ug/kg	750	700	R	ug/kg	700
Hexachlorophene	34000	UJ	ug/kg	34000	36000	UJ	ug/kg	36000	36000	UJ	ug/kg	36000	34000	R	ug/kg	34000
Aramite	3400	R	ug/kg	3400	3600	R	ug/kg	3600	3600	R	ug/kg	3600	3400	R	ug/kg	3400
2-Chlorophenol	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
3- & 4-Methylphenol (2)	700	U	ug/kg	700	730	U	ug/kg	730	750	U	ug/kg	750	700	R	ug/kg	700
Hexachloropropene	3400	UJ	ug/kg	3400	3600	UJ	ug/kg	3600	3600	UJ	ug/kg	3600	3400	R	ug/kg	3400
2-Acetylaminofluorene	700	UJ	ug/kg	700	730	UJ	ug/kg	730	750	UJ	ug/kg	750	700	R	ug/kg	700

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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Lab Sample Number:		M8994011			M8985004			M8985006			M8985007		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		01B00807			23B00105			23B00406			23B01606		
Collect Date:		21-MAY-95			19-MAY-95			19-MAY-95			19-MAY-95		
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	
SEMIVOLATILES	ug/kg												
N-Nitrosodimethylamine	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
Phenol	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
Aniline	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
bis(2-Chloroethyl) ether	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
Benzyl Alcohol	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
2-Methylphenol	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
bis(2-Chloroisopropyl) ether	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
N-Nitroso-di-n-propylamine	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
Hexachloroethane	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
Nitrobenzene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
Isophorone	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
2-Nitrophenol	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
2,4-Dimethylphenol	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
Benzoic acid	1700	U	ug/kg	1700	2000	UJ	ug/kg	2000	1800	UJ	ug/kg	1800	1800
bis(2-Chloroethoxy) methane	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
2,4-Dichlorophenol	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
1,2,4-Trichlorobenzene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
Naphthalene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
4-Chloroaniline	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
Hexachlorobutadiene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
4-Chloro-3-methylphenol	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
2-Methylnaphthalene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
Hexachlorocyclopentadiene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
2,4,6-Trichlorophenol	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
Dimethylphthalate	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
2,4,5-Trichlorophenol	1700	U	ug/kg	1700	2000	U	ug/kg	2000	1800	U	ug/kg	1800	1800
2-Chloronaphthalene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
2-Nitroaniline	1700	U	ug/kg	1700	2000	U	ug/kg	2000	1800	U	ug/kg	1800	1800
Acenaphthylene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
2,6-Dinitrotoluene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
3-Nitroaniline	1700	U	ug/kg	1700	2000	U	ug/kg	2000	1800	U	ug/kg	1800	1800
Acenaphthene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
2,4-Dinitrophenol	1700	U	ug/kg	1700	2000	U	ug/kg	2000	1800	U	ug/kg	1800	1800
4-Nitrophenol	1700	U	ug/kg	1700	2000	U	ug/kg	2000	1800	U	ug/kg	1800	1800
Dibenzofuran	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
2,4-Dinitrotoluene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
Diethylphthalate	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
4-Chlorophenyl-phenylether	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
Fluorene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350
4-Nitroaniline	1700	U	ug/kg	1700	2000	U	ug/kg	2000	1800	U	ug/kg	1800	1800

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SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:	M8994011				M8985004				M8985006				M8985007			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01B00807				23B00105				23B00406				23B01606			
Collect Date:	21-MAY-95				19-MAY-95				19-MAY-95				19-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	1700	U	ug/kg	1700	2000	U	ug/kg	2000	1800	U	ug/kg	1800	1800	U	ug/kg	1800
N-Nitrosodiphenylamine (1)	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
1,2-Diphenylhydrazine	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
4-Bromophenyl-phenylether	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
Hexachlorobenzene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
Pentachlorophenol	1700	U	ug/kg	1700	2000	U	ug/kg	2000	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Phenanthrene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
Anthracene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
Di-n-Butylphthalate	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
Fluoranthene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
Pyrene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
Butylbenzylphthalate	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
3,3-Dichlorobenzidine	700	U	ug/kg	700	810	U	ug/kg	810	720	U	ug/kg	720	710	U	ug/kg	710
Benzo (a) anthracene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
Chrysene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
bis(2-Ethylhexyl) phthalate	52	J	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
Di-n-octylphthalate	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
Benzo (b) fluoranthene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
Benzo (k) fluoranthene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
Benzo (a) pyrene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
Indeno (1,2,3-cd) pyrene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
Dibenz (a,h) anthracene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
Benzo (g,h,i) perylene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
2-Picoline	1700	U	ug/kg	1700	2000	U	ug/kg	2000	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Methyl methanesulfonate	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
Ethyl methanesulfonate	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
Acetophenone	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
N-Nitrosopiperidine	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
Phenyl-tert-butylamine	1700	U	ug/kg	1700	2000	U	ug/kg	2000	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2,6-Dichlorophenol	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
N-Nitroso-di-n-butylamine	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
N-Nitrosodiethylamine	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
N-Nitrosopyrrolidine	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
Benzidine	1700	U	ug/kg	1700	2000	U	ug/kg	2000	1800	U	ug/kg	1800	1800	U	ug/kg	1800
1,2,4,5-Tetrachlorobenzene	1700	U	ug/kg	1700	2000	U	ug/kg	2000	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Pentachlorobenzene	1700	U	ug/kg	1700	2000	U	ug/kg	2000	1800	U	ug/kg	1800	1800	U	ug/kg	1800
1-Naphthylamine	1700	U	ug/kg	1700	2000	U	ug/kg	2000	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2-Naphthylamine	1700	U	ug/kg	1700	2000	U	ug/kg	2000	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2,3,4,6-Tetrachlorophenol	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
Phenacetin	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
4-Aminobiphenyl	1700	U	ug/kg	1700	2000	U	ug/kg	2000	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Pentachloronitrobenzene	1700	U	ug/kg	1700	2000	U	ug/kg	2000	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Pronamide	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
p-(Dimethylamino)azobenzene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
7,12-Dimethylbenz(A)Anthracene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
3-Methylcholanthrene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
Pyridine	1700	U	ug/kg	1700	2000	U	ug/kg	2000	1800	U	ug/kg	1800	1800	U	ug/kg	1800
N-Nitrosomethylethylamine	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
N-Nitrosomorpholine	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
o-Toluidine	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
Hexachloropropene	1700	U	ug/kg	1700	2000	U	ug/kg	2000	1800	U	ug/kg	1800	1800	U	ug/kg	1800
p-Phenylenediamine	17000	U	ug/kg	17000	20000	U	ug/kg	20000	18000	U	ug/kg	18000	18000	U	ug/kg	18000

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Lab Sample Number:	M8994011				M8985004				M8985006				M8985007			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01B00807				23B00105				23B00406				23B01606			
Collect Date:	21-MAY-95				19-MAY-95				19-MAY-95				19-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	1700	U	ug/kg	1700	2000	U	ug/kg	2000	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Isosafrole	1700	U	ug/kg	1700	2000	U	ug/kg	2000	1800	U	ug/kg	1800	1800	U	ug/kg	1800
1,4-Naphthoquinone	35000	U	ug/kg	35000	41000	U	ug/kg	41000	36000	U	ug/kg	36000	35000	U	ug/kg	35000
1,3-Dinitrobenzene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
5-Nitro-o-toluidine	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
1,3,5-Trinitrobenzene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
4-Nitroquinoline-1-oxide	17000	R	ug/kg	17000	20000	R	ug/kg	20000	18000	R	ug/kg	18000	18000	R	ug/kg	18000
Methapyrilene	1700	U	ug/kg	1700	2000	U	ug/kg	2000	1800	U	ug/kg	1800	1800	U	ug/kg	1800
3,3-Dimethylbenzidine	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
Hexachlorophene	17000	U	ug/kg	17000	20000	U	ug/kg	20000	18000	U	ug/kg	18000	18000	U	ug/kg	18000
Aramite	1700	U	ug/kg	1700	2000	U	ug/kg	2000	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2-Chlorophenol	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
3- & 4-Methylphenol (2)	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	350	U	ug/kg	350
Hexachloropropene	1700	U	ug/kg	1700	2000	U	ug/kg	2000	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2-Acetylaminofluorene	350	U	ug/kg	350	410	U	ug/kg	410	360	U	ug/kg	360	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.

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Lab Sample Number:	M8994006				M8994001				M8994002				M8994005			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23B02108				23B02407				23B02807				23B02908			
Collect Date:	20-MAY-95				20-MAY-95				20-MAY-95				20-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/kg																
N-Nitrosodimethylamine	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Phenol	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Aniline	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
bis(2-Chloroethyl) ether	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Benzyl Alcohol	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
2-Methylphenol	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
bis(2-Chloroisopropyl) ether	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
N-Nitroso-di-n-propylamine	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Hexachloroethane	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Nitrobenzene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Isophorone	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
2-Nitrophenol	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
2,4-Dimethylphenol	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Benzoic acid	1900	U	ug/kg	1900	1800	U	ug/kg	1800	2100	U	ug/kg	2100	1700	U	ug/kg	1700
bis(2-Chloroethoxy) methane	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
2,4-Dichlorophenol	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
1,2,4-Trichlorobenzene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Naphthalene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
4-Chloroaniline	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Hexachlorobutadiene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
4-Chloro-3-methylphenol	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
2-Methylnaphthalene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Hexachlorocyclopentadiene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
2,4,6-Trichlorophenol	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Dimethylphthalate	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
2,4,5-Trichlorophenol	1900	U	ug/kg	1900	1800	U	ug/kg	1800	2100	U	ug/kg	2100	1700	U	ug/kg	1700
2-Chloronaphthalene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
2-Nitroaniline	1900	U	ug/kg	1900	1800	U	ug/kg	1800	2100	U	ug/kg	2100	1700	U	ug/kg	1700
Acenaphthylene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
2,6-Dinitrotoluene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
3-Nitroaniline	1900	U	ug/kg	1900	1800	U	ug/kg	1800	2100	U	ug/kg	2100	1700	U	ug/kg	1700
Acenaphthene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
2,4-Dinitrophenol	1900	U	ug/kg	1900	1800	U	ug/kg	1800	2100	U	ug/kg	2100	1700	U	ug/kg	1700
4-Nitrophenol	1900	U	ug/kg	1900	1800	U	ug/kg	1800	2100	U	ug/kg	2100	1700	U	ug/kg	1700
Dibenzofuran	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
2,4-Dinitrotoluene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Diethylphthalate	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
4-Chlorophenyl-phenylether	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Fluorene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
4-Nitroaniline	1900	U	ug/kg	1900	1800	U	ug/kg	1800	2100	U	ug/kg	2100	1700	U	ug/kg	1700

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Lab Sample Number:	M8994006				M8994001				M8994002				M8994005			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23B02108				23B02407				23B02807				23B02908			
Collect Date:	20-MAY-95				20-MAY-95				20-MAY-95				20-MAY-95			
	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	1800	U	ug/kg	1800	2100	U	ug/kg	2100	1700	U	ug/kg	1700
N-Nitrosodiphenylamine (1)	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
1,2-Diphenylhydrazine	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
4-Bromophenyl-phenylether	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Hexachlorobenzene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Pentachlorophenol	1900	U	ug/kg	1900	1800	U	ug/kg	1800	2100	U	ug/kg	2100	1700	U	ug/kg	1700
Phenanthrene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Anthracene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Di-n-Butylphthalate	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Fluoranthene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Pyrene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Butylbenzylphthalate	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
3,3-Dichlorobenzidine	770	U	ug/kg	770	740	U	ug/kg	740	840	U	ug/kg	840	700	U	ug/kg	700
Benzo (a) anthracene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Chrysene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
bis(2-Ethylhexyl) phthalate	380	U	ug/kg	380	370	U	ug/kg	370	45	J	ug/kg	420	350	U	ug/kg	350
Di-n-octylphthalate	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Benzo (b) fluoranthene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Benzo (k) fluoranthene	380	UJ	ug/kg	380	370	UJ	ug/kg	370	420	UJ	ug/kg	420	350	UJ	ug/kg	350
Benzo (a) pyrene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Indeno (1,2,3-cd) pyrene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Dibenz (a,h) anthracene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Benzo (g,h,i) perylene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
2-Picoline	1900	U	ug/kg	1900	1800	U	ug/kg	1800	2100	U	ug/kg	2100	1700	U	ug/kg	1700
Methyl methanesulfonate	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Ethyl methanesulfonate	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Acetophenone	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
N-Nitrosopiperidine	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Phenyl-tert-butylamine	1900	U	ug/kg	1900	1800	U	ug/kg	1800	2100	U	ug/kg	2100	1700	U	ug/kg	1700
2,6-Dichlorophenol	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
N-Nitroso-di-n-butylamine	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
N-Nitrosodiethylamine	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
N-Nitrosopyrrolidine	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Benzidine	1900	U	ug/kg	1900	1800	U	ug/kg	1800	2100	U	ug/kg	2100	1700	U	ug/kg	1700
1,2,4,5-Tetrachlorobenzene	1900	U	ug/kg	1900	1800	U	ug/kg	1800	2100	U	ug/kg	2100	1700	U	ug/kg	1700
Pentachlorobenzene	1900	U	ug/kg	1900	1800	U	ug/kg	1800	2100	U	ug/kg	2100	1700	U	ug/kg	1700
1-Naphthylamine	1900	U	ug/kg	1900	1800	U	ug/kg	1800	2100	U	ug/kg	2100	1700	U	ug/kg	1700
2-Naphthylamine	1900	U	ug/kg	1900	1800	U	ug/kg	1800	2100	U	ug/kg	2100	1700	U	ug/kg	1700
2,3,4,6-Tetrachlorophenol	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Phenacetin	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
4-Aminobiphenyl	1900	U	ug/kg	1900	1800	U	ug/kg	1800	2100	U	ug/kg	2100	1700	U	ug/kg	1700
Pentachloronitrobenzene	1900	U	ug/kg	1900	1800	U	ug/kg	1800	2100	U	ug/kg	2100	1700	U	ug/kg	1700
Pronamide	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
p-(Dimethylamino)azobenzene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
7,12-Dimethylbenz(A)Anthracene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
3-Methylcholanthrene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Pyridine	1900	U	ug/kg	1900	1800	U	ug/kg	1800	2100	U	ug/kg	2100	1700	U	ug/kg	1700
N-Nitrosomethylethylamine	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
N-Nitrosomorpholine	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
o-Toluidine	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Hexachloropropene	1900	U	ug/kg	1900	1800	U	ug/kg	1800	2100	U	ug/kg	2100	1700	U	ug/kg	1700
p-Phenylenediamine	19000	U	ug/kg	19000	18000	U	ug/kg	18000	21000	U	ug/kg	21000	17000	U	ug/kg	17000

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Lab Sample Number:	M8994006				M8994001				M8994002				M8994005			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23B02108				23B02407				23B02807				23B02908			
Collect Date:	20-MAY-95				20-MAY-95				20-MAY-95				20-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	1900	U	ug/kg	1900	1800	U	ug/kg	1800	2100	U	ug/kg	2100	1700	U	ug/kg	1700
Isosafrole	1900	U	ug/kg	1900	1800	U	ug/kg	1800	2100	U	ug/kg	2100	1700	U	ug/kg	1700
1,4-Naphthoquinone	38000	U	ug/kg	38000	37000	U	ug/kg	37000	42000	U	ug/kg	42000	35000	U	ug/kg	35000
1,3-Dinitrobenzene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
5-Nitro-o-toluidine	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
1,3,5-Trinitrobenzene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
4-Nitroquinoline-1-oxide	19000	R	ug/kg	19000	18000	R	ug/kg	18000	21000	R	ug/kg	21000	17000	R	ug/kg	17000
Methapyrilene	1900	U	ug/kg	1900	1800	U	ug/kg	1800	2100	U	ug/kg	2100	1700	U	ug/kg	1700
3,3-Dimethylbenzidine	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Hexachlorophene	19000	U	ug/kg	19000	18000	U	ug/kg	18000	21000	U	ug/kg	21000	17000	U	ug/kg	17000
Aramite	1900	U	ug/kg	1900	1800	U	ug/kg	1800	2100	U	ug/kg	2100	1700	U	ug/kg	1700
2-Chlorophenol	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
3- & 4-Methylphenol (2)	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	350	U	ug/kg	350
Hexachloropropene	1900	U	ug/kg	1900	1800	U	ug/kg	1800	2100	U	ug/kg	2100	1700	U	ug/kg	1700
2-Acetylaminofluorene	380	U	ug/kg	380	370	U	ug/kg	370	420	U	ug/kg	420	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.

US Naval Station, Mayport, RCRA Facil.., Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:		M8985003			M8985005			M8994007			R9955018		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		24B00707			44B00107			44B00908			44B01006		
Collect Date:		19-MAY-95			19-MAY-95			20-MAY-95			24-MAY-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES	ug/kg												
N-Nitrosodimethylamine		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
Phenol		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
Aniline		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
bis(2-Chloroethyl) ether		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
Benzyl Alcohol		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
2-Methylphenol		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
bis(2-Chloroisopropyl) ether		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
N-Nitroso-di-n-propylamine		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
Hexachloroethane		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
Nitrobenzene		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
Isophorone		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
2-Nitrophenol		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
2,4-Dimethylphenol		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
Benzoic acid		1800 UJ	ug/kg	1800	1800 UJ	ug/kg	1800	1800 U	ug/kg	1800	3400 U	ug/kg	3400
bis(2-Chloroethoxy) methane		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
2,4-Dichlorophenol		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
1,2,4-Trichlorobenzene		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
Naphthalene		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
4-Chloroaniline		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
Hexachlorobutadiene		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
4-Chloro-3-methylphenol		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
2-Methylnaphthalene		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
Hexachlorocyclopentadiene		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
2,4,6-Trichlorophenol		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
Dimethylphthalate		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
2,4,5-Trichlorophenol		1800 U	ug/kg	1800	1800 U	ug/kg	1800	1800 U	ug/kg	1800	3400 U	ug/kg	3400
2-Chloronaphthalene		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
2-Nitroaniline		1800 U	ug/kg	1800	1800 U	ug/kg	1800	1800 U	ug/kg	1800	3400 U	ug/kg	3400
Acenaphthylene		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
2,6-Dinitrotoluene		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
3-Nitroaniline		1800 U	ug/kg	1800	1800 U	ug/kg	1800	1800 U	ug/kg	1800	3400 U	ug/kg	3400
Acenaphthene		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
2,4-Dinitrophenol		1800 U	ug/kg	1800	1800 U	ug/kg	1800	1800 U	ug/kg	1800	3400 U	ug/kg	3400
4-Nitrophenol		1800 U	ug/kg	1800	1800 U	ug/kg	1800	1800 U	ug/kg	1800	3400 U	ug/kg	3400
Dibenzofuran		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
2,4-Dinitrotoluene		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
Diethylphthalate		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
4-Chlorophenyl-phenylether		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
Fluorene		370 U	ug/kg	370	370 U	ug/kg	370	360 U	ug/kg	360	710 U	ug/kg	710
4-Nitroaniline		1800 U	ug/kg	1800	1800 U	ug/kg	1800	1800 U	ug/kg	1800	3400 U	ug/kg	3400

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:	M8985003				M8985005				M8994007				R9955018			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	24B00707				44B00107				44B00908				44B01006			
Collect Date:	19-MAY-95				19-MAY-95				20-MAY-95				24-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	3400	U	ug/kg	3400
N-Nitrosodiphenylamine (1)	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
1,2-Diphenylhydrazine	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
4-Bromophenyl-phenylether	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
Hexachlorobenzene	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
Pentachlorophenol	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	3400	U	ug/kg	3400
Phenanthrene	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
Anthracene	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
Di-n-Butylphthalate	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
Fluoranthene	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
Pyrene	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
Butylbenzylphthalate	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
3,3-Dichlorobenzidine	750	U	ug/kg	750	730	U	ug/kg	730	720	U	ug/kg	720	1400	U	ug/kg	1400
Benzo (a) anthracene	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
Chrysene	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
bis(2-Ethylhexyl) phthalate	60	J	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
Di-n-octylphthalate	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
Benzo (b) fluoranthene	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
Benzo (k) fluoranthene	370	U	ug/kg	370	370	U	ug/kg	370	360	UJ	ug/kg	360	710	U	ug/kg	710
Benzo (a) pyrene	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
Indeno (1,2,3-cd) pyrene	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
Dibenz (a,h) anthracene	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
Benzo (g,h,i) perylene	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
2-Picoline	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	3400	U	ug/kg	3400
Methyl methanesulfonate	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	UJ	ug/kg	710
Ethyl methanesulfonate	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
Acetophenone	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
N-Nitrosopiperidine	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
Phenyl-tert-butylamine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	3400	UJ	ug/kg	3400
2,6-Dichlorophenol	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	UJ	ug/kg	710
N-Nitroso-di-n-butylamine	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
N-Nitrosodiethylamine	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
N-Nitrosopyrrolidine	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
Benzidine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	3400	UJ	ug/kg	3400
1,2,4,5-Tetrachlorobenzene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	3400	UJ	ug/kg	3400
Pentachlorobenzene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	3400	UJ	ug/kg	3400
1-Naphthylamine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	3400	U	ug/kg	3400
2-Naphthylamine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	3400	U	ug/kg	3400
2,3,4,6-Tetrachlorophenol	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	UJ	ug/kg	710
Phenacetin	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
4-Aminobiphenyl	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	3400	U	ug/kg	3400
Pentachloronitrobenzene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	3400	UJ	ug/kg	3400
Pronamide	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	UJ	ug/kg	710
p-(Dimethylamino)azobenzene	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	UJ	ug/kg	710
7,12-Dimethylbenz(A)Anthracene	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
3-Methylcholanthrene	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
Pyridine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	3400	U	ug/kg	3400
N-Nitrosomethylethylamine	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
N-Nitrosomorpholine	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
o-Toluidine	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
Hexachloropropene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	3400	U	ug/kg	3400
p-Phenylenediamine	18000	U	ug/kg	18000	18000	U	ug/kg	18000	18000	U	ug/kg	18000	34000	UJ	ug/kg	34000

US Naval Station, Mayport, RCRA Facil.., Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:	M8985003				M8985005				M8994007				R9955018			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	24B00707				44B00107				44B00908				44B01006			
Collect Date:	19-MAY-95				19-MAY-95				20-MAY-95				24-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	3400	UJ	ug/kg	3400
Isosafrole	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	3400	U	ug/kg	3400
1,4-Naphthoquinone	37000	U	ug/kg	37000	37000	U	ug/kg	37000	36000	U	ug/kg	36000	71000	R	ug/kg	71000
1,3-Dinitrobenzene	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
5-Nitro-o-toluidine	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
1,3,5-Trinitrobenzene	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
4-Nitroquinoline-1-oxide	18000	R	ug/kg	18000	18000	R	ug/kg	18000	18000	R	ug/kg	18000	34000	UJ	ug/kg	34000
Methapyrilene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	3400	UJ	ug/kg	3400
3,3-Dimethylbenzidine	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	UJ	ug/kg	710
Hexachlorophene	18000	U	ug/kg	18000	18000	U	ug/kg	18000	18000	U	ug/kg	18000	34000	UJ	ug/kg	34000
Aramite	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	3400	U	ug/kg	3400
2-Chlorophenol	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
3- & 4-Methylphenol (2)	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	U	ug/kg	710
Hexachloropropene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	3400	U	ug/kg	3400
2-Acetylaminofluorene	370	U	ug/kg	370	370	U	ug/kg	370	360	U	ug/kg	360	710	UJ	ug/kg	710

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:	M8994009				R9955016				R9861016RE			
Site	GROUP111				GROUP111				GROUP111			
Locator	45B00805				45B01005				01B00708RE			
Collect Date:	21-MAY-95				24-MAY-95				03-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/kg												
N-Nitrosodimethylamine	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Phenol	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Aniline	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
bis(2-Chloroethyl) ether	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Benzyl Alcohol	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
2-Methylphenol	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
bis(2-Chloroisopropyl) ether	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
N-Nitroso-di-n-propylamine	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Hexachloroethane	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Nitrobenzene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Isophorone	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
2-Nitrophenol	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
2,4-Dimethylphenol	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Benzoic acid	1800	U	ug/kg	1800	3700	U	ug/kg	3700	3400	UJ	ug/kg	3400
bis(2-Chloroethoxy) methane	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
2,4-Dichlorophenol	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
1,2,4-Trichlorobenzene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Naphthalene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
4-Chloroaniline	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Hexachlorobutadiene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
4-Chloro-3-methylphenol	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
2-Methylnaphthalene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Hexachlorocyclopentadiene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
2,4,6-Trichlorophenol	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Dimethylphthalate	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
2,4,5-Trichlorophenol	1800	U	ug/kg	1800	3700	U	ug/kg	3700	3400	UJ	ug/kg	3400
2-Chloronaphthalene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
2-Nitroaniline	1800	U	ug/kg	1800	3700	U	ug/kg	3700	3400	UJ	ug/kg	3400
Acenaphthylene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
2,6-Dinitrotoluene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
3-Nitroaniline	1800	U	ug/kg	1800	3700	U	ug/kg	3700	3400	UJ	ug/kg	3400
Acenaphthene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
2,4-Dinitrophenol	1800	U	ug/kg	1800	3700	U	ug/kg	3700	3400	UJ	ug/kg	3400
4-Nitrophenol	1800	U	ug/kg	1800	3700	U	ug/kg	3700	3400	UJ	ug/kg	3400
Dibenzofuran	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
2,4-Dinitrotoluene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Diethylphthalate	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
4-Chlorophenyl-phenylether	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Fluorene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
4-Nitroaniline	1800	U	ug/kg	1800	3700	U	ug/kg	3700	3400	UJ	ug/kg	3400

US Naval Station, Mayport, RCRA Facil... Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:	M8994009				R9955016				R9861016RE			
Site	GROUP111				GROUP111				GROUP111			
Locator	45B00805				45B01005				01B00708RE			
Collect Date:	21-MAY-95				24-MAY-95				03-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	1800	U	ug/kg	1800	3700	U	ug/kg	3700	3400	UJ	ug/kg	3400
N-Nitrosodiphenylamine (1)	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
1,2-Diphenylhydrazine	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
4-Bromophenyl-phenylether	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Hexachlorobenzene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Pentachlorophenol	1800	U	ug/kg	1800	3700	U	ug/kg	3700	3400	UJ	ug/kg	3400
Phenanthrene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Anthracene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Di-n-Butylphthalate	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Fluoranthene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Pyrene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Butylbenzylphthalate	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
3,3-Dichlorobenzidine	740	U	ug/kg	740	1500	U	ug/kg	1500	1400	UJ	ug/kg	1400
Benzo (a) anthracene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Chrysene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
bis(2-Ethylhexyl) phthalate	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Di-n-octylphthalate	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Benzo (b) fluoranthene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Benzo (k) fluoranthene	370	UJ	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Benzo (a) pyrene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Indeno (1,2,3-cd) pyrene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Dibenz (a,h) anthracene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Benzo (g,h,i) perylene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
2-Picoline	1800	U	ug/kg	1800	3700	U	ug/kg	3700	3400	UJ	ug/kg	3400
Methyl methanesulfonate	370	U	ug/kg	370	770	UJ	ug/kg	770	700	UJ	ug/kg	700
Ethyl methanesulfonate	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Acetophenone	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
N-Nitrosopiperidine	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Phenyl-tert-butylamine	1800	U	ug/kg	1800	3700	UJ	ug/kg	3700	3400	UJ	ug/kg	3400
2,6-Dichlorophenol	370	U	ug/kg	370	770	UJ	ug/kg	770	700	UJ	ug/kg	700
N-Nitroso-di-n-butylamine	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
N-Nitrosodiethylamine	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
N-Nitrosopyrrolidine	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Benzidine	1800	U	ug/kg	1800	3700	UJ	ug/kg	3700	3400	UJ	ug/kg	3400
1,2,4,5-Tetrachlorobenzene	1800	U	ug/kg	1800	3700	UJ	ug/kg	3700	3400	UJ	ug/kg	3400
Pentachlorobenzene	1800	U	ug/kg	1800	3700	UJ	ug/kg	3700	3400	UJ	ug/kg	3400
1-Naphthylamine	1800	U	ug/kg	1800	3700	U	ug/kg	3700	3400	UJ	ug/kg	3400
2-Naphthylamine	1800	U	ug/kg	1800	3700	U	ug/kg	3700	3400	UJ	ug/kg	3400
2,3,4,6-Tetrachlorophenol	370	U	ug/kg	370	770	UJ	ug/kg	770	700	UJ	ug/kg	700
Phenacetin	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
4-Aminobiphenyl	1800	U	ug/kg	1800	3700	U	ug/kg	3700	3400	UJ	ug/kg	3400
Pentachloronitrobenzene	1800	U	ug/kg	1800	3700	UJ	ug/kg	3700	3400	UJ	ug/kg	3400
Pronamide	370	U	ug/kg	370	770	UJ	ug/kg	770	700	UJ	ug/kg	700
p-(Dimethylamino)azobenzene	370	U	ug/kg	370	770	UJ	ug/kg	770	700	UJ	ug/kg	700
7,12-Dimethylbenz(A)Anthracene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
3-Methylcholanthrene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Pyridine	1800	U	ug/kg	1800	3700	U	ug/kg	3700	3400	UJ	ug/kg	3400
N-Nitrosomethylethylamine	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
N-Nitrosomorpholine	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
o-Toluidine	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Hexachloropropene	1800	U	ug/kg	1800	3700	U	ug/kg	3700	3400	UJ	ug/kg	3400
p-Phenylenediamine	18000	U	ug/kg	18000	37000	UJ	ug/kg	37000	34000	UJ	ug/kg	34000

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SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:	M8994009				R9955016				R9861016RE			
Site	GROUP111				GROUP111				GROUP111			
Locator	45B00805				45B01005				01B00708RE			
Collect Date:	21-MAY-95				24-MAY-95				03-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	1800	U	ug/kg	1800	3700	UJ	ug/kg	3700	3400	UJ	ug/kg	3400
Isosafrole	1800	U	ug/kg	1800	3700	U	ug/kg	3700	3400	UJ	ug/kg	3400
1,4-Naphthoquinone	37000	U	ug/kg	37000	77000	R	ug/kg	77000	70000	UJ	ug/kg	70000
1,3-Dinitrobenzene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
5-Nitro-o-toluidine	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
1,3,5-Trinitrobenzene	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
4-Nitroquinoline-1-oxide	18000	R	ug/kg	18000	37000	UJ	ug/kg	37000	34000	UJ	ug/kg	34000
Methapyrilene	1800	U	ug/kg	1800	3700	UJ	ug/kg	3700	3400	UJ	ug/kg	3400
3,3-Dimethylbenzidine	370	U	ug/kg	370	770	UJ	ug/kg	770	700	UJ	ug/kg	700
Hexachlorophene	18000	U	ug/kg	18000	37000	UJ	ug/kg	37000	34000	UJ	ug/kg	34000
Aramite	1800	U	ug/kg	1800	3700	U	ug/kg	3700	3400	UJ	ug/kg	3400
2-Chlorophenol	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
3- & 4-Methylphenol (2)	370	U	ug/kg	370	770	U	ug/kg	770	700	UJ	ug/kg	700
Hexachloropropene	1800	U	ug/kg	1800	3700	U	ug/kg	3700	3400	UJ	ug/kg	3400
2-Acetylaminofluorene	370	U	ug/kg	370	770	UJ	ug/kg	770	700	UJ	ug/kg	700

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.

US Naval Station, Mayport, RCRA Facil. Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:	R9861003				R9861005				R9861008				R9861009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01B00109				01B00208				01B00308				01B00409			
Collect Date:	03-MAY-95				03-MAY-95				03-MAY-95				03-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs ug/kg																
alpha-BHC	.81	U	ug/kg	.81	.73	U	ug/kg	.73	.71	U	ug/kg	.71	.8	U	ug/kg	.8
beta-BHC	1.6	U	ug/kg	1.6	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.5	U	ug/kg	1.5
delta-BHC	.81	U	ug/kg	.81	.73	U	ug/kg	.73	.71	U	ug/kg	.71	.8	U	ug/kg	.8
gamma-BHC (Lindane)	.81	U	ug/kg	.81	.73	U	ug/kg	.73	.71	U	ug/kg	.71	.8	U	ug/kg	.8
Heptachlor	.81	U	ug/kg	.81	.73	U	ug/kg	.73	.71	U	ug/kg	.71	.8	U	ug/kg	.8
Aldrin	.81	U	ug/kg	.81	.73	U	ug/kg	.73	.71	U	ug/kg	.71	.8	U	ug/kg	.8
Heptachlor epoxide	.81	U	ug/kg	.81	.73	U	ug/kg	.73	.71	U	ug/kg	.71	.8	U	ug/kg	.8
Endosulfan I	.81	U	ug/kg	.81	.73	U	ug/kg	.73	.71	U	ug/kg	.71	.8	U	ug/kg	.8
Dieldrin	.81	U	ug/kg	.81	.73	U	ug/kg	.73	.71	U	ug/kg	.71	.8	U	ug/kg	.8
4,4-DDE	.81	U	ug/kg	.81	.73	U	ug/kg	.73	.71	U	ug/kg	.71	.8	U	ug/kg	.8
Endrin	1.6	U	ug/kg	1.6	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.5	U	ug/kg	1.5
Endosulfan II	1.6	U	ug/kg	1.6	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.5	U	ug/kg	1.5
4,4-DDD	1.6	U	ug/kg	1.6	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.5	U	ug/kg	1.5
Endosulfan sulfate	1.6	U	ug/kg	1.6	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.5	U	ug/kg	1.5
4,4-DDT	1.6	U	ug/kg	1.6	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.5	U	ug/kg	1.5
Methoxychlor	3.3	U	ug/kg	3.3	2.9	U	ug/kg	2.9	2.8	U	ug/kg	2.8	3.2	U	ug/kg	3.2
Endrin aldehyde	1.6	U	ug/kg	1.6	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.5	U	ug/kg	1.5
Endrin ketone	1.6	U	ug/kg	1.6	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.5	U	ug/kg	1.5
Chlordane	8.1	U	ug/kg	8.1	7.3	U	ug/kg	7.3	7.1	U	ug/kg	7.1	8	U	ug/kg	8
Chlorobenzilate	24	U	ug/kg	24	22	U	ug/kg	22	21	U	ug/kg	21	24	U	ug/kg	24
Diallate	48	U	ug/kg	48	43	U	ug/kg	43	42	U	ug/kg	42	48	U	ug/kg	48
Toxaphene	40	U	ug/kg	40	36	U	ug/kg	36	35	U	ug/kg	35	39	U	ug/kg	39
Isodrin	.81	U	ug/kg	.81	.73	U	ug/kg	.73	.71	U	ug/kg	.71	.8	U	ug/kg	.8
Kepone	48	UJ	ug/kg	48	43	UJ	ug/kg	43	42	UJ	ug/kg	42	47	UJ	ug/kg	47
Aroclor-1016	40	U	ug/kg	40	36	U	ug/kg	36	35	U	ug/kg	35	39	U	ug/kg	39
Aroclor-1221	81	U	ug/kg	81	73	U	ug/kg	73	71	U	ug/kg	71	80	U	ug/kg	80
Aroclor-1232	81	U	ug/kg	81	73	U	ug/kg	73	71	U	ug/kg	71	80	U	ug/kg	80
Aroclor-1242	40	U	ug/kg	40	36	U	ug/kg	36	35	U	ug/kg	35	39	U	ug/kg	39
Aroclor-1248	40	U	ug/kg	40	36	U	ug/kg	36	35	U	ug/kg	35	39	U	ug/kg	39
Aroclor-1254	19	U	ug/kg	19	17	U	ug/kg	17	17	U	ug/kg	17	19	U	ug/kg	19
Aroclor-1260	19	U	ug/kg	19	17	U	ug/kg	17	17	U	ug/kg	17	19	U	ug/kg	19

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:		R9861011			R9861013			R9861014			R9861016		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		01B00508			01B00608			01B00608D			01B00708		
Collect Date:		03-MAY-95			03-MAY-95			03-MAY-95			03-MAY-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg												
alpha-BHC		.71 U	ug/kg	.71	.74 U	ug/kg	.74	.76 U	ug/kg	.76	.71 U	ug/kg	.71
beta-BHC		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4
delta-BHC		.71 U	ug/kg	.71	.74 U	ug/kg	.74	.76 U	ug/kg	.76	.71 U	ug/kg	.71
gamma-BHC (Lindane)		.71 U	ug/kg	.71	.74 U	ug/kg	.74	.76 U	ug/kg	.76	.71 U	ug/kg	.71
Heptachlor		.71 U	ug/kg	.71	.74 U	ug/kg	.74	.76 U	ug/kg	.76	.71 U	ug/kg	.71
Aldrin		.71 U	ug/kg	.71	.74 U	ug/kg	.74	.76 U	ug/kg	.76	.71 U	ug/kg	.71
Heptachlor epoxide		.71 U	ug/kg	.71	.74 U	ug/kg	.74	.76 U	ug/kg	.76	.71 U	ug/kg	.71
Endosulfan I		.71 U	ug/kg	.71	.74 U	ug/kg	.74	.76 U	ug/kg	.76	.71 U	ug/kg	.71
Dieldrin		.71 U	ug/kg	.71	.74 U	ug/kg	.74	.76 U	ug/kg	.76	.71 U	ug/kg	.71
4,4-DDE		3.3	ug/kg	.71	.74 U	ug/kg	.74	.76 U	ug/kg	.76	.71 U	ug/kg	.71
Endrin		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4
Endosulfan II		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4
4,4-DDD		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4
Endosulfan sulfate		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4
4,4-DDT		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4
Methoxychlor		2.9 U	ug/kg	2.9	3 U	ug/kg	3	3.1 U	ug/kg	3.1	2.9 U	ug/kg	2.9
Endrin aldehyde		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4
Endrin ketone		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4
Chlordane		7.1 U	ug/kg	7.1	7.4 U	ug/kg	7.4	7.6 U	ug/kg	7.6	7.1 U	ug/kg	7.1
Chlorobenzilate		21 U	ug/kg	21	22 U	ug/kg	22	23 U	ug/kg	23	21 U	ug/kg	21
Dialiate		42 U	ug/kg	42	44 U	ug/kg	44	45 U	ug/kg	45	42 U	ug/kg	42
Toxaphene		35 U	ug/kg	35	37 U	ug/kg	37	38 U	ug/kg	38	35 U	ug/kg	35
Isodrin		.71 U	ug/kg	.71	.74 U	ug/kg	.74	.76 U	ug/kg	.76	.71 U	ug/kg	.71
Kepone		42 UJ	ug/kg	42	45 UJ	ug/kg	45	46 UJ	ug/kg	46	42 UJ	ug/kg	42
Aroclor-1016		35 U	ug/kg	35	37 U	ug/kg	37	38 U	ug/kg	38	35 U	ug/kg	35
Aroclor-1221		71 U	ug/kg	71	74 U	ug/kg	74	76 U	ug/kg	76	71 U	ug/kg	71
Aroclor-1232		71 U	ug/kg	71	74 U	ug/kg	74	76 U	ug/kg	76	71 U	ug/kg	71
Aroclor-1242		35 U	ug/kg	35	37 U	ug/kg	37	38 U	ug/kg	38	35 U	ug/kg	35
Aroclor-1248		35 U	ug/kg	35	37 U	ug/kg	37	38 U	ug/kg	38	35 U	ug/kg	35
Aroclor-1254		17 U	ug/kg	17	18 U	ug/kg	18	18 U	ug/kg	18	17 U	ug/kg	17
Aroclor-1260		17 U	ug/kg	17	18 U	ug/kg	18	18 U	ug/kg	18	17 U	ug/kg	17

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:	M8994011				M8985004				M8985006				M8985007			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01B00807				23B00105				23B00406				23B01606			
Collect Date:	21-MAY-95				19-MAY-95				19-MAY-95				19-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs ug/kg																
alpha-BHC	.71	U	ug/kg	.71	.82	U	ug/kg	.82	.72	U	ug/kg	.72	.71	U	ug/kg	.71
beta-BHC	1.4	U	ug/kg	1.4	1.6	U	ug/kg	1.6	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
delta-BHC	.71	U	ug/kg	.71	.82	U	ug/kg	.82	.72	U	ug/kg	.72	.71	U	ug/kg	.71
gamma-BHC (Lindane)	.71	U	ug/kg	.71	.82	U	ug/kg	.82	.72	U	ug/kg	.72	.71	U	ug/kg	.71
Heptachlor	.71	U	ug/kg	.71	.82	U	ug/kg	.82	.72	U	ug/kg	.72	.71	U	ug/kg	.71
Aldrin	.71	U	ug/kg	.71	.82	U	ug/kg	.82	.72	U	ug/kg	.72	.71	U	ug/kg	.71
Heptachlor epoxide	.71	U	ug/kg	.71	.82	U	ug/kg	.82	.72	U	ug/kg	.72	.71	U	ug/kg	.71
Endosulfan I	.71	U	ug/kg	.71	.82	U	ug/kg	.82	.72	U	ug/kg	.72	.71	U	ug/kg	.71
Dieldrin	.71	U	ug/kg	.71	.82	U	ug/kg	.82	.72	U	ug/kg	.72	.71	U	ug/kg	.71
4,4-DDE	.71	U	ug/kg	.71	.82	U	ug/kg	.82	.72	U	ug/kg	.72	.71	U	ug/kg	.71
Endrin	1.4	U	ug/kg	1.4	1.6	U	ug/kg	1.6	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endosulfan II	1.4	U	ug/kg	1.4	1.6	U	ug/kg	1.6	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
4,4-DDD	1.4	U	ug/kg	1.4	1.6	U	ug/kg	1.6	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endosulfan sulfate	1.4	U	ug/kg	1.4	1.6	U	ug/kg	1.6	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
4,4-DDT	1.4	U	ug/kg	1.4	1.6	U	ug/kg	1.6	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Methoxychlor	2.8	U	ug/kg	2.8	3.3	U	ug/kg	3.3	2.9	U	ug/kg	2.9	2.9	U	ug/kg	2.9
Endrin aldehyde	1.4	U	ug/kg	1.4	1.6	U	ug/kg	1.6	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endrin ketone	1.4	U	ug/kg	1.4	1.6	U	ug/kg	1.6	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Chlordane	7.1	U	ug/kg	7.1	8.2	U	ug/kg	8.2	7.2	U	ug/kg	7.2	7.1	U	ug/kg	7.1
Chlorobenzilate	21	U	ug/kg	21	24	U	ug/kg	24	22	U	ug/kg	22	21	U	ug/kg	21
Dialiate	42	U	ug/kg	42	49	U	ug/kg	49	43	U	ug/kg	43	43	U	ug/kg	43
Toxaphene	35	U	ug/kg	35	40	U	ug/kg	40	35	U	ug/kg	35	35	U	ug/kg	35
Isodrin	.71	U	ug/kg	.71	.82	U	ug/kg	.82	.72	U	ug/kg	.72	.71	U	ug/kg	.71
Kepone	42	U	ug/kg	42	49	U	ug/kg	49	43	U	ug/kg	43	43	U	ug/kg	43
Aroclor-1016	35	U	ug/kg	35	40	U	ug/kg	40	35	U	ug/kg	35	35	U	ug/kg	35
Aroclor-1221	71	U	ug/kg	71	82	U	ug/kg	82	72	U	ug/kg	72	71	U	ug/kg	71
Aroclor-1232	71	U	ug/kg	71	82	U	ug/kg	82	72	U	ug/kg	72	71	U	ug/kg	71
Aroclor-1242	35	U	ug/kg	35	40	U	ug/kg	40	35	U	ug/kg	35	35	U	ug/kg	35
Aroclor-1248	35	U	ug/kg	35	40	U	ug/kg	40	35	U	ug/kg	35	35	U	ug/kg	35
Aroclor-1254	18	UJ	ug/kg	18	21	UJ	ug/kg	21	18	UJ	ug/kg	18	18	UJ	ug/kg	18
Aroclor-1260	18	U	ug/kg	18	21	U	ug/kg	21	18	U	ug/kg	18	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:		M8994006			M8994001			M8994002			M8994005		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		23B02108			23B02407			23B02807			23B02908		
Collect Date:		20-MAY-95			20-MAY-95			20-MAY-95			20-MAY-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg												
alpha-BHC		.77 U	ug/kg	.77	.74 U	ug/kg	.74	.85 U	ug/kg	.85	.71 U	ug/kg	.71
beta-BHC		1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	1.6 U	ug/kg	1.6	1.4 U	ug/kg	1.4
delta-BHC		.77 U	ug/kg	.77	.74 U	ug/kg	.74	.85 U	ug/kg	.85	.71 U	ug/kg	.71
gamma-BHC (Lindane)		.77 U	ug/kg	.77	.74 U	ug/kg	.74	.85 U	ug/kg	.85	.71 U	ug/kg	.71
Heptachlor		.77 U	ug/kg	.77	.74 U	ug/kg	.74	.85 U	ug/kg	.85	.71 U	ug/kg	.71
Aldrin		.77 U	ug/kg	.77	.74 U	ug/kg	.74	.85 U	ug/kg	.85	.71 U	ug/kg	.71
Heptachlor epoxide		.77 U	ug/kg	.77	.74 U	ug/kg	.74	.85 U	ug/kg	.85	.71 U	ug/kg	.71
Endosulfan I		.77 U	ug/kg	.77	.74 U	ug/kg	.74	.85 U	ug/kg	.85	.71 U	ug/kg	.71
Dieldrin		.77 U	ug/kg	.77	.74 U	ug/kg	.74	.85 U	ug/kg	.85	.71 U	ug/kg	.71
4,4-DDE		.77 U	ug/kg	.77	.74 U	ug/kg	.74	.85 U	ug/kg	.85	.71 U	ug/kg	.71
Endrin		1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	1.6 U	ug/kg	1.6	1.4 U	ug/kg	1.4
Endosulfan II		1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	1.6 U	ug/kg	1.6	1.4 U	ug/kg	1.4
4,4-DDD		1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	1.6 U	ug/kg	1.6	1.4 U	ug/kg	1.4
Endosulfan sulfate		1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	1.6 U	ug/kg	1.6	1.4 U	ug/kg	1.4
4,4-DDT		1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	1.6 U	ug/kg	1.6	1.4 U	ug/kg	1.4
Methoxychlor		3.1 U	ug/kg	3.1	3 U	ug/kg	3	3.4 U	ug/kg	3.4	2.8 U	ug/kg	2.8
Endrin aldehyde		1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	1.6 U	ug/kg	1.6	1.4 U	ug/kg	1.4
Endrin ketone		1.5 U	ug/kg	1.5	1.4 U	ug/kg	1.4	1.6 U	ug/kg	1.6	1.4 U	ug/kg	1.4
Chlordane		7.7 U	ug/kg	7.7	7.4 U	ug/kg	7.4	8.5 U	ug/kg	8.5	7.1 U	ug/kg	7.1
Chlorobenzilate		23 U	ug/kg	23	22 U	ug/kg	22	28 U	ug/kg	28	21 U	ug/kg	21
Diallate		46 U	ug/kg	46	44 U	ug/kg	44	56 U	ug/kg	56	42 U	ug/kg	42
Toxaphene		40 U	ug/kg	40	37 U	ug/kg	37	42 U	ug/kg	42	35 U	ug/kg	35
Isodrin		.77 U	ug/kg	.77	.74 U	ug/kg	.74	.85 U	ug/kg	.85	.71 U	ug/kg	.71
Kepone		46 U	ug/kg	46	44 U	ug/kg	44	51 U	ug/kg	51	42 U	ug/kg	42
Aroclor-1016		40 U	ug/kg	40	37 U	ug/kg	37	42 U	ug/kg	42	35 U	ug/kg	35
Aroclor-1221		77 U	ug/kg	77	74 U	ug/kg	74	85 U	ug/kg	85	71 U	ug/kg	71
Aroclor-1232		77 U	ug/kg	77	74 U	ug/kg	74	85 U	ug/kg	85	71 U	ug/kg	71
Aroclor-1242		40 U	ug/kg	40	37 U	ug/kg	37	42 U	ug/kg	42	35 U	ug/kg	35
Aroclor-1248		40 U	ug/kg	40	37 U	ug/kg	37	42 U	ug/kg	42	35 U	ug/kg	35
Aroclor-1254		20 UJ	ug/kg	20	19 UJ	ug/kg	19	22 UJ	ug/kg	22	18 UJ	ug/kg	18
Aroclor-1260		20 U	ug/kg	20	19 U	ug/kg	19	22 U	ug/kg	22	18 U	ug/kg	18

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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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:	M8985003				M8985005				M8994007				R9955018			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	24B00707				44B00107				44B00908				44B01006			
Collect Date:	19-MAY-95				19-MAY-95				20-MAY-95				24-MAY-95			
	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	.74	U	ug/kg	.74	.72	U	ug/kg	.72	.72	U	ug/kg	.72
beta-BHC	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
delta-BHC	.75	U	ug/kg	.75	.74	U	ug/kg	.74	.72	U	ug/kg	.72	.72	U	ug/kg	.72
gamma-BHC (Lindane)	.75	U	ug/kg	.75	.74	U	ug/kg	.74	.72	U	ug/kg	.72	.72	U	ug/kg	.72
Heptachlor	.75	U	ug/kg	.75	.74	U	ug/kg	.74	.72	U	ug/kg	.72	.72	U	ug/kg	.72
Aldrin	.75	U	ug/kg	.75	.74	U	ug/kg	.74	.72	U	ug/kg	.72	.72	U	ug/kg	.72
Heptachlor epoxide	.75	U	ug/kg	.75	.74	U	ug/kg	.74	.72	U	ug/kg	.72	.72	U	ug/kg	.72
Endosulfan I	.75	U	ug/kg	.75	.74	U	ug/kg	.74	.72	U	ug/kg	.72	.72	U	ug/kg	.72
Dieldrin	.75	U	ug/kg	.75	.74	U	ug/kg	.74	.72	U	ug/kg	.72	.72	U	ug/kg	.72
4,4-DDE	.75	U	ug/kg	.75	.74	U	ug/kg	.74	.72	U	ug/kg	.72	.72	U	ug/kg	.72
Endrin	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endosulfan II	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
4,4-DDD	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endosulfan sulfate	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
4,4-DDT	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Methoxychlor	3	U	ug/kg	3	3	U	ug/kg	3	2.9	U	ug/kg	2.9	2.9	U	ug/kg	2.9
Endrin aldehyde	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endrin ketone	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Chlordane	8.8	J	ug/kg	7.5	7.4	U	ug/kg	7.4	7.2	U	ug/kg	7.2	7.2	U	ug/kg	7.2
Chlorobenzilate	22	U	ug/kg	22	22	U	ug/kg	22	22	U	ug/kg	22	21	U	ug/kg	21
Diallate	45	U	ug/kg	45	44	U	ug/kg	44	43	U	ug/kg	43	43	U	ug/kg	43
Toxaphene	37	U	ug/kg	37	36	U	ug/kg	36	35	U	ug/kg	35	35	U	ug/kg	35
Isodrin	.75	U	ug/kg	.75	.74	U	ug/kg	.74	.72	U	ug/kg	.72	.72	U	ug/kg	.72
Kepone	45	U	ug/kg	45	44	U	ug/kg	44	43	U	ug/kg	43	43	U	ug/kg	43
Aroclor-1016	37	U	ug/kg	37	36	U	ug/kg	36	35	U	ug/kg	35	35	U	ug/kg	35
Aroclor-1221	75	U	ug/kg	75	74	U	ug/kg	74	72	U	ug/kg	72	72	U	ug/kg	72
Aroclor-1232	75	U	ug/kg	75	74	U	ug/kg	74	72	U	ug/kg	72	72	U	ug/kg	72
Aroclor-1242	37	U	ug/kg	37	36	U	ug/kg	36	35	U	ug/kg	35	35	U	ug/kg	35
Aroclor-1248	37	U	ug/kg	37	36	U	ug/kg	36	35	U	ug/kg	35	35	U	ug/kg	35
Aroclor-1254	19	UJ	ug/kg	19	19	UJ	ug/kg	19	18	UJ	ug/kg	18	17	U	ug/kg	17
Aroclor-1260	19	U	ug/kg	19	19	U	ug/kg	19	18	U	ug/kg	18	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:	M8994009				R9955016			
Site	GROUP111				GROUP111			
Locator	45B00805				45B01005			
Collect Date:	21-MAY-95				24-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs ug/kg								
alpha-BHC	.74	U	ug/kg	.74	.78	U	ug/kg	.78
beta-BHC	1.4	U	ug/kg	1.4	1.5	U	ug/kg	1.5
delta-BHC	.74	U	ug/kg	.74	.78	U	ug/kg	.78
gamma-BHC (Lindane)	.74	U	ug/kg	.74	.78	U	ug/kg	.78
Heptachlor	.74	U	ug/kg	.74	.78	U	ug/kg	.78
Aldrin	.74	U	ug/kg	.74	.78	U	ug/kg	.78
Heptachlor epoxide	.74	U	ug/kg	.74	.78	U	ug/kg	.78
Endosulfan I	.74	U	ug/kg	.74	.78	U	ug/kg	.78
Dieldrin	.74	U	ug/kg	.74	.78	U	ug/kg	.78
4,4-DDE	.74	U	ug/kg	.74	.78	U	ug/kg	.78
Endrin	1.4	U	ug/kg	1.4	1.5	U	ug/kg	1.5
Endosulfan II	1.4	U	ug/kg	1.4	1.5	U	ug/kg	1.5
4,4-DDD	1.4	U	ug/kg	1.4	1.5	U	ug/kg	1.5
Endosulfan sulfate	1.4	U	ug/kg	1.4	1.5	U	ug/kg	1.5
4,4-DDT	1.4	U	ug/kg	1.4	1.5	U	ug/kg	1.5
Methoxychlor	3	U	ug/kg	3	3.1	U	ug/kg	3.1
Endrin aldehyde	1.4	U	ug/kg	1.4	1.5	U	ug/kg	1.5
Endrin ketone	1.4	U	ug/kg	1.4	1.5	U	ug/kg	1.5
Chlordane	7.4	U	ug/kg	7.4	7.8	U	ug/kg	7.8
Chlorobenzilate	22	U	ug/kg	22	23	U	ug/kg	23
Dialiate	44	U	ug/kg	44	47	U	ug/kg	47
Toxaphene	37	U	ug/kg	37	38	U	ug/kg	38
Isodrin	.74	U	ug/kg	.74	.78	U	ug/kg	.78
Kepone	44	U	ug/kg	44	47	U	ug/kg	47
Aroclor-1016	37	U	ug/kg	37	38	U	ug/kg	38
Aroclor-1221	74	U	ug/kg	74	78	U	ug/kg	78
Aroclor-1232	74	U	ug/kg	74	78	U	ug/kg	78
Aroclor-1242	37	U	ug/kg	37	38	U	ug/kg	38
Aroclor-1248	37	U	ug/kg	37	38	U	ug/kg	38
Aroclor-1254	19	UJ	ug/kg	19	19	U	ug/kg	19
Aroclor-1260	19	U	ug/kg	19	19	U	ug/kg	19

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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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:	R9861003				R9861005				R9861008				R9861009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01B00109				01B00208				01B00308				01B00409			
Collect Date:	03-MAY-95				03-MAY-95				03-MAY-95				03-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	1.2	U	mg/kg	1.2	1.1	U	mg/kg	1.1	1.1	U	mg/kg	1.1	1.2	U	mg/kg	1.2
Arsenic	1.3	J	mg/kg	.6	.52	J	mg/kg	.6	.51	J	mg/kg	.6	.59	J	mg/kg	.6
Barium	3.9	J	mg/kg	.26	2.3	J	mg/kg	.24	3.9	J	mg/kg	.23	2.4	J	mg/kg	.26
Beryllium	.1	J	mg/kg	.072	.07	J	mg/kg	.065	.06	U	mg/kg	.06	.07	U	mg/kg	.07
Cadmium	.29	U	mg/kg	.29	.26	U	mg/kg	.26	.25	U	mg/kg	.25	.28	U	mg/kg	.28
Chromium	2.6		mg/kg	.41	1.7	J	mg/kg	.37	1.1	J	mg/kg	.36	2	J	mg/kg	.4
Cobalt	.75	U	mg/kg	.75	.67	U	mg/kg	.67	.65	U	mg/kg	.65	.73	U	mg/kg	.73
Copper	2.2	UJ	mg/kg	2.2	1.8	UJ	mg/kg	1.8	1.48	UJ	mg/kg	1.48	2	UJ	mg/kg	2
Cyanide	.09	J	mg/kg	1	.15	J	mg/kg	1	.12	J	mg/kg	1	.09	J	mg/kg	1
Lead	.65	J	mg/kg	.4	.61	J	mg/kg	.4	.19	J	mg/kg	.4	1	J	mg/kg	.4
Mercury	.03	U	mg/kg	.03	.03	U	mg/kg	.03	.03	U	mg/kg	.03	.03	U	mg/kg	.03
Nickel	1.5	J	mg/kg	1.4	1.2	U	mg/kg	1.2	1.2	U	mg/kg	1.2	1.4	U	mg/kg	1.4
Selenium	.6	UJ	mg/kg	.6	.54	UJ	mg/kg	.54	.53	UJ	mg/kg	.53	.59	UJ	mg/kg	.59
Silver	.37	UJ	mg/kg	.37	.37	UJ	mg/kg	.37	.37	UJ	mg/kg	.37	.37	UJ	mg/kg	.37
Thallium	.14	U	mg/kg	.14	.13	U	mg/kg	.13	.13	U	mg/kg	.13	.14	U	mg/kg	.14
Tin	5.1	UJ	mg/kg	5.1	2.9	U	mg/kg	2.9	4.36	UJ	mg/kg	4.36	5.6	UJ	mg/kg	5.6
Vanadium	4.2	J	mg/kg	.29	1.7	J	mg/kg	.26	1.6	J	mg/kg	.25	1.2	J	mg/kg	.28
Zinc	3.7	J	mg/kg	.51	2.5	UJ	mg/kg	2.5	2.8	UJ	mg/kg	2.8	5.7	J	mg/kg	.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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:		R9861011			R9861013			R9861014			R9861016		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		01B00508			01B00608			01B00608D			01B00708		
Collect Date:		03-MAY-95			03-MAY-95			03-MAY-95			03-MAY-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg												
Antimony		.01 J	mg/kg	5	.01 U	mg/kg	.01	.01 U	mg/kg	.01	.01 U	mg/kg	.01
Arsenic		.93 J	mg/kg	.6	.56 J	mg/kg	.6	.59 J	mg/kg	.6	.76 J	mg/kg	.6
Barium		7.7 J	mg/kg	.23	3.9 J	mg/kg	.25	3 J	mg/kg	.25	3.5 J	mg/kg	.23
Beryllium		.12 J	mg/kg	.064	.07 U	mg/kg	.07	.07 U	mg/kg	.07	.09 J	mg/kg	.063
Cadmium		.25 U	mg/kg	.25	.27 U	mg/kg	.27	.27 U	mg/kg	.27	.25 U	mg/kg	.25
Chromium		1.7 J	mg/kg	.36	2 J	mg/kg	.38	1.5 J	mg/kg	.39	1.8 J	mg/kg	.36
Cobalt		.66 U	mg/kg	.66	.69 U	mg/kg	.69	.71 U	mg/kg	.71	.66 J	mg/kg	.66
Copper		6.1 UJ	mg/kg	6.1	1.48 UJ	mg/kg	1.48	1.48 UJ	mg/kg	1.48	1.48 UJ	mg/kg	1.48
Cyanide		.12 J	mg/kg	1	.12 J	mg/kg	1	.09 J	mg/kg	1	.08 J	mg/kg	1
Lead		16.2	mg/kg	2	.54 J	mg/kg	.4	.43 J	mg/kg	.4	.34 J	mg/kg	.4
Mercury		.07	mg/kg	.1	.04 J	mg/kg	.1	.03 U	mg/kg	.03	.03 J	mg/kg	.1
Nickel		12.1	mg/kg	1.2	1.3 U	mg/kg	1.3	1.3 U	mg/kg	1.3	1.2 U	mg/kg	1.2
Selenium		.53 UJ	mg/kg	.53	.56 U	mg/kg	.56	.57 UJ	mg/kg	.57	.53 U	mg/kg	.53
Silver		.37 UJ	mg/kg	.37	.31 U	mg/kg	.31	.37 UJ	mg/kg	.37	.3 U	mg/kg	.3
Thallium		.13 U	mg/kg	.13	.13 U	mg/kg	.13	.14 U	mg/kg	.14	.13 U	mg/kg	.13
Tin		5.6 UJ	mg/kg	5.6	4.36 UJ	mg/kg	4.36	5.3 UJ	mg/kg	5.3	4.36 UJ	mg/kg	4.36
Vanadium		11.2	mg/kg	.25	2 J	mg/kg	.27	2.1 J	mg/kg	.27	2.2 J	mg/kg	.25
Zinc		59.1 J	mg/kg	.45	2.6 UJ	mg/kg	2.6	2.4 UJ	mg/kg	2.4	2.6 UJ	mg/kg	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.

US Naval Station, Mayport, RCRA Facil..; Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:	M8994011				M8985004				M8985006				M8985007			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01B00807				23B00105				23B00406				23B01606			
Collect Date:	21-MAY-95				19-MAY-95				19-MAY-95				19-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	.63	J	mg/kg	.44	.55	J	mg/kg	.51	.48	J	mg/kg	.44	.44	U	mg/kg	.44
Arsenic	.59	J	mg/kg	.16	.74	J	mg/kg	.19	.5	J	mg/kg	.16	.57	J	mg/kg	.16
Barium	3.2	J	mg/kg	.084	3.2	J	mg/kg	.098	3.4	J	mg/kg	.085	2.7	J	mg/kg	.085
Beryllium	.04	UJ	mg/kg	.04	.04	UJ	mg/kg	.04	.04	J	mg/kg	.03	.04	UJ	mg/kg	.04
Cadmium	.61	U	mg/kg	.61	.71	U	mg/kg	.71	.62	U	mg/kg	.62	.82	J	mg/kg	.61
Chromium	1.3	J	mg/kg	1.2	2.3	J	mg/kg	1.4	3.1		mg/kg	1.3	2.3		mg/kg	1.3
Cobalt	.78	U	mg/kg	.78	.91	U	mg/kg	.91	.79	U	mg/kg	.79	.78	U	mg/kg	.78
Copper	1.9	J	mg/kg	.34	3.7	J	mg/kg	.39	1.3	J	mg/kg	.34	2.9	J	mg/kg	.34
Cyanide	.11	U	mg/kg	.11	.12	U	mg/kg	.12	.11	U	mg/kg	.11	.11	U	mg/kg	.11
Lead	1.4		mg/kg	.26	1.7		mg/kg	.3	1.2		mg/kg	.26	1.2		mg/kg	.26
Mercury	.06	U	mg/kg	.06	.08	U	mg/kg	.08	.07	U	mg/kg	.07	.07	U	mg/kg	.07
Nickel	1.5	U	mg/kg	1.5	1.8	U	mg/kg	1.8	1.5	U	mg/kg	1.5	1.5	U	mg/kg	1.5
Selenium	.29	J	mg/kg	.23	.41	J	mg/kg	.27	.49	J	mg/kg	.23	.54	J	mg/kg	.23
Silver	.38	U	mg/kg	.38	.44	U	mg/kg	.44	.38	U	mg/kg	.38	.38	U	mg/kg	.38
Thallium	.36	U	mg/kg	.36	.41	U	mg/kg	.41	.36	U	mg/kg	.36	.36	U	mg/kg	.36
Tin	1.9	U	mg/kg	1.9	2.2	U	mg/kg	2.2	1.9	U	mg/kg	1.9	1.9	U	mg/kg	1.9
Vanadium	.86	J	mg/kg	.42	2.2	J	mg/kg	.49	2	J	mg/kg	.43	1.3	J	mg/kg	.42
Zinc	34		mg/kg	.29	24.1		mg/kg	.34	8.2		mg/kg	.3	9.3		mg/kg	.3

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:	M8994006				M8994001				M8994002				M8994005			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23B02108				23B02407				23B02807				23B02908			
Collect Date:	20-MAY-95				20-MAY-95				20-MAY-95				20-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	.55	J	mg/kg	.47	.46	U	mg/kg	.46	.49	U	mg/kg	.49	.63	J	mg/kg	.44
Arsenic	.6	J	mg/kg	.17	.62	J	mg/kg	.17	1.2	J	mg/kg	.18	.26	J	mg/kg	.16
Barium	2.2	J	mg/kg	.091	3.1	J	mg/kg	.088	3	J	mg/kg	.093	2.1	J	mg/kg	.084
Beryllium	.06	J	mg/kg	.032	.06	J	mg/kg	.031	.03	J	mg/kg	.03	.04	UJ	mg/kg	.04
Cadmium	.66	U	mg/kg	.66	.64	U	mg/kg	.64	.68	J	mg/kg	.67	.61	U	mg/kg	.61
Chromium	2	J	mg/kg	1.3	2.9		mg/kg	1.3	3.4		mg/kg	1.4	2.9		mg/kg	1.2
Cobalt	.84	U	mg/kg	.84	.81	U	mg/kg	.81	.86	U	mg/kg	.86	.77	U	mg/kg	.77
Copper	.49	J	mg/kg	.36	2.8	J	mg/kg	.35	.82	J	mg/kg	.37	.99	J	mg/kg	.33
Cyanide	.11	U	mg/kg	.11	.11	U	mg/kg	.11	.12	U	mg/kg	.12	.1	U	mg/kg	.1
Lead	1.8		mg/kg	.28	1.8		mg/kg	.27	1.2		mg/kg	.29	1.3		mg/kg	.26
Mercury	.07	U	mg/kg	.07	.07	U	mg/kg	.07	.07	U	mg/kg	.07	.07	U	mg/kg	.07
Nickel	1.6	U	mg/kg	1.6	1.6	U	mg/kg	1.6	1.7	J	mg/kg	1.7	1.5	U	mg/kg	1.5
Selenium	.25	UJ	mg/kg	.25	.49	J	mg/kg	.24	.57	J	mg/kg	.25	.23	UJ	mg/kg	.23
Silver	.41	U	mg/kg	.41	.4	U	mg/kg	.4	.42	U	mg/kg	.42	.38	U	mg/kg	.38
Thallium	.38	U	mg/kg	.38	.37	U	mg/kg	.37	.39	U	mg/kg	.39	.35	U	mg/kg	.35
Tin	2	U	mg/kg	2	2	U	mg/kg	2	2.1	U	mg/kg	2.1	1.9	U	mg/kg	1.9
Vanadium	1.4	J	mg/kg	.45	1.3	J	mg/kg	.44	1.6	J	mg/kg	.46	1	J	mg/kg	.42
Zinc	6.9		mg/kg	.32	14.6		mg/kg	.31	36.5		mg/kg	.32	10.5		mg/kg	.29

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.

US Naval Station, Mayport, RCRA Facil. , Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:	M8985003				M8985005				M8994007				R9955018			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	24B00707				44B00107				44B00908				44B01006			
Collect Date:	19-MAY-95				19-MAY-95				20-MAY-95				24-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg															
Antimony	.59	J	mg/kg	.47	.87	J	mg/kg	.45	2.2		mg/kg	.53	1.1	U	mg/kg	1.1
Arsenic	.74	J	mg/kg	.69	.66	J	mg/kg	.16	.74	J	mg/kg	.19	.6	J	mg/kg	.6
Barium	4.7	J	mg/kg	.09	2.7	J	mg/kg	.087	5	J	mg/kg	.1	3.2	J	mg/kg	.24
Beryllium	.22	J	mg/kg	.032	.04	UJ	mg/kg	.04	.04	UJ	mg/kg	.04	.09	J	mg/kg	.064
Cadmium	.65	U	mg/kg	.65	.63	U	mg/kg	.63	.74	U	mg/kg	.74	.26	U	mg/kg	.26
Chromium	3.2		mg/kg	1.3	2	J	mg/kg	1.3	2.8		mg/kg	1.5	1	UJ	mg/kg	1
Cobalt	.83	U	mg/kg	.83	.8	U	mg/kg	.8	.94	U	mg/kg	.94	.67	U	mg/kg	.67
Copper	22.5		mg/kg	.36	9.1		mg/kg	.35	10.6		mg/kg	.41	2.4	UJ	mg/kg	2.4
Cyanide	.11	U	mg/kg	.11	.11	U	mg/kg	.11	.13	U	mg/kg	.13	.05	U	mg/kg	.05
Lead	16.9		mg/kg	1.38	1.3		mg/kg	.27	42.4		mg/kg	1.6	.69		mg/kg	.4
Mercury	.07	U	mg/kg	.07	.06	U	mg/kg	.06	.08	U	mg/kg	.08	.03	U	mg/kg	.03
Nickel	3.9	J	mg/kg	1.6	2.3	J	mg/kg	1.6	2.4	J	mg/kg	1.8	1.7	UJ	mg/kg	1.7
Selenium	.44	J	mg/kg	.25	.57	J	mg/kg	.24	.28	UJ	mg/kg	.28	.11	U	mg/kg	.11
Silver	.41	U	mg/kg	.41	.39	U	mg/kg	.39	.46	U	mg/kg	.46	.3	U	mg/kg	.3
Thallium	.38	U	mg/kg	.38	.37	U	mg/kg	.37	.43	U	mg/kg	.43	.13	U	mg/kg	.13
Tin	62		mg/kg	2	2	U	mg/kg	2	2.3	U	mg/kg	2.3	2.9	U	mg/kg	2.9
Vanadium	1.7	J	mg/kg	.45	3.5	J	mg/kg	.43	1.9	J	mg/kg	.51	1.7	J	mg/kg	.26
Zinc	56.6		mg/kg	.32	36.6		mg/kg	.3	17.3		mg/kg	.36	2.6	UJ	mg/kg	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1,23,24,25,44, and 45 Sub-Surface Soil Data

Lab Sample Number:	M8994009			R9955016		
Site	GROUP111			GROUP111		
Locator	45B00805			45B01005		
Collect Date:	21-MAY-95			24-MAY-95		
	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg						
Antimony	.46 U	mg/kg	.46	1.2 U	mg/kg	1.2
Arsenic	.77 J	mg/kg	.17	.7 J	mg/kg	.6
Barium	7.3 J	mg/kg	.087	4.7 J	mg/kg	.26
Beryllium	.15 J	mg/kg	.031	.12 J	mg/kg	.07
Cadmium	.84 J	mg/kg	.63	.28 U	mg/kg	.28
Chromium	5.3	mg/kg	1.3	2.9	mg/kg	.4
Cobalt	.81 U	mg/kg	.81	.72 U	mg/kg	.72
Copper	4.2 J	mg/kg	.35	4.9 J	mg/kg	.23
Cyanide	.11 U	mg/kg	.11	.09 J	mg/kg	1
Lead	2.3	mg/kg	.27	1.5	mg/kg	.4
Mercury	.05 U	mg/kg	.05	.03 U	mg/kg	.03
Nickel	2.5 J	mg/kg	1.6	1.3 U	mg/kg	1.3
Selenium	.24 UJ	mg/kg	.24	.12 U	mg/kg	.12
Silver	.39 U	mg/kg	.39	.33 U	mg/kg	.33
Thallium	.37 U	mg/kg	.37	.14 U	mg/kg	.14
Tin	3.3 J	mg/kg	2	3.2 U	mg/kg	3.2
Vanadium	5.8 J	mg/kg	.44	2 J	mg/kg	.28
Zinc	23.4	mg/kg	.31	5.2	mg/kg	.49

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, SWMU 45

US Naval Station, Mayport, RCRA Faci... Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:	R9703001				R9703002				R9703005				R9703006			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45L00101				45L00101D				45L00102				45L00102D			
Collect Date:	28-MAR-95				28-MAR-95				28-MAR-95				28-MAR-95			
	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	10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10	10	U	ug/kg	10
Carbon disulfide	5	U	ug/kg	5	5	U	ug/kg	5	1	J	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)	3	J	ug/kg	5	1	J	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	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	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	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	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Acrylonitrile	100	U	ug/kg	100	100	U	ug/kg	100	100	U	ug/kg	100	100	U	ug/kg	100
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	680	U	ug/kg	680	680	U	ug/kg	680
2-Chloroethylvinyl ether	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	R	ug/kg	210	210	R	ug/kg	210	210	R	ug/kg	210	210	R	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

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:	R9703001				R9703002				R9703005				R9703006			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45L00101				45L00101D				45L00102				45L00102D			
Collect Date:	28-MAR-95				28-MAR-95				28-MAR-95				28-MAR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	210	R	ug/kg	210	210	R	ug/kg	210	210	R	ug/kg	210	210	R	ug/kg	210
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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:	R9703003				R9703007				R9703004				R9703008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45L00201				45L00202				45L00301				45L00302			
Collect Date:	28-MAR-95				28-MAR-95				28-MAR-95				28-MAR-95			
	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	11	U	ug/kg	11	10	U	ug/kg	10
Bromomethane	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11	10	U	ug/kg	10
Vinyl chloride	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11	10	U	ug/kg	10
Chloroethane	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11	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	10	U	ug/kg	10	10	U	ug/kg	10	13	U	ug/kg	13	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	11	U	ug/kg	11	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	11	U	ug/kg	11	10	U	ug/kg	10
2-Hexanone	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11	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	2	J	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Dichlorodifluoromethane	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11	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	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Acrolein	100	U	ug/kg	100	100	U	ug/kg	100	110	U	ug/kg	110	100	U	ug/kg	100
Iodomethane	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11	10	U	ug/kg	10
1,4-Dichlorobenzene	5	U	ug/kg	5	680	U	ug/kg	680	5	U	ug/kg	5	5	U	ug/kg	5
Acrylonitrile	100	U	ug/kg	100	100	U	ug/kg	100	110	U	ug/kg	110	100	U	ug/kg	100

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:	R9703003				R9703007				R9703004				R9703008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45L00201				45L00202				45L00301				45L00302			
Collect Date:	28-MAR-95				28-MAR-95				28-MAR-95				28-MAR-95			
	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	670	U	ug/kg	670	680	U	ug/kg	680	5	U	ug/kg	5	680	U	ug/kg	680
2-Chloroethylvinyl ether	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11	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	200	R	ug/kg	200	210	R	ug/kg	210	210	R	ug/kg	210	210	R	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	11	U	ug/kg	11	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	200	R	ug/kg	200	210	R	ug/kg	210	210	R	ug/kg	210	210	R	ug/kg	210
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	110	U	ug/kg	110	100	U	ug/kg	100
Chloroprene	200	U	ug/kg	200	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	11	U	ug/kg	11	10	U	ug/kg	10
Pentachloroethane	10	U	ug/kg	10	10	U	ug/kg	10	11	U	ug/kg	11	10	U	ug/kg	10
Propionitrile	100	U	ug/kg	100	100	U	ug/kg	100	110	U	ug/kg	110	100	U	ug/kg	100
Vinyl acetate	10	U	ug/kg	10	10	U	ug/kg	10	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:		R9703009				R9703010				R9703016				R9703017			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		45L00401				45L00402				45L00501				45L00502			
Collect Date:		28-MAR-95				28-MAR-95				28-MAR-95				28-MAR-95			
		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	15	U	ug/kg	15	12	U	ug/kg	12
Bromomethane		10	U	ug/kg	10	10	U	ug/kg	10	15	U	ug/kg	15	12	U	ug/kg	12
Vinyl chloride		10	U	ug/kg	10	10	U	ug/kg	10	15	U	ug/kg	15	12	U	ug/kg	12
Chloroethane		10	U	ug/kg	10	10	U	ug/kg	10	15	U	ug/kg	15	12	U	ug/kg	12
Methylene chloride		5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
Acetone		10	U	ug/kg	10	10	U	ug/kg	10	15	U	ug/kg	15	12	U	ug/kg	12
Carbon disulfide		5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
1,1-Dichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
1,1-Dichloroethene		5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
1,2-Dichloroethene (total)		5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
Chloroform		5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
1,2-Dichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
2-Butanone		10	U	ug/kg	10	10	U	ug/kg	10	15	U	ug/kg	15	12	U	ug/kg	12
1,1,1-Trichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
Carbon tetrachloride		5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
Bromodichloromethane		5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
1,2-Dichloropropane		5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
cis-1,3-Dichloropropene		5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
Trichloroethene		5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
Dibromochloromethane		5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
1,1,2-Trichloroethane		5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
Benzene		5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
trans-1,3-Dichloropropene		5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
Bromoform		5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
4-Methyl-2-pentanone		10	U	ug/kg	10	10	U	ug/kg	10	15	U	ug/kg	15	12	U	ug/kg	12
2-Hexanone		10	U	ug/kg	10	10	U	ug/kg	10	15	U	ug/kg	15	12	U	ug/kg	12
Tetrachloroethene		5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
1,1,2,2-Tetrachloroethane		5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
Toluene		5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
Chlorobenzene		5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
Ethylbenzene		5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
Styrene		5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
Xylenes (total)		1	J	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
Dichlorodifluoromethane		10	U	ug/kg	10	10	U	ug/kg	10	15	U	ug/kg	15	12	U	ug/kg	12
Trichlorofluoromethane		5	U	ug/kg	5	5	U	ug/kg	5	5	J	ug/kg	7	6	U	ug/kg	6
1,3-Dichlorobenzene		5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	780	U	ug/kg	780
Acrolein		100	U	ug/kg	100	100	U	ug/kg	100	150	UJ	ug/kg	150	120	U	ug/kg	120
Iodomethane		10	U	ug/kg	10	10	U	ug/kg	10	15	U	ug/kg	15	12	U	ug/kg	12
1,4-Dichlorobenzene		5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
Acrylonitrile		100	U	ug/kg	100	100	U	ug/kg	100	150	UJ	ug/kg	150	120	U	ug/kg	120

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:	R9703009				R9703010				R9703016				R9703017			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45L00401				45L00402				45L00501				45L00502			
Collect Date:	28-MAR-95				28-MAR-95				28-MAR-95				28-MAR-95			
	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	7	U	ug/kg	7	6	U	ug/kg	6
1,2-Dichlorobenzene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
2-Chloroethylvinyl ether	10	U	ug/kg	10	10	U	ug/kg	10	15	U	ug/kg	15	12	U	ug/kg	12
Ethyl methacrylate	5	U	ug/kg	5	5	U	ug/kg	5	7	UJ	ug/kg	7	6	U	ug/kg	6
1,2,3-Trichloropropane	5	U	ug/kg	5	5	U	ug/kg	5	7	UJ	ug/kg	7	6	U	ug/kg	6
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	5	U	ug/kg	5	7	UJ	ug/kg	7	6	U	ug/kg	6
Isobutyl alcohol	210	R	ug/kg	210	200	R	ug/kg	200	290	R	ug/kg	290	240	R	ug/kg	240
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
1,2-Dibromo-3-chloropropane	10	U	ug/kg	10	10	U	ug/kg	10	15	U	ug/kg	15	12	U	ug/kg	12
1,2-Dibromoethane	5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
1,4-Dioxane	210	R	ug/kg	210	200	R	ug/kg	200	290	R	ug/kg	290	240	R	ug/kg	240
3-Chloropropene	5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
Acetonitrile	100	U	ug/kg	100	100	U	ug/kg	100	150	U	ug/kg	150	120	U	ug/kg	120
Chloroprene	210	U	ug/kg	210	200	U	ug/kg	200	290	U	ug/kg	290	240	U	ug/kg	240
Methacrylonitrile	5	U	ug/kg	5	5	U	ug/kg	5	7	U	ug/kg	7	6	U	ug/kg	6
Methyl methacrylate	10	U	ug/kg	10	10	U	ug/kg	10	15	U	ug/kg	15	12	U	ug/kg	12
Pentachloroethane	10	U	ug/kg	10	10	U	ug/kg	10	15	U	ug/kg	15	12	U	ug/kg	12
Propionitrile	100	U	ug/kg	100	100	U	ug/kg	100	150	U	ug/kg	150	120	U	ug/kg	120
Vinyl acetate	10	U	ug/kg	10	10	U	ug/kg	10	15	U	ug/kg	15	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.

US Naval Station, Mayport, RCRA Facil.., Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:		R9703014				R9703015				R9703018				R9703019			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		45L00601				45L00602				45L00701				45L00702			
Collect Date:		28-MAR-95				28-MAR-95				28-MAR-95				28-MAR-95			
		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		6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Acetone		12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11
Carbon disulfide		6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,1-Dichloroethane		6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,1-Dichloroethene		6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloroethene (total)		6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Chloroform		6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloroethane		6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
2-Butanone		12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11
1,1,1-Trichloroethane		6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Carbon tetrachloride		6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Bromodichloromethane		6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloropropane		6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
cis-1,3-Dichloropropene		6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Trichloroethene		6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Dibromochloromethane		6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,1,2-Trichloroethane		6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Benzene		6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
trans-1,3-Dichloropropene		6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Bromoform		6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
4-Methyl-2-pentanone		12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11
2-Hexanone		12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11
Tetrachloroethene		6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,1,2,2-Tetrachloroethane		6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Toluene		6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Chlorobenzene		6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Ethylbenzene		6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Styrene		6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Xylenes (total)		6	U	ug/kg	6	6	U	ug/kg	6	3	J	ug/kg	5	5	U	ug/kg	5
Dichlorodifluoromethane		12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11
Trichlorofluoromethane		6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,3-Dichlorobenzene		6	U	ug/kg	6	6	U	ug/kg	6	700	U	ug/kg	700	5	U	ug/kg	5
Acrolein		120	UJ	ug/kg	120	120	UJ	ug/kg	120	110	UJ	ug/kg	110	110	UJ	ug/kg	110
Iodomethane		12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11
1,4-Dichlorobenzene		6	U	ug/kg	6	770	U	ug/kg	770	700	U	ug/kg	700	5	U	ug/kg	5
Acrylonitrile		120	UJ	ug/kg	120	120	UJ	ug/kg	120	110	UJ	ug/kg	110	110	UJ	ug/kg	110

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:	R9703014				R9703015				R9703018				R9703019			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45L00601				45L00602				45L00701				45L00702			
Collect Date:	28-MAR-95				28-MAR-95				28-MAR-95				28-MAR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichlorobenzene	820	U	ug/kg	820	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
2-Chloroethylvinyl ether	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	6	UJ	ug/kg	6	5	UJ	ug/kg	5	5	UJ	ug/kg	5
1,2,3-Trichloropropane	6	UJ	ug/kg	6	6	UJ	ug/kg	6	5	UJ	ug/kg	5	5	UJ	ug/kg	5
trans-1,4-Dichloro-2-butene	6	UJ	ug/kg	6	6	UJ	ug/kg	6	5	UJ	ug/kg	5	5	UJ	ug/kg	5
Isobutyl alcohol	250	R	ug/kg	250	230	R	ug/kg	230	210	R	ug/kg	210	210	R	ug/kg	210
1,1,1,2-Tetrachloroethane	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dibromo-3-chloropropane	12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11
1,2-Dibromoethane	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
1,4-Dioxane	250	R	ug/kg	250	230	R	ug/kg	230	210	R	ug/kg	210	210	R	ug/kg	210
3-Chloropropene	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Acetonitrile	120	U	ug/kg	120	120	U	ug/kg	120	110	U	ug/kg	110	110	U	ug/kg	110
Chloroprene	250	U	ug/kg	250	230	U	ug/kg	230	210	U	ug/kg	210	210	U	ug/kg	210
Methacrylonitrile	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5	5	U	ug/kg	5
Methyl methacrylate	12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11
Pentachloroethane	12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11	11	U	ug/kg	11
Propionitrile	120	U	ug/kg	120	120	U	ug/kg	120	110	U	ug/kg	110	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.

US Naval Station, Mayport, RCRA Faci..., Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:	R9703020			R9703021		
Site	GROUP111			GROUP111		
Locator	45L00801			45L00802		
Collect Date:	28-MAR-95			28-MAR-95		
	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
VOLATILES ug/kg						
Chloromethane	11 U	ug/kg	11	10 U	ug/kg	10
Bromomethane	11 U	ug/kg	11	10 U	ug/kg	10
Vinyl chloride	11 U	ug/kg	11	10 U	ug/kg	10
Chloroethane	11 U	ug/kg	11	10 U	ug/kg	10
Methylene chloride	5 U	ug/kg	5	5 U	ug/kg	5
Acetone	11 U	ug/kg	11	10 U	ug/kg	10
Carbon disulfide	5 U	ug/kg	5	5 U	ug/kg	5
1,1-Dichloroethane	5 U	ug/kg	5	5 U	ug/kg	5
1,1-Dichloroethene	5 U	ug/kg	5	5 U	ug/kg	5
1,2-Dichloroethene (total)	5 U	ug/kg	5	5 U	ug/kg	5
Chloroform	5 U	ug/kg	5	5 U	ug/kg	5
1,2-Dichloroethane	5 U	ug/kg	5	5 U	ug/kg	5
2-Butanone	11 U	ug/kg	11	10 U	ug/kg	10
1,1,1-Trichloroethane	5 U	ug/kg	5	5 U	ug/kg	5
Carbon tetrachloride	5 U	ug/kg	5	5 U	ug/kg	5
Bromodichloromethane	5 U	ug/kg	5	5 U	ug/kg	5
1,2-Dichloropropane	5 U	ug/kg	5	5 U	ug/kg	5
cis-1,3-Dichloropropene	5 U	ug/kg	5	5 U	ug/kg	5
Trichloroethene	5 U	ug/kg	5	5 U	ug/kg	5
Dibromochloromethane	5 U	ug/kg	5	5 U	ug/kg	5
1,1,2-Trichloroethane	5 U	ug/kg	5	5 U	ug/kg	5
Benzene	5 U	ug/kg	5	5 U	ug/kg	5
trans-1,3-Dichloropropene	5 U	ug/kg	5	5 U	ug/kg	5
Bromoform	5 U	ug/kg	5	5 U	ug/kg	5
4-Methyl-2-pentanone	11 U	ug/kg	11	10 U	ug/kg	10
2-Hexanone	11 U	ug/kg	11	10 U	ug/kg	10
Tetrachloroethene	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
Toluene	5 U	ug/kg	5	5 U	ug/kg	5
Chlorobenzene	5 U	ug/kg	5	5 U	ug/kg	5
Ethylbenzene	5 U	ug/kg	5	5 U	ug/kg	5
Styrene	5 U	ug/kg	5	5 U	ug/kg	5
Xylenes (total)	5 U	ug/kg	5	1 J	ug/kg	5
Dichlorodifluoromethane	11 U	ug/kg	11	10 U	ug/kg	10
Trichlorofluoromethane	5 U	ug/kg	5	5 U	ug/kg	5
1,3-Dichlorobenzene	5 U	ug/kg	5	5 U	ug/kg	5
Acrolein	110 UJ	ug/kg	110	100 UJ	ug/kg	100
Iodomethane	11 U	ug/kg	11	10 U	ug/kg	10
1,4-Dichlorobenzene	5 U	ug/kg	5	680 U	ug/kg	680
Acrylonitrile	110 UJ	ug/kg	110	100 UJ	ug/kg	100

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:	R9703020				R9703021			
Site	GROUP111				GROUP111			
Locator	45L00801				45L00802			
Collect Date:	28-MAR-95				28-MAR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichlorobenzene	5	U	ug/kg	5	5	U	ug/kg	5
2-Chloroethylvinyl ether	11	U	ug/kg	11	10	U	ug/kg	10
Ethyl methacrylate	5	UJ	ug/kg	5	5	UJ	ug/kg	5
1,2,3-Trichloropropane	5	UJ	ug/kg	5	5	UJ	ug/kg	5
trans-1,4-Dichloro-2-butene	5	UJ	ug/kg	5	5	UJ	ug/kg	5
Isobutyl alcohol	220	R	ug/kg	220	210	R	ug/kg	210
1,1,1,2-Tetrachloroethane	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
1,2-Dibromoethane	5	U	ug/kg	5	5	U	ug/kg	5
1,4-Dioxane	220	R	ug/kg	220	210	R	ug/kg	210
3-Chloropropene	5	U	ug/kg	5	5	U	ug/kg	5
Acetonitrile	110	U	ug/kg	110	100	U	ug/kg	100
Chloroprene	220	U	ug/kg	220	210	U	ug/kg	210
Methacrylonitrile	5	U	ug/kg	5	5	U	ug/kg	5
Methyl methacrylate	11	U	ug/kg	11	10	U	ug/kg	10
Pentachloroethane	11	U	ug/kg	11	10	U	ug/kg	10
Propionitrile	110	U	ug/kg	110	100	U	ug/kg	100
Vinyl acetate	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.

US Naval Station, Mayport, RCRA Faci nvestigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:	R9703001			R9703002			R9703005			R9703006		
Site	GROUP111			GROUP111			GROUP111			GROUP111		
Locator	45L00101			45L00101D			45L00102			45L00102D		
Collect Date:	28-MAR-95			28-MAR-95			28-MAR-95			28-MAR-95		
	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES ug/kg												
N-Nitrosodimethylamine	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
Phenol	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
Aniline	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
bis(2-Chloroethyl) ether	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
Benzyl Alcohol	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
2-Methylphenol	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
bis(2-Chloroisopropyl) ether	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
N-Nitroso-di-n-propylamine	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
Hexachloroethane	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
Nitrobenzene	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
Isophorone	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
2-Nitrophenol	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
2,4-Dimethylphenol	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
Benzoic acid	3300 U	ug/kg	3300	3300 U	ug/kg	3300	3300 U	ug/kg	3300	3300 U	ug/kg	3300
bis(2-Chloroethoxy) methane	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
2,4-Dichlorophenol	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
1,2,4-Trichlorobenzene	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
Naphthalene	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
4-Chloroaniline	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
Hexachlorobutadiene	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
4-Chloro-3-methylphenol	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
2-Methylnaphthalene	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
Hexachlorocyclopentadiene	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
2,4,6-Trichlorophenol	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
Dimethylphthalate	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
2,4,5-Trichlorophenol	3300 U	ug/kg	3300	3300 U	ug/kg	3300	3300 U	ug/kg	3300	3300 U	ug/kg	3300
2-Chloronaphthalene	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
2-Nitroaniline	3300 U	ug/kg	3300	3300 U	ug/kg	3300	3300 U	ug/kg	3300	3300 UJ	ug/kg	3300
Acenaphthylene	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
2,6-Dinitrotoluene	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
3-Nitroaniline	3300 U	ug/kg	3300	3300 U	ug/kg	3300	3300 U	ug/kg	3300	3300 U	ug/kg	3300
Acenaphthene	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
2,4-Dinitrophenol	3300 U	ug/kg	3300	3300 U	ug/kg	3300	3300 U	ug/kg	3300	3300 U	ug/kg	3300
4-Nitrophenol	3300 UJ	ug/kg	3300	3300 UJ	ug/kg	3300	3300 UJ	ug/kg	3300	3300 UJ	ug/kg	3300
Dibenzofuran	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
2,4-Dinitrotoluene	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
Diethylphthalate	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
4-Chlorophenyl-phenylether	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
Fluorene	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
4-Nitroaniline	3300 U	ug/kg	3300	3300 U	ug/kg	3300	3300 U	ug/kg	3300	3300 U	ug/kg	3300
4,6-Dinitro-2-methylphenol	3300 U	ug/kg	3300	3300 U	ug/kg	3300	3300 U	ug/kg	3300	3300 U	ug/kg	3300
N-Nitrosodiphenylamine (1)	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
1,2-Diphenylhydrazine	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 UJ	ug/kg	680
4-Bromophenyl-phenylether	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
Hexachlorobenzene	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
Pentachlorophenol	3300 U	ug/kg	3300	3300 U	ug/kg	3300	3300 U	ug/kg	3300	3300 U	ug/kg	3300
Phenanthrene	81 J	ug/kg	690	89 J	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
Anthracene	690 U	ug/kg	690	690 U	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
Di-n-Butylphthalate	160 J	ug/kg	690	91 J	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680
Fluoranthene	180 J	ug/kg	690	150 J	ug/kg	690	680 U	ug/kg	680	680 U	ug/kg	680

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:	R9703001				R9703002				R9703005				R9703006			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45L00101				45L00101D				45L00102				45L00102D			
Collect Date:	28-MAR-95				28-MAR-95				28-MAR-95				28-MAR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Pyrene	170	J	ug/kg	690	150	J	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
Butylbenzylphthalate	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
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	120	J	ug/kg	690	98	J	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
Chrysene	140	J	ug/kg	690	130	J	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
bis(2-Ethylhexyl) phthalate	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
Di-n-octylphthalate	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
Benzo (b) fluoranthene	92	J	ug/kg	690	120	J	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
Benzo (k) fluoranthene	150	J	ug/kg	690	130	J	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
Benzo (a) pyrene	100	J	ug/kg	690	99	J	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
Indeno (1,2,3-cd) pyrene	79	J	ug/kg	690	84	J	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
Dibenz (a,h) anthracene	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
Benzo (g,h,i) perylene	96	J	ug/kg	690	110	J	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
2-Picoline	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300
Methyl methanesulfonate	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
Ethyl methanesulfonate	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
Acetophenone	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
N-Nitrosopiperidine	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
Phenyl-tert-butylamine	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300
2,6-Dichlorophenol	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
N-Nitroso-di-n-butylamine	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
N-Nitrosodiethylamine	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
N-Nitrosopyrrolidine	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
Benzidine	3300	U	ug/kg	3300	3300	U	ug/kg	3300	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	3300	U	ug/kg	3300	3300	U	ug/kg	3300
Pentachlorobenzene	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300
1-Naphthylamine	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300
2-Naphthylamine	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300
2,3,4,6-Tetrachlorophenol	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
Phenacetin	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
4-Aminobiphenyl	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300
Pentachloronitrobenzene	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300
Pronamide	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
p-(Dimethylamino)azobenzene	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
7,12-Dimethylbenz(A)Anthracene	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
3-Methylcholanthrene	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
Pyridine	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300
N-Nitrosomethylethylamine	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
N-Nitrosomorpholine	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
o-Toluidine	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
Hexachloropropene	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300
p-Phenylenediamine	33000	U	ug/kg	33000	33000	U	ug/kg	33000	33000	U	ug/kg	33000	33000	U	ug/kg	33000
Safrole	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300
Isosafrole	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300
1,4-Naphthoquinone	69000	UJ	ug/kg	69000	69000	UJ	ug/kg	69000	68000	UJ	ug/kg	68000	68000	UJ	ug/kg	68000
1,3-Dinitrobenzene	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
5-Nitro-o-toluidine	690	UJ	ug/kg	690	690	UJ	ug/kg	690	680	UJ	ug/kg	680	680	UJ	ug/kg	680
1,3,5-Trinitrobenzene	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
4-Nitroquinoline-1-oxide	33000	U	ug/kg	33000	33000	U	ug/kg	33000	33000	U	ug/kg	33000	33000	U	ug/kg	33000
Methapyrilene	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300
3,3-Dimethylbenzidine	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
Hexachlorophene	33000	R	ug/kg	33000	33000	R	ug/kg	33000	33000	R	ug/kg	33000	33000	UJ	ug/kg	33000

US Naval Station, Mayport, RCRA Faci. Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:	R9703001				R9703002				R9703005				R9703006			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45L00101				45L00101D				45L00102				45L00102D			
Collect Date:	28-MAR-95				28-MAR-95				28-MAR-95				28-MAR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Aramite	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300
2-Chlorophenol	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
3- & 4-Methylphenol (2)	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680
Hexachloropropene	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3300	U	ug/kg	3300
2-Acetylaminofluorene	690	U	ug/kg	690	690	U	ug/kg	690	680	U	ug/kg	680	680	U	ug/kg	680

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:	R9703003				R9703007				R9703004				R9703008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45L00201				45L00202				45L00301				45L00302			
Collect Date:	28-MAR-95				28-MAR-95				28-MAR-95				28-MAR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/kg																
N-Nitrosodimethylamine	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Phenol	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Aniline	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
bis(2-Chloroethyl) ether	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Benzyl Alcohol	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
2-Methylphenol	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
bis(2-Chloroisopropyl) ether	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
N-Nitroso-di-n-propylamine	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Hexachloroethane	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Nitrobenzene	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Isophorone	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
2-Nitrophenol	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
2,4-Dimethylphenol	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Benzoic acid	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
bis(2-Chloroethoxy) methane	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
2,4-Dichlorophenol	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
1,2,4-Trichlorobenzene	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Naphthalene	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
4-Chloroaniline	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Hexachlorobutadiene	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
4-Chloro-3-methylphenol	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
2-Methylnaphthalene	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Hexachlorocyclopentadiene	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
2,4,6-Trichlorophenol	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Dimethylphthalate	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
2,4,5-Trichlorophenol	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
2-Chloronaphthalene	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
2-Nitroaniline	3300	U	ug/kg	3300	3300	UJ	ug/kg	3300	3400	U	ug/kg	3400	3300	UJ	ug/kg	3300
Acenaphthylene	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
2,6-Dinitrotoluene	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
3-Nitroaniline	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
Acenaphthene	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
2,4-Dinitrophenol	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
4-Nitrophenol	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3400	UJ	ug/kg	3400	3300	UJ	ug/kg	3300
Dibenzofuran	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
2,4-Dinitrotoluene	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Diethylphthalate	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
4-Chlorophenyl-phenylether	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Fluorene	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
4-Nitroaniline	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300

Lab Sample Number:	R9703003				R9703007				R9703004				R9703008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45L00201				45L00202				45L00301				45L00302			
Collect Date:	28-MAR-95				28-MAR-95				28-MAR-95				28-MAR-95			
	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	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
N-Nitrosodiphenylamine (1)	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
1,2-Diphenylhydrazine	670	U	ug/kg	670	680	UJ	ug/kg	680	690	U	ug/kg	690	680	UJ	ug/kg	680
4-Bromophenyl-phenylether	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Hexachlorobenzene	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Pentachlorophenol	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
Phenanthrene	130	J	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Anthracene	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Di-n-Butylphthalate	230	J	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Fluoranthene	340	J	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Pyrene	320	J	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Butylbenzylphthalate	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
3,3-Dichlorobenzidine	1300	U	ug/kg	1300	1400	U	ug/kg	1400	1400	U	ug/kg	1400	1400	U	ug/kg	1400
Benzo (a) anthracene	260	J	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Chrysene	280	J	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
bis(2-Ethylhexyl) phthalate	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Di-n-octylphthalate	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Benzo (b) fluoranthene	290	J	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Benzo (k) fluoranthene	330	J	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Benzo (a) pyrene	250	J	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Indeno (1,2,3-cd) pyrene	180	J	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Dibenz (a,h) anthracene	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Benzo (g,h,i) perylene	190	J	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
2-Picoline	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
Methyl methanesulfonate	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Ethyl methanesulfonate	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Acetophenone	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
N-Nitrosopiperidine	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Phenyl-tert-butylamine	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
2,6-Dichlorophenol	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
N-Nitroso-di-n-butylamine	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
N-Nitrosodiethylamine	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
N-Nitrosopyrrolidine	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Benzidine	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
1,2,4,5-Tetrachlorobenzene	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
Pentachlorobenzene	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
1-Naphthylamine	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3400	UJ	ug/kg	3400	3300	UJ	ug/kg	3300
2-Naphthylamine	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3400	UJ	ug/kg	3400	3300	UJ	ug/kg	3300
2,3,4,6-Tetrachlorophenol	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Phenacetin	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
4-Aminobiphenyl	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3400	UJ	ug/kg	3400	3300	UJ	ug/kg	3300
Pentachloronitrobenzene	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
Pronamide	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
p-(Dimethylamino)azobenzene	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
7,12-Dimethylbenz(A)Anthracene	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
3-Methylcholanthrene	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Pyridine	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
N-Nitrosomethylethylamine	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
N-Nitrosomorpholine	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
o-Toluidine	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Hexachloropropene	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
p-Phenylenediamine	33000	U	ug/kg	33000	33000	U	ug/kg	33000	34000	U	ug/kg	34000	33000	U	ug/kg	33000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:	R9703003				R9703007				R9703004				R9703008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45L00201				45L00202				45L00301				45L00302			
Collect Date:	28-MAR-95				28-MAR-95				28-MAR-95				28-MAR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
Isosafrole	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
1,4-Naphthoquinone	67000	UJ	ug/kg	67000	68000	UJ	ug/kg	68000	69000	UJ	ug/kg	69000	68000	UJ	ug/kg	68000
1,3-Dinitrobenzene	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
5-Nitro-o-toluidine	670	UJ	ug/kg	670	680	UJ	ug/kg	680	690	UJ	ug/kg	690	680	UJ	ug/kg	680
1,3,5-Trinitrobenzene	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
4-Nitroquinoline-1-oxide	33000	U	ug/kg	33000	33000	U	ug/kg	33000	34000	U	ug/kg	34000	33000	U	ug/kg	33000
Methapyrilene	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
3,3-Dimethylbenzidine	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Hexachlorophene	33000	R	ug/kg	33000	33000	UJ	ug/kg	33000	34000	R	ug/kg	34000	33000	UJ	ug/kg	33000
Aramite	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300	3400	UJ	ug/kg	3400	3300	UJ	ug/kg	3300
2-Chlorophenol	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
3- & 4-Methylphenol (2)	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680
Hexachloropropene	3300	U	ug/kg	3300	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3300	U	ug/kg	3300
2-Acetylaminofluorene	670	U	ug/kg	670	680	U	ug/kg	680	690	U	ug/kg	690	680	U	ug/kg	680

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.

US Naval Station, Mayport, RCRA Faci Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:	R9703009				R9703010				R9703016				R9703017			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45L00401				45L00402				45L00501				45L00502			
Collect Date:	28-MAR-95				28-MAR-95				28-MAR-95				28-MAR-95			
	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	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Phenol	680	U	ug/kg	680	670	U	ug/kg	670	340	J	ug/kg	970	780	U	ug/kg	780
Aniline	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
bis(2-Chloroethyl) ether	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Benzyl Alcohol	680	U	ug/kg	680	670	U	ug/kg	670	300	J	ug/kg	970	780	U	ug/kg	780
2-Methylphenol	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
bis(2-Chloroisopropyl) ether	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
N-Nitroso-di-n-propylamine	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Hexachloroethane	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Nitrobenzene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Isophorone	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
2-Nitrophenol	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
2,4-Dimethylphenol	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Benzoic acid	3300	U	ug/kg	3300	3200	U	ug/kg	3200	4700	U	ug/kg	4700	3800	U	ug/kg	3800
bis(2-Chloroethoxy) methane	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
2,4-Dichlorophenol	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
1,2,4-Trichlorobenzene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Naphthalene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
4-Chloroaniline	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Hexachlorobutadiene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
4-Chloro-3-methylphenol	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
2-Methylnaphthalene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Hexachlorocyclopentadiene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
2,4,6-Trichlorophenol	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Dimethylphthalate	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
2,4,5-Trichlorophenol	3300	U	ug/kg	3300	3200	U	ug/kg	3200	4700	U	ug/kg	4700	3800	U	ug/kg	3800
2-Chloronaphthalene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
2-Nitroaniline	3300	UJ	ug/kg	3300	3200	UJ	ug/kg	3200	4700	UJ	ug/kg	4700	3800	UJ	ug/kg	3800
Acenaphthylene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
2,6-Dinitrotoluene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
3-Nitroaniline	3300	U	ug/kg	3300	3200	U	ug/kg	3200	4700	U	ug/kg	4700	3800	U	ug/kg	3800
Acenaphthene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
2,4-Dinitrophenol	3300	U	ug/kg	3300	3200	U	ug/kg	3200	4700	U	ug/kg	4700	3800	U	ug/kg	3800
4-Nitrophenol	3300	UJ	ug/kg	3300	3200	UJ	ug/kg	3200	4700	UJ	ug/kg	4700	3800	UJ	ug/kg	3800
Dibenzofuran	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
2,4-Dinitrotoluene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Diethylphthalate	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
4-Chlorophenyl-phenylether	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Fluorene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
4-Nitroaniline	3300	U	ug/kg	3300	3200	U	ug/kg	3200	4700	U	ug/kg	4700	3800	U	ug/kg	3800

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:	R9703009				R9703010				R9703016				R9703017			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45L00401				45L00402				45L00501				45L00502			
Collect Date:	28-MAR-95				28-MAR-95				28-MAR-95				28-MAR-95			
	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	3200	U	ug/kg	3200	4700	U	ug/kg	4700	3800	U	ug/kg	3800
N-Nitrosodiphenylamine (1)	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
1,2-Diphenylhydrazine	680	UJ	ug/kg	680	670	UJ	ug/kg	670	970	UJ	ug/kg	970	780	UJ	ug/kg	780
4-Bromophenyl-phenylether	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Hexachlorobenzene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Pentachlorophenol	3300	U	ug/kg	3300	3200	U	ug/kg	3200	4700	U	ug/kg	4700	3800	U	ug/kg	3800
Phenanthrene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Anthracene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Di-n-Butylphthalate	680	U	ug/kg	680	670	U	ug/kg	670	1500		ug/kg	970	670	J	ug/kg	780
Fluoranthene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Pyrene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Butylbenzylphthalate	680	U	ug/kg	680	670	U	ug/kg	670	110	J	ug/kg	970	780	U	ug/kg	780
3,3-Dichlorobenzidine	1400	U	ug/kg	1400	1300	U	ug/kg	1300	1900	U	ug/kg	1900	1600	U	ug/kg	1600
Benzo (a) anthracene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Chrysene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
bis(2-Ethylhexyl) phthalate	680	U	ug/kg	680	670	U	ug/kg	670	2800		ug/kg	970	950	U	ug/kg	950
Di-n-octylphthalate	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Benzo (b) fluoranthene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Benzo (k) fluoranthene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Benzo (a) pyrene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Indeno (1,2,3-cd) pyrene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Dibenz (a,h) anthracene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Benzo (g,h,i) perylene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
2-Picoline	3300	U	ug/kg	3300	3200	U	ug/kg	3200	4700	U	ug/kg	4700	3800	U	ug/kg	3800
Methyl methanesulfonate	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Ethyl methanesulfonate	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Acetophenone	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
N-Nitrosopiperidine	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Phenyl-tert-butylamine	3300	U	ug/kg	3300	3200	U	ug/kg	3200	4700	U	ug/kg	4700	3800	U	ug/kg	3800
2,6-Dichlorophenol	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
N-Nitroso-di-n-butylamine	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
N-Nitrosodiethylamine	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
N-Nitrosopyrrolidine	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Benzidine	3300	U	ug/kg	3300	3200	U	ug/kg	3200	4700	U	ug/kg	4700	3800	U	ug/kg	3800
1,2,4,5-Tetrachlorobenzene	3300	U	ug/kg	3300	3200	U	ug/kg	3200	4700	U	ug/kg	4700	3800	U	ug/kg	3800
Pentachlorobenzene	3300	U	ug/kg	3300	3200	U	ug/kg	3200	4700	U	ug/kg	4700	3800	U	ug/kg	3800
1-Naphthylamine	3300	UJ	ug/kg	3300	3200	UJ	ug/kg	3200	4700	UJ	ug/kg	4700	3800	UJ	ug/kg	3800
2-Naphthylamine	3300	UJ	ug/kg	3300	3200	UJ	ug/kg	3200	4700	UJ	ug/kg	4700	3800	UJ	ug/kg	3800
2,3,4,6-Tetrachlorophenol	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Phenacetin	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
4-Aminobiphenyl	3300	UJ	ug/kg	3300	3200	UJ	ug/kg	3200	4700	UJ	ug/kg	4700	3800	UJ	ug/kg	3800
Pentachloronitrobenzene	3300	U	ug/kg	3300	3200	U	ug/kg	3200	4700	U	ug/kg	4700	3800	U	ug/kg	3800
Pronamide	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
p-(Dimethylamino)azobenzene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
7,12-Dimethylbenz(A)Anthracene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
3-Methylcholanthrene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Pyridine	3300	U	ug/kg	3300	3200	U	ug/kg	3200	4700	U	ug/kg	4700	3800	U	ug/kg	3800
N-Nitrosomethylethylamine	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
N-Nitrosomorpholine	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
o-Toluidine	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Hexachloropropene	3300	U	ug/kg	3300	3200	U	ug/kg	3200	4700	U	ug/kg	4700	3800	U	ug/kg	3800
p-Phenylenediamine	33000	U	ug/kg	33000	32000	U	ug/kg	32000	47000	U	ug/kg	47000	38000	U	ug/kg	38000

US Naval Station, Mayport, RCRA Faci[illegible] Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:	R9703009				R9703010				R9703016				R9703017			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45L00401				45L00402				45L00501				45L00502			
Collect Date:	28-MAR-95				28-MAR-95				28-MAR-95				28-MAR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	3300	U	ug/kg	3300	3200	U	ug/kg	3200	4700	U	ug/kg	4700	3800	U	ug/kg	3800
Isosafrole	3300	U	ug/kg	3300	3200	U	ug/kg	3200	4700	U	ug/kg	4700	3800	U	ug/kg	3800
1,4-Naphthoquinone	68000	UJ	ug/kg	68000	67000	UJ	ug/kg	67000	97000	UJ	ug/kg	97000	78000	UJ	ug/kg	78000
1,3-Dinitrobenzene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
5-Nitro-o-toluidine	680	UJ	ug/kg	680	670	UJ	ug/kg	670	970	UJ	ug/kg	970	780	UJ	ug/kg	780
1,3,5-Trinitrobenzene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
4-Nitroquinoline-1-oxide	33000	U	ug/kg	33000	32000	U	ug/kg	32000	47000	U	ug/kg	47000	38000	U	ug/kg	38000
Methapyrilene	3300	U	ug/kg	3300	3200	U	ug/kg	3200	4700	U	ug/kg	4700	3800	U	ug/kg	3800
3,3-Dimethylbenzidine	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Hexachlorophene	33000	UJ	ug/kg	33000	32000	UJ	ug/kg	32000	47000	UJ	ug/kg	47000	38000	UJ	ug/kg	38000
Aramite	3300	UJ	ug/kg	3300	3200	UJ	ug/kg	3200	4700	UJ	ug/kg	4700	3800	UJ	ug/kg	3800
2-Chlorophenol	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
3- & 4-Methylphenol (2)	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780
Hexachloropropene	3300	U	ug/kg	3300	3200	U	ug/kg	3200	4700	U	ug/kg	4700	3800	U	ug/kg	3800
2-Acetylaminofluorene	680	U	ug/kg	680	670	U	ug/kg	670	970	U	ug/kg	970	780	U	ug/kg	780

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:		R9703014				R9703015				R9703018				R9703019			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		45L00601				45L00602				45L00701				45L00702			
Collect Date:		28-MAR-95				28-MAR-95				28-MAR-95				28-MAR-95			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg																
N-Nitrosodimethylamine		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Phenol		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Aniline		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
bis(2-Chloroethyl) ether		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Benzyl Alcohol		820	U	ug/kg	820	770	U	ug/kg	770	210	J	ug/kg	700	700	U	ug/kg	700
2-Methylphenol		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
bis(2-Chloroisopropyl) ether		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
N-Nitroso-di-n-propylamine		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Hexachloroethane		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Nitrobenzene		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Isophorone		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
2-Nitrophenol		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
2,4-Dimethylphenol		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Benzoic acid		4000	U	ug/kg	4000	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
bis(2-Chloroethoxy) methane		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
2,4-Dichlorophenol		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
1,2,4-Trichlorobenzene		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Naphthalene		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
4-Chloroaniline		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Hexachlorobutadiene		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
4-Chloro-3-methylphenol		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
2-Methylnaphthalene		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Hexachlorocyclopentadiene		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
2,4,6-Trichlorophenol		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Dimethylphthalate		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
2,4,5-Trichlorophenol		4000	U	ug/kg	4000	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
2-Chloronaphthalene		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
2-Nitroaniline		4000	UJ	ug/kg	4000	3700	UJ	ug/kg	3700	3400	UJ	ug/kg	3400	3400	UJ	ug/kg	3400
Acenaphthylene		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
2,6-Dinitrotoluene		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
3-Nitroaniline		4000	U	ug/kg	4000	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Acenaphthene		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
2,4-Dinitrophenol		4000	U	ug/kg	4000	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
4-Nitrophenol		4000	UJ	ug/kg	4000	3700	UJ	ug/kg	3700	3400	UJ	ug/kg	3400	3400	UJ	ug/kg	3400
Dibenzofuran		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
2,4-Dinitrotoluene		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Diethylphthalate		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
4-Chlorophenyl-phenylether		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Fluorene		820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
4-Nitroaniline		4000	U	ug/kg	4000	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:	R9703014				R9703015				R9703018				R9703019			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45L00601				45L00602				45L00701				45L00702			
Collect Date:	28-MAR-95				28-MAR-95				28-MAR-95				28-MAR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	4000	U	ug/kg	4000	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
N-Nitrosodiphenylamine (1)	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
1,2-Diphenylhydrazine	820	UJ	ug/kg	820	770	UJ	ug/kg	770	700	UJ	ug/kg	700	700	UJ	ug/kg	700
4-Bromophenyl-phenylether	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Hexachlorobenzene	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Pentachlorophenol	4000	U	ug/kg	4000	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Phenanthrene	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Anthracene	91	J	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Di-n-Butylphthalate	890		ug/kg	820	930		ug/kg	770	260	J	ug/kg	700	320	J	ug/kg	700
Fluoranthene	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Pyrene	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Butylbenzylphthalate	820	U	ug/kg	820	120	J	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
3,3-Dichlorobenzidine	1600	U	ug/kg	1600	1500	U	ug/kg	1500	1400	U	ug/kg	1400	1400	U	ug/kg	1400
Benzo (a) anthracene	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Chrysene	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
bis(2-Ethylhexyl) phthalate	1000	U	ug/kg	1000	990	U	ug/kg	990	700	U	ug/kg	700	700	U	ug/kg	700
Di-n-octylphthalate	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Benzo (b) fluoranthene	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Benzo (k) fluoranthene	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Benzo (a) pyrene	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Indeno (1,2,3-cd) pyrene	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Dibenz (a,h) anthracene	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Benzo (g,h,i) perylene	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
2-Picoline	4000	U	ug/kg	4000	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Methyl methanesulfonate	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Ethyl methanesulfonate	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Acetophenone	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
N-Nitrosopiperidine	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Phenyl-tert-butylamine	4000	U	ug/kg	4000	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
2,6-Dichlorophenol	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
N-Nitroso-di-n-butylamine	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
N-Nitrosodiethylamine	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
N-Nitrosopyrrolidine	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Benzidine	4000	U	ug/kg	4000	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	UJ	ug/kg	3400
1,2,4,5-Tetrachlorobenzene	4000	U	ug/kg	4000	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Pentachlorobenzene	4000	U	ug/kg	4000	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
1-Naphthylamine	4000	UJ	ug/kg	4000	3700	UJ	ug/kg	3700	3400	UJ	ug/kg	3400	3400	UJ	ug/kg	3400
2-Naphthylamine	4000	UJ	ug/kg	4000	3700	UJ	ug/kg	3700	3400	UJ	ug/kg	3400	3400	UJ	ug/kg	3400
2,3,4,6-Tetrachlorophenol	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Phenacetin	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
4-Aminobiphenyl	4000	UJ	ug/kg	4000	3700	UJ	ug/kg	3700	3400	UJ	ug/kg	3400	3400	UJ	ug/kg	3400
Pentachloronitrobenzene	4000	U	ug/kg	4000	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Pronamide	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
p-(Dimethylamino)azobenzene	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
7,12-Dimethylbenz(A)Anthracene	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
3-Methylcholanthrene	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Pyridine	4000	U	ug/kg	4000	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
N-Nitrosomethylethylamine	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
N-Nitrosomorpholine	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
o-Toluidine	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Hexachloropropene	4000	U	ug/kg	4000	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
p-Phenylenediamine	40000	U	ug/kg	40000	37000	U	ug/kg	37000	34000	U	ug/kg	34000	34000	U	ug/kg	34000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:	R9703014				R9703015				R9703018				R9703019			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45L00601				45L00602				45L00701				45L00702			
Collect Date:	28-MAR-95				28-MAR-95				28-MAR-95				28-MAR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	4000	U	ug/kg	4000	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Isosafrole	4000	U	ug/kg	4000	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
1,4-Naphthoquinone	82000	UJ	ug/kg	82000	77000	UJ	ug/kg	77000	70000	UJ	ug/kg	70000	70000	UJ	ug/kg	70000
1,3-Dinitrobenzene	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
5-Nitro-o-toluidine	820	UJ	ug/kg	820	770	UJ	ug/kg	770	700	UJ	ug/kg	700	700	UJ	ug/kg	700
1,3,5-Trinitrobenzene	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
4-Nitroquinoline-1-oxide	40000	U	ug/kg	40000	37000	U	ug/kg	37000	34000	U	ug/kg	34000	34000	U	ug/kg	34000
Methapyrilene	4000	U	ug/kg	4000	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	UJ	ug/kg	3400
3,3-Dimethylbenzidine	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Hexachlorophene	40000	UJ	ug/kg	40000	37000	UJ	ug/kg	37000	34000	UJ	ug/kg	34000	34000	R	ug/kg	34000
Aramite	4000	UJ	ug/kg	4000	3700	UJ	ug/kg	3700	3400	UJ	ug/kg	3400	3400	UJ	ug/kg	3400
2-Chlorophenol	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
3- & 4-Methylphenol (2)	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700
Hexachloropropene	4000	U	ug/kg	4000	3700	U	ug/kg	3700	3400	U	ug/kg	3400	3400	U	ug/kg	3400
2-Acetylaminofluorene	820	U	ug/kg	820	770	U	ug/kg	770	700	U	ug/kg	700	700	U	ug/kg	700

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.

US Naval Station, Mayport, RCRA Faci. .y Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:	R9703020			R9703021		
Site	GROUP111			GROUP111		
Locator	45L00801			45L00802		
Collect Date:	28-MAR-95			28-MAR-95		
	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL
SEMIVOLATILES ug/kg						
N-Nitrosodimethylamine	710	U ug/kg	710	680	U ug/kg	680
Phenol	220	J ug/kg	710	680	U ug/kg	680
Aniline	710	U ug/kg	710	680	U ug/kg	680
bis(2-Chloroethyl) ether	710	U ug/kg	710	680	U ug/kg	680
Benzyl Alcohol	710	U ug/kg	710	680	U ug/kg	680
2-Methylphenol	710	U ug/kg	710	680	U ug/kg	680
bis(2-Chloroisopropyl) ether	710	U ug/kg	710	680	U ug/kg	680
N-Nitroso-di-n-propylamine	710	U ug/kg	710	680	U ug/kg	680
Hexachloroethane	710	U ug/kg	710	680	U ug/kg	680
Nitrobenzene	710	U ug/kg	710	680	U ug/kg	680
Isophorone	710	U ug/kg	710	680	U ug/kg	680
2-Nitrophenol	710	U ug/kg	710	680	U ug/kg	680
2,4-Dimethylphenol	710	U ug/kg	710	680	U ug/kg	680
Benzoic acid	3400	U ug/kg	3400	3300	U ug/kg	3300
bis(2-Chloroethoxy) methane	710	U ug/kg	710	680	U ug/kg	680
2,4-Dichlorophenol	710	U ug/kg	710	680	U ug/kg	680
1,2,4-Trichlorobenzene	710	U ug/kg	710	680	U ug/kg	680
Naphthalene	710	U ug/kg	710	680	U ug/kg	680
4-Chloroaniline	710	U ug/kg	710	680	U ug/kg	680
Hexachlorobutadiene	710	U ug/kg	710	680	U ug/kg	680
4-Chloro-3-methylphenol	710	U ug/kg	710	680	U ug/kg	680
2-Methylnaphthalene	710	U ug/kg	710	680	U ug/kg	680
Hexachlorocyclopentadiene	710	U ug/kg	710	680	U ug/kg	680
2,4,6-Trichlorophenol	710	U ug/kg	710	680	U ug/kg	680
Dimethylphthalate	710	U ug/kg	710	680	U ug/kg	680
2,4,5-Trichlorophenol	3400	U ug/kg	3400	3300	U ug/kg	3300
2-Chloronaphthalene	710	U ug/kg	710	680	U ug/kg	680
2-Nitroaniline	3400	UJ ug/kg	3400	3300	UJ ug/kg	3300
Acenaphthylene	710	U ug/kg	710	680	U ug/kg	680
2,6-Dinitrotoluene	710	U ug/kg	710	680	U ug/kg	680
3-Nitroaniline	3400	U ug/kg	3400	3300	U ug/kg	3300
Acenaphthene	710	U ug/kg	710	680	U ug/kg	680
2,4-Dinitrophenol	3400	U ug/kg	3400	3300	U ug/kg	3300
4-Nitrophenol	3400	UJ ug/kg	3400	3300	UJ ug/kg	3300
Dibenzofuran	710	U ug/kg	710	680	U ug/kg	680
2,4-Dinitrotoluene	710	U ug/kg	710	680	U ug/kg	680
Diethylphthalate	710	U ug/kg	710	680	U ug/kg	680
4-Chlorophenyl-phenylether	710	U ug/kg	710	680	U ug/kg	680
Fluorene	710	U ug/kg	710	680	U ug/kg	680
4-Nitroaniline	3400	U ug/kg	3400	3300	U ug/kg	3300

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:	R9703020				R9703021			
Site	GROUP111				GROUP111			
Locator	45L00801				45L00802			
Collect Date:	28-MAR-95				28-MAR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	3400	U	ug/kg	3400	3300	U	ug/kg	3300
N-Nitrosodiphenylamine (1)	710	U	ug/kg	710	680	U	ug/kg	680
1,2-Diphenylhydrazine	710	UJ	ug/kg	710	680	UJ	ug/kg	680
4-Bromophenyl-phenylether	710	U	ug/kg	710	680	U	ug/kg	680
Hexachlorobenzene	710	U	ug/kg	710	680	U	ug/kg	680
Pentachlorophenol	3400	U	ug/kg	3400	3300	U	ug/kg	3300
Phenanthrene	710	U	ug/kg	710	680	U	ug/kg	680
Anthracene	710	U	ug/kg	710	680	U	ug/kg	680
Di-n-Butylphthalate	170	J	ug/kg	710	73	J	ug/kg	680
Fluoranthene	710	U	ug/kg	710	680	U	ug/kg	680
Pyrene	710	U	ug/kg	710	680	U	ug/kg	680
Butylbenzylphthalate	710	U	ug/kg	710	680	U	ug/kg	680
3,3-Dichlorobenzidine	1400	U	ug/kg	1400	1400	U	ug/kg	1400
Benzo (a) anthracene	710	U	ug/kg	710	680	U	ug/kg	680
Chrysene	710	U	ug/kg	710	680	U	ug/kg	680
bis(2-Ethylhexyl) phthalate	710	U	ug/kg	710	680	U	ug/kg	680
Di-n-octylphthalate	710	U	ug/kg	710	680	U	ug/kg	680
Benzo (b) fluoranthene	710	U	ug/kg	710	680	U	ug/kg	680
Benzo (k) fluoranthene	710	U	ug/kg	710	680	U	ug/kg	680
Benzo (a) pyrene	710	U	ug/kg	710	680	U	ug/kg	680
Indeno (1,2,3-cd) pyrene	710	U	ug/kg	710	680	U	ug/kg	680
Dibenz (a,h) anthracene	710	U	ug/kg	710	680	U	ug/kg	680
Benzo (g,h,i) perylene	710	U	ug/kg	710	680	U	ug/kg	680
2-Picoline	3400	U	ug/kg	3400	3300	U	ug/kg	3300
Methyl methanesulfonate	710	U	ug/kg	710	680	U	ug/kg	680
Ethyl methanesulfonate	710	U	ug/kg	710	680	U	ug/kg	680
Acetophenone	710	U	ug/kg	710	680	U	ug/kg	680
N-Nitrosopiperidine	710	U	ug/kg	710	680	U	ug/kg	680
Phenyl-tert-butylamine	3400	U	ug/kg	3400	3300	U	ug/kg	3300
2,6-Dichlorophenol	710	U	ug/kg	710	680	U	ug/kg	680
N-Nitroso-di-n-butylamine	710	U	ug/kg	710	680	U	ug/kg	680
N-Nitrosodiethylamine	710	U	ug/kg	710	680	U	ug/kg	680
N-Nitrosopyrrolidine	710	U	ug/kg	710	680	U	ug/kg	680
Benzidine	3400	UJ	ug/kg	3400	3300	UJ	ug/kg	3300
1,2,4,5-Tetrachlorobenzene	3400	U	ug/kg	3400	3300	U	ug/kg	3300
Pentachlorobenzene	3400	U	ug/kg	3400	3300	U	ug/kg	3300
1-Naphthylamine	3400	UJ	ug/kg	3400	3300	UJ	ug/kg	3300
2-Naphthylamine	3400	UJ	ug/kg	3400	3300	UJ	ug/kg	3300
2,3,4,6-Tetrachlorophenol	710	U	ug/kg	710	680	U	ug/kg	680
Phenacetin	710	U	ug/kg	710	680	U	ug/kg	680
4-Aminobiphenyl	3400	UJ	ug/kg	3400	3300	UJ	ug/kg	3300
Pentachloronitrobenzene	3400	U	ug/kg	3400	3300	U	ug/kg	3300
Pronamide	710	U	ug/kg	710	680	U	ug/kg	680
p-(Dimethylamino)azobenzene	710	U	ug/kg	710	680	U	ug/kg	680
7,12-Dimethylbenz(A)Anthracene	710	U	ug/kg	710	680	U	ug/kg	680
3-Methylcholanthrene	710	U	ug/kg	710	680	U	ug/kg	680
Pyridine	3400	U	ug/kg	3400	3300	U	ug/kg	3300
N-Nitrosomethylethylamine	710	U	ug/kg	710	680	U	ug/kg	680
N-Nitrosomorpholine	710	U	ug/kg	710	680	U	ug/kg	680
o-Toluidine	710	U	ug/kg	710	680	U	ug/kg	680
Hexachloropropene	3400	U	ug/kg	3400	3300	U	ug/kg	3300
p-Phenylenediamine	34000	U	ug/kg	34000	33000	U	ug/kg	33000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:	R9703020				R9703021			
Site	GROUP111				GROUP111			
Locator	45L00801				45L00802			
Collect Date:	28-MAR-95				28-MAR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	3400	U	ug/kg	3400	3300	U	ug/kg	3300
Isosafrole	3400	U	ug/kg	3400	3300	U	ug/kg	3300
1,4-Naphthoquinone	71000	UJ	ug/kg	71000	68000	UJ	ug/kg	68000
1,3-Dinitrobenzene	710	U	ug/kg	710	680	U	ug/kg	680
5-Nitro-o-toluidine	710	UJ	ug/kg	710	680	UJ	ug/kg	680
1,3,5-Trinitrobenzene	710	U	ug/kg	710	680	U	ug/kg	680
4-Nitroquinoline-1-oxide	34000	U	ug/kg	34000	33000	U	ug/kg	33000
Methapyrilene	3400	UJ	ug/kg	3400	3300	UJ	ug/kg	3300
3,3-Dimethylbenzidine	710	U	ug/kg	710	680	U	ug/kg	680
Hexachlorophene	34000	R	ug/kg	34000	33000	R	ug/kg	33000
Aramite	3400	UJ	ug/kg	3400	3300	UJ	ug/kg	3300
2-Chlorophenol	710	U	ug/kg	710	680	U	ug/kg	680
3- & 4-Methylphenol (2)	710	U	ug/kg	710	680	U	ug/kg	680
Hexachloropropene	3400	U	ug/kg	3400	3300	U	ug/kg	3300
2-Acetylaminofluorene	710	U	ug/kg	710	680	U	ug/kg	680

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:		R9703001			R9703002			R9703005			R9703006		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		45L00101			45L00101D			45L00102			45L00102D		
Collect Date:		28-MAR-95			28-MAR-95			28-MAR-95			28-MAR-95		
		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	.7 U	ug/kg	.7	.69 U	ug/kg	.69	.69 U	ug/kg	.69
beta-BHC		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3	1.3 U	ug/kg	1.3
delta-BHC		.7 U	ug/kg	.7	.7 U	ug/kg	.7	.69 U	ug/kg	.69	.69 U	ug/kg	.69
gamma-BHC (Lindane)		.7 U	ug/kg	.7	.7 U	ug/kg	.7	.69 U	ug/kg	.69	.69 U	ug/kg	.69
Heptachlor		.7 U	ug/kg	.7	.7 U	ug/kg	.7	.69 U	ug/kg	.69	.69 U	ug/kg	.69
Aldrin		.7 U	ug/kg	.7	.7 U	ug/kg	.7	.69 U	ug/kg	.69	.69 U	ug/kg	.69
Heptachlor epoxide		.7 U	ug/kg	.7	.7 U	ug/kg	.7	.69 U	ug/kg	.69	.69 U	ug/kg	.69
Endosulfan I		.7 U	ug/kg	.7	.7 U	ug/kg	.7	.69 U	ug/kg	.69	.69 U	ug/kg	.69
Dieldrin		.7 U	ug/kg	.7	.79 J	ug/kg	.7	.69 U	ug/kg	.69	.69 U	ug/kg	.69
4,4-DDE		.7 U	ug/kg	.7	.7 U	ug/kg	.7	.69 U	ug/kg	.69	.69 U	ug/kg	.69
Endrin		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3	1.3 U	ug/kg	1.3
Endosulfan II		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3	1.3 U	ug/kg	1.3
4,4-DDD		1.4 U	ug/kg	1.4	1.4 J	ug/kg	1.4	1.3 U	ug/kg	1.3	1.3 U	ug/kg	1.3
Endosulfan sulfate		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3	1.3 U	ug/kg	1.3
4,4-DDT		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3	1.3 U	ug/kg	1.3
Methoxychlor		2.8 U	ug/kg	2.8	2.8 U	ug/kg	2.8	2.8 U	ug/kg	2.8	2.8 U	ug/kg	2.8
Endrin aldehyde		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3	1.3 U	ug/kg	1.3
Endrin ketone		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3	1.3 U	ug/kg	1.3
Chlordane		7 U	ug/kg	7	7 U	ug/kg	7	6.9 U	ug/kg	6.9	6.9 U	ug/kg	6.9
Chlorobenzilate		21 U	ug/kg	21	21 U	ug/kg	21	21 U	ug/kg	21	21 U	ug/kg	21
Diallate		42 U	ug/kg	42	42 U	ug/kg	42	41 U	ug/kg	41	41 U	ug/kg	41
Toxaphene		35 U	ug/kg	35	35 U	ug/kg	35	34 U	ug/kg	34	34 U	ug/kg	34
Isodrin		.7 U	ug/kg	.7	.7 U	ug/kg	.7	.69 U	ug/kg	.69	.69 U	ug/kg	.69
Kepone		42 UJ	ug/kg	42	42 UJ	ug/kg	42	41 UJ	ug/kg	41	41 UJ	ug/kg	41
Aroclor-1016		35 U	ug/kg	35	35 U	ug/kg	35	34 U	ug/kg	34	34 U	ug/kg	34
Aroclor-1221		70 U	ug/kg	70	70 U	ug/kg	70	69 U	ug/kg	69	69 U	ug/kg	69
Aroclor-1232		70 U	ug/kg	70	70 U	ug/kg	70	69 U	ug/kg	69	69 U	ug/kg	69
Aroclor-1242		35 U	ug/kg	35	35 U	ug/kg	35	34 U	ug/kg	34	34 U	ug/kg	34
Aroclor-1248		35 U	ug/kg	35	35 U	ug/kg	35	34 U	ug/kg	34	34 U	ug/kg	34
Aroclor-1254		17 U	ug/kg	17	17 U	ug/kg	17	17 U	ug/kg	17	17 U	ug/kg	17
Aroclor-1260		17 U	ug/kg	17	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.

Lab Sample Number:	R9703003			R9703007			R9703004			R9703008		
Site	GROUP111			GROUP111			GROUP111			GROUP111		
Locator	45L00201			45L00202			45L00301			45L00302		
Collect Date:	28-MAR-95			28-MAR-95			28-MAR-95			28-MAR-95		
	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	.71	U ug/kg	.71	.69	U ug/kg	.69
beta-BHC	1.3	U ug/kg	1.3	1.3	U ug/kg	1.3	1.4	U ug/kg	1.4	1.3	U ug/kg	1.3
delta-BHC	.69	U ug/kg	.69	.69	U ug/kg	.69	.71	U ug/kg	.71	.69	U ug/kg	.69
gamma-BHC (Lindane)	.69	U ug/kg	.69	.69	U ug/kg	.69	.71	U ug/kg	.71	.69	U ug/kg	.69
Heptachlor	.69	U ug/kg	.69	.69	U ug/kg	.69	.71	U ug/kg	.71	.69	U ug/kg	.69
Aldrin	.69	U ug/kg	.69	.69	U ug/kg	.69	.71	U ug/kg	.71	.69	U ug/kg	.69
Heptachlor epoxide	.69	U ug/kg	.69	.69	U ug/kg	.69	.71	U ug/kg	.71	.69	U ug/kg	.69
Endosulfan I	.69	U ug/kg	.69	.69	U ug/kg	.69	.71	U ug/kg	.71	.69	U ug/kg	.69
Dieldrin	.8	ug/kg	.69	.69	U ug/kg	.69	.71	U ug/kg	.71	.69	U ug/kg	.69
4,4-DDE	.69	U ug/kg	.69	.69	U ug/kg	.69	.71	U ug/kg	.71	.69	U ug/kg	.69
Endrin	1.3	U ug/kg	1.3	1.3	U ug/kg	1.3	1.4	U ug/kg	1.4	1.3	U ug/kg	1.3
Endosulfan II	1.3	U ug/kg	1.3	1.3	U ug/kg	1.3	1.4	U ug/kg	1.4	1.3	U ug/kg	1.3
4,4-DDD	1.3	U ug/kg	1.3	1.3	U ug/kg	1.3	1.4	U ug/kg	1.4	1.3	U ug/kg	1.3
Endosulfan sulfate	1.3	U ug/kg	1.3	1.3	U ug/kg	1.3	1.4	U ug/kg	1.4	1.3	U ug/kg	1.3
4,4-DDT	1.3	U ug/kg	1.3	1.3	U ug/kg	1.3	1.4	U ug/kg	1.4	1.3	U ug/kg	1.3
Methoxychlor	2.8	U ug/kg	2.8	2.8	U ug/kg	2.8	2.9	U ug/kg	2.9	2.8	U ug/kg	2.8
Endrin aldehyde	1.3	U ug/kg	1.3	1.3	U ug/kg	1.3	1.4	U ug/kg	1.4	1.3	U ug/kg	1.3
Endrin ketone	1.3	U ug/kg	1.3	1.3	U ug/kg	1.3	1.4	U ug/kg	1.4	1.3	U ug/kg	1.3
Chlordane	6.9	U ug/kg	6.9	6.9	U ug/kg	6.9	7.1	U ug/kg	7.1	6.9	U ug/kg	6.9
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	41	U ug/kg	41	42	U ug/kg	42	41	U ug/kg	41
Toxaphene	34	U ug/kg	34	34	U ug/kg	34	35	U ug/kg	35	34	U ug/kg	34
Isodrin	.74	J ug/kg	.69	.69	U ug/kg	.69	.71	U ug/kg	.71	.69	U ug/kg	.69
Kepone	41	UJ ug/kg	41	41	UJ ug/kg	41	42	UJ ug/kg	42	41	UJ ug/kg	41
Aroclor-1016	34	U ug/kg	34	34	U ug/kg	34	35	U ug/kg	35	34	U ug/kg	34
Aroclor-1221	69	U ug/kg	69	69	U ug/kg	69	71	U ug/kg	71	69	U ug/kg	69
Aroclor-1232	69	U ug/kg	69	69	U ug/kg	69	71	U ug/kg	71	69	U ug/kg	69
Aroclor-1242	34	U ug/kg	34	34	U ug/kg	34	35	U ug/kg	35	34	U ug/kg	34
Aroclor-1248	34	U ug/kg	34	34	U ug/kg	34	35	U ug/kg	35	34	U ug/kg	34
Aroclor-1254	16	U ug/kg	16	16	U ug/kg	16	17	U ug/kg	17	17	U ug/kg	17
Aroclor-1260	16	U ug/kg	16	16	U ug/kg	16	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:		R9703009			R9703010			R9703016			R9703017		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		45L00401			45L00402			45L00501			45L00502		
Collect Date:		28-MAR-95			28-MAR-95			28-MAR-95			28-MAR-95		
		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	.68 U	ug/kg	.68	.99 U	ug/kg	.99	.79 U	ug/kg	.79
beta-BHC		1.3 U	ug/kg	1.3	1.3 U	ug/kg	1.3	1.9 U	ug/kg	1.9	1.5 U	ug/kg	1.5
delta-BHC		.69 U	ug/kg	.69	.68 U	ug/kg	.68	.99 U	ug/kg	.99	.79 U	ug/kg	.79
gamma-BHC (Lindane)		.69 U	ug/kg	.69	.68 U	ug/kg	.68	.99 U	ug/kg	.99	.79 U	ug/kg	.79
Heptachlor		.69 U	ug/kg	.69	.68 U	ug/kg	.68	.99 U	ug/kg	.99	.79 U	ug/kg	.79
Aldrin		.69 U	ug/kg	.69	.68 U	ug/kg	.68	.99 U	ug/kg	.99	.79 U	ug/kg	.79
Heptachlor epoxide		.69 U	ug/kg	.69	.68 U	ug/kg	.68	.99 U	ug/kg	.99	.79 U	ug/kg	.79
Endosulfan I		.69 U	ug/kg	.69	.68 U	ug/kg	.68	.99 U	ug/kg	.99	.79 U	ug/kg	.79
Dieldrin		.69 U	ug/kg	.69	.68 U	ug/kg	.68	3.8 J	ug/kg	.99	1.5 J	ug/kg	.79
4,4-DDE		.69 U	ug/kg	.69	.68 U	ug/kg	.68	.99 U	ug/kg	.99	.79 U	ug/kg	.79
Endrin		1.3 U	ug/kg	1.3	1.3 U	ug/kg	1.3	1.9 U	ug/kg	1.9	1.5 U	ug/kg	1.5
Endosulfan II		1.3 U	ug/kg	1.3	1.3 U	ug/kg	1.3	1.9 U	ug/kg	1.9	1.5 U	ug/kg	1.5
4,4-DDD		1.3 U	ug/kg	1.3	1.3 U	ug/kg	1.3	1.9 U	ug/kg	1.9	1.5 U	ug/kg	1.5
Endosulfan sulfate		1.3 U	ug/kg	1.3	1.3 U	ug/kg	1.3	1.9 U	ug/kg	1.9	1.5 U	ug/kg	1.5
4,4-DDT		1.3 U	ug/kg	1.3	1.3 U	ug/kg	1.3	1.9 U	ug/kg	1.9	1.5 U	ug/kg	1.5
Methoxychlor		2.8 U	ug/kg	2.8	2.7 U	ug/kg	2.7	4 U	ug/kg	4	3.2 U	ug/kg	3.2
Endrin aldehyde		1.3 U	ug/kg	1.3	1.3 U	ug/kg	1.3	1.9 U	ug/kg	1.9	1.5 U	ug/kg	1.5
Endrin ketone		1.3 U	ug/kg	1.3	1.3 U	ug/kg	1.3	1.9 U	ug/kg	1.9	1.5 U	ug/kg	1.5
Chlordane		6.9 U	ug/kg	6.9	6.8 U	ug/kg	6.8	9.9 U	ug/kg	9.9	7.9 U	ug/kg	7.9
Chlorobenzilate		21 U	ug/kg	21	20 U	ug/kg	20	29 U	ug/kg	29	24 U	ug/kg	24
Diallate		41 U	ug/kg	41	41 U	ug/kg	41	59 U	ug/kg	59	47 U	ug/kg	47
Toxaphene		34 U	ug/kg	34	33 U	ug/kg	33	49 U	ug/kg	49	39 U	ug/kg	39
Isodrin		.69 U	ug/kg	.69	.68 U	ug/kg	.68	1.2 J	ug/kg	.99	.79 U	ug/kg	.79
Kepone		41 UJ	ug/kg	41	41 UJ	ug/kg	41	59 UJ	ug/kg	59	47 UJ	ug/kg	47
Aroclor-1016		34 U	ug/kg	34	33 U	ug/kg	33	49 U	ug/kg	49	39 U	ug/kg	39
Aroclor-1221		69 U	ug/kg	69	68 U	ug/kg	68	99 U	ug/kg	99	79 U	ug/kg	79
Aroclor-1232		69 U	ug/kg	69	68 U	ug/kg	68	99 U	ug/kg	99	79 U	ug/kg	79
Aroclor-1242		34 U	ug/kg	34	33 U	ug/kg	33	49 U	ug/kg	49	39 U	ug/kg	39
Aroclor-1248		34 U	ug/kg	34	33 U	ug/kg	33	49 U	ug/kg	49	39 U	ug/kg	39
Aroclor-1254		16 U	ug/kg	16	16 U	ug/kg	16	24 U	ug/kg	24	19 U	ug/kg	19
Aroclor-1260		16 U	ug/kg	16	16 U	ug/kg	16	24 U	ug/kg	24	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.

Lab Sample Number:	R9703014				R9703015				R9703018				R9703019			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45L00601				45L00602				45L00701				45L00702			
Collect Date:	28-MAR-95				28-MAR-95				28-MAR-95				28-MAR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs ug/kg																
alpha-BHC	.84	U	ug/kg	.84	.78	U	ug/kg	.78	.71	U	ug/kg	.71	.72	U	ug/kg	.72
beta-BHC	1.6	U	ug/kg	1.6	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
delta-BHC	.84	U	ug/kg	.84	.78	U	ug/kg	.78	.71	U	ug/kg	.71	.72	U	ug/kg	.72
gamma-BHC (Lindane)	.84	U	ug/kg	.84	.78	U	ug/kg	.78	.71	U	ug/kg	.71	.72	U	ug/kg	.72
Heptachlor	.84	U	ug/kg	.84	.78	U	ug/kg	.78	.71	U	ug/kg	.71	.72	U	ug/kg	.72
Aldrin	2.6	J	ug/kg	.84	.78	U	ug/kg	.78	.71	U	ug/kg	.71	.72	U	ug/kg	.72
Heptachlor epoxide	.84	U	ug/kg	.84	.78	U	ug/kg	.78	.71	U	ug/kg	.71	.72	U	ug/kg	.72
Endosulfan I	.84	U	ug/kg	.84	.78	U	ug/kg	.78	.71	U	ug/kg	.71	.72	U	ug/kg	.72
Dieldrin	3.7	J	ug/kg	.84	2	J	ug/kg	.78	1.5	J	ug/kg	.71	1	J	ug/kg	.72
4,4-DDE	.84	U	ug/kg	.84	1.2	J	ug/kg	.78	.78	J	ug/kg	.71	.72	U	ug/kg	.72
Endrin	1.6	U	ug/kg	1.6	1.5	J	ug/kg	1.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endosulfan II	1.6	U	ug/kg	1.6	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
4,4-DDD	1.6	U	ug/kg	1.6	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endosulfan sulfate	1.6	U	ug/kg	1.6	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
4,4-DDT	1.6	U	ug/kg	1.6	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Methoxychlor	3.4	U	ug/kg	3.4	3.1	U	ug/kg	3.1	2.9	U	ug/kg	2.9	2.9	U	ug/kg	2.9
Endrin aldehyde	1.6	U	ug/kg	1.6	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endrin ketone	1.7	J	ug/kg	1.6	1.8	J	ug/kg	1.5	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Chlordane	8.4	U	ug/kg	8.4	7.8	U	ug/kg	7.8	7.1	U	ug/kg	7.1	7.2	U	ug/kg	7.2
Chlorobenzilate	25	U	ug/kg	25	23	U	ug/kg	23	21	U	ug/kg	21	21	U	ug/kg	21
Diallate	50	U	ug/kg	50	47	U	ug/kg	47	42	U	ug/kg	42	43	U	ug/kg	43
Toxaphene	41	U	ug/kg	41	38	U	ug/kg	38	35	U	ug/kg	35	35	U	ug/kg	35
Isodrin	.84	U	ug/kg	.84	.78	U	ug/kg	.78	.71	U	ug/kg	.71	.72	U	ug/kg	.72
Kepone	50	UJ	ug/kg	50	47	UJ	ug/kg	47	42	UJ	ug/kg	42	43	UJ	ug/kg	43
Aroclor-1016	41	U	ug/kg	41	38	U	ug/kg	38	35	U	ug/kg	35	35	U	ug/kg	35
Aroclor-1221	84	U	ug/kg	84	78	U	ug/kg	78	71	U	ug/kg	71	72	U	ug/kg	72
Aroclor-1232	84	U	ug/kg	84	78	U	ug/kg	78	71	U	ug/kg	71	72	U	ug/kg	72
Aroclor-1242	41	U	ug/kg	41	38	U	ug/kg	38	35	U	ug/kg	35	35	U	ug/kg	35
Aroclor-1248	41	U	ug/kg	41	38	U	ug/kg	38	35	U	ug/kg	35	35	U	ug/kg	35
Aroclor-1254	20	U	ug/kg	20	19	U	ug/kg	19	17	U	ug/kg	17	17	U	ug/kg	17
Aroclor-1260	20	U	ug/kg	20	19	U	ug/kg	19	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:		R9703020			R9703021		
Site		GROUP111			GROUP111		
Locator		45L00801			45L00802		
Collect Date:		28-MAR-95			28-MAR-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg						
alpha-BHC		.72 U	ug/kg	.72	.69 U	ug/kg	.69
beta-BHC		1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3
delta-BHC		.72 U	ug/kg	.72	.69 U	ug/kg	.69
gamma-BHC (Lindane)		.72 U	ug/kg	.72	.69 U	ug/kg	.69
Heptachlor		.72 U	ug/kg	.72	.69 U	ug/kg	.69
Aldrin		.72 U	ug/kg	.72	.69 U	ug/kg	.69
Heptachlor epoxide		.72 U	ug/kg	.72	.69 U	ug/kg	.69
Endosulfan I		.72 U	ug/kg	.72	.69 U	ug/kg	.69
Dieldrin		.92 J	ug/kg	.72	.69 U	ug/kg	.69
4,4-DDE		.72 U	ug/kg	.72	.69 U	ug/kg	.69
Endrin		1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3
Endosulfan II		1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3
4,4-DDD		1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3
Endosulfan sulfate		1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3
4,4-DDT		1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3
Methoxychlor		2.9 U	ug/kg	2.9	2.8 U	ug/kg	2.8
Endrin aldehyde		1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3
Endrin ketone		1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3
Chlordane		7.2 U	ug/kg	7.2	6.9 U	ug/kg	6.9
Chlorobenzilate		21 U	ug/kg	21	21 U	ug/kg	21
Diallate		43 U	ug/kg	43	41 U	ug/kg	41
Toxaphene		35 U	ug/kg	35	34 U	ug/kg	34
Isodrin		.72 U	ug/kg	.72	.69 U	ug/kg	.69
Kepone		43 UJ	ug/kg	43	41 UJ	ug/kg	41
Aroclor-1016		35 U	ug/kg	35	34 U	ug/kg	34
Aroclor-1221		72 U	ug/kg	72	69 U	ug/kg	69
Aroclor-1232		72 U	ug/kg	72	69 U	ug/kg	69
Aroclor-1242		35 U	ug/kg	35	34 U	ug/kg	34
Aroclor-1248		35 U	ug/kg	35	34 U	ug/kg	34
Aroclor-1254		17 U	ug/kg	17	17 U	ug/kg	17
Aroclor-1260		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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:	R9703001				R9703002				R9703005				R9703006			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45L00101				45L00101D				45L00102				45L00102D			
Collect Date:	28-MAR-95				28-MAR-95				28-MAR-95				28-MAR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	1	U	mg/kg	1	1.6	J	mg/kg	5	1	U	mg/kg	1	1	U	mg/kg	1
Arsenic	.5	J	mg/kg	.7	.46	J	mg/kg	.7	.83	J	mg/kg	.7	.7	J	mg/kg	.7
Barium	14.5	J	mg/kg	.084	28.3	J	mg/kg	.084	8.8	J	mg/kg	.083	8.4	J	mg/kg	.083
Beryllium	.04	U	mg/kg	.04	.04	U	mg/kg	.04	.05	J	mg/kg	.04	.04	U	mg/kg	.04
Cadmium	.57	J	mg/kg	.27	.63	J	mg/kg	.27	.52	J	mg/kg	.27	.64	J	mg/kg	.27
Chromium	3.2		mg/kg	.44	4.2		mg/kg	.44	1.9	J	mg/kg	.43	2.1		mg/kg	.43
Cobalt	.57	U	mg/kg	.57	.57	U	mg/kg	.57	.56	U	mg/kg	.56	.56	U	mg/kg	.56
Copper	297		mg/kg	.31	443		mg/kg	.31	116		mg/kg	.31	106		mg/kg	.31
Cyanide	.21	J	mg/kg	1	.5	J	mg/kg	1	.18	J	mg/kg	1	.4	J	mg/kg	1
Lead	9.8	J	mg/kg	.5	8.3	J	mg/kg	.5	3.7	J	mg/kg	.5	3.3	J	mg/kg	.5
Mercury	.19		mg/kg	.1	.22		mg/kg	.1	.05	J	mg/kg	.1	.04	J	mg/kg	.1
Nickel	11.7		mg/kg	1.1	13.8		mg/kg	1.1	12		mg/kg	1.1	11.5		mg/kg	1.1
Selenium	.13	U	mg/kg	.13	.14	J	mg/kg	.6	.12	UJ	mg/kg	.12	.12	UJ	mg/kg	.12
Silver	1.1	J	mg/kg	.48	1.5	J	mg/kg	.48	.48	U	mg/kg	.48	.47	U	mg/kg	.47
Thallium	.13	U	mg/kg	.13	.13	U	mg/kg	.13	.12	U	mg/kg	.12	.12	U	mg/kg	.12
Tin	6.1	J	mg/kg	2.1	10.3	J	mg/kg	2.1	4.1	J	mg/kg	2	2.5	J	mg/kg	2
Vanadium	1.2	J	mg/kg	.31	1.2	J	mg/kg	.31	1.7	J	mg/kg	.31	1.9	J	mg/kg	.31
Zinc	58.2		mg/kg	.25	80.6		mg/kg	.25	89.8		mg/kg	.25	72.9		mg/kg	.25

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:		R9703003			R9703007			R9703004			R9703008		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		45L00201			45L00202			45L00301			45L00302		
Collect Date:		28-MAR-95			28-MAR-95			28-MAR-95			28-MAR-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg												
Antimony		1 U	mg/kg	1	1 U	mg/kg	1	2 J	mg/kg	5	1 U	mg/kg	1
Arsenic		.31 J	mg/kg	.7	.95 J	mg/kg	.7	.53 J	mg/kg	.7	.99 J	mg/kg	.7
Barium		10.9 J	mg/kg	.082	6.5 J	mg/kg	.082	20.7 J	mg/kg	.084	11.9 J	mg/kg	.083
Beryllium		.04 U	mg/kg	.04	.04 U	mg/kg	.04	.04 U	mg/kg	.04	.04 U	mg/kg	.04
Cadmium		.41 J	mg/kg	.27	.29 J	mg/kg	.27	.47 J	mg/kg	.27	.44 J	mg/kg	.27
Chromium		2.5	mg/kg	.43	1.4 J	mg/kg	.43	2.5	mg/kg	.44	2.3	mg/kg	.43
Cobalt		.55 U	mg/kg	.55	.56 U	mg/kg	.56	.57 U	mg/kg	.57	.56 U	mg/kg	.56
Copper		117	mg/kg	.31	53.3	mg/kg	.31	190	mg/kg	.32	115	mg/kg	.31
Cyanide		.21 J	mg/kg	1	.18 J	mg/kg	1	.21 J	mg/kg	1	.24 J	mg/kg	1
Lead		7.8 J	mg/kg	.5	8.2 J	mg/kg	.5	9 J	mg/kg	.5	7.1 J	mg/kg	.5
Mercury		.09	mg/kg	.1	.08	mg/kg	.1	.22	mg/kg	.1	.12	mg/kg	.1
Nickel		6 J	mg/kg	1.1	5 J	mg/kg	1.1	11	mg/kg	1.1	9.2	mg/kg	1.1
Selenium		.12 U	mg/kg	.12	.12 U	mg/kg	.12	.13 U	mg/kg	.13	.12 U	mg/kg	.12
Silver		.79 J	mg/kg	.47	.47 U	mg/kg	.47	1.9 J	mg/kg	.49	1.1 J	mg/kg	.48
Thallium		.12 U	mg/kg	.12	.12 U	mg/kg	.12	.13 U	mg/kg	.13	.12 U	mg/kg	.12
Tin		4.8 J	mg/kg	2	3.1 J	mg/kg	2	4.9 J	mg/kg	2.1	4.2 J	mg/kg	2
Vanadium		.82 J	mg/kg	.31	1.4 J	mg/kg	.31	.94 J	mg/kg	.32	1.7 J	mg/kg	.31
Zinc		35.5	mg/kg	.25	19.3	mg/kg	.25	73.9	mg/kg	.25	51.9	mg/kg	.25

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.

US Naval Station, Mayport, RCRA Fac... Investigation Group 111 Report
SWMU 45 Sludge Data

Lab Sample Number:	R9703009				R9703010				R9703016				R9703017			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45L00401				45L00402				45L00501				45L00502			
Collect Date:	28-MAR-95				28-MAR-95				28-MAR-95				28-MAR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	1	UJ	mg/kg	1	1	U	mg/kg	1	5	J	mg/kg	5	2.4	J	mg/kg	5
Arsenic	.51	J	mg/kg	.7	.43	J	mg/kg	.7	1.2	J	mg/kg	.7	.77	J	mg/kg	.7
Barium	13.7	J	mg/kg	.082	11.9	J	mg/kg	.081	118		mg/kg	.12	54.2		mg/kg	.094
Beryllium	.05	J	mg/kg	.04	.04	U	mg/kg	.04	.06	U	mg/kg	.06	.05	U	mg/kg	.05
Cadmium	.4	J	mg/kg	.27	.26	U	mg/kg	.26	1.9		mg/kg	.38	1.1	J	mg/kg	.3
Chromium	2.5		mg/kg	.43	4.8		mg/kg	.43	16.5		mg/kg	.62	6.8		mg/kg	.49
Cobalt	.56	U	mg/kg	.56	.55	U	mg/kg	.55	.8	U	mg/kg	.8	.63	U	mg/kg	.63
Copper	101		mg/kg	.31	70.4		mg/kg	.3	939		mg/kg	.44	422		mg/kg	.35
Cyanide	.4	J	mg/kg	1	.14	J	mg/kg	1	.66	J	mg/kg	1	.45	J	mg/kg	1
Lead	5.6	J	mg/kg	.5	3.6	J	mg/kg	.5	27.4	J	mg/kg	2.5	19.1	J	mg/kg	2.5
Mercury	.14		mg/kg	.1	.08		mg/kg	.1	1.1		mg/kg	.1	.64		mg/kg	.1
Nickel	7	J	mg/kg	1.1	5.6	J	mg/kg	1.1	41.6		mg/kg	1.5	20.1		mg/kg	1.2
Selenium	.12	U	mg/kg	.12	.12	U	mg/kg	.12	.92	J	mg/kg	.6	.5	J	mg/kg	.6
Silver	1.9	J	mg/kg	.47	.85	J	mg/kg	.47	6.3		mg/kg	.68	3.3		mg/kg	.54
Thallium	.12	U	mg/kg	.12	.12	U	mg/kg	.12	.18	U	mg/kg	.18	.14	U	mg/kg	.14
Tin	4.5	J	mg/kg	2	2	U	mg/kg	2	25.3		mg/kg	2.9	13.5	J	mg/kg	2.3
Vanadium	.95	J	mg/kg	.31	.84	J	mg/kg	.3	1.7	J	mg/kg	.44	3	J	mg/kg	.35
Zinc	46.9		mg/kg	.25	38.1		mg/kg	.24	372		mg/kg	.35	173		mg/kg	.28

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 45 Sludge Data

Lab Sample Number:		R9703014				R9703015				R9703018				R9703019		
Site		GROUP111				GROUP111				GROUP111				GROUP111		
Locator		45L00601				45L00602				45L00701				45L00702		
Collect Date:		28-MAR-95				28-MAR-95				28-MAR-95				28-MAR-95		
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg																
Antimony		4.7	J	mg/kg	5	3.4	J	mg/kg	5	1.5	J	mg/kg	5	1.1	U	mg/kg	1.1
Arsenic		.78	J	mg/kg	.7	.6	J	mg/kg	.7	.47	J	mg/kg	.7	.58	J	mg/kg	.7
Barium		67.3		mg/kg	.1	51.8		mg/kg	.093	28	J	mg/kg	.085	20.3	J	mg/kg	.085
Beryllium		.05	U	mg/kg	.05	.05	U	mg/kg	.05	.04	U	mg/kg	.04	.04	U	mg/kg	.04
Cadmium		1.3		mg/kg	.33	1.1	J	mg/kg	.3	.54	J	mg/kg	.28	.46	J	mg/kg	.28
Chromium		8.3		mg/kg	.53	6.9		mg/kg	.49	4		mg/kg	.44	3.2		mg/kg	.45
Cobalt		.68	U	mg/kg	.68	.63	U	mg/kg	.63	.57	U	mg/kg	.57	.58	U	mg/kg	.58
Copper		540		mg/kg	.38	435		mg/kg	.35	223		mg/kg	.32	163		mg/kg	.32
Cyanide		.29	J	mg/kg	1	.45	J	mg/kg	1	.41	J	mg/kg	1	.28	J	mg/kg	1
Lead		26.2	J	mg/kg	2.5	25.2	J	mg/kg	2.5	9.2	J	mg/kg	.5	6.7	J	mg/kg	.5
Mercury		.8		mg/kg	.1	.44		mg/kg	.1	.2		mg/kg	.1	.2		mg/kg	.1
Nickel		21.8		mg/kg	1.3	16.1		mg/kg	1.2	10.5		mg/kg	1.1	7.6	J	mg/kg	1.1
Selenium		.71	J	mg/kg	.6	.46	J	mg/kg	.6	.23	J	mg/kg	.6	.18	J	mg/kg	.6
Silver		4.8		mg/kg	.58	3.9		mg/kg	.53	1.7	J	mg/kg	.49	1.3	J	mg/kg	.49
Thallium		.15	U	mg/kg	.15	.14	U	mg/kg	.14	.13	U	mg/kg	.13	.13	U	mg/kg	.13
Tin		14.7	J	mg/kg	2.5	12.4	J	mg/kg	2.3	6.9	J	mg/kg	2.1	5	J	mg/kg	2.1
Vanadium		1.6	J	mg/kg	.38	.89	J	mg/kg	.35	.8	J	mg/kg	.32	.99	J	mg/kg	.32
Zinc		198		mg/kg	.3	161		mg/kg	.28	86.7		mg/kg	.25	64.6		mg/kg	.26

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.

Lab Sample Number:	R9703020				R9703021			
Site	GROUP111				GROUP111			
Locator	45L00801				45L00802			
Collect Date:	28-MAR-95				28-MAR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg								
Antimony	1.1	U	mg/kg	1.1	1	U	mg/kg	1
Arsenic	.34	J	mg/kg	.7	.14	U	mg/kg	.14
Barium	19.5	J	mg/kg	.086	8.1	J	mg/kg	.083
Beryllium	.04	U	mg/kg	.04	.04	U	mg/kg	.04
Cadmium	.36	J	mg/kg	.28	.27	U	mg/kg	.27
Chromium	2.7		mg/kg	.45	1.3	J	mg/kg	.43
Cobalt	.62	J	mg/kg	.58	.56	U	mg/kg	.56
Copper	139		mg/kg	.32	65.4		mg/kg	.31
Cyanide	.19	J	mg/kg	1	.12	J	mg/kg	1
Lead	6.6	J	mg/kg	.5	2.7	J	mg/kg	.5
Mercury	.11		mg/kg	.1	.07		mg/kg	.1
Nickel	7.3	J	mg/kg	1.1	3.7	J	mg/kg	1.1
Selenium	.21	J	mg/kg	.6	.12	U	mg/kg	.12
Silver	.93	J	mg/kg	.49	.48	U	mg/kg	.48
Thallium	.13	U	mg/kg	.13	.12	U	mg/kg	.12
Tin	4.2	J	mg/kg	2.1	3.1	J	mg/kg	2
Vanadium	1.1	J	mg/kg	.32	.6	J	mg/kg	.31
Zinc	63.1		mg/kg	.26	28.9		mg/kg	.25

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

FIELD SCREENING RESULTS, GROUNDWATER, SWMUs 1, 23, 24, 25, 44, AND 45

US Naval Station, Maypo. . Group III Report
Shipyards (SWMUs 1, 23, 24, 25, 44, and 45) TerraProbe Groundwater Data

Lab Sample Number:		R9757014			R9757015			R9757011			R9757012		
Site		GROUPIII			GROUPIII			GROUPIII			GROUPIII		
Locator		010007			010007D			23Q004			23Q016		
Collect Date:		10-APR-95			10-APR-95			10-APR-95			10-APR-95		
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	
Halogenated Volatiles	ug/l												
1,1,1-Trichloroethane		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
1,1,2,2-Tetrachloroethane		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
1,1,2-Trichloroethane		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
1,1-Dichloroethane		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
1,1-Dichloroethene		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
1,2-Dichlorobenzene		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
1,2-Dichloroethane		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
1,2-Dichloropropane		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
1,3-Dichlorobenzene		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
1,4-Dichlorobenzene		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
2-Chloroethylvinyl ether		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Bromodichloromethane		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Bromoform		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Bromomethane		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Carbon tetrachloride		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Chlorobenzene		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Chloroethane		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Chloroform		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Chloromethane		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Dibromochloromethane		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Dichlorodifluoromethane		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Methylene Chloride		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Tetrachloroethene		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Trichloroethene		1	U	ug/l	1	1	U	ug/l	1	1.4		ug/l	1
Trichlorofluoromethane		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Vinyl chloride		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
cis-1,2-Dichloroethene		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
cis-1,3-Dichloropropene		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
trans-1,2-Dichloroethene		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
trans-1,3-Dichloropropene		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aromatics	ug/l												
Benzene		.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
Toluene		.5	U	ug/l	.5	.5	U	ug/l	.5	.53		ug/l	
Xylenes (total)		.5	U	ug/l	.5	.5	U	ug/l	.5	.65		ug/l	
tert-Butyl methyl ether		1.2		ug/l		.5	U	ug/l	.5	.5	U	ug/l	.5
Fuels	ug/l												
Diesel		-		ug/l		-		ug/l		-		ug/l	
Gasoline		-		ug/l		-		ug/l		-		ug/l	
JP-4		-		ug/l		-		ug/l		-		ug/l	
JP-5		-		ug/l		-		ug/l		-		ug/l	
Jet A		-		ug/l		-		ug/l		-		ug/l	
Kerosene		-		ug/l		-		ug/l		-		ug/l	
Mineral Spirits		-		ug/l		-		ug/l		-		ug/l	
TPH Gasoline		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50

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.

US Naval Station, Mayport, Group III Report
Shipyards (SWMUs 1, 23, 24, 25, 44, and 45) TerraProbe Groundwater Data

Lab Sample Number:		R9757013			R9757016		
Site		GROUPIII			GROUPIII		
Locator		23Q028			45Q002		
Collect Date:		10-APR-95			10-APR-95		
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Halogenated Volatiles	ug/l							
1,1,1-Trichloroethane		1	U	ug/l	1	1	U	ug/l	1
1,1,2,2-Tetrachloroethane		1	U	ug/l	1	1	U	ug/l	1
1,1,2-Trichloroethane		1	U	ug/l	1	1	U	ug/l	1
1,1-Dichloroethane		1	U	ug/l	1	1	U	ug/l	1
1,1-Dichloroethene		1	U	ug/l	1	1	U	ug/l	1
1,2-Dichlorobenzene		1	U	ug/l	1	1	U	ug/l	1
1,2-Dichloroethane		1	U	ug/l	1	1	U	ug/l	1
1,2-Dichloropropane		1	U	ug/l	1	1	U	ug/l	1
1,3-Dichlorobenzene		1	U	ug/l	1	1	U	ug/l	1
1,4-Dichlorobenzene		1	U	ug/l	1	1	U	ug/l	1
2-Chloroethylvinyl ether		1	U	ug/l	1	1	U	ug/l	1
Bromodichloromethane		1	U	ug/l	1	1	U	ug/l	1
Bromoform		1	U	ug/l	1	1	U	ug/l	1
Bromomethane		1	U	ug/l	1	1	U	ug/l	1
Carbon tetrachloride		1	U	ug/l	1	1	U	ug/l	1
Chlorobenzene		1	U	ug/l	1	1	U	ug/l	1
Chloroethane		1	U	ug/l	1	1	U	ug/l	1
Chloroform		1	U	ug/l	1	1	U	ug/l	1
Chloromethane		1	U	ug/l	1	1	U	ug/l	1
Dibromochloromethane		1	U	ug/l	1	1	U	ug/l	1
Dichlorodifluoromethane		1	U	ug/l	1	1	U	ug/l	1
Methylene Chloride		5	U	ug/l	5	5	U	ug/l	5
Tetrachloroethene		1	U	ug/l	1	1	U	ug/l	1
Trichloroethene		1	U	ug/l	1	1	U	ug/l	1
Trichlorofluoromethane		1	U	ug/l	1	1	U	ug/l	1
Vinyl chloride		1	U	ug/l	1	1	U	ug/l	1
cis-1,2-Dichloroethene		1	U	ug/l	1	1	U	ug/l	1
cis-1,3-Dichloropropene		1	U	ug/l	1	1	U	ug/l	1
trans-1,2-Dichloroethene		1	U	ug/l	1	1	U	ug/l	1
trans-1,3-Dichloropropene		1	U	ug/l	1	1	U	ug/l	1
Aromatics	ug/l							
Benzene		.5	U	ug/l	.5	.5	U	ug/l	.5
Ethylbenzene		.5	U	ug/l	.5	.5	U	ug/l	.5
Toluene		.5	U	ug/l	.5	.5	U	ug/l	.5
Xylenes (total)		.5	U	ug/l	.5	.5	U	ug/l	.5
tert-Butyl methyl ether		.5	U	ug/l	.5	.5	U	ug/l	.5
Fuels	ug/l							
Diesel		500	U	ug/l	500	-		ug/l	

US Naval Station, Maypo.., Group III Report
Shipyards (SWMUs 1, 23, 24, 25, 44, and 45) TerraProbe Groundwater Data

Lab Sample Number:	R9757013				R9757016			
Site	GROUPIII				GROUPIII			
Locator	23Q028				45Q002			
Collect Date:	10-APR-95				10-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Gasoline	500	U	ug/l	500	-		ug/l	
JP-4	500	U	ug/l	500	-		ug/l	
JP-5	500	U	ug/l	500	-		ug/l	
Jet A	500	U	ug/l	500	-		ug/l	
Kerosene	500	U	ug/l	500	-		ug/l	
Mineral Spirits	500	U	ug/l	500	-		ug/l	
TFH Gasoline	50	U	ug/l	50	50	U	ug/l	50

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, SWMUs 1, 23, 24, 25, 44, AND 45

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	R9994010				RA061013				RA061012				R9994007			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01G00101				01G00102				01G00103				01G00201			
Collect Date:	07-JUN-95				21-JUN-95				21-JUN-95				06-JUN-95			
	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	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	UJ	ug/l	10
Carbon disulfide	5	U	ug/l	5	5	U	ug/l	5	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	R	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	R	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	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	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Acrolein	100	R	ug/l	100	100	U	ug/l	100	100	U	ug/l	100	100	R	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	5	U	ug/l	5	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
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	5	U	ug/l	5	10	U	ug/l	10	5	U	ug/l	5
2-Chloroethylvinyl ether	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	200	U	ug/l	200	200	U	ug/l	200	200	R	ug/l	200
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

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	R9994010				RA061013				RA061012				R9994007			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01G00101				01G00102				01G00103				01G00201			
Collect Date:	07-JUN-95				21-JUN-95				21-JUN-95				06-JUN-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	200	R	ug/l	200	200	R	ug/l	200	200	R	ug/l	200	200	R	ug/l	200
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	U	ug/l	100	100	U	ug/l	100	100	U	ug/l	100
Chloroprene	200	U	ug/l	200	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	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	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	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	R9994006				R9989005				R9989006				R9989007			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01G00301				23G00101				23G00101D				23G00201			
Collect Date:	06-JUN-95				04-JUN-95				04-JUN-95				05-JUN-95			
	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	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Carbon disulfide	5	U	ug/l	5	5	U	ug/l	5	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	7		ug/l	5
1,1-Dichloroethene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	2	J	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	R	ug/l	10	10	R	ug/l	10	10	R	ug/l	10	10	R	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	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	1	J	ug/l	5	5	U	ug/l	5
1,3-Dichlorobenzene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Acrolein	100	UJ	ug/l	100	100	UJ	ug/l	100	100	UJ	ug/l	100	100	UJ	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	5	U	ug/l	5	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

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	R9994006				R9989005				R9989006				R9989007			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01G00301				23G00101				23G00101D				23G00201			
Collect Date:	06-JUN-95				04-JUN-95				04-JUN-95				05-JUN-95			
	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	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
2-Chloroethylvinyl ether	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	200	R	ug/l	200	200	R	ug/l	200	200	R	ug/l	200
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	200	R	ug/l	200	200	R	ug/l	200	200	R	ug/l	200
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	U	ug/l	100	100	U	ug/l	100	100	U	ug/l	100
Chloroprene	200	U	ug/l	200	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	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	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	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.

US Naval Station, Mayport, RCRA Facil.., Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:		R9989008			R9994003			R9994004			R9994009		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		23G00301			23G00401			23G00401D			23G00501		
Collect Date:		05-JUN-95			06-JUN-95			06-JUN-95			07-JUN-95		
	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	
Bromomethane	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	
Chloroethane	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	
Acetone	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	
Carbon disulfide	5	U	ug/l	5	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	
1,1-Dichloroethene	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	
Chloroform	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	
2-Butanone	10	R	ug/l	10	10	R	ug/l	10	10	R	ug/l	10	
1,1,1-Trichloroethane	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	
Bromodichloromethane	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	
cis-1,3-Dichloropropene	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	
Dibromochloromethane	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	
Benzene	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	
Bromoform	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	
2-Hexanone	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	
1,1,2,2-Tetrachloroethane	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	
Chlorobenzene	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	
Styrene	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	
Dichlorodifluoromethane	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	
1,3-Dichlorobenzene	5	U	ug/l	5	5	U	ug/l	5	10	U	ug/l	10	
Acrolein	100	UJ	ug/l	100	100	UJ	ug/l	100	100	UJ	ug/l	100	
Iodomethane	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	
1,4-Dichlorobenzene	5	U	ug/l	5	5	U	ug/l	5	10	U	ug/l	10	
Acrylonitrile	100	U	ug/l	100	100	U	ug/l	100	100	U	ug/l	100	

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	R9989008				R9994003				R9994004				R9994009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23G00301				23G00401				23G00401D				23G00501			
Collect Date:	05-JUN-95				06-JUN-95				06-JUN-95				07-JUN-95			
	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	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
2-Chloroethylvinyl ether	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	200	R	ug/l	200	200	R	ug/l	200	200	R	ug/l	200
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	200	R	ug/l	200	200	R	ug/l	200	200	R	ug/l	200
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	U	ug/l	100	100	U	ug/l	100	100	U	ug/l	100
Chloroprene	200	U	ug/l	200	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	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	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	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	RA061005				RA061005RE				RA061008				R9989009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23G00502				23G00502RE				23G00503				23G00601			
Collect Date:	19-JUN-95				19-JUN-95				20-JUN-95				05-JUN-95			
	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	5	U	ug/l	5
1,1-Dichloroethane	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	8		ug/l	5
1,1-Dichloroethene	5	U	ug/l	5	-		ug/l		5	U	ug/l	5	5		ug/l	5
1,2-Dichloroethene (total)	5		ug/l	5	-		ug/l		5	U	ug/l	5	1	J	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	R	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	5	U	ug/l	5	10	UJ	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	UJ	ug/l	100
Iodomethane	10	U	ug/l	10	-		ug/l		10	U	ug/l	10	10	U	ug/l	10
1,4-Dichlorobenzene	5	U	ug/l	5	10	UJ	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

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	RA061005				RA061005RE				RA061008				R9989009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23G00502				23G00502RE				23G00503				23G00601			
Collect Date:	19-JUN-95				19-JUN-95				20-JUN-95				05-JUN-95			
	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	10	UJ	ug/l	10	5	U	ug/l	5	5	U	ug/l	5
2-Chloroethylvinyl ether	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	R	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	200	-		ug/l		200	R	ug/l	200	200	R	ug/l	200
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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:		R9989003				R9994013				R9994011				RA061011		
Site		GROUP111				GROUP111				GROUP111				GROUP111		
Locator		23G00701				24G00101				44G00101				44G00102		
Collect Date:		03-JUN-95				07-JUN-95				07-JUN-95				21-JUN-95		
		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		10	U	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10	10	U	ug/l	10
Carbon disulfide		5	U	ug/l	5	5	U	ug/l	5	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	R	ug/l	10	10	R	ug/l	10	10	R	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	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		10	U	ug/l	10	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Acrolein		100	UJ	ug/l	100	100	R	ug/l	100	100	R	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		10	U	ug/l	10	5	U	ug/l	5	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

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	R9989003				R9994013				R9994011				RA061011			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23G00701				24G00101				44G00101				44G00102			
Collect Date:	03-JUN-95				07-JUN-95				07-JUN-95				21-JUN-95			
	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	5	U	ug/l	5	5	U	ug/l	5
2-Chloroethylvinyl ether	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	200	R	ug/l	200	200	R	ug/l	200	200	U	ug/l	200
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	200	R	ug/l	200	200	R	ug/l	200	200	R	ug/l	200
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	U	ug/l	100	100	U	ug/l	100	100	U	ug/l	100
Chloroprene	200	U	ug/l	200	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	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	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	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.

US Naval Station, Mayport, RCRA Faci..., Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:		RA061009			R9994005			R9994012			R9994017		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		44G00103			44G00201			44G00301			45G00101		
Collect Date:		20-JUN-95			06-JUN-95			07-JUN-95			08-JUN-95		
	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
Bromomethane	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
Vinyl chloride	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
Chloroethane	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
Methylene chloride	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
Acetone	10	U	ug/l	10	10	U	ug/l	10	10	UJ	ug/l	10	10
Carbon disulfide	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
1,1-Dichloroethane	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
1,1-Dichloroethene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
1,2-Dichloroethene (total)	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
Chloroform	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
1,2-Dichloroethane	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
2-Butanone	10	U	ug/l	10	10	R	ug/l	10	10	R	ug/l	10	10
1,1,1-Trichloroethane	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
Carbon tetrachloride	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
Bromodichloromethane	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
1,2-Dichloropropane	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
cis-1,3-Dichloropropene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
Trichloroethene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
Dibromochloromethane	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
1,1,2-Trichloroethane	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
Benzene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
trans-1,3-Dichloropropene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
Bromoform	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
4-Methyl-2-pentanone	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
2-Hexanone	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
Tetrachloroethene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
1,1,2,2-Tetrachloroethane	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
Toluene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
Chlorobenzene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
Ethylbenzene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
Styrene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
Xylenes (total)	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
Dichlorodifluoromethane	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
Trichlorofluoromethane	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
1,3-Dichlorobenzene	5	U	ug/l	5	10	U	ug/l	10	5	U	ug/l	5	5
Acrolein	100	U	ug/l	100	100	UJ	ug/l	100	100	R	ug/l	100	100
Iodomethane	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
1,4-Dichlorobenzene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5
Acrylonitrile	100	U	ug/l	100	100	U	ug/l	100	100	U	ug/l	100	100

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	RA061009				R9994005				R9994012				R9994017			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	44G00103				44G00201				44G00301				45G00101			
Collect Date:	20-JUN-95				06-JUN-95				07-JUN-95				08-JUN-95			
	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-Chloroethylvinyl ether	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	U	ug/l	200	200	R	ug/l	200	200	R	ug/l	200	200	R	ug/l	200
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	200	R	ug/l	200	200	R	ug/l	200	200	R	ug/l	200
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	U	ug/l	100	100	U	ug/l	100	100	U	ug/l	100
Chloroprene	200	U	ug/l	200	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	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	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	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:		RA061003			RA061004			RA061006			R9994015		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		45G00102			45G00102D			45G00103			45G00201		
Collect Date:		19-JUN-95			19-JUN-95			19-JUN-95			08-JUN-95		
	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	
Bromomethane	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	
Chloroethane	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	
Acetone	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	
Carbon disulfide	5	U	ug/l	5	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	
1,1-Dichloroethene	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	
Chloroform	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	
2-Butanone	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	
Carbon tetrachloride	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	
1,2-Dichloropropane	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	
Trichloroethene	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	
1,1,2-Trichloroethane	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	
trans-1,3-Dichloropropene	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	
4-Methyl-2-pentanone	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	
Tetrachloroethene	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	
Toluene	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	
Ethylbenzene	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	
Xylenes (total)	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	
Trichlorofluoromethane	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	5	U	ug/l	5	
Acrolein	100	U	ug/l	100	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	
1,4-Dichlorobenzene	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	

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SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	RA061003				RA061004				RA061006				R9994015			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45G00102				45G00102D				45G00103				45G00201			
Collect Date:	19-JUN-95				19-JUN-95				19-JUN-95				08-JUN-95			
	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	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
2-Chloroethylvinyl ether	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	U	ug/l	200	200	U	ug/l	200	200	U	ug/l	200	200	R	ug/l	200
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	200	R	ug/l	200	200	R	ug/l	200	200	R	ug/l	200
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	U	ug/l	100	100	U	ug/l	100	100	U	ug/l	100
Chloroprene	200	U	ug/l	200	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	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	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	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	R9994016
Site	GROUP111
Locator	45G00201D
Collect Date:	08-JUN-95

		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		10	UJ	ug/l	10
Carbon disulfide		5	U	ug/l	5
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		10	R	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	U	ug/l	10
Trichlorofluoromethane		5	U	ug/l	5
1,3-Dichlorobenzene		5	U	ug/l	5
Acrolein		100	R	ug/l	100
Iodomethane		10	U	ug/l	10
1,4-Dichlorobenzene		5	U	ug/l	5
Acrylonitrile		100	U	ug/l	100

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	R9994016
Site	GROUP111
Locator	45G00201D
Collect Date:	08-JUN-95

	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/l	5
1,2-Dichlorobenzene	5	U	ug/l	5
2-Chloroethylvinyl ether	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	R	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	200
3-Chloropropene	5	U	ug/l	5
Acetonitrile	100	U	ug/l	100
Chloroprene	200	U	ug/l	200
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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:		R9994010			RA061013			RA061012			R9994007		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		01G00101			01G00102			01G00103			01G00201		
Collect Date:		07-JUN-95			21-JUN-95			21-JUN-95			06-JUN-95		
	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	U	ug/l	10
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	UJ	ug/l	50	50	UJ	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	U	ug/l	10
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	U	ug/l	50
Acenaphthene		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
4-Nitrophenol		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
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
4,6-Dinitro-2-methylphenol		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
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	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

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	R9994010				RA061013				RA061012				R9994007			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01G00101				01G00102				01G00103				01G00201			
Collect Date:	07-JUN-95				21-JUN-95				21-JUN-95				06-JUN-95			
	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	UJ	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	10
Dibenz (a,h) anthracene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	UJ	ug/l	10
Benzo (g,h,i) perylene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	UJ	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	10	U	ug/l	10	10	U	ug/l	10	10	UJ	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	UJ	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	UJ	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	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	500	500	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	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	R	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	U	ug/l	500	500	UJ	ug/l	500	500	UJ	ug/l	500	500	U	ug/l	500
Methapyrilene	50	UJ	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	UJ	ug/l	50
3,3-Dimethylbenzidine	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	UJ	ug/l	10
Hexachlorophene	500	UJ	ug/l	500	500	U	ug/l	500	500	U	ug/l	500	500	UJ	ug/l	500

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	R9994010				RA061013				RA061012				R9994007			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01G00101				01G00102				01G00103				01G00201			
Collect Date:	07-JUN-95				21-JUN-95				21-JUN-95				06-JUN-95			
	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	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	UJ	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:		R9994006			R9989005			R9989006			R9989007		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		01G00301			23G00101			23G00101D			23G00201		
Collect Date:		06-JUN-95			04-JUN-95			04-JUN-95			05-JUN-95		
	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
Phenol		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l
Aniline		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	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
Benzyl Alcohol		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l
2-Methylphenol		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	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
N-Nitroso-di-n-propylamine		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l
Hexachloroethane		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l
Nitrobenzene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l
Isophorone		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l
2-Nitrophenol		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l
2,4-Dimethylphenol		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l
Benzoic acid		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	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
2,4-Dichlorophenol		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	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
Naphthalene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l
4-Chloroaniline		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l
Hexachlorobutadiene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l
4-Chloro-3-methylphenol		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l
2-Methylnaphthalene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l
Hexachlorocyclopentadiene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l
2,4,6-Trichlorophenol		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l
Dimethylphthalate		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l
2,4,5-Trichlorophenol		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l
2-Chloronaphthalene		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l
2-Nitroaniline		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l
Acenaphthylene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l
2,6-Dinitrotoluene		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l
3-Nitroaniline		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l
Acenaphthene		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l
2,4-Dinitrophenol		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l
4-Nitrophenol		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l
Dibenzofuran		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l
2,4-Dinitrotoluene		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l
Diethylphthalate		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l
4-Chlorophenyl-phenylether		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l
Fluorene		50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l
4-Nitroaniline																

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SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	R9994006				R9989005				R9989006				R9989007			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01G00301				23G00101				23G00101D				23G00201			
Collect Date:	06-JUN-95				04-JUN-95				04-JUN-95				05-JUN-95			
	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	2	J	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	5	J	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	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10
Dibenz (a,h) anthracene	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10
Benzo (g,h,i) perylene	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	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	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	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	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	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	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	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	500	500	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	ug/l	500

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Lab Sample Number:	R9994006				R9989005				R9989006				R9989007			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	01G00301				23G00101				23G001010				23G00201			
Collect Date:	06-JUN-95				04-JUN-95				04-JUN-95				05-JUN-95			
	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	U	ug/l	500	500	U	ug/l	500	500	U	ug/l	500	500	U	ug/l	500
Methapyrilene	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50
3,3-Dimethylbenzidine	10	UJ	ug/l	10	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorophene	500	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	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)	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	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	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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SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:		R9989008			R9994003			R9994004			R9994009		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		23G00301			23G00401			23G00401D			23G00501		
Collect Date:		05-JUN-95			06-JUN-95			06-JUN-95			07-JUN-95		
	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	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

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SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	R9989008				R9994003				R9994004				R9994009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23G00301				23G00401				23G00401D				23G00501			
Collect Date:	05-JUN-95				06-JUN-95				06-JUN-95				07-JUN-95			
	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	4	J	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	10	UJ	ug/l	10	10	UJ	ug/l	10	10	U	ug/l	10
Dibenz (a,h) anthracene	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10	10	U	ug/l	10
Benzo (g,h,i) perylene	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	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	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	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	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	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	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	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	500	500	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	ug/l	500

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SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	R9989008				R9994003				R9994004				R9994009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23G00301				23G00401				23G00401D				23G00501			
Collect Date:	05-JUN-95				06-JUN-95				06-JUN-95				07-JUN-95			
	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	R	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	U	ug/l	500	500	U	ug/l	500	500	U	ug/l	500	500	U	ug/l	500
Methapyrilene	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50
3,3-Dimethylbenzidine	10	U	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10
Hexachlorophene	500	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	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)	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	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	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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SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	RA061005				RA061008				R9989009				R9989003			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23G00502				23G00503				23G00601				23G00701			
Collect Date:	19-JUN-95				20-JUN-95				05-JUN-95				03-JUN-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/l																
N-Nitrosodimethylamine	10	UJ	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	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
bis(2-Chloroethyl) ether	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzyl Alcohol	10	UJ	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	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitroso-di-n-propylamine	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachloroethane	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Nitrobenzene	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Isophorone	10	UJ	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	UJ	ug/l	50	50	UJ	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
bis(2-Chloroethoxy) methane	10	UJ	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	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Naphthalene	10	UJ	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	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorobutadiene	10	UJ	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	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorocyclopentadiene	10	UJ	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	UJ	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	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2-Nitroaniline	50	UJ	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Acenaphthylene	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,6-Dinitrotoluene	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3-Nitroaniline	50	UJ	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Acenaphthene	10	UJ	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	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
2,4-Dinitrotoluene	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Diethylphthalate	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Chlorophenyl-phenylether	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Fluorene	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Nitroaniline	50	UJ	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50

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SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	RA061005				RA061008				R9989009				R9989003			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23G00502				23G00503				23G00601				23G00701			
Collect Date:	19-JUN-95				20-JUN-95				05-JUN-95				03-JUN-95			
	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	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,2-Diphenylhydrazine	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Bromophenyl-phenylether	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorobenzene	10	UJ	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	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Anthracene	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Di-n-Butylphthalate	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Fluoranthene	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pyrene	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Butylbenzylphthalate	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
3,3-Dichlorobenzidine	20	UJ	ug/l	20	20	U	ug/l	20	20	U	ug/l	20	20	U	ug/l	20
Benzo (a) anthracene	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Chrysene	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
bis(2-Ethylhexyl) phthalate	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Di-n-octylphthalate	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo (b) fluoranthene	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo (k) fluoranthene	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzo (a) pyrene	10	UJ	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	10	U	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10
Dibenz (a,h) anthracene	10	UJ	ug/l	10	10	U	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10
Benzo (g,h,i) perylene	10	UJ	ug/l	10	10	U	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10
2-Picoline	50	UJ	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	10	U	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10
Ethyl methanesulfonate	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Acetophenone	10	UJ	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	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Phenyl-tert-butylamine	50	UJ	ug/l	50	50	U	ug/l	50	50	UJ	ug/l	50	50	UJ	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	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosodiethylamine	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosopyrrolidine	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Benzidine	50	UJ	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1,2,4,5-Tetrachlorobenzene	50	UJ	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pentachlorobenzene	50	UJ	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
1-Naphthylamine	50	UJ	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Naphthylamine	50	UJ	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	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Aminobiphenyl	50	UJ	ug/l	50	50	U	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50
Pentachloronitrobenzene	50	UJ	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Pronamide	10	UJ	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	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
7,12-Dimethylbenz(A)Anthracene	10	UJ	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	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pyridine	50	UJ	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
N-Nitrosomethylethylamine	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
N-Nitrosomorpholine	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
o-Toluidine	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachloropropene	50	UJ	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
p-Phenylenediamine	500	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	ug/l	500

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	RA061005				RA061008				R9989009				R9989003			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23G00502				23G00503				23G00601				23G00701			
Collect Date:	19-JUN-95				20-JUN-95				05-JUN-95				03-JUN-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	50	UJ	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
Isosafrole	50	UJ	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	1000	U	ug/l	1000	1000	U	ug/l	1000	1000	U	ug/l	1000
1,3-Dinitrobenzene	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
5-Nitro-o-toluidine	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
1,3,5-Trinitrobenzene	10	UJ	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	500	UJ	ug/l	500	500	U	ug/l	500	500	U	ug/l	500
Methapyrilene	50	UJ	ug/l	50	50	U	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50
3,3-Dimethylbenzidine	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	UJ	ug/l	10
Hexachlorophene	500	UJ	ug/l	500	500	U	ug/l	500	500	UJ	ug/l	500	500	UJ	ug/l	500
Aramite	50	UJ	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	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
2-Acetylaminofluorene	10	UJ	ug/l	10	10	U	ug/l	10	10	UJ	ug/l	10	10	UJ	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:		R9994013			R9994011			RA061011			RA061009		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		24G00101			44G00101			44G00102			44G00103		
Collect Date:		07-JUN-95			07-JUN-95			21-JUN-95			20-JUN-95		
	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	UJ	ug/l	50	50	UJ	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	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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SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	R9994013				R9994011				RA061011				RA061009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	24G00101				44G00101				44G00102				44G00103			
Collect Date:	07-JUN-95				07-JUN-95				21-JUN-95				20-JUN-95			
	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	[illegible]	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	5	J	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	10	UJ	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	UJ	ug/l	50	50	UJ	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	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	ug/l	500

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	R9994013				R9994011				RA061011				RA061009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	24G00101				44G00101				44G00102				44G00103			
Collect Date:	07-JUN-95				07-JUN-95				21-JUN-95				20-JUN-95			
	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	R	ug/l	1000	1000	R	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	U	ug/l	500	500	U	ug/l	500	500	UJ	ug/l	500	500	UJ	ug/l	500
Methapyrilene	50	UJ	ug/l	50	50	UJ	ug/l	50	50	U	ug/l	50	50	U	ug/l	50
3,3-Dimethylbenzidine	10	UJ	ug/l	10	10	UJ	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorophene	500	UJ	ug/l	500	500	UJ	ug/l	500	500	U	ug/l	500	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)	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	UJ	ug/l	10	10	UJ	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:		R9994005			R9994012			R9994017			RA061003		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		44G00201			44G00301			45G00101			45G00102		
Collect Date:		06-JUN-95			07-JUN-95			08-JUN-95			19-JUN-95		
	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
Phenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
Aniline	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
bis(2-Chloroethyl) ether	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
Benzyl Alcohol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
2-Methylphenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
bis(2-Chloroisopropyl) ether	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
N-Nitroso-di-n-propylamine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
Hexachloroethane	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
Nitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
Isophorone	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
2-Nitrophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
2,4-Dimethylphenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
Benzoic acid	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50
bis(2-Chloroethoxy) methane	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
2,4-Dichlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
1,2,4-Trichlorobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
Naphthalene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
4-Chloroaniline	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
Hexachlorobutadiene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
4-Chloro-3-methylphenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
2-Methylnaphthalene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
Hexachlorocyclopentadiene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
2,4,6-Trichlorophenol	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
Dimethylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
2,4,5-Trichlorophenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50
2-Chloronaphthalene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
2-Nitroaniline	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50
Acenaphthylene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
2,6-Dinitrotoluene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
3-Nitroaniline	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50
Acenaphthene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
2,4-Dinitrophenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50
4-Nitrophenol	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50
Dibenzofuran	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
2,4-Dinitrotoluene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
Diethylphthalate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
4-Chlorophenyl-phenylether	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
Fluorene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10
4-Nitroaniline	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50	50

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	R9994005				R9994012				R9994017				RA061003			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	44G00201				44G00301				45G00101				45G00102			
Collect Date:	06-JUN-95				07-JUN-95				08-JUN-95				19-JUN-95			
	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	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Dibenz (a,h) anthracene	10	UJ	ug/l	10	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	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	10	UJ	ug/l	10	10	UJ	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	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	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	UJ	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	500	500	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	ug/l	500

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SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	R9994005				R9994012				R9994017				RA061003			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	44G00201				44G00301				45G00101				45G00102			
Collect Date:	06-JUN-95				07-JUN-95				08-JUN-95				19-JUN-95			
	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	R	ug/l	1000	1000	R	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	U	ug/l	500	500	U	ug/l	500	500	U	ug/l	500	500	UJ	ug/l	500
Methapyrilene	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50	50	U	ug/l	50
3,3-Dimethylbenzidine	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10	10	U	ug/l	10
Hexachlorophene	500	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	ug/l	500	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)	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	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	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.

US Naval Station, Mayport, RCRA Facil.., Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:		RA061004			RA061006			R9994015			R9994016		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		45G001020			45G00103			45G00201			45G00201D		
Collect Date:		19-JUN-95			19-JUN-95			08-JUN-95			08-JUN-95		
		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 UJ	ug/l	50	50 UJ	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 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

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	RA061004				RA061006				R9994015				R9994016			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45G00102D				45G00103				45G00201				45G00201D			
Collect Date:	19-JUN-95				19-JUN-95				08-JUN-95				08-JUN-95			
	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	1	J	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	3	J	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	UJ	ug/l	10	10	UJ	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	UJ	ug/l	50	50	UJ	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	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	ug/l	500

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SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	RA061004				RA061006				R9994015				R9994016			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	45G00102D				45G00103				45G00201				45G00201D			
Collect Date:	19-JUN-95				19-JUN-95				08-JUN-95				08-JUN-95			
	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	R	ug/l	1000	1000	R	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	500	UJ	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	UJ	ug/l	50	50	UJ	ug/l	50
3,3-Dimethylbenzidine	10	U	ug/l	10	10	U	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10
Hexachlorophene	500	U	ug/l	500	500	U	ug/l	500	500	UJ	ug/l	500	500	UJ	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)	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	UJ	ug/l	10	10	UJ	ug/l	10

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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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	RA061005RE
Site	GROUP111
Locator	23G00502RE
Collect Date:	19-JUN-95

	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/l				
N-Nitrosodimethylamine	10	UJ	ug/l	10
Phenol	10	UJ	ug/l	10
Aniline	10	UJ	ug/l	10
bis(2-Chloroethyl) ether	10	UJ	ug/l	10
Benzyl Alcohol	10	UJ	ug/l	10
2-Methylphenol	10	UJ	ug/l	10
bis(2-Chloroisopropyl) ether	10	UJ	ug/l	10
N-Nitroso-di-n-propylamine	10	UJ	ug/l	10
Hexachloroethane	10	UJ	ug/l	10
Nitrobenzene	10	UJ	ug/l	10
Isophorone	10	UJ	ug/l	10
2-Nitrophenol	10	UJ	ug/l	10
2,4-Dimethylphenol	10	UJ	ug/l	10
Benzoic acid	50	UJ	ug/l	50
bis(2-Chloroethoxy) methane	10	UJ	ug/l	10
2,4-Dichlorophenol	10	UJ	ug/l	10
1,2,4-Trichlorobenzene	10	UJ	ug/l	10
Naphthalene	10	UJ	ug/l	10
4-Chloroaniline	10	UJ	ug/l	10
Hexachlorobutadiene	10	UJ	ug/l	10
4-Chloro-3-methylphenol	10	UJ	ug/l	10
2-Methylnaphthalene	10	UJ	ug/l	10
Hexachlorocyclopentadiene	10	UJ	ug/l	10
2,4,6-Trichlorophenol	10	UJ	ug/l	10
Dimethylphthalate	10	UJ	ug/l	10
2,4,5-Trichlorophenol	50	UJ	ug/l	50
2-Chloronaphthalene	10	UJ	ug/l	10
2-Nitroaniline	50	UJ	ug/l	50
Acenaphthylene	10	UJ	ug/l	10
2,6-Dinitrotoluene	10	UJ	ug/l	10
3-Nitroaniline	50	UJ	ug/l	50
Acenaphthene	10	UJ	ug/l	10
2,4-Dinitrophenol	50	UJ	ug/l	50
4-Nitrophenol	50	UJ	ug/l	50
Dibenzofuran	10	UJ	ug/l	10
2,4-Dinitrotoluene	10	UJ	ug/l	10
Diethylphthalate	10	UJ	ug/l	10
4-Chlorophenyl-phenylether	10	UJ	ug/l	10
Fluorene	10	UJ	ug/l	10
4-Nitroaniline	50	UJ	ug/l	50

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	RA061005RE			
Site	GROUP111			
Locator	23G00502RE			
Collect Date:	19-JUN-95			
	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	50	UJ	ug/l	50
N-Nitrosodiphenylamine (1)	10	UJ	ug/l	10
1,2-Diphenylhydrazine	10	UJ	ug/l	10
4-Bromophenyl-phenylether	10	UJ	ug/l	10
Hexachlorobenzene	10	UJ	ug/l	10
Pentachlorophenol	50	UJ	ug/l	50
Phenanthrene	10	UJ	ug/l	10
Anthracene	10	UJ	ug/l	10
Di-n-Butylphthalate	10	UJ	ug/l	10
Fluoranthene	10	UJ	ug/l	10
Pyrene	10	UJ	ug/l	10
Butylbenzylphthalate	10	UJ	ug/l	10
3,3-Dichlorobenzidine	20	UJ	ug/l	20
Benzo (a) anthracene	10	UJ	ug/l	10
Chrysene	10	UJ	ug/l	10
bis(2-Ethylhexyl) phthalate	10	UJ	ug/l	10
Di-n-octylphthalate	10	UJ	ug/l	10
Benzo (b) fluoranthene	10	UJ	ug/l	10
Benzo (k) fluoranthene	10	UJ	ug/l	10
Benzo (a) pyrene	10	UJ	ug/l	10
Indeno (1,2,3-cd) pyrene	10	UJ	ug/l	10
Dibenz (a,h) anthracene	10	UJ	ug/l	10
Benzo (g,h,i) perylene	10	UJ	ug/l	10
2-Picoline	50	UJ	ug/l	50
Methyl methanesulfonate	10	UJ	ug/l	10
Ethyl methanesulfonate	10	UJ	ug/l	10
Acetophenone	10	UJ	ug/l	10
N-Nitrosopiperidine	10	UJ	ug/l	10
Phenyl-tert-butylamine	50	UJ	ug/l	50
2,6-Dichlorophenol	10	UJ	ug/l	10
N-Nitroso-di-n-butylamine	10	UJ	ug/l	10
N-Nitrosodiethylamine	10	UJ	ug/l	10
N-Nitrosopyrrolidine	10	UJ	ug/l	10
Benzidine	50	UJ	ug/l	50
1,2,4,5-Tetrachlorobenzene	50	UJ	ug/l	50
Pentachlorobenzene	50	UJ	ug/l	50
1-Naphthylamine	50	UJ	ug/l	50
2-Naphthylamine	50	UJ	ug/l	50
2,3,4,6-Tetrachlorophenol	10	UJ	ug/l	10
Phenacetin	10	UJ	ug/l	10
4-Aminobiphenyl	50	UJ	ug/l	50
Pentachloronitrobenzene	50	UJ	ug/l	50
Pronamide	10	UJ	ug/l	10
p-(Dimethylamino)azobenzene	10	UJ	ug/l	10
7,12-Dimethylbenz(A)Anthracene	10	UJ	ug/l	10
3-Methylcholanthrene	10	UJ	ug/l	10
Pyridine	50	UJ	ug/l	50
N-Nitrosomethylethylamine	10	UJ	ug/l	10
N-Nitrosomorpholine	10	UJ	ug/l	10
o-Toluidine	10	UJ	ug/l	10
Hexachloropropene	50	UJ	ug/l	50
p-Phenylenediamine	500	UJ	ug/l	500

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	RA061005RE			
Site	GROUP111			
Locator	23G00502RE			
Collect Date:	19-JUN-95			
	VALUE	QUAL	UNITS	DL
Safrole	50	UJ	ug/l	50
Isosafrole	50	UJ	ug/l	50
1,4-Naphthoquinone	1000	UJ	ug/l	1000
1,3-Dinitrobenzene	10	UJ	ug/l	10
5-Nitro-o-toluidine	10	UJ	ug/l	10
1,3,5-Trinitrobenzene	10	UJ	ug/l	10
4-Nitroquinoline-1-oxide	500	UJ	ug/l	500
Methapyrilene	50	UJ	ug/l	50
3,3-Dimethylbenzidine	10	UJ	ug/l	10
Hexachlorophene	500	UJ	ug/l	500
Aramite	50	UJ	ug/l	50
2-Chlorophenol	10	UJ	ug/l	10
3- & 4-Methylphenol (2)	10	UJ	ug/l	10
Hexachloropropene	50	UJ	ug/l	50
2-Acetylaminofluorene	10	UJ	ug/l	10

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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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:		R9994010				RA061013			RA061012			R9994007		
Site		GROUP111				GROUP111			GROUP111			GROUP111		
Locator		01G00101				01G00102			01G00103			01G00201		
Collect Date:		07-JUN-95				21-JUN-95			21-JUN-95			06-JUN-95		
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE
PESTICIDES/PCBs	ug/l													
alpha-BHC		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02
beta-BHC		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04
delta-BHC		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02
gamma-BHC (Lindane)		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02
Heptachlor		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02
Aldrin		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02
Heptachlor epoxide		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02
Endosulfan I		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02
Dieldrin		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02
4,4-DDE		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02
Endrin		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04
Endosulfan II		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04
4,4-DDD		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04
Endosulfan sulfate		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04
4,4-DDT		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04
Methoxychlor		.08	U	ug/l	.08	.08	U	ug/l	.08	.08	U	ug/l	.08	.08
Endrin aldehyde		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04
Endrin ketone		.04	U	ug/l	.04	.04	U	ug/l	.04	.04	U	ug/l	.04	.04
Chlordane		.2	U	ug/l	.2	.2	U	ug/l	.2	.2	U	ug/l	.2	.2
Chlorobenzilate		.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5
Diallate		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1
Toxaphene		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1
Isodrin		.02	U	ug/l	.02	.02	U	ug/l	.02	.02	U	ug/l	.02	.02
Kepone		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1
Aroclor-1016		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1
Aroclor-1221		2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2	2
Aroclor-1232		2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2	2
Aroclor-1242		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1
Aroclor-1248		1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1
Aroclor-1254		.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5
Aroclor-1260		.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5

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US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	R9994006			R9989005			R9989006			R9989007		
Site	GROUP111			GROUP111			GROUP111			GROUP111		
Locator	01G00301			23G00101			23G00101D			23G00201		
Collect Date:	06-JUN-95			04-JUN-95			04-JUN-95			05-JUN-95		
	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	1 UJ	ug/l	1	1 UJ	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:		R9989008			R9994003			R9994004			R9994009		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		23G00301			23G00401			23G00401D			23G00501		
Collect Date:		05-JUN-95			06-JUN-95			06-JUN-95			07-JUN-95		
	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	
beta-BHC	.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	
gamma-BHC (Lindane)	.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	
Aldrin	.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	
Endosulfan I	.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	
4,4-DDE	.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	
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	.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	
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	UJ	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	
Aroclor-1221	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	
Aroclor-1242	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	
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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:		RA061005			RA061008			R9989009			R9989003		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		23G00502			23G00503			23G00601			23G00701		
Collect Date:		19-JUN-95			20-JUN-95			05-JUN-95			03-JUN-95		
	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	1	UJ	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	R9994013			R9994011			RA061011			RA061009		
Site	GROUP111			GROUP111			GROUP111			GROUP111		
Locator	24G00101			44G00101			44G00102			44G00103		
Collect Date:	07-JUN-95			07-JUN-95			21-JUN-95			20-JUN-95		
	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	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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US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:		R9994005			R9994012			R9994017			RA061003		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		44G00201			44G00301			45G00101			45G00102		
Collect Date:		06-JUN-95			07-JUN-95			08-JUN-95			19-JUN-95		
	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	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:		RA061004			RA061006			R9994015			R9994016		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		45G00102D			45G00103			45G00201			45G00201D		
Collect Date:		19-JUN-95			19-JUN-95			08-JUN-95			08-JUN-95		
	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	
beta-BHC	.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	
gamma-BHC (Lindane)	.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	
Aldrin	.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	
Endosulfan I	.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	
4,4-DDE	.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	
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	.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	
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	1	U	ug/l	1	
Aroclor-1221	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	
Aroclor-1242	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	
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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US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:		R9994010			RA061013			RA061012			R9994007		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		01G00101			01G00102			01G00103			01G00201		
Collect Date:		07-JUN-95			21-JUN-95			21-JUN-95			06-JUN-95		
		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	10.6 J	ug/l	5
Arsenic		5.7 J	ug/l	.6	.7 J	ug/l	.6	57	ug/l	3	7.7 J	ug/l	.6
Barium		1.3 J	ug/l	1.1	1.5 J	ug/l	1.1	48 J	ug/l	1.1	1.9 J	ug/l	1.1
Beryllium		.3 U	ug/l	.3	.3 U	ug/l	.3	.3 U	ug/l	.3	.3 U	ug/l	.3
Cadmium		1.2 U	ug/l	1.2	1.2 U	ug/l	1.2	1.2 U	ug/l	1.2	1.2 U	ug/l	1.2
Calcium		62400	ug/l	34.8	62000	ug/l	34.8	158000	ug/l	34.8	56900	ug/l	34.8
Chromium		1.7 U	ug/l	1.7	1.7 U	ug/l	1.7	1.7 U	ug/l	1.7	1.8 J	ug/l	1.7
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		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Cyanide		1.6 J	ug/l	1.5	1.5 U	ug/l	1.5	1.5 U	ug/l	1.5	1.5 U	ug/l	1.5
Iron		75.9 J	ug/l	1.9	51.9 J	ug/l	1.9	3930	ug/l	1.9	12.8 UJ	ug/l	12.8
Lead		.5 J	ug/l	.4	1 UJ	ug/l	1	7 J	ug/l	4	.4 U	ug/l	.4
Magnesium		2530 J	ug/l	19.8	10300	ug/l	19.8	422000	ug/l	19.8	6810	ug/l	19.8
Manganese		3.4 J	ug/l	.5	5.5 J	ug/l	.5	150	ug/l	.5	4.8 J	ug/l	.5
Mercury		.1 U	ug/l	.1	.1 U	ug/l	.1	.1 U	ug/l	.1	.1 U	ug/l	.1
Nickel		5.7 U	ug/l	5.7	5.7 U	ug/l	5.7	5.7 U	ug/l	5.7	5.7 U	ug/l	5.7
Selenium		.5 U	ug/l	.5	.5 UJ	ug/l	.5	5.6 J	ug/l	5	.5 U	ug/l	.5
Silver		1.4 U	ug/l	1.4	1.4 U	ug/l	1.4	1.4 J	ug/l	1.4	1.4 U	ug/l	1.4
Sodium		5320	ug/l	19.5	13400	ug/l	19.5	3630000	ug/l	390	6490	ug/l	19.5
Thallium		.6 U	ug/l	.6	.6 U	ug/l	.6	6 UJ	ug/l	6	.6 U	ug/l	.6
Tin		13.6 U	ug/l	13.6	13.6 U	ug/l	13.6	13.6 U	ug/l	13.6	13.6 U	ug/l	13.6
Vanadium		5.7 J	ug/l	1.2	1.2 U	ug/l	1.2	17 J	ug/l	1.2	8.5 J	ug/l	1.2
Zinc		5.2 UJ	ug/l	5.2	4.3 UJ	ug/l	4.3	3.3 UJ	ug/l	3.3	5.2 UJ	ug/l	5.2

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US Naval Station, Mayport, RCRA Facil., Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:		R9994006			R9989005			R9989006			R9989007		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		01G00301			23G00101			23G00101D			23G00201		
Collect Date:		06-JUN-95			04-JUN-95			04-JUN-95			05-JUN-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
INORGANICS (WATER)	ug/l												
Antimony		28.3 J	ug/l	5	5 R	ug/l	5	5 R	ug/l	5	5 R	ug/l	5
Arsenic		1.9 J	ug/l	.6	3.2 UJ	ug/l	3.2	3.7 UJ	ug/l	3.7	2.4 UJ	ug/l	2.4
Barium		71.9 J	ug/l	1.1	4.2 J	ug/l	1.1	4 J	ug/l	1.1	3.7 J	ug/l	1.1
Beryllium		.3 U	ug/l	.3	.3 U	ug/l	.3	.3 U	ug/l	.3	.3 U	ug/l	.3
Cadmium		1.2 U	ug/l	1.2	1.2 U	ug/l	1.2	1.2 U	ug/l	1.2	1.2 U	ug/l	1.2
Calcium		154000	ug/l	34.8	92000	ug/l	34.8	92400	ug/l	34.8	116000	ug/l	34.8
Chromium		1.7 U	ug/l	1.7	1.7 U	ug/l	1.7	1.7 U	ug/l	1.7	1.7 U	ug/l	1.7
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		108	ug/l	1	1 U	ug/l	1	1.5 UJ	ug/l	1.5	1 U	ug/l	1
Cyanide		1.5 U	ug/l	1.5	1.5 U	ug/l	1.5	1.7 J	ug/l	1.5	1.5 U	ug/l	1.5
Iron		13.9 UJ	ug/l	13.9	18.7 UJ	ug/l	18.7	14 UJ	ug/l	14	603	ug/l	1.9
Lead		4.6	ug/l	.4	.4 U	ug/l	.4	.4 U	ug/l	.4	.4 U	ug/l	.4
Magnesium		17500	ug/l	19.8	4580 J	ug/l	19.8	4600 J	ug/l	19.8	8280	ug/l	19.8
Manganese		131	ug/l	.5	23.7	ug/l	.5	22.6	ug/l	.5	149	ug/l	.5
Mercury		.15 J	ug/l	.1	.1 U	ug/l	.1	.1 U	ug/l	.1	.1 U	ug/l	.1
Nickel		10 J	ug/l	5.7	5.7 U	ug/l	5.7	5.7 U	ug/l	5.7	5.7 U	ug/l	5.7
Selenium		.5 UJ	ug/l	.5	.98 J	ug/l	.5	.71 J	ug/l	.5	.5 U	ug/l	.5
Silver		1.4 U	ug/l	1.4	1.4 U	ug/l	1.4	1.4 U	ug/l	1.4	1.4 U	ug/l	1.4
Sodium		16200	ug/l	19.5	8590	ug/l	19.5	8600	ug/l	19.5	37200	ug/l	19.5
Thallium		.6 U	ug/l	.6	.6 U	ug/l	.6	.6 U	ug/l	.6	.6 U	ug/l	.6
Tin		13.6 U	ug/l	13.6	13.6 U	ug/l	13.6	13.6 U	ug/l	13.6	13.6 U	ug/l	13.6
Vanadium		33.6 J	ug/l	1.2	7.8 J	ug/l	1.2	7.3 J	ug/l	1.2	3.5 J	ug/l	1.2
Zinc		180	ug/l	2.1	5.37 UJ	ug/l	5.37	5.37 UJ	ug/l	5.37	5.7 UJ	ug/l	5.7

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US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	R9989008				R9994003				R9994004				R9994009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	23G00301				23G00401				23G00401D				23G00501			
Collect Date:	05-JUN-95				06-JUN-95				06-JUN-95				07-JUN-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (WATER) ug/l																
Antimony	5	R	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Arsenic	5	UJ	ug/l	5	4.4	J	ug/l	.6	3.7	J	ug/l	.6	2	J	ug/l	.6
Barium	4.5	J	ug/l	1.1	2.8	J	ug/l	1.1	3.3	J	ug/l	1.1	13.7	J	ug/l	1.1
Beryllium	.3	U	ug/l	.3	.3	U	ug/l	.3	.3	U	ug/l	.3	.3	U	ug/l	.3
Cadmium	1.2	U	ug/l	1.2	1.2	U	ug/l	1.2	1.2	U	ug/l	1.2	1.2	U	ug/l	1.2
Calcium	67000		ug/l	34.8	68300		ug/l	34.8	70100		ug/l	34.8	106000		ug/l	34.8
Chromium	1.7	U	ug/l	1.7	1.7	U	ug/l	1.7	1.7	U	ug/l	1.7	1.7	U	ug/l	1.7
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	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Cyanide	1.5	U	ug/l	1.5	1.5	U	ug/l	1.5	1.5	U	ug/l	1.5	1.5	U	ug/l	1.5
Iron	55.9	J	ug/l	1.9	16.5	UJ	ug/l	16.5	22.2	UJ	ug/l	22.2	23.3	UJ	ug/l	23.3
Lead	.4	U	ug/l	.4	.8	J	ug/l	.4	.4	U	ug/l	.4	.4	U	ug/l	.4
Magnesium	3120	J	ug/l	19.8	4440	J	ug/l	19.8	4670	J	ug/l	19.8	7030		ug/l	19.8
Manganese	34		ug/l	.5	29.3		ug/l	.5	31.7		ug/l	.5	35.8		ug/l	.5
Mercury	.1	U	ug/l	.1	.1	U	ug/l	.1	.1	U	ug/l	.1	.1	U	ug/l	.1
Nickel	5.7	U	ug/l	5.7	5.7	U	ug/l	5.7	5.7	U	ug/l	5.7	7.4	J	ug/l	5.7
Selenium	.5	U	ug/l	.5	.91	J	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5
Silver	1.4	U	ug/l	1.4	1.7	UJ	ug/l	1.7	1.7	UJ	ug/l	1.7	1.4	U	ug/l	1.4
Sodium	9700		ug/l	19.5	10200		ug/l	19.5	10700		ug/l	19.5	42000		ug/l	19.5
Thallium	.6	U	ug/l	.6	.6	U	ug/l	.6	.6	U	ug/l	.6	.6	U	ug/l	.6
Tin	13.6	U	ug/l	13.6	13.6	U	ug/l	13.6	13.6	U	ug/l	13.6	13.6	U	ug/l	13.6
Vanadium	4.7	J	ug/l	1.2	3.8	J	ug/l	1.2	3.4	J	ug/l	1.2	53.5		ug/l	1.2
Zinc	5.37	UJ	ug/l	5.37	5	UJ	ug/l	5	5	UJ	ug/l	5	5	UJ	ug/l	5

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US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:		RA061005			RA061008			R9989009			R9989003		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		23G00502			23G00503			23G00601			23G00701		
Collect Date:		19-JUN-95			20-JUN-95			05-JUN-95			03-JUN-95		
	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	R	ug/l	5	5	R	ug/l	5
Arsenic	.6	U	ug/l	.6	102		ug/l	3	2.4	UJ	ug/l	2.4	5.3	J	ug/l	.6
Barium	10.3	J	ug/l	1.1	67.3	J	ug/l	1.1	5	J	ug/l	1.1	4.2	J	ug/l	1.1
Beryllium	.3	U	ug/l	.3	.3	U	ug/l	.3	.3	U	ug/l	.3	.3	U	ug/l	.3
Cadmium	1.2	U	ug/l	1.2	1.2	U	ug/l	1.2	1.2	U	ug/l	1.2	1.2	U	ug/l	1.2
Calcium	58700		ug/l	34.8	236000		ug/l	34.8	100000		ug/l	34.8	118000		ug/l	34.8
Chromium	1.7	U	ug/l	1.7	1.7	U	ug/l	1.7	1.7	U	ug/l	1.7	1.7	U	ug/l	1.7
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	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Cyanide	1.5	U	ug/l	1.5	3.3	J	ug/l	1.5	1.5	U	ug/l	1.5	1.5	U	ug/l	1.5
Iron	894		ug/l	1.9	8410		ug/l	1.9	10.9	UJ	ug/l	10.9	111		ug/l	1.9
Lead	1	UJ	ug/l	1	8	J	ug/l	4	.4	U	ug/l	.4	.4	U	ug/l	.4
Magnesium	72000		ug/l	19.8	614000		ug/l	19.8	11500		ug/l	19.8	8750		ug/l	19.8
Manganese	199		ug/l	.5	200		ug/l	.5	79		ug/l	.5	72.5		ug/l	.5
Mercury	.1	U	ug/l	.1	.1	U	ug/l	.1	.1	U	ug/l	.1	.1	U	ug/l	.1
Nickel	5.7	U	ug/l	5.7	8.4	J	ug/l	5.7	5.7	U	ug/l	5.7	5.7	U	ug/l	5.7
Selenium	2.5	UJ	ug/l	2.5	5	UJ	ug/l	5	.5	U	ug/l	.5	1.6	J	ug/l	.5
Silver	1.4	U	ug/l	1.4	1.4	U	ug/l	1.4	1.4	U	ug/l	1.4	1.4	U	ug/l	1.4
Sodium	346000		ug/l	19.5	4900000		ug/l	390	24600		ug/l	19.5	18400		ug/l	19.5
Thallium	.6	UJ	ug/l	.6	6	UJ	ug/l	6	.6	U	ug/l	.6	.6	U	ug/l	.6
Tin	13.6	U	ug/l	13.6	13.6	U	ug/l	13.6	13.6	U	ug/l	13.6	13.6	U	ug/l	13.6
Vanadium	2.4	J	ug/l	1.2	4.8	J	ug/l	1.2	4.7	J	ug/l	1.2	10.5	J	ug/l	1.2
Zinc	3.8	UJ	ug/l	3.8	4.6	UJ	ug/l	4.6	5.37	UJ	ug/l	5.37	5.37	UJ	ug/l	5.37

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US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:		R9994013			R9994011			RA061011			RA061009		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		24G00101			44G00101			44G00102			44G00103		
Collect Date:		07-JUN-95			07-JUN-95			21-JUN-95			20-JUN-95		
		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	7.9 J	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Arsenic		3.4 J	ug/l	.6	5.4 J	ug/l	.6	.6 U	ug/l	.6	80.5	ug/l	3
Barium		3.3 J	ug/l	1.1	11.4 J	ug/l	1.1	9.5 J	ug/l	1.1	54.8 J	ug/l	1.1
Beryllium		.3 U	ug/l	.3	.3 U	ug/l	.3	.3 U	ug/l	.3	.3 U	ug/l	.3
Cadmium		1.2 U	ug/l	1.2	1.2 U	ug/l	1.2	1.2 U	ug/l	1.2	1.2 U	ug/l	1.2
Calcium		95700	ug/l	34.8	94400	ug/l	34.8	49900	ug/l	34.8	124000	ug/l	34.8
Chromium		1.7 U	ug/l	1.7	1.7 U	ug/l	1.7	1.7 U	ug/l	1.7	1.7 U	ug/l	1.7
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		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Cyanide		1.5 U	ug/l	1.5	1.5 U	ug/l	1.5	1.5 U	ug/l	1.5	7.7 J	ug/l	1.5
Iron		81.8 J	ug/l	1.9	230	ug/l	1.9	536	ug/l	1.9	3170	ug/l	1.9
Lead		.4 U	ug/l	.4	.4 U	ug/l	.4	1 UJ	ug/l	1	7 J	ug/l	4
Magnesium		4640 J	ug/l	19.8	7570	ug/l	19.8	27600	ug/l	19.8	308000	ug/l	19.8
Manganese		114	ug/l	.5	117	ug/l	.5	73.6	ug/l	.5	701	ug/l	.5
Mercury		.1 U	ug/l	.1	.1 U	ug/l	.1	.1 U	ug/l	.1	.1 U	ug/l	.1
Nickel		5.7 U	ug/l	5.7	6.4 J	ug/l	5.7	5.7 U	ug/l	5.7	5.7 U	ug/l	5.7
Selenium		.5 U	ug/l	.5	.5 U	ug/l	.5	2.5 UJ	ug/l	2.5	5 UJ	ug/l	5
Silver		1.4 U	ug/l	1.4	1.4 U	ug/l	1.4	1.4 U	ug/l	1.4	1.4 U	ug/l	1.4
Sodium		19400	ug/l	19.5	12900	ug/l	19.5	218000	ug/l	19.5	3100000	ug/l	390
Thallium		.6 U	ug/l	.6	.6 U	ug/l	.6	6 UJ	ug/l	6	6 UJ	ug/l	6
Tin		13.6 U	ug/l	13.6	13.6 U	ug/l	13.6	13.6 U	ug/l	13.6	13.6 U	ug/l	13.6
Vanadium		4 J	ug/l	1.2	3 J	ug/l	1.2	4.7 J	ug/l	1.2	15.8 J	ug/l	1.2
Zinc		5.9 UJ	ug/l	5.9	5 UJ	ug/l	5	3.6 UJ	ug/l	3.6	4.7 UJ	ug/l	4.7

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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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:	R9994005				R9994012				R9994017				RA061003			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	44G00201				44G00301				45G00101				45G00102			
Collect Date:	06-JUN-95				07-JUN-95				08-JUN-95				19-JUN-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (WATER) ug/l																
Antimony	50.2	J	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Arsenic	1.9	J	ug/l	.6	3.1	J	ug/l	.6	4.5	J	ug/l	.6	.6	U	ug/l	.6
Barium	6.2	J	ug/l	1.1	13.8	J	ug/l	1.1	3.1	J	ug/l	1.1	5.5	J	ug/l	1.1
Beryllium	.3	U	ug/l	.3	.3	U	ug/l	.3	.3	U	ug/l	.3	.3	U	ug/l	.3
Cadmium	1.2	U	ug/l	1.2	1.2	U	ug/l	1.2	1.2	U	ug/l	1.2	1.2	U	ug/l	1.2
Calcium	107000		ug/l	34.8	94700		ug/l	34.8	88800		ug/l	34.8	24700		ug/l	34.8
Chromium	1.7	U	ug/l	1.7	1.7	U	ug/l	1.7	2.8	J	ug/l	1.7	1.7	U	ug/l	1.7
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	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Cyanide	1.5	U	ug/l	1.5	1.5	U	ug/l	1.5	1.5	U	ug/l	1.5	2.1	J	ug/l	1.5
Iron	174		ug/l	1.9	18.7	UJ	ug/l	18.7	20.4	UJ	ug/l	20.4	136		ug/l	1.9
Lead	2.2	J	ug/l	.4	.4	U	ug/l	.4	.4	U	ug/l	.4	1	UJ	ug/l	1
Magnesium	13900		ug/l	19.8	9100		ug/l	19.8	10400		ug/l	19.8	37600		ug/l	19.8
Manganese	158		ug/l	.5	66.2		ug/l	.5	25.8		ug/l	.5	25.6		ug/l	.5
Mercury	.1	U	ug/l	.1	.1	U	ug/l	.1	.1	U	ug/l	.1	.1	U	ug/l	.1
Nickel	5.7	U	ug/l	5.7	5.7	U	ug/l	5.7	7	J	ug/l	5.7	5.7	U	ug/l	5.7
Selenium	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.6	J	ug/l	.5
Silver	1.4	U	ug/l	1.4	1.4	U	ug/l	1.4	1.4	U	ug/l	1.4	1.4	U	ug/l	1.4
Sodium	15700		ug/l	19.5	8420		ug/l	19.5	24600		ug/l	19.5	63300		ug/l	19.5
Thallium	.6	U	ug/l	.6	.6	U	ug/l	.6	.6	U	ug/l	.6	.6	U	ug/l	.6
Tin	13.6	U	ug/l	13.6	13.6	U	ug/l	13.6	13.6	U	ug/l	13.6	13.6	U	ug/l	13.6
Vanadium	57		ug/l	1.2	5.4	J	ug/l	1.2	7.1	J	ug/l	1.2	4.2	J	ug/l	1.2
Zinc	5.9	UJ	ug/l	5.9	5	UJ	ug/l	5	5	UJ	ug/l	5	3.3	UJ	ug/l	3.3

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US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:		RA061004				RA061006				R9994015				R9994016			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		45G00102D				45G00103				45G00201				45G00201D			
Collect Date:		19-JUN-95				19-JUN-95				08-JUN-95				08-JUN-95			
		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	8.7	J	ug/l	5	8.3	J	ug/l	5
Arsenic		.6	U	ug/l	.6	65.5		ug/l	3	2.2	J	ug/l	.6	2.2	J	ug/l	.6
Barium		5.2	J	ug/l	1.1	73.5	J	ug/l	1.1	6.6	J	ug/l	1.1	6.4	J	ug/l	1.1
Beryllium		.3	U	ug/l	.3	.3	U	ug/l	.3	.3	U	ug/l	.3	.3	U	ug/l	.3
Cadmium		1.2	U	ug/l	1.2	1.2	U	ug/l	1.2	1.2	U	ug/l	1.2	1.2	U	ug/l	1.2
Calcium		24200		ug/l	34.8	254000		ug/l	34.8	95100		ug/l	34.8	95300		ug/l	34.8
Chromium		1.9	J	ug/l	1.7	1.7	U	ug/l	1.7	1.7	U	ug/l	1.7	1.7	U	ug/l	1.7
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		1	U	ug/l	1	1	U	ug/l	1	4.9	J	ug/l	1	4.2	J	ug/l	1
Cyanide		2.1	J	ug/l	1.5	5.8	J	ug/l	1.5	1.6	J	ug/l	1.5	1.6	J	ug/l	1.5
Iron		140		ug/l	1.9	9040		ug/l	1.9	20.8	UJ	ug/l	20.8	13.4	UJ	ug/l	13.4
Lead		1	UJ	ug/l	1	7	J	ug/l	4	.4	U	ug/l	.4	.4	U	ug/l	.4
Magnesium		36300		ug/l	19.8	680000		ug/l	19.8	16600		ug/l	19.8	16800		ug/l	19.8
Manganese		24.6		ug/l	.5	182		ug/l	.5	43.7		ug/l	.5	44.2		ug/l	.5
Mercury		.1	U	ug/l	.1	.1	U	ug/l	.1	.1	U	ug/l	.1	.1	U	ug/l	.1
Nickel		5.7	U	ug/l	5.7	5.7	U	ug/l	5.7	10.3	J	ug/l	5.7	6.6	J	ug/l	5.7
Selenium		.5	UJ	ug/l	.5	25	UJ	ug/l	25	.5	U	ug/l	.5	.5	U	ug/l	.5
Silver		1.4	U	ug/l	1.4	1.4	U	ug/l	1.4	1.4	U	ug/l	1.4	1.4	U	ug/l	1.4
Sodium		60100		ug/l	19.5	5370000		ug/l	390	57000		ug/l	19.5	57400		ug/l	19.5
Thallium		.6	U	ug/l	.6	6	UJ	ug/l	6	.6	U	ug/l	.6	.6	U	ug/l	.6
Tin		13.6	U	ug/l	13.6	13.6	U	ug/l	13.6	13.6	U	ug/l	13.6	13.6	U	ug/l	13.6
Vanadium		4	J	ug/l	1.2	7.8	J	ug/l	1.2	7.9	J	ug/l	1.2	7.6	J	ug/l	1.2
Zinc		4.9	UJ	ug/l	4.9	4.2	UJ	ug/l	4.2	8.4	UJ	ug/l	8.4	5	UJ	ug/l	5

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US Naval Station, Mayport, RCRA Facil.., Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:		R9994010			RA061013			RA061012			R9994007		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		01G00101			01G00102			01G00103			01G00201		
Collect Date:		07-JUN-95			21-JUN-95			21-JUN-95			06-JUN-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
GROUND WATER QUALITY	mg/l												
Alkalinity as CaCO3		145	mg/l	2	189	mg/l	2	507	mg/l	2	154	mg/l	2
Ammonia-N		.3 <	mg/l	.3	1.5 U	mg/l	1.5	3.4	mg/l	.3	.3 <	mg/l	.3
Chloride		11.4	mg/l	1	15.1	mg/l	1	4400	mg/l	1000	14.6	mg/l	1
Hardness as CaCO3		163	mg/l	3	246	mg/l	3	2350	mg/l	30	180	mg/l	3
Nitrate/Nitrite-N		1.67	mg/l	.25	1.98	mg/l	.25	.14	mg/l	.1	.42	mg/l	.1
Oil and Grease		5 <	mg/l	5	5 U	mg/l	5	5 U	mg/l	5	5 <	mg/l	5
Phosphorous-P, Total		.1 <	mg/l	.1	.39	mg/l	.1	.56	mg/l	.1	.12	mg/l	.1
Sulfate		13.1	mg/l	1	18.3	mg/l	1	520	mg/l	100	13.7	mg/l	1
Sulfide		1 <	mg/l	1	1.2	mg/l	1	1 U	mg/l	1	1 <	mg/l	1
Total Dissolved Solids		218	mg/l	10	287	mg/l	10	9300	mg/l	10	225	mg/l	10
Total Kjeldahl Nitrogen		.3 <	mg/l	.3	1.5 U	mg/l	1.5	4	mg/l	.8	.3 <	mg/l	.3
Total Organic Carbon		2.7	mg/l	1	15.3	mg/l	1	2.1	mg/l	1	2.9	mg/l	1
COLOR	units												
Color		5 <	units	5	10	units	5	250	units	25	5 <	units	5
pH	units												
pH		7.52	units		7.9	units		7.57	units		7.57	units	

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US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:		R9994006			R9989005			R9989007			R9989008		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		01G00301			23G00101			23G00201			23G00301		
Collect Date:		06-JUN-95			04-JUN-95			05-JUN-95			05-JUN-95		
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	
GROUND WATER QUALITY	mg/l												
Alkalinity as CaCO3	363		mg/l	2	218		mg/l	2	346		mg/l	2	158		mg/l	2
Ammonia-N	.5		mg/l	.3	.3	U	mg/l	.3	.3	U	mg/l	.3	.3	U	mg/l	.3
Chloride	24.8		mg/l	10	13.2		mg/l	1	16.8		mg/l	1	14.8		mg/l	1
Hardness as CaCO3	453		mg/l	6	249		mg/l	3	329		mg/l	3	180		mg/l	3
Nitrate/Nitrite-N	3.38		mg/l	1	1.24		mg/l	1	.23		mg/l	.1	.27		mg/l	.1
Oil and Grease	5	<	mg/l	5	5	U	mg/l	5	5	U	mg/l	5	5	U	mg/l	5
Phosphorous-P, Total	.1	<	mg/l	.1	.1		mg/l	.1	.19		mg/l	.1	.1		mg/l	.1
Sulfate	104		mg/l	10	26.6		mg/l	1	54.5		mg/l	10	21.5		mg/l	1
Sulfide	1	<	mg/l	1	1	U	mg/l	1	1	U	mg/l	1	1	U	mg/l	1
Total Dissolved Solids	591		mg/l	10	333		mg/l	10	477		mg/l	10	288		mg/l	10
Total Kjeldahl Nitrogen	1.3		mg/l	.3	.3	U	mg/l	.3	.4		mg/l	.3	.3	U	mg/l	.3
Total Organic Carbon	23.3		mg/l	1	4.9		mg/l	1	-		mg/l		4		mg/l	1
COLOR	units															
Color	20		units	5	5		units	5	15		units	5	5		units	5
pH	units															
pH	7.1		units		7.43		units		7.34		units		7.72		units	

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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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:		R9994003			R9994009			RA061005			RA061008		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		23G00401			23G00501			23G00502			23G00503		
Collect Date:		06-JUN-95			07-JUN-95			19-JUN-95			20-JUN-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
GROUND WATER QUALITY	mg/l												
Alkalinity as CaCO3		174	mg/l	2	198	mg/l	2	584	mg/l	2	418	mg/l	2
Ammonia-N		.3 <	mg/l	.3	.3 <	mg/l	.3	17.7	mg/l	3	4.8	mg/l	.75
Chloride		15	mg/l	1	61	mg/l	10	415	mg/l	100	9240	mg/l	2000
Hardness as CaCO3		186	mg/l	3	300	mg/l	3	441	mg/l	6	4760	mg/l	60
Nitrate/Nitrite-N		.38	mg/l	.1	.57	mg/l	.1	.16	mg/l	.1	.13	mg/l	.1
Oil and Grease		5 <	mg/l	5	5 <	mg/l	5	5 U	mg/l	5	5 U	mg/l	5
Phosphorous-P, Total		.1 <	mg/l	.1	.15	mg/l	.1	2.74	mg/l	.5	.41	mg/l	.1
Sulfate		21.2	mg/l	1	114	mg/l	10	12.1	mg/l	10	1180	mg/l	200
Sulfide		1 <	mg/l	1	1 <	mg/l	1	2.2	mg/l	1	1 U	mg/l	1
Total Dissolved Solids		257	mg/l	10	487	mg/l	10	1170	mg/l	10	17200	mg/l	10
Total Kjeldahl Nitrogen		.3	mg/l	.3	.3	mg/l	.3	18.1	mg/l	3	4.7	mg/l	3
Total Organic Carbon		6.7	mg/l	1	7.4	mg/l	1	10.2	mg/l	1	11	mg/l	1
COLOR	units												
Color		10	units	5	5	units	5	50	units	5	250	units	25
pH	units												
pH		7.81	units		7.38	units		7.46	units		7.24	units	

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US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:		R9989009			R9989003			R9994013			R9994011		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		23G00601			23G00701			24G00101			44G00101		
Collect Date:		05-JUN-95			03-JUN-95			07-JUN-95			07-JUN-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
GROUND WATER QUALITY	mg/l												
Alkalinity as CaCO3		267	mg/l	2	266	mg/l	2	276	mg/l	2	228	mg/l	2
Ammonia-N		.3 U	mg/l	.3	.3 U	mg/l	.3	.3 <	mg/l	.3	.3 <	mg/l	.3
Chloride		28.2	mg/l	10	16.4	mg/l	1	10.2	mg/l	1	23.4	mg/l	10
Hardness as CaCO3		304	mg/l	3	339	mg/l	3	263	mg/l	3	269	mg/l	3
Nitrate/Nitrite-N		.22	mg/l	.1	4.37	mg/l	1	1.38	mg/l	.25	.24	mg/l	.1
Oil and Grease		5 U	mg/l	5	5 U	mg/l	5	5 <	mg/l	5	5 <	mg/l	5
Phosphorous-P, Total		.15	mg/l	.1	.14	mg/l	.1	.13	mg/l	.1	.21	mg/l	.1
Sulfate		73.4	mg/l	10	68.6	mg/l	10	16.4	mg/l	1	49.4	mg/l	10
Sulfide		1 U	mg/l	1	1 U	mg/l	1	1 <	mg/l	1	1 <	mg/l	1
Total Dissolved Solids		444	mg/l	10	460	mg/l	10	360	mg/l	10	362	mg/l	10
Total Kjeldahl Nitrogen		.4	mg/l	.3	.3 U	mg/l	.3	.7	mg/l	.3	.5	mg/l	.3
Total Organic Carbon		-	mg/l		6.2	mg/l	1	8	mg/l	1	7.9	mg/l	1
COLOR	units												
Color		5	units	5	10	units	5	5	units	5	10	units	5
pH	units												
pH		7.5	units		7.31	units		7.18	units		7.35	units	

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US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:		RA061011			RA061009			R9994005			R9994012		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		44G00102			44G00103			44G00201			44G00301		
Collect Date:		21-JUN-95			20-JUN-95			06-JUN-95			07-JUN-95		
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	
GROUND WATER QUALITY	mg/l												
Alkalinity as CaCO3	475		mg/l	2	574		mg/l	2	300		mg/l	2	184		mg/l	2
Ammonia-N	7.8		mg/l	3	3.5		mg/l	.3	.6		mg/l	.3	.3	<	mg/l	.3
Chloride	207		mg/l	100	5750		mg/l	2000	20.5		mg/l	10	10.3		mg/l	1
Hardness as CaCO3	233		mg/l	6	2270		mg/l	60	328		mg/l	3	276		mg/l	3
Nitrate/Nitrite-N	.1	U	mg/l	.1	.88		mg/l	.1	.65		mg/l	.25	.52		mg/l	.1
Oil and Grease	5	U	mg/l	5	5	U	mg/l	5	5	<	mg/l	5	5	<	mg/l	5
Phosphorous-P, Total	2.99		mg/l	1	.89		mg/l	.2	.2		mg/l	.1	.21		mg/l	.1
Sulfate	10	U	mg/l	10	597		mg/l	200	31.1		mg/l	1	119		mg/l	10
Sulfide	1	U	mg/l	1	1	U	mg/l	1	1	<	mg/l	1	1	<	mg/l	1
Total Dissolved Solids	871		mg/l	10	10200		mg/l	10	416		mg/l	10	379		mg/l	10
Total Kjeldahl Nitrogen	9.1		mg/l	3	4.2		mg/l	.8	.8		mg/l	.3	.4		mg/l	.3
Total Organic Carbon	9.8		mg/l	1	17.1		mg/l	1	6.7		mg/l	1	5.1		mg/l	1
COLOR	units															
Color	80		units	10	200		units	25	5		units	5	5		units	5
pH	units															
pH	7.66		units		7.58		units		7.66		units		7.36		units	

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMUs 1, 23, 24, 44, and 45 Groundwater Data

Lab Sample Number:		R9994017				RA061003				RA061006				R9994015		
Site		GROUP111				GROUP111				GROUP111				GROUP111		
Locator		45G00101				45G00102				45G00103				45G00201		
Collect Date:		08-JUN-95				19-JUN-95				19-JUN-95				08-JUN-95		
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
GROUND WATER QUALITY	mg/l																
Alkalinity as CaCO3		204		mg/l	2	355		mg/l	2	430		mg/l	2	243		mg/l	2
Ammonia-N		.3	<	mg/l	.3	7.4		mg/l	3	5.3		mg/l	.6	.3	<	mg/l	.3
Chloride		32.8		mg/l	10	37.7		mg/l	10	10500		mg/l	2000	68.8		mg/l	10
Hardness as CaCO3		262		mg/l	3	227		mg/l	8	4250		mg/l	60	310		mg/l	3
Nitrate/Nitrite-N		2		mg/l	.25	.52		mg/l	.1	.58		mg/l	.1	6.49		mg/l	1.25
Oil and Grease		5	<	mg/l	5	5	U	mg/l	5	5	U	mg/l	5	5	<	mg/l	5
Phosphorous-P, Total		.1	<	mg/l	.1	2.13		mg/l	1	.31		mg/l	.1	.1	<	mg/l	.1
Sulfate		67.6		mg/l	10	12.1		mg/l	10	1410		mg/l	200	101		mg/l	10
Sulfide		1	<	mg/l	1	2.8		mg/l	1	1	U	mg/l	1	1	<	mg/l	1
Total Dissolved Solids		399		mg/l	10	455		mg/l	10	19300		mg/l	10	560		mg/l	10
Total Kjeldahl Nitrogen		.4		mg/l	.3	8.8		mg/l	3	5.4		mg/l	3	1.2		mg/l	.3
Total Organic Carbon		5.5		mg/l	1	9.9		mg/l	1	16.9		mg/l	1	20.2		mg/l	1
COLOR	units																
Color		10		units	5	70		units	5	300		units	25	40		units	5
pH	units																
pH		7.54		units		7.87		units		7.23		units		7.26		units	

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 17

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 17 Surface Soil Data

Lab Sample Number:		M8801003				M8801003				M8801004				M8801004			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		17S00101				17S00101				17S00101D				17S00101D			
Collect Date:		11-APR-95				11-APR-95				11-APR-95				11-APR-95			
		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	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
Bromomethane		10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
Vinyl chloride		10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
Chloroethane		10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
Methylene chloride		16	U	ug/kg	16	-		ug/kg		14	U	ug/kg	14	-		ug/kg	
Acetone		10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
Carbon disulfide		2	J	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,1-Dichloroethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,1-Dichloroethene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dichloroethene (total)		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Chloroform		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dichloroethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
2-Butanone		10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
1,1,1-Trichloroethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Carbon tetrachloride		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Bromodichloromethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dichloropropane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
cis-1,3-Dichloropropene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Trichloroethene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Dibromochloromethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,1,2-Trichloroethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Benzene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
trans-1,3-Dichloropropene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Bromoform		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
4-Methyl-2-pentanone		10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
2-Hexanone		10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
Tetrachloroethene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,1,2,2-Tetrachloroethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Toluene		4	J	ug/kg	5	-		ug/kg		3	J	ug/kg	5	-		ug/kg	
Chlorobenzene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Ethylbenzene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Styrene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Xylenes (total)		10		ug/kg	5	-		ug/kg		8		ug/kg	5	-		ug/kg	
Dichlorodifluoromethane		10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
Trichlorofluoromethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,3-Dichlorobenzene		5	U	ug/kg	5	1700	U	ug/kg	1700	5	U	ug/kg	5	1700	U	ug/kg	1700
Acrolein		100	UJ	ug/kg	100	-		ug/kg		100	UJ	ug/kg	100	-		ug/kg	
Iodomethane		10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
1,4-Dichlorobenzene		5	U	ug/kg	5	1700	U	ug/kg	1700	5	U	ug/kg	5	1700	U	ug/kg	1700
Acrylonitrile		100	UJ	ug/kg	100	-		ug/kg		100	UJ	ug/kg	100	-		ug/kg	
Dibromomethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dichlorobenzene		5	U	ug/kg	5	1700	U	ug/kg	1700	5	U	ug/kg	5	1700	U	ug/kg	1700
2-Chloroethylvinyl ether		10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
Ethyl methacrylate		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2,3-Trichloropropane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
trans-1,4-Dichloro-2-butene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Isobutyl alcohol		210	U	ug/kg	210	-		ug/kg		210	U	ug/kg	210	-		ug/kg	
1,1,1,2-Tetrachloroethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dibromo-3-chloropropane		10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
1,2-Dibromoethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 17 Surface Soil Data

Lab Sample Number:	M8801003				M8801003				M8801004				M8801004		
Site	GROUP111				GROUP111				GROUP111				GROUP111		
Locator	17S00101				17S00101				17S00101D				17S00101D		
Collect Date:	11-APR-95				11-APR-95				11-APR-95				11-APR-95		
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	210	R	ug/kg	210	-		ug/kg		210	R	ug/kg	210	-		ug/kg	
3-Chloropropene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Acetonitrile	100	U	ug/kg	100	-		ug/kg		100	U	ug/kg	100	-		ug/kg	
Chloroprene	210	U	ug/kg	210	-		ug/kg		210	U	ug/kg	210	-		ug/kg	
Methacrylonitrile	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Methyl methacrylate	10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
Pentachloroethane	10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
Propionitrile	100	U	ug/kg	100	-		ug/kg		100	U	ug/kg	100	-		ug/kg	
Vinyl acetate	10	U	ug/kg	10	-		ug/kg		10	U	ug/kg	10	-		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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 17 Surface Soil Data

Lab Sample Number:		M8801002				M8801002				M8801001				M8801001			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		17S00201				17S00201				17S00301				17S00301			
Collect Date:		11-APR-95				11-APR-95				11-APR-95				11-APR-95			
		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		12	U	ug/kg	12	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Acetone		11	U	ug/kg	11	-		ug/kg		17	U	ug/kg	17	-		ug/kg	
Carbon disulfide		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,1-Dichloroethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,1-Dichloroethene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dichloroethene (total)		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Chloroform		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dichloroethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
2-Butanone		11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
1,1,1-Trichloroethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Carbon tetrachloride		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Bromodichloromethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dichloropropane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
cis-1,3-Dichloropropene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Trichloroethene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Dibromochloromethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,1,2-Trichloroethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Benzene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
trans-1,3-Dichloropropene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Bromoform		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		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		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,1,2,2-Tetrachloroethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Toluene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Chlorobenzene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Ethylbenzene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Styrene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Xylenes (total)		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Dichlorodifluoromethane		11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Trichlorofluoromethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,3-Dichlorobenzene		5	U	ug/kg	5	1800	U	ug/kg	1800	5	U	ug/kg	5	1800	U	ug/kg	1800
Acrolein		110	UJ	ug/kg	110	-		ug/kg		110	UJ	ug/kg	110	-		ug/kg	
Iodomethane		11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
1,4-Dichlorobenzene		5	U	ug/kg	5	1800	U	ug/kg	1800	5	U	ug/kg	5	1800	U	ug/kg	1800
Acrylonitrile		110	UJ	ug/kg	110	-		ug/kg		110	UJ	ug/kg	110	-		ug/kg	

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 17 Surface Soil Data

Lab Sample Number:	M8801002				M8801002				M8801001				M8801001			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17S00201				17S00201				17S00301				17S00301			
Collect Date:	11-APR-95				11-APR-95				11-APR-95				11-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dichlorobenzene	5	U	ug/kg	5	1800	U	ug/kg	1800	5	U	ug/kg	5	1800	U	ug/kg	1800
2-Chloroethylvinyl ether	11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Ethyl methacrylate	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2,3-Trichloropropane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Isobutyl alcohol	220	U	ug/kg	220	-		ug/kg		220	U	ug/kg	220	-		ug/kg	
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
1,2-Dibromoethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,4-Dioxane	220	R	ug/kg	220	-		ug/kg		220	R	ug/kg	220	-		ug/kg	
3-Chloropropene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		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	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		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-DI. 'OBENZENE WERE GENERATED FROM THE SVOC (8270) ANALYTICAL RUN.

US Naval Station, Mayport, RCRA Facil.., Investigation Group III Report
SWMU 17 Surface Soil Data

Lab Sample Number:		M8801005				M8801005				R9955014				R9955013		
Site		GROUP111				GROUP111				GROUP111				GROUP111		
Locator		17S00401				17S00401				17S00501				17S00601		
Collect Date:		11-APR-95				11-APR-95				24-MAY-95				24-MAY-95		
		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	11	U	ug/kg	11
Bromomethane		11	U	ug/kg	11	-		ug/kg		11	UJ	ug/kg	11	11	U	ug/kg	11
Vinyl chloride		11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	11	U	ug/kg	11
Chloroethane		11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	11	U	ug/kg	11
Methylene chloride		13	U	ug/kg	13	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Acetone		11	U	ug/kg	11	-		ug/kg		49	U	ug/kg	49	11	U	ug/kg	11
Carbon disulfide		5	U	ug/kg	5	-		ug/kg		3	J	ug/kg	5	5	U	ug/kg	5
1,1-Dichloroethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,1-Dichloroethene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloroethene (total)		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Chloroform		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloroethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
2-Butanone		11	U	ug/kg	11	-		ug/kg		11		ug/kg	11	11	U	ug/kg	11
1,1,1-Trichloroethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Carbon tetrachloride		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Bromodichloromethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloropropane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
cis-1,3-Dichloropropene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Trichloroethene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Dibromochloromethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,1,2-Trichloroethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Benzene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
trans-1,3-Dichloropropene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Bromoform		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
4-Methyl-2-pentanone		11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	11	U	ug/kg	11
2-Hexanone		11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	11	U	ug/kg	11
Tetrachloroethene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,1,2,2-Tetrachloroethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Toluene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	1	J	ug/kg	5
Chlorobenzene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Ethylbenzene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Styrene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Xylenes (total)		5	J	ug/kg	5	-		ug/kg		2	J	ug/kg	5	3	J	ug/kg	5
Dichlorodifluoromethane		11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	11	U	ug/kg	11
Trichlorofluoromethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,3-Dichlorobenzene		5	U	ug/kg	5	1800	U	ug/kg	1800	5	U	ug/kg	5	730	U	ug/kg	730
Acrolein		110	UJ	ug/kg	110	-		ug/kg		110	U	ug/kg	110	110	U	ug/kg	110
Iodomethane		11	U	ug/kg	11	-		ug/kg		11	UJ	ug/kg	11	11	UJ	ug/kg	11
1,4-Dichlorobenzene		5	U	ug/kg	5	1800	U	ug/kg	1800	5	U	ug/kg	5	730	U	ug/kg	730
Acrylonitrile		110	UJ	ug/kg	110	-		ug/kg		110	U	ug/kg	110	110	U	ug/kg	110

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Lab Sample Number:	M8801005				M8801005				R9955014				R9955013			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17S00401				17S00401				17S00501				17S00601			
Collect Date:	11-APR-95				11-APR-95				24-MAY-95				24-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichlorobenzene	5	U	ug/kg	5	1800	U	ug/kg	1800	730	U	ug/kg	730	5	U	ug/kg	5
2-Chloroethylvinyl ether	11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	11	U	ug/kg	11
Ethyl methacrylate	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,2,3-Trichloropropane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Isobutyl alcohol	220	U	ug/kg	220	-		ug/kg		220	U	ug/kg	220	220	U	ug/kg	220
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	11	U	ug/kg	11
1,2-Dibromoethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,4-Dioxane	220	R	ug/kg	220	-		ug/kg		220	R	ug/kg	220	220	R	ug/kg	220
3-Chloropropene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Acetonitrile	110	U	ug/kg	110	-		ug/kg		110	U	ug/kg	110	110	U	ug/kg	110
Chloroprene	220	U	ug/kg	220	-		ug/kg		220	U	ug/kg	220	220	U	ug/kg	220
Methacrylonitrile	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Methyl methacrylate	11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	11	U	ug/kg	11
Pentachloroethane	11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	11	UJ	ug/kg	11
Propionitrile	110	U	ug/kg	110	-		ug/kg		110	U	ug/kg	110	110	U	ug/kg	110
Vinyl acetate	11	U	ug/kg	11	-		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.

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Lab Sample Number:		M8801010				M8801010				M8801009				M8801009		
Site		GROUP111				GROUP111				GROUP111				GROUP111		
Locator		17S00701				17S00701				17S00801				17S00801		
Collect Date:		11-APR-95				11-APR-95				11-APR-95				11-APR-95		
		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		9	U	ug/kg	9	-		ug/kg		9	U	ug/kg	9	-		ug/kg	
Acetone		11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Carbon disulfide		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,1-Dichloroethane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,1-Dichloroethene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2-Dichloroethene (total)		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Chloroform		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2-Dichloroethane		5	U	ug/kg	5	-		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		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Carbon tetrachloride		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Bromodichloromethane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2-Dichloropropane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
cis-1,3-Dichloropropene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Trichloroethene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Dibromochloromethane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,1,2-Trichloroethane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Benzene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
trans-1,3-Dichloropropene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Bromoform		5	U	ug/kg	5	-		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		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,1,2,2-Tetrachloroethane		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Toluene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Chlorobenzene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Ethylbenzene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Styrene		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
Xylenes (total)		2	J	ug/kg	5	-		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		5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,3-Dichlorobenzene		5	U	ug/kg	5	720	U	ug/kg	720	6	U	ug/kg	6	1900	U	ug/kg	1900
Acrolein		110	UJ	ug/kg	110	-		ug/kg		110	UJ	ug/kg	110	-		ug/kg	
Iodomethane		11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
1,4-Dichlorobenzene		5	U	ug/kg	5	720	U	ug/kg	720	6	U	ug/kg	6	1900	U	ug/kg	1900
Acrylonitrile		110	UJ	ug/kg	110	-		ug/kg		110	UJ	ug/kg	110	-		ug/kg	

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Lab Sample Number:	M8801010				M8801010				M8801009				M8801009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17S00701				17S00701				17S00801				17S00801			
Collect Date:	11-APR-95				11-APR-95				11-APR-95				11-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2-Dichlorobenzene	5	U	ug/kg	5	720	U	ug/kg	720	6	U	ug/kg	6	1900	U	ug/kg	1900
2-Chloroethylvinyl ether	11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Ethyl methacrylate	5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,2,3-Trichloropropane	5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	-		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	5	U	ug/kg	5	-		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	5	U	ug/kg	5	-		ug/kg		6	U	ug/kg	6	-		ug/kg	
1,4-Dioxane	220	R	ug/kg	220	-		ug/kg		220	R	ug/kg	220	-		ug/kg	
3-Chloropropene	5	U	ug/kg	5	-		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	5	U	ug/kg	5	-		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.

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Lab Sample Number:	M8801011				M8801011				M8801012				M8801012			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17S00901				17S00901				17S00901D				17S00901D			
Collect Date:	11-APR-95				11-APR-95				11-APR-95				11-APR-95			
	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		9	U	ug/kg	9	-		ug/kg	
Acetone	11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Carbon disulfide	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,1-Dichloroethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,1-Dichloroethene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dichloroethene (total)	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Chloroform	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dichloroethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
2-Butanone	11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
1,1,1-Trichloroethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Carbon tetrachloride	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Bromodichloromethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dichloropropane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
cis-1,3-Dichloropropene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Trichloroethene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Dibromochloromethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,1,2-Trichloroethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Benzene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
trans-1,3-Dichloropropene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Bromoform	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		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	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,1,2,2-Tetrachloroethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Toluene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Chlorobenzene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Ethylbenzene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Styrene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Xylenes (total)	5	U	ug/kg	5	-		ug/kg		2	J	ug/kg	5	-		ug/kg	
Dichlorodifluoromethane	11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Trichlorofluoromethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,3-Dichlorobenzene	5	U	ug/kg	5	720	U	ug/kg	720	5	U	ug/kg	5	720	U	ug/kg	720
Acrolein	110	UJ	ug/kg	110	-		ug/kg		110	UJ	ug/kg	110	-		ug/kg	
Iodomethane	11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
1,4-Dichlorobenzene	5	U	ug/kg	5	720	U	ug/kg	720	5	U	ug/kg	5	720	U	ug/kg	720
Acrylonitrile	110	UJ	ug/kg	110	-		ug/kg		110	UJ	ug/kg	110	-		ug/kg	

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Lab Sample Number:	M8801011				M8801011				M8801012				M8801012			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17S00901				17S00901				17S00901D				17S00901D			
Collect Date:	11-APR-95				11-APR-95				11-APR-95				11-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dichlorobenzene	5	U	ug/kg	5	720	U	ug/kg	720	5	U	ug/kg	5	720	U	ug/kg	720
2-Chloroethylvinyl ether	11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
Ethyl methacrylate	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2,3-Trichloropropane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Isobutyl alcohol	220	U	ug/kg	220	-		ug/kg		220	U	ug/kg	220	-		ug/kg	
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11	-		ug/kg		11	U	ug/kg	11	-		ug/kg	
1,2-Dibromoethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,4-Dioxane	220	R	ug/kg	220	-		ug/kg		220	R	ug/kg	220	-		ug/kg	
3-Chloropropene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		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	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		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.

US Naval Station, Mayport, RCRA Facil.., Investigation Group III Report
SWMU 17 Surface Soil Data

Lab Sample Number:		M8801006				M8801006				M8801007				M8801007		
Site		GROUP111				GROUP111				GROUP111				GROUP111		
Locator		17S01001				17S01001				17S01101				17S01101		
Collect Date:		11-APR-95				11-APR-95				11-APR-95				11-APR-95		
		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		10	U	ug/kg	10	-		ug/kg	
Bromomethane		11	U	ug/kg	11	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
Vinyl chloride		11	U	ug/kg	11	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
Chloroethane		11	U	ug/kg	11	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
Methylene chloride		13	U	ug/kg	13	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
Acetone		11	U	ug/kg	11	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
Carbon disulfide		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,1-Dichloroethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,1-Dichloroethene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dichloroethene (total)		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Chloroform		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dichloroethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
2-Butanone		11	U	ug/kg	11	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
1,1,1-Trichloroethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Carbon tetrachloride		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Bromodichloromethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dichloropropane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
cis-1,3-Dichloropropene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Trichloroethene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Dibromochloromethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,1,2-Trichloroethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Benzene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
trans-1,3-Dichloropropene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Bromoform		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
4-Methyl-2-pentanone		11	U	ug/kg	11	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
2-Hexanone		11	U	ug/kg	11	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
Tetrachloroethene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,1,2,2-Tetrachloroethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Toluene		1	J	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Chlorobenzene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Ethylbenzene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Styrene		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Xylenes (total)		6		ug/kg	5	-		ug/kg		1	J	ug/kg	5	-		ug/kg	
Dichlorodifluoromethane		11	U	ug/kg	11	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
Trichlorofluoromethane		5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,3-Dichlorobenzene		5	U	ug/kg	5	720	U	ug/kg	720	5	U	ug/kg	5	340	U	ug/kg	340
Acrolein		110	UJ	ug/kg	110	-		ug/kg		100	UJ	ug/kg	100	-		ug/kg	
Iodomethane		11	U	ug/kg	11	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
1,4-Dichlorobenzene		5	U	ug/kg	5	720	U	ug/kg	720	5	U	ug/kg	5	340	U	ug/kg	340
Acrylonitrile		110	UJ	ug/kg	110	-		ug/kg		100	UJ	ug/kg	100	-		ug/kg	

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Lab Sample Number:	M8801006				M8801006				M8801007				M8801007			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17S01001				17S01001				17S01101				17S01101			
Collect Date:	11-APR-95				11-APR-95				11-APR-95				11-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dichlorobenzene	5	U	ug/kg	5	720	U	ug/kg	720	5	U	ug/kg	5	340	U	ug/kg	340
2-Chloroethylvinyl ether	11	U	ug/kg	11	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
Ethyl methacrylate	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2,3-Trichloropropane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Isobutyl alcohol	220	U	ug/kg	220	-		ug/kg		210	U	ug/kg	210	-		ug/kg	
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
1,2-Dibromoethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
1,4-Dioxane	220	R	ug/kg	220	-		ug/kg		210	R	ug/kg	210	-		ug/kg	
3-Chloropropene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Acetonitrile	110	U	ug/kg	110	-		ug/kg		100	U	ug/kg	100	-		ug/kg	
Chloroprene	220	U	ug/kg	220	-		ug/kg		210	U	ug/kg	210	-		ug/kg	
Methacrylonitrile	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	-		ug/kg	
Methyl methacrylate	11	U	ug/kg	11	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
Pentachloroethane	11	U	ug/kg	11	-		ug/kg		10	U	ug/kg	10	-		ug/kg	
Propionitrile	110	U	ug/kg	110	-		ug/kg		100	U	ug/kg	100	-		ug/kg	
Vinyl acetate	11	U	ug/kg	11	-		ug/kg		10	U	ug/kg	10	-		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.

US Naval Station, Mayport, RCRA Facil.., Investigation Group III Report
SWMU 17 Surface Soil Data

Lab Sample Number:	M8801008				M8801008				R9955006				R9955008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17S01201				17S01201				17S01301				17S01401			
Collect Date:	11-APR-95				11-APR-95				23-MAY-95				23-MAY-95			
	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		10	U	ug/kg	10	11	U	ug/kg	11
Bromomethane	11	U	ug/kg	11	-		ug/kg		10	U	ug/kg	10	11	U	ug/kg	11
Vinyl chloride	11	U	ug/kg	11	-		ug/kg		10	U	ug/kg	10	11	U	ug/kg	11
Chloroethane	11	U	ug/kg	11	-		ug/kg		10	U	ug/kg	10	11	U	ug/kg	11
Methylene chloride	13	U	ug/kg	13	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Acetone	11	U	ug/kg	11	-		ug/kg		10	U	ug/kg	10	11	U	ug/kg	11
Carbon disulfide	1	J	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,1-Dichloroethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,1-Dichloroethene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloroethene (total)	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Chloroform	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloroethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
2-Butanone	11	U	ug/kg	11	-		ug/kg		10	U	ug/kg	10	11	U	ug/kg	11
1,1,1-Trichloroethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Carbon tetrachloride	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Bromodichloromethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichloropropane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
cis-1,3-Dichloropropene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Trichloroethene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Dibromochloromethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,1,2-Trichloroethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Benzene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
trans-1,3-Dichloropropene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Bromoform	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
4-Methyl-2-pentanone	11	U	ug/kg	11	-		ug/kg		10	U	ug/kg	10	11	U	ug/kg	11
2-Hexanone	11	U	ug/kg	11	-		ug/kg		10	U	ug/kg	10	11	U	ug/kg	11
Tetrachloroethene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,1,2,2-Tetrachloroethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Toluene	1	J	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Chlorobenzene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Ethylbenzene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Styrene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Xylenes (total)	5	U	ug/kg	5	-		ug/kg		1	J	ug/kg	5	2	J	ug/kg	5
Dichlorodifluoromethane	11	U	ug/kg	11	-		ug/kg		10	U	ug/kg	10	11	U	ug/kg	11
Trichlorofluoromethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,3-Dichlorobenzene	5	U	ug/kg	5	710	U	ug/kg	710	5	U	ug/kg	5	5	U	ug/kg	5
Acrolein	110	UJ	ug/kg	110	-		ug/kg		100	U	ug/kg	100	110	U	ug/kg	110
Iodomethane	11	U	ug/kg	11	-		ug/kg		10	UJ	ug/kg	10	11	UJ	ug/kg	11
1,4-Dichlorobenzene	5	U	ug/kg	5	710	U	ug/kg	710	5	U	ug/kg	5	5	U	ug/kg	5
Acrylonitrile	110	UJ	ug/kg	110	-		ug/kg		100	U	ug/kg	100	110	U	ug/kg	110

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Lab Sample Number:	M8801008				M8801008				R9955006				R9955008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17S01201				17S01201				17S01301				17S01401			
Collect Date:	11-APR-95				11-APR-95				23-MAY-95				23-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dichlorobenzene	5	U	ug/kg	5	710	U	ug/kg	710	5	U	ug/kg	5	5	U	ug/kg	5
2-Chloroethylvinyl ether	11	U	ug/kg	11	-		ug/kg		10	U	ug/kg	10	11	U	ug/kg	11
Ethyl methacrylate	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,2,3-Trichloropropane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Isobutyl alcohol	210	U	ug/kg	210	-		ug/kg		210	U	ug/kg	210	210	U	ug/kg	210
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11	-		ug/kg		10	U	ug/kg	10	11	U	ug/kg	11
1,2-Dibromoethane	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
1,4-Dioxane	210	R	ug/kg	210	-		ug/kg		210	R	ug/kg	210	210	R	ug/kg	210
3-Chloropropene	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Acetonitrile	110	U	ug/kg	110	-		ug/kg		100	U	ug/kg	100	110	U	ug/kg	110
Chloroprene	210	U	ug/kg	210	-		ug/kg		210	U	ug/kg	210	210	U	ug/kg	210
Methacrylonitrile	5	U	ug/kg	5	-		ug/kg		5	U	ug/kg	5	5	U	ug/kg	5
Methyl methacrylate	11	U	ug/kg	11	-		ug/kg		10	U	ug/kg	10	11	U	ug/kg	11
Pentachloroethane	11	U	ug/kg	11	-		ug/kg		10	UJ	ug/kg	10	11	UJ	ug/kg	11
Propionitrile	110	U	ug/kg	110	-		ug/kg		100	U	ug/kg	100	110	U	ug/kg	110
Vinyl acetate	11	U	ug/kg	11	-		ug/kg		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.

Lab Sample Number:	R9955010
Site	GROUP111
Locator	17S01501
Collect Date:	24-MAY-95

		VALUE	QUAL	UNITS	DL
VOLATILES	ug/kg				
Chloromethane		11	U	ug/kg	11
Bromomethane		11	U	ug/kg	11
Vinyl chloride		11	U	ug/kg	11
Chloroethane		11	U	ug/kg	11
Methylene chloride		5	U	ug/kg	5
Acetone		32	U	ug/kg	32
Carbon disulfide		5	U	ug/kg	5
1,1-Dichloroethane		5	U	ug/kg	5
1,1-Dichloroethene		5	U	ug/kg	5
1,2-Dichloroethene (total)		5	U	ug/kg	5
Chloroform		5	U	ug/kg	5
1,2-Dichloroethane		5	U	ug/kg	5
2-Butanone		6	J	ug/kg	11
1,1,1-Trichloroethane		5	U	ug/kg	5
Carbon tetrachloride		5	U	ug/kg	5
Bromodichloromethane		5	U	ug/kg	5
1,2-Dichloropropane		5	U	ug/kg	5
cis-1,3-Dichloropropene		5	U	ug/kg	5
Trichloroethene		5	U	ug/kg	5
Dibromochloromethane		5	U	ug/kg	5
1,1,2-Trichloroethane		5	U	ug/kg	5
Benzene		5	U	ug/kg	5
trans-1,3-Dichloropropene		5	U	ug/kg	5
Bromoform		5	U	ug/kg	5
4-Methyl-2-pentanone		11	U	ug/kg	11
2-Hexanone		11	U	ug/kg	11
Tetrachloroethene		5	U	ug/kg	5
1,1,2,2-Tetrachloroethane		5	U	ug/kg	5
Toluene		5	U	ug/kg	5
Chlorobenzene		5	U	ug/kg	5
Ethylbenzene		5	U	ug/kg	5
Styrene		5	U	ug/kg	5
Xylenes (total)		2	J	ug/kg	5
Dichlorodifluoromethane		11	U	ug/kg	11
Trichlorofluoromethane		5	U	ug/kg	5
1,3-Dichlorobenzene		730	U	ug/kg	730
Acrolein		110	U	ug/kg	110
Iodomethane		11	UJ	ug/kg	11
1,4-Dichlorobenzene		5	U	ug/kg	5
Acrylonitrile		110	U	ug/kg	110

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 17 Surface Soil Data

Lab Sample Number:	R9955010
Site	GROUP111
Locator	17S01501
Collect Date:	24-MAY-95

	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/kg	5
1,2-Dichlorobenzene	5	U	ug/kg	5
2-Chloroethylvinyl ether	11	U	ug/kg	11
Ethyl methacrylate	5	U	ug/kg	5
1,2,3-Trichloropropane	5	U	ug/kg	5
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5
Isobutyl alcohol	220	U	ug/kg	220
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11
1,2-Dibromoethane	5	U	ug/kg	5
1,4-Dioxane	220	R	ug/kg	220
3-Chloropropene	5	U	ug/kg	5
Acetonitrile	110	U	ug/kg	110
Chloroprene	220	U	ug/kg	220
Methacrylonitrile	5	U	ug/kg	5
Methyl methacrylate	11	U	ug/kg	11
Pentachloroethane	11	UJ	ug/kg	11
Propionitrile	110	U	ug/kg	110
Vinyl acetate	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.

US Naval Station, Mayport, RCRA Facil.., Investigation Group III Report
SWMU 17 Surface Soil Data

Lab Sample Number:		M8801003				M8801004				M8801002				M8801001			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		17S00101				17S00101D				17S00201				17S00301			
Collect Date:		11-APR-95				11-APR-95				11-APR-95				11-APR-95			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg																
N-Nitrosodimethylamine		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Phenol		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Aniline		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
bis(2-Chloroethyl) ether		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Benzyl Alcohol		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2-Methylphenol		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
bis(2-Chloroisopropyl) ether		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
N-Nitroso-di-n-propylamine		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Hexachloroethane		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Nitrobenzene		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Isophorone		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2-Nitrophenol		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2,4-Dimethylphenol		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Benzoic acid		8600	U	ug/kg	8600	8500	U	ug/kg	8500	8900	U	ug/kg	8900	8900	U	ug/kg	8900
bis(2-Chloroethoxy) methane		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2,4-Dichlorophenol		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
1,2,4-Trichlorobenzene		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Naphthalene		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
4-Chloroaniline		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Hexachlorobutadiene		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
4-Chloro-3-methylphenol		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2-Methylnaphthalene		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Hexachlorocyclopentadiene		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2,4,6-Trichlorophenol		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Dimethylphthalate		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2,4,5-Trichlorophenol		8600	U	ug/kg	8600	8500	U	ug/kg	8500	8900	U	ug/kg	8900	8900	U	ug/kg	8900
2-Chloronaphthalene		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2-Nitroaniline		8600	U	ug/kg	8600	8500	U	ug/kg	8500	8900	U	ug/kg	8900	8900	U	ug/kg	8900
Acenaphthylene		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2,6-Dinitrotoluene		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
3-Nitroaniline		8600	U	ug/kg	8600	8500	U	ug/kg	8500	8900	U	ug/kg	8900	8900	U	ug/kg	8900
Acenaphthene		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2,4-Dinitrophenol		8600	U	ug/kg	8600	8500	U	ug/kg	8500	8900	U	ug/kg	8900	8900	U	ug/kg	8900
4-Nitrophenol		8600	U	ug/kg	8600	8500	U	ug/kg	8500	8900	U	ug/kg	8900	8900	U	ug/kg	8900
Dibenzofuran		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2,4-Dinitrotoluene		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Diethylphthalate		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
4-Chlorophenyl-phenylether		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Fluorene		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
4-Nitroaniline		8600	U	ug/kg	8600	8500	U	ug/kg	8500	8900	U	ug/kg	8900	8900	U	ug/kg	8900
4,6-Dinitro-2-methylphenol		8600	U	ug/kg	8600	8500	U	ug/kg	8500	8900	U	ug/kg	8900	8900	U	ug/kg	8900
N-Nitrosodiphenylamine (1)		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
1,2-Diphenylhydrazine		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
4-Bromophenyl-phenylether		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Hexachlorobenzene		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Pentachlorophenol		8600	U	ug/kg	8600	8500	U	ug/kg	8500	8900	U	ug/kg	8900	8900	U	ug/kg	8900
Phenanthrene		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Anthracene		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Di-n-Butylphthalate		1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Fluoranthene		1700	U	ug/kg	1700	1700	U	ug/kg	1700	150	J	ug/kg	1800	1800	U	ug/kg	1800

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SWMU 17 Surface Soil Data

Lab Sample Number:	M8801003				M8801004				M8801002				M8801001			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17S00101				17S00101D				17S00201				17S00301			
Collect Date:	11-APR-95				11-APR-95				11-APR-95				11-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Pyrene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	120	J	ug/kg	1800	1800	U	ug/kg	1800
Butylbenzylphthalate	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
3,3-Dichlorobenzidine	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3600	U	ug/kg	3600	3600	U	ug/kg	3600
Benzo (a) anthracene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Chrysene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	120	J	ug/kg	1800	1800	U	ug/kg	1800
bis(2-Ethylhexyl) phthalate	1700	U	ug/kg	1700	1700	U	ug/kg	1700	140	J	ug/kg	1800	1800	U	ug/kg	1800
Di-n-octylphthalate	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Benzo (b) fluoranthene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	120	J	ug/kg	1800	1800	U	ug/kg	1800
Benzo (k) fluoranthene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	120	J	ug/kg	1800	1800	U	ug/kg	1800
Benzo (a) pyrene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	110	J	ug/kg	1800	1800	U	ug/kg	1800
Indeno (1,2,3-cd) pyrene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	94	J	ug/kg	1800	1800	U	ug/kg	1800
Dibenz (a,h) anthracene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Benzo (g,h,i) perylene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	120	J	ug/kg	1800	1800	U	ug/kg	1800
2-Picoline	8600	U	ug/kg	8600	8500	U	ug/kg	8500	8900	U	ug/kg	8900	8900	U	ug/kg	8900
Methyl methanesulfonate	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Ethyl methanesulfonate	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Acetophenone	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
N-Nitrosopiperidine	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Phenyl-tert-butylamine	8600	U	ug/kg	8600	8500	U	ug/kg	8500	8900	U	ug/kg	8900	8900	U	ug/kg	8900
2,6-Dichlorophenol	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
N-Nitroso-di-n-butylamine	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
N-Nitrosodiethylamine	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
N-Nitrosopyrrolidine	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Benzidine	8600	U	ug/kg	8600	8500	U	ug/kg	8500	8900	U	ug/kg	8900	8900	U	ug/kg	8900
1,2,4,5-Tetrachlorobenzene	8600	U	ug/kg	8600	8500	U	ug/kg	8500	8900	U	ug/kg	8900	8900	U	ug/kg	8900
Pentachlorobenzene	8600	U	ug/kg	8600	8500	U	ug/kg	8500	8900	U	ug/kg	8900	8900	U	ug/kg	8900
1-Naphthylamine	8600	U	ug/kg	8600	8500	U	ug/kg	8500	8900	U	ug/kg	8900	8900	U	ug/kg	8900
2-Naphthylamine	8600	U	ug/kg	8600	8500	U	ug/kg	8500	8900	U	ug/kg	8900	8900	U	ug/kg	8900
2,3,4,6-Tetrachlorophenol	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Phenacetin	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
4-Aminobiphenyl	8600	U	ug/kg	8600	8500	U	ug/kg	8500	8900	U	ug/kg	8900	8900	U	ug/kg	8900
Pentachloronitrobenzene	8600	U	ug/kg	8600	8500	U	ug/kg	8500	8900	U	ug/kg	8900	8900	U	ug/kg	8900
Pronamide	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
p-(Dimethylamino)azobenzene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
7,12-Dimethylbenz(A)Anthracene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
3-Methylcholanthrene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Pyridine	8600	U	ug/kg	8600	8500	U	ug/kg	8500	8900	U	ug/kg	8900	8900	U	ug/kg	8900
N-Nitrosomethylethylamine	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
N-Nitrosomorpholine	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
o-Toluidine	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Hexachloropropene	8600	U	ug/kg	8600	8500	U	ug/kg	8500	8900	U	ug/kg	8900	8900	U	ug/kg	8900
p-Phenylenediamine	86000	U	ug/kg	86000	85000	U	ug/kg	85000	89000	U	ug/kg	89000	89000	U	ug/kg	89000
Safrole	8600	U	ug/kg	8600	8500	U	ug/kg	8500	8900	U	ug/kg	8900	8900	U	ug/kg	8900
Isosafrole	8600	U	ug/kg	8600	8500	U	ug/kg	8500	8900	U	ug/kg	8900	8900	U	ug/kg	8900
1,4-Naphthoquinone	170000	U	ug/kg	170000	170000	U	ug/kg	170000	180000	U	ug/kg	180000	180000	U	ug/kg	180000
1,3-Dinitrobenzene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
5-Nitro-o-toluidine	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
1,3,5-Trinitrobenzene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
4-Nitroquinoline-1-oxide	86000	U	ug/kg	86000	85000	U	ug/kg	85000	89000	U	ug/kg	89000	89000	U	ug/kg	89000
Methapyrilene	8600	U	ug/kg	8600	8500	U	ug/kg	8500	8900	U	ug/kg	8900	8900	U	ug/kg	8900
3,3-Dimethylbenzidine	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Hexachlorophene	86000	U	ug/kg	86000	85000	U	ug/kg	85000	89000	U	ug/kg	89000	89000	U	ug/kg	89000

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SWMU 17 Surface Soil Data

Lab Sample Number:	M8801003				M8801004				M8801002				M8801001			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17S00101				17S00101D				17S00201				17S00301			
Collect Date:	11-APR-95				11-APR-95				11-APR-95				11-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Aramite	8600	U	ug/kg	8600	8500	U	ug/kg	8500	8900	U	ug/kg	8900	8900	U	ug/kg	8900
2-Chlorophenol	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
3- & 4-Methylphenol (2)	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Hexachloropropene	8600	U	ug/kg	8600	8500	U	ug/kg	8500	8900	U	ug/kg	8900	8900	U	ug/kg	8900
2-Acetylaminofluorene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1800	U	ug/kg	1800

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 17 Surface Soil Data

Lab Sample Number:		M8801005			R9955014			R9955013			M8801010		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		17S00401			17S00501			17S00601			17S00701		
Collect Date:		11-APR-95			24-MAY-95			24-MAY-95			11-APR-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES	ug/kg												
N-Nitrosodimethylamine		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
Phenol		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
Aniline		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
bis(2-Chloroethyl) ether		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
Benzyl Alcohol		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
2-Methylphenol		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
bis(2-Chloroisopropyl) ether		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
N-Nitroso-di-n-propylamine		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
Hexachloroethane		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
Nitrobenzene		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
Isophorone		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
2-Nitrophenol		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
2,4-Dimethylphenol		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
Benzoic acid		9100 U	ug/kg	9100	3500 U	ug/kg	3500	3500 U	ug/kg	3500	3500 U	ug/kg	3500
bis(2-Chloroethoxy) methane		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
2,4-Dichlorophenol		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
1,2,4-Trichlorobenzene		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
Naphthalene		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
4-Chloroaniline		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
Hexachlorobutadiene		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
4-Chloro-3-methylphenol		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
2-Methylnaphthalene		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
Hexachlorocyclopentadiene		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
2,4,6-Trichlorophenol		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
Dimethylphthalate		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
2,4,5-Trichlorophenol		9100 U	ug/kg	9100	3500 U	ug/kg	3500	3500 U	ug/kg	3500	3500 U	ug/kg	3500
2-Chloronaphthalene		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
2-Nitroaniline		9100 U	ug/kg	9100	3500 U	ug/kg	3500	3500 U	ug/kg	3500	3500 U	ug/kg	3500
Acenaphthylene		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
2,6-Dinitrotoluene		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
3-Nitroaniline		9100 U	ug/kg	9100	3500 U	ug/kg	3500	3500 U	ug/kg	3500	3500 U	ug/kg	3500
Acenaphthene		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
2,4-Dinitrophenol		9100 U	ug/kg	9100	3500 U	ug/kg	3500	3500 U	ug/kg	3500	3500 U	ug/kg	3500
4-Nitrophenol		9100 U	ug/kg	9100	3500 U	ug/kg	3500	3500 U	ug/kg	3500	3500 U	ug/kg	3500
Dibenzofuran		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
2,4-Dinitrotoluene		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
Diethylphthalate		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
4-Chlorophenyl-phenylether		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
Fluorene		1800 U	ug/kg	1800	730 U	ug/kg	730	730 U	ug/kg	730	720 U	ug/kg	720
4-Nitroaniline		9100 U	ug/kg	9100	3500 U	ug/kg	3500	3500 U	ug/kg	3500	3500 U	ug/kg	3500

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SWMU 17 Surface Soil Data

Lab Sample Number:	M8801005				R9955014				R9955013				M8801010			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17S00401				17S00501				17S00601				17S00701			
Collect Date:	11-APR-95				24-MAY-95				24-MAY-95				11-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	9100	U	ug/kg	9100	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
N-Nitrosodiphenylamine (1)	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
1,2-Diphenylhydrazine	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
4-Bromophenyl-phenylether	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
Hexachlorobenzene	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
Pentachlorophenol	9100	U	ug/kg	9100	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
Phenanthrene	1800	U	ug/kg	1800	95	J	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
Anthracene	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
Di-n-Butylphthalate	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	44	J	ug/kg	720
Fluoranthene	1800	U	ug/kg	1800	180	J	ug/kg	730	730	U	ug/kg	730	71	J	ug/kg	720
Pyrene	1800	U	ug/kg	1800	110	J	ug/kg	730	95	J	ug/kg	730	56	J	ug/kg	720
Butylbenzylphthalate	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
3,3-Dichlorobenzidine	3700	U	ug/kg	3700	1500	U	ug/kg	1500	1500	U	ug/kg	1500	1400	U	ug/kg	1400
Benzo (a) anthracene	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	37	J	ug/kg	720
Chrysene	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	59	J	ug/kg	720
bis(2-Ethylhexyl) phthalate	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
Di-n-octylphthalate	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
Benzo (b) fluoranthene	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	61	J	ug/kg	720
Benzo (k) fluoranthene	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	79	J	ug/kg	720
Benzo (a) pyrene	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	54	J	ug/kg	720
Indeno (1,2,3-cd) pyrene	1800	U	ug/kg	1800	730	UJ	ug/kg	730	730	U	ug/kg	730	63	J	ug/kg	720
Dibenz (a,h) anthracene	1800	U	ug/kg	1800	730	UJ	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
Benzo (g,h,i) perylene	1800	U	ug/kg	1800	730	UJ	ug/kg	730	730	U	ug/kg	730	77	J	ug/kg	720
2-Picoline	9100	U	ug/kg	9100	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
Methyl methanesulfonate	1800	U	ug/kg	1800	730	UJ	ug/kg	730	730	UJ	ug/kg	730	720	U	ug/kg	720
Ethyl methanesulfonate	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
Acetophenone	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
N-Nitrosopiperidine	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
Phenyl-tert-butylamine	9100	U	ug/kg	9100	3500	UJ	ug/kg	3500	3500	UJ	ug/kg	3500	3500	U	ug/kg	3500
2,6-Dichlorophenol	1800	U	ug/kg	1800	730	UJ	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
N-Nitroso-di-n-butylamine	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
N-Nitrosodiethylamine	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
N-Nitrosopyrrolidine	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
Benzidine	9100	U	ug/kg	9100	3500	U	ug/kg	3500	3500	UJ	ug/kg	3500	3500	U	ug/kg	3500
1,2,4,5-Tetrachlorobenzene	9100	U	ug/kg	9100	3500	U	ug/kg	3500	3500	UJ	ug/kg	3500	3500	U	ug/kg	3500
Pentachlorobenzene	9100	U	ug/kg	9100	3500	U	ug/kg	3500	3500	UJ	ug/kg	3500	3500	U	ug/kg	3500
1-Naphthylamine	9100	U	ug/kg	9100	3500	UJ	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
2-Naphthylamine	9100	U	ug/kg	9100	3500	UJ	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
2,3,4,6-Tetrachlorophenol	1800	U	ug/kg	1800	730	U	ug/kg	730	730	UJ	ug/kg	730	720	U	ug/kg	720
Phenacetin	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
4-Aminobiphenyl	9100	U	ug/kg	9100	3500	UJ	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
Pentachloronitrobenzene	9100	U	ug/kg	9100	3500	U	ug/kg	3500	3500	UJ	ug/kg	3500	3500	U	ug/kg	3500
Pronamide	1800	U	ug/kg	1800	730	U	ug/kg	730	730	UJ	ug/kg	730	720	U	ug/kg	720
p-(Dimethylamino)azobenzene	1800	U	ug/kg	1800	730	U	ug/kg	730	730	UJ	ug/kg	730	720	U	ug/kg	720
7,12-Dimethylbenz(A)Anthracene	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
3-Methylcholanthrene	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
Pyridine	9100	U	ug/kg	9100	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
N-Nitrosomethylethylamine	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
N-Nitrosomorpholine	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
o-Toluidine	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
Hexachloropropene	9100	U	ug/kg	9100	3500	U	ug/kg	3500	3500	UJ	ug/kg	3500	3500	U	ug/kg	3500
p-Phenylenediamine	91000	U	ug/kg	91000	35000	UJ	ug/kg	35000	35000	UJ	ug/kg	35000	35000	U	ug/kg	35000

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Lab Sample Number:	M8801005				R9955014				R9955013				M8801010			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17S00401				17S00501				17S00601				17S00701			
Collect Date:	11-APR-95				24-MAY-95				24-MAY-95				11-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	9100	U	ug/kg	9100	3500	UJ	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
Isosafrole	9100	U	ug/kg	9100	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
1,4-Naphthoquinone	180000	U	ug/kg	180000	73000	R	ug/kg	73000	73000	R	ug/kg	73000	72000	U	ug/kg	72000
1,3-Dinitrobenzene	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
5-Nitro-o-toluidine	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
1,3,5-Trinitrobenzene	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
4-Nitroquinoline-1-oxide	91000	U	ug/kg	91000	35000	U	ug/kg	35000	35000	UJ	ug/kg	35000	35000	U	ug/kg	35000
Methapyrilene	9100	U	ug/kg	9100	3500	UJ	ug/kg	3500	3500	UJ	ug/kg	3500	3500	U	ug/kg	3500
3,3-Dimethylbenzidine	1800	U	ug/kg	1800	730	UJ	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
Hexachlorophene	91000	U	ug/kg	91000	35000	UJ	ug/kg	35000	35000	R	ug/kg	35000	35000	U	ug/kg	35000
Aramite	9100	U	ug/kg	9100	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
2-Chlorophenol	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
3- & 4-Methylphenol (2)	1800	U	ug/kg	1800	730	U	ug/kg	730	730	U	ug/kg	730	720	U	ug/kg	720
Hexachloropropene	9100	U	ug/kg	9100	3500	U	ug/kg	3500	3500	UJ	ug/kg	3500	3500	U	ug/kg	3500
2-Acetylaminofluorene	1800	U	ug/kg	1800	730	UJ	ug/kg	730	730	UJ	ug/kg	730	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.

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Lab Sample Number:		M8801009			M8801011			M8801012			M8801006		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		17S00801			17S00901			17S00901D			17S01001		
Collect Date:		11-APR-95			11-APR-95			11-APR-95			11-APR-95		
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	
SEMIVOLATILES	ug/kg												
N-Nitrosodimethylamine	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
Phenol	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
Aniline	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
bis(2-Chloroethyl) ether	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
Benzyl Alcohol	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
2-Methylphenol	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
bis(2-Chloroisopropyl) ether	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
N-Nitroso-di-n-propylamine	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
Hexachloroethane	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
Nitrobenzene	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
Isophorone	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
2-Nitrophenol	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
2,4-Dimethylphenol	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
Benzoic acid	9300	U	ug/kg	9300	3500	U	ug/kg	3500	3500	U	ug/kg	3500	
bis(2-Chloroethoxy) methane	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
2,4-Dichlorophenol	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
1,2,4-Trichlorobenzene	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
Naphthalene	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
4-Chloroaniline	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
Hexachlorobutadiene	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
4-Chloro-3-methylphenol	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
2-Methylnaphthalene	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
Hexachlorocyclopentadiene	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
2,4,6-Trichlorophenol	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
Dimethylphthalate	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
2,4,5-Trichlorophenol	9300	U	ug/kg	9300	3500	U	ug/kg	3500	3500	U	ug/kg	3500	
2-Chloronaphthalene	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
2-Nitroaniline	9300	U	ug/kg	9300	3500	U	ug/kg	3500	3500	U	ug/kg	3500	
Acenaphthylene	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
2,6-Dinitrotoluene	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
3-Nitroaniline	9300	U	ug/kg	9300	3500	U	ug/kg	3500	3500	U	ug/kg	3500	
Acenaphthene	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
2,4-Dinitrophenol	9300	U	ug/kg	9300	3500	U	ug/kg	3500	3500	U	ug/kg	3500	
4-Nitrophenol	9300	U	ug/kg	9300	3500	U	ug/kg	3500	3500	U	ug/kg	3500	
Dibenzofuran	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
2,4-Dinitrotoluene	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
Diethylphthalate	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
4-Chlorophenyl-phenylether	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
Fluorene	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	
4-Nitroaniline	9300	U	ug/kg	9300	3500	U	ug/kg	3500	3500	U	ug/kg	3500	

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Lab Sample Number:	M8801009				M8801011				M8801012				M8801006			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17S00801				17S00901				17S00901D				17S01001			
Collect Date:	11-APR-95				11-APR-95				11-APR-95				11-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	9300	U	ug/kg	9300	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
N-Nitrosodiphenylamine (1)	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
1,2-Diphenylhydrazine	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
4-Bromophenyl-phenylether	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
Hexachlorobenzene	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
Pentachlorophenol	9300	U	ug/kg	9300	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
Phenanthrene	1900	U	ug/kg	1900	41	J	ug/kg	720	41	J	ug/kg	720	720	U	ug/kg	720
Anthracene	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
Di-n-Butylphthalate	1900	U	ug/kg	1900	39	J	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
Fluoranthene	360	J	ug/kg	1900	47	J	ug/kg	720	45	J	ug/kg	720	720	U	ug/kg	720
Pyrene	280	J	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
Butylbenzylphthalate	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
3,3-Dichlorobenzidine	3700	U	ug/kg	3700	1400	U	ug/kg	1400	1400	U	ug/kg	1400	1400	U	ug/kg	1400
Benzo (a) anthracene	170	J	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
Chrysene	290	J	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
bis(2-Ethylhexyl) phthalate	110	J	ug/kg	1900	51	J	ug/kg	720	39	J	ug/kg	720	720	U	ug/kg	720
Di-n-octylphthalate	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
Benzo (b) fluoranthene	280	J	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
Benzo (k) fluoranthene	370	J	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
Benzo (a) pyrene	270	J	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
Indeno (1,2,3-cd) pyrene	280	J	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
Dibenz (a,h) anthracene	140	J	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
Benzo (g,h,i) perylene	360	J	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
2-Picoline	9300	U	ug/kg	9300	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
Methyl methanesulfonate	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
Ethyl methanesulfonate	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
Acetophenone	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
N-Nitrosopiperidine	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
Phenyl-tert-butylamine	9300	U	ug/kg	9300	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
2,6-Dichlorophenol	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
N-Nitroso-di-n-butylamine	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
N-Nitrosodiethylamine	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
N-Nitrosopyrrolidine	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
Benzidine	9300	U	ug/kg	9300	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
1,2,4,5 Tetrachlorobenzene	9300	U	ug/kg	9300	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
Pentachlorobenzene	9300	U	ug/kg	9300	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
1-Naphthylamine	9300	U	ug/kg	9300	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
2-Naphthylamine	9300	U	ug/kg	9300	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
2,3,4,6-Tetrachlorophenol	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
Phenacetin	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
4-Aminobiphenyl	9300	U	ug/kg	9300	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
Pentachloronitrobenzene	9300	U	ug/kg	9300	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
Pronamide	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
p-(Dimethylamino)azobenzene	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
7,12-Dimethylbenz(A)Anthracene	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
3-Methylcholanthrene	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
Pyridine	9300	U	ug/kg	9300	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
N-Nitrosomethylethylamine	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
N-Nitrosomorpholine	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
o-Toluidine	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
Hexachloropropene	9300	U	ug/kg	9300	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
p-Phenylenediamine	93000	U	ug/kg	93000	35000	U	ug/kg	35000	35000	U	ug/kg	35000	35000	U	ug/kg	35000

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Lab Sample Number:	M8801009				M8801011				M8801012				M8801006			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17S00801				17S00901				17S00901D				17S01001			
Collect Date:	11-APR-95				11-APR-95				11-APR-95				11-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	9300	U	ug/kg	9300	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
Isosafrole	9300	U	ug/kg	9300	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
1,4-Naphthoquinone	190000	U	ug/kg	190000	72000	U	ug/kg	72000	72000	U	ug/kg	72000	72000	U	ug/kg	72000
1,3-Dinitrobenzene	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
5-Nitro-o-toluidine	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
1,3,5-Trinitrobenzene	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
4-Nitroquinoline-1-oxide	93000	U	ug/kg	93000	35000	U	ug/kg	35000	35000	U	ug/kg	35000	35000	U	ug/kg	35000
Methapyrilene	9300	U	ug/kg	9300	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
3,3-Dimethylbenzidine	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
Hexachlorophene	93000	U	ug/kg	93000	35000	U	ug/kg	35000	35000	U	ug/kg	35000	35000	U	ug/kg	35000
Aramite	9300	U	ug/kg	9300	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
2-Chlorophenol	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
3- & 4-Methylphenol (2)	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	720	U	ug/kg	720
Hexachloropropene	9300	U	ug/kg	9300	3500	U	ug/kg	3500	3500	U	ug/kg	3500	3500	U	ug/kg	3500
2-Acetylaminofluorene	1900	U	ug/kg	1900	720	U	ug/kg	720	720	U	ug/kg	720	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.

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SWMU 17 Surface Soil Data

Lab Sample Number:	M8801007				M8801008				R9955006				R9955008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17S01101				17S01201				17S01301				17S01401			
Collect Date:	11-APR-95				11-APR-95				23-MAY-95				23-MAY-95			
	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	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Phenol	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Aniline	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
bis(2-Chloroethyl) ether	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Benzyl Alcohol	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
2-Methylphenol	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
bis(2-Chloroisopropyl) ether	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
N-Nitroso-di-n-propylamine	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Hexachloroethane	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Nitrobenzene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Isophorone	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
2-Nitrophenol	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
2,4-Dimethylphenol	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Benzoic acid	1700	U	ug/kg	1700	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
bis(2-Chloroethoxy) methane	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
2,4-Dichlorophenol	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
1,2,4-Trichlorobenzene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Naphthalene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
4-Chloroaniline	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Hexachlorobutadiene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
4-Chloro-3-methylphenol	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
2-Methylnaphthalene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Hexachlorocyclopentadiene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
2,4,6-Trichlorophenol	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Dimethylphthalate	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
2,4,5-Trichlorophenol	1700	U	ug/kg	1700	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
2-Chloronaphthalene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
2-Nitroaniline	1700	U	ug/kg	1700	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
Acenaphthylene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
2,6-Dinitrotoluene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
3-Nitroaniline	1700	U	ug/kg	1700	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
Acenaphthene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
2,4-Dinitrophenol	1700	U	ug/kg	1700	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
4-Nitrophenol	1700	U	ug/kg	1700	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
Dibenzofuran	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
2,4-Dinitrotoluene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Diethylphthalate	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
4-Chlorophenyl-phenylether	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Fluorene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
4-Nitroaniline	1700	U	ug/kg	1700	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500

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SWMU 17 Surface Soil Data

Lab Sample Number:	M8801007				M8801008				R9955006				R9955008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17S01101				17S01201				17S01301				17S01401			
Collect Date:	11-APR-95				11-APR-95				23-MAY-95				23-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	1700	U	ug/kg	1700	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
N-Nitrosodiphenylamine (1)	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
1,2-Diphenylhydrazine	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
4-Bromophenyl-phenylether	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Hexachlorobenzene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Pentachlorophenol	1700	U	ug/kg	1700	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
Phenanthrene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Anthracene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Di-n-Butylphthalate	20	J	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Fluoranthene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Pyrene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Butylbenzylphthalate	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
3,3-Dichlorobenzidine	690	U	ug/kg	690	1400	U	ug/kg	1400	1400	U	ug/kg	1400	1400	U	ug/kg	1400
Benzo (a) anthracene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Chrysene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
bis(2-Ethylhexyl) phthalate	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Di-n-octylphthalate	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Benzo (b) fluoranthene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Benzo (k) fluoranthene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Benzo (a) pyrene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Indeno (1,2,3-cd) pyrene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Dibenz (a,h) anthracene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Benzo (g,h,i) perylene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
2-Picoline	1700	U	ug/kg	1700	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
Methyl methanesulfonate	340	U	ug/kg	340	710	U	ug/kg	710	710	UJ	ug/kg	710	720	UJ	ug/kg	720
Ethyl methanesulfonate	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Acetophenone	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
N-Nitrosopiperidine	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Phenyl-tert-butylamine	1700	U	ug/kg	1700	3500	U	ug/kg	3500	3400	UJ	ug/kg	3400	3500	UJ	ug/kg	3500
2,6-Dichlorophenol	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
N-Nitroso-di-n-butylamine	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
N-Nitrosodiethylamine	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
N-Nitrosopyrrolidine	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Benzidine	1700	U	ug/kg	1700	3500	U	ug/kg	3500	3400	UJ	ug/kg	3400	3500	UJ	ug/kg	3500
1,2,4,5-Tetrachlorobenzene	1700	U	ug/kg	1700	3500	U	ug/kg	3500	3400	UJ	ug/kg	3400	3500	UJ	ug/kg	3500
Pentachlorobenzene	1700	U	ug/kg	1700	3500	U	ug/kg	3500	3400	UJ	ug/kg	3400	3500	UJ	ug/kg	3500
1-Naphthylamine	1700	U	ug/kg	1700	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
2-Naphthylamine	1700	U	ug/kg	1700	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
2,3,4,6-Tetrachlorophenol	340	U	ug/kg	340	710	U	ug/kg	710	710	UJ	ug/kg	710	720	UJ	ug/kg	720
Phenacetin	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
4-Aminobiphenyl	1700	U	ug/kg	1700	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
Pentachloronitrobenzene	1700	U	ug/kg	1700	3500	U	ug/kg	3500	3400	UJ	ug/kg	3400	3500	UJ	ug/kg	3500
Pronamide	340	U	ug/kg	340	710	U	ug/kg	710	710	UJ	ug/kg	710	720	UJ	ug/kg	720
p-(Dimethylamino)azobenzene	340	U	ug/kg	340	710	U	ug/kg	710	710	UJ	ug/kg	710	720	UJ	ug/kg	720
7,12-Dimethylbenz(A)Anthracene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
3-Methylcholanthrene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Pyridine	1700	U	ug/kg	1700	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
N-Nitrosomethylethylamine	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
N-Nitrosomorpholine	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
o-Toluidine	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Hexachloropropene	1700	U	ug/kg	1700	3500	U	ug/kg	3500	3400	UJ	ug/kg	3400	3500	UJ	ug/kg	3500
p-Phenylenediamine	17000	U	ug/kg	17000	35000	U	ug/kg	35000	34000	UJ	ug/kg	34000	35000	UJ	ug/kg	35000

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Lab Sample Number:	M8801007				M8801008				R9955006				R9955008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17S01101				17S01201				17S01301				17S01401			
Collect Date:	11-APR-95				11-APR-95				23-MAY-95				23-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	1700	U	ug/kg	1700	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
Isosafrole	1700	U	ug/kg	1700	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
1,4-Naphthoquinone	34000	U	ug/kg	34000	71000	U	ug/kg	71000	71000	R	ug/kg	71000	72000	R	ug/kg	72000
1,3-Dinitrobenzene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
5-Nitro-o-toluidine	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
1,3,5-Trinitrobenzene	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
4-Nitroquinoline-1-oxide	17000	U	ug/kg	17000	35000	U	ug/kg	35000	34000	UJ	ug/kg	34000	35000	UJ	ug/kg	35000
Methapyrilene	1700	U	ug/kg	1700	3500	U	ug/kg	3500	3400	UJ	ug/kg	3400	3500	UJ	ug/kg	3500
3,3-Dimethylbenzidine	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Hexachlorophene	17000	U	ug/kg	17000	35000	U	ug/kg	35000	34000	R	ug/kg	34000	35000	R	ug/kg	35000
Aramite	1700	U	ug/kg	1700	3500	U	ug/kg	3500	3400	U	ug/kg	3400	3500	U	ug/kg	3500
2-Chlorophenol	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
3- & 4-Methylphenol (2)	340	U	ug/kg	340	710	U	ug/kg	710	710	U	ug/kg	710	720	U	ug/kg	720
Hexachloropropene	1700	U	ug/kg	1700	3500	U	ug/kg	3500	3400	UJ	ug/kg	3400	3500	UJ	ug/kg	3500
2-Acetylaminofluorene	340	U	ug/kg	340	710	U	ug/kg	710	710	UJ	ug/kg	710	720	UJ	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.

Lab Sample Number: R9955010
Site GROUP111
Locator 17S01501
Collect Date: 24-MAY-95

	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/kg				
N-Nitrosodimethylamine	730	U	ug/kg	730
Phenol	730	U	ug/kg	730
Aniline	730	U	ug/kg	730
bis(2-Chloroethyl) ether	730	U	ug/kg	730
Benzyl Alcohol	730	U	ug/kg	730
2-Methylphenol	730	U	ug/kg	730
bis(2-Chloroisopropyl) ether	730	U	ug/kg	730
N-Nitroso-di-n-propylamine	730	U	ug/kg	730
Hexachloroethane	730	U	ug/kg	730
Nitrobenzene	730	U	ug/kg	730
Isophorone	730	U	ug/kg	730
2-Nitrophenol	730	U	ug/kg	730
2,4-Dimethylphenol	730	U	ug/kg	730
Benzoic acid	3600	U	ug/kg	3600
bis(2-Chloroethoxy) methane	730	U	ug/kg	730
2,4-Dichlorophenol	730	U	ug/kg	730
1,2,4-Trichlorobenzene	730	U	ug/kg	730
Naphthalene	210	J	ug/kg	730
4-Chloroaniline	730	U	ug/kg	730
Hexachlorobutadiene	730	U	ug/kg	730
4-Chloro-3-methylphenol	730	U	ug/kg	730
2-Methylnaphthalene	730	U	ug/kg	730
Hexachlorocyclopentadiene	730	U	ug/kg	730
2,4,6-Trichlorophenol	730	U	ug/kg	730
Dimethylphthalate	730	U	ug/kg	730
2,4,5-Trichlorophenol	3600	U	ug/kg	3600
2-Chloronaphthalene	730	U	ug/kg	730
2-Nitroaniline	3600	U	ug/kg	3600
Acenaphthylene	730	U	ug/kg	730
2,6-Dinitrotoluene	730	U	ug/kg	730
3-Nitroaniline	3600	U	ug/kg	3600
Acenaphthene	730	U	ug/kg	730
2,4-Dinitrophenol	3600	U	ug/kg	3600
4-Nitrophenol	3600	U	ug/kg	3600
Dibenzofuran	730	U	ug/kg	730
2,4-Dinitrotoluene	730	U	ug/kg	730
Diethylphthalate	730	U	ug/kg	730
4-Chlorophenyl-phenylether	730	U	ug/kg	730
Fluorene	730	U	ug/kg	730
4-Nitroaniline	3600	U	ug/kg	3600

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SWMU 17 Surface Soil Data

Lab Sample Number:	R9955010			
Site	GROUP111			
Locator	17S01501			
Collect Date:	24-MAY-95			
	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	3600	U	ug/kg	3600
N-Nitrosodiphenylamine (1)	730	U	ug/kg	730
1,2-Diphenylhydrazine	730	U	ug/kg	730
4-Bromophenyl-phenylether	730	U	ug/kg	730
Hexachlorobenzene	730	U	ug/kg	730
Pentachlorophenol	3600	U	ug/kg	3600
Phenanthrene	730	U	ug/kg	730
Anthracene	730	U	ug/kg	730
Di-n-Butylphthalate	730	U	ug/kg	730
Fluoranthene	730	U	ug/kg	730
Pyrene	730	U	ug/kg	730
Butylbenzylphthalate	730	U	ug/kg	730
3,3-Dichlorobenzidine	1500	U	ug/kg	1500
Benzo (a) anthracene	730	U	ug/kg	730
Chrysene	730	U	ug/kg	730
bis(2-Ethylhexyl) phthalate	730	U	ug/kg	730
Di-n-octylphthalate	730	U	ug/kg	730
Benzo (b) fluoranthene	730	U	ug/kg	730
Benzo (k) fluoranthene	730	U	ug/kg	730
Benzo (a) pyrene	730	U	ug/kg	730
Indeno (1,2,3-cd) pyrene	730	UJ	ug/kg	730
Dibenz (a,h) anthracene	730	UJ	ug/kg	730
Benzo (g,h,i) perylene	730	UJ	ug/kg	730
2-Picoline	3600	U	ug/kg	3600
Methyl methanesulfonate	730	UJ	ug/kg	730
Ethyl methanesulfonate	730	U	ug/kg	730
Acetophenone	730	U	ug/kg	730
N-Nitrosopiperidine	730	U	ug/kg	730
Phenyl-tert-butylamine	3600	UJ	ug/kg	3600
2,6-Dichlorophenol	730	UJ	ug/kg	730
N-Nitroso-di-n-butylamine	730	U	ug/kg	730
N-Nitrosodiethylamine	730	U	ug/kg	730
N-Nitrosopyrrolidine	730	U	ug/kg	730
Benzidine	3600	U	ug/kg	3600
1,2,4,5-Tetrachlorobenzene	3600	U	ug/kg	3600
Pentachlorobenzene	3600	U	ug/kg	3600
1-Naphthylamine	3600	UJ	ug/kg	3600
2-Naphthylamine	3600	UJ	ug/kg	3600
2,3,4,6-Tetrachlorophenol	730	U	ug/kg	730
Phenacetin	730	U	ug/kg	730
4-Aminobiphenyl	3600	UJ	ug/kg	3600
Pentachloronitrobenzene	3600	U	ug/kg	3600
Pronamide	730	U	ug/kg	730
p-(Dimethylamino)azobenzene	730	U	ug/kg	730
7,12-Dimethylbenz(A)Anthracene	730	U	ug/kg	730
3-Methylcholanthrene	730	U	ug/kg	730
Pyridine	3600	U	ug/kg	3600
N-Nitrosomethylethylamine	730	U	ug/kg	730
N-Nitrosomorpholine	730	U	ug/kg	730
o-Toluidine	730	U	ug/kg	730
Hexachloropropene	3600	U	ug/kg	3600
p-Phenylenediamine	36000	UJ	ug/kg	36000

Lab Sample Number:	R9955010
Site	GROUP111
Locator	17S01501
Collect Date:	24-MAY-95

	VALUE	QUAL	UNITS	DL
Safrole	3600	UJ	ug/kg	3600
Isosafrole	3600	U	ug/kg	3600
1,4-Naphthoquinone	73000	R	ug/kg	73000
1,3-Dinitrobenzene	730	U	ug/kg	730
5-Nitro-o-toluidine	730	U	ug/kg	730
1,3,5-Trinitrobenzene	730	U	ug/kg	730
4-Nitroquinoline-1-oxide	36000	U	ug/kg	36000
Methapyrilene	3600	UJ	ug/kg	3600
3,3-Dimethylbenzidine	730	UJ	ug/kg	730
Hexachlorophene	36000	UJ	ug/kg	36000
Aramite	3600	U	ug/kg	3600
2-Chlorophenol	730	U	ug/kg	730
3- & 4-Methylphenol (2)	730	U	ug/kg	730
Hexachloropropene	3600	U	ug/kg	3600
2-Acetylaminofluorene	730	UJ	ug/kg	730

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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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
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Lab Sample Number:		M8801003			M8801004			M8801002			M8801001		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		17S00101			17S00101D			17S00201			17S00301		
Collect Date:		11-APR-95			11-APR-95			11-APR-95			11-APR-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg												
alpha-BHC		17 U	ug/kg	17	17 U	ug/kg	17	7.2 U	ug/kg	7.2	36 U	ug/kg	36
beta-BHC		34 U	ug/kg	34	34 U	ug/kg	34	14 U	ug/kg	14	70 U	ug/kg	70
delta-BHC		17 U	ug/kg	17	17 U	ug/kg	17	7.2 U	ug/kg	7.2	36 U	ug/kg	36
gamma-BHC (Lindane)		17 U	ug/kg	17	17 U	ug/kg	17	7.2 U	ug/kg	7.2	36 U	ug/kg	36
Heptachlor		17 U	ug/kg	17	17 U	ug/kg	17	7.2 U	ug/kg	7.2	36 U	ug/kg	36
Aldrin		17 U	ug/kg	17	17 U	ug/kg	17	7.2 U	ug/kg	7.2	36 U	ug/kg	36
Heptachlor epoxide		17 U	ug/kg	17	17 U	ug/kg	17	7.2 U	ug/kg	7.2	36 U	ug/kg	36
Endosulfan I		17 U	ug/kg	17	17 U	ug/kg	17	7.2 U	ug/kg	7.2	36 U	ug/kg	36
Dieldrin		17 U	ug/kg	17	17 U	ug/kg	17	11	ug/kg	7.2	36 U	ug/kg	36
4,4-DDE		240	ug/kg	17	110	ug/kg	17	23 J	ug/kg	7.2	450	ug/kg	36
Endrin		34 U	ug/kg	34	34 U	ug/kg	34	14 U	ug/kg	14	70 U	ug/kg	70
Endosulfan II		34 U	ug/kg	34	34 U	ug/kg	34	14 U	ug/kg	14	70 U	ug/kg	70
4,4-DDD		34 U	ug/kg	34	34 U	ug/kg	34	14 U	ug/kg	14	70 U	ug/kg	70
Endosulfan sulfate		34 U	ug/kg	34	34 U	ug/kg	34	14 U	ug/kg	14	70 U	ug/kg	70
4,4-DDT		54	ug/kg	34	31	ug/kg	34	25	ug/kg	14	93	ug/kg	70
Methoxychlor		70 U	ug/kg	70	70 U	ug/kg	70	29 U	ug/kg	29	140 U	ug/kg	140
Endrin aldehyde		34 U	ug/kg	34	34 U	ug/kg	34	14 U	ug/kg	14	70 U	ug/kg	70
Endrin ketone		34 U	ug/kg	34	34 U	ug/kg	34	14 U	ug/kg	14	70 U	ug/kg	70
Chlordane		170 U	ug/kg	170	170 U	ug/kg	170	72 U	ug/kg	72	360 U	ug/kg	360
Chlorobenzilate		520 U	ug/kg	520	520 U	ug/kg	520	220 U	ug/kg	220	1100 U	ug/kg	1100
Diallate		1000 U	ug/kg	1000	1000 U	ug/kg	1000	430 U	ug/kg	430	2200 U	ug/kg	2200
Toxaphene		860 U	ug/kg	860	850 U	ug/kg	850	350 U	ug/kg	350	1800 U	ug/kg	1800
Isodrin		17 U	ug/kg	17	17 U	ug/kg	17	7.2 U	ug/kg	7.2	36 U	ug/kg	36
Kepone		210 UJ	ug/kg	210	210 UJ	ug/kg	210	86 UJ	ug/kg	86	430 UJ	ug/kg	430
Aroclor-1016		860 U	ug/kg	860	850 U	ug/kg	850	350 U	ug/kg	350	1800 U	ug/kg	1800
Aroclor-1221		1700 U	ug/kg	1700	1700 U	ug/kg	1700	720 U	ug/kg	720	3600 U	ug/kg	3600
Aroclor-1232		1700 U	ug/kg	1700	1700 U	ug/kg	1700	720 U	ug/kg	720	3600 U	ug/kg	3600
Aroclor-1242		860 U	ug/kg	860	850 U	ug/kg	850	350 U	ug/kg	350	1800 U	ug/kg	1800
Aroclor-1248		860 U	ug/kg	860	850 U	ug/kg	850	350 U	ug/kg	350	1800 U	ug/kg	1800
Aroclor-1254		440 U	ug/kg	440	440 U	ug/kg	440	180 U	ug/kg	180	910 U	ug/kg	910
Aroclor-1260		440 U	ug/kg	440	440 U	ug/kg	440	180 U	ug/kg	180	910 U	ug/kg	910

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.

US Naval Station, Mayport, RCRA Facil. Investigation Group III Report
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Lab Sample Number:		M8801005				R9955014				R9955013				M8801010		
Site		GROUP111				GROUP111				GROUP111				GROUP111		
Locator		17S00401				17S00501				17S00601				17S00701		
Collect Date:		11-APR-95				24-MAY-95				24-MAY-95				11-APR-95		
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg																
alpha-BHC		37	U	ug/kg	37	.74	U	ug/kg	.74	.73	U	ug/kg	.73	3.6	U	ug/kg	3.6
beta-BHC		71	U	ug/kg	71	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	7	U	ug/kg	7
delta-BHC		37	U	ug/kg	37	.74	U	ug/kg	.74	.73	U	ug/kg	.73	3.6	U	ug/kg	3.6
gamma-BHC (Lindane)		37	U	ug/kg	37	.74	U	ug/kg	.74	.73	U	ug/kg	.73	3.6	U	ug/kg	3.6
Heptachlor		37	U	ug/kg	37	.74	U	ug/kg	.74	.73	U	ug/kg	.73	3.6	U	ug/kg	3.6
Aldrin		37	U	ug/kg	37	.74	U	ug/kg	.74	.73	U	ug/kg	.73	3.6	U	ug/kg	3.6
Heptachlor epoxide		37	U	ug/kg	37	.74	U	ug/kg	.74	.73	U	ug/kg	.73	3.6	U	ug/kg	3.6
Endosulfan I		37	U	ug/kg	37	.74	U	ug/kg	.74	.73	U	ug/kg	.73	3.6	U	ug/kg	3.6
Dieldrin		37	U	ug/kg	37	.74	U	ug/kg	.74	.73	U	ug/kg	.73	3.6	U	ug/kg	3.6
4,4-DDE		250		ug/kg	37	20		ug/kg	.74	3.2		ug/kg	.73	2.6	J	ug/kg	3.6
Endrin		71	U	ug/kg	71	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	7	U	ug/kg	7
Endosulfan II		71	U	ug/kg	71	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	7	U	ug/kg	7
4,4-DDD		71	U	ug/kg	71	12		ug/kg	1.4	1.5	J	ug/kg	1.4	7	U	ug/kg	7
Endosulfan sulfate		71	U	ug/kg	71	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	7	U	ug/kg	7
4,4-DDT		77		ug/kg	71	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	4.2	J	ug/kg	7
Methoxychlor		150	U	ug/kg	150	3	U	ug/kg	3	3	U	ug/kg	3	14	U	ug/kg	14
Endrin aldehyde		71	U	ug/kg	71	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	7	U	ug/kg	7
Endrin ketone		71	U	ug/kg	71	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	7	U	ug/kg	7
Chlordane		370	U	ug/kg	370	33		ug/kg	7.4	41		ug/kg	7.3	180		ug/kg	36
Chlorobenzilate		1100	U	ug/kg	1100	22	U	ug/kg	22	22	U	ug/kg	22	110	U	ug/kg	110
Diallate		2200	U	ug/kg	2200	44	U	ug/kg	44	44	U	ug/kg	44	220	U	ug/kg	220
Toxaphene		1800	U	ug/kg	1800	36	U	ug/kg	36	36	U	ug/kg	36	180	U	ug/kg	180
Isodrin		37	U	ug/kg	37	.74	U	ug/kg	.74	.73	U	ug/kg	.73	3.6	U	ug/kg	3.6
Kepone		220	UJ	ug/kg	220	44	UJ	ug/kg	44	44	UJ	ug/kg	44	43	UJ	ug/kg	43
Aroclor-1016		1800	U	ug/kg	1800	36	U	ug/kg	36	36	U	ug/kg	36	180	U	ug/kg	180
Aroclor-1221		3700	U	ug/kg	3700	74	U	ug/kg	74	73	U	ug/kg	73	360	U	ug/kg	360
Aroclor-1232		3700	U	ug/kg	3700	74	U	ug/kg	74	73	U	ug/kg	73	360	U	ug/kg	360
Aroclor-1242		1800	U	ug/kg	1800	36	U	ug/kg	36	36	U	ug/kg	36	180	U	ug/kg	180
Aroclor-1248		1800	U	ug/kg	1800	36	U	ug/kg	36	36	U	ug/kg	36	180	U	ug/kg	180
Aroclor-1254		930	U	ug/kg	930	18	U	ug/kg	18	18	U	ug/kg	18	91	U	ug/kg	91
Aroclor-1260		930	U	ug/kg	930	18	U	ug/kg	18	18	U	ug/kg	18	91	U	ug/kg	91

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
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Lab Sample Number:	M8801009				M8801011				M8801012				M8801006			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17S00801				17S00901				17S00901D				17S01001			
Collect Date:	11-APR-95				11-APR-95				11-APR-95				11-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs ug/kg																
alpha-BHC	3.7	U	ug/kg	3.7	.72	U	ug/kg	.72	.72	U	ug/kg	.72	.72	U	ug/kg	.72
beta-BHC	7.3	U	ug/kg	7.3	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
delta-BHC	3.7	U	ug/kg	3.7	.72	U	ug/kg	.72	.72	U	ug/kg	.72	.72	U	ug/kg	.72
gamma-BHC (Lindane)	3.7	U	ug/kg	3.7	.72	U	ug/kg	.72	.72	U	ug/kg	.72	.72	U	ug/kg	.72
Heptachlor	3.7	U	ug/kg	3.7	.72	U	ug/kg	.72	.72	U	ug/kg	.72	.72	U	ug/kg	.72
Aldrin	3.7	U	ug/kg	3.7	.72	U	ug/kg	.72	.72	U	ug/kg	.72	.72	U	ug/kg	.72
Heptachlor epoxide	3.7	U	ug/kg	3.7	.72	U	ug/kg	.72	.72	U	ug/kg	.72	.72	U	ug/kg	.72
Endosulfan I	3.7	U	ug/kg	3.7	.72	U	ug/kg	.72	.72	U	ug/kg	.72	.72	U	ug/kg	.72
Dieldrin	3.7	U	ug/kg	3.7	.72	U	ug/kg	.72	.72	U	ug/kg	.72	.72	U	ug/kg	.72
4,4-DDE	3.7	U	ug/kg	3.7	3.4		ug/kg	.72	5.4		ug/kg	.72	1		ug/kg	.72
Endrin	7.3	U	ug/kg	7.3	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endosulfan II	7.3	U	ug/kg	7.3	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
4,4-DDD	7.3	U	ug/kg	7.3	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endosulfan sulfate	7.3	U	ug/kg	7.3	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
4,4-DDT	7.3	U	ug/kg	7.3	1.3	J	ug/kg	1.4	1.6		ug/kg	1.4	1.2	J	ug/kg	1.4
Methoxychlor	15	U	ug/kg	15	2.9	U	ug/kg	2.9	2.9	U	ug/kg	2.9	2.9	U	ug/kg	2.9
Endrin aldehyde	7.3	U	ug/kg	7.3	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endrin ketone	7.3	U	ug/kg	7.3	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Chlordane	73	U	ug/kg	73	9.2	J	ug/kg	7.2	13	J	ug/kg	7.2	7.2	U	ug/kg	7.2
Chlorobenzilate	110	U	ug/kg	110	22	U	ug/kg	22	22	U	ug/kg	22	22	U	ug/kg	22
Diallate	220	U	ug/kg	220	43	U	ug/kg	43	43	U	ug/kg	43	43	U	ug/kg	43
Toxaphene	180	U	ug/kg	180	35	U	ug/kg	35	35	U	ug/kg	35	35	U	ug/kg	35
Isodrin	3.7	U	ug/kg	3.7	.72	U	ug/kg	.72	.72	U	ug/kg	.72	.72	U	ug/kg	.72
Kepone	45	UJ	ug/kg	45	43	UJ	ug/kg	43	43	UJ	ug/kg	43	43	UJ	ug/kg	43
Aroclor-1016	180	U	ug/kg	180	35	U	ug/kg	35	35	U	ug/kg	35	35	U	ug/kg	35
Aroclor-1221	380	U	ug/kg	380	72	U	ug/kg	72	72	U	ug/kg	72	72	U	ug/kg	72
Aroclor-1232	380	U	ug/kg	380	72	U	ug/kg	72	72	U	ug/kg	72	72	U	ug/kg	72
Aroclor-1242	180	U	ug/kg	180	35	U	ug/kg	35	35	U	ug/kg	35	35	U	ug/kg	35
Aroclor-1248	180	U	ug/kg	180	35	U	ug/kg	35	35	U	ug/kg	35	35	U	ug/kg	35
Aroclor-1254	96	U	ug/kg	96	18	U	ug/kg	18	18	U	ug/kg	18	18	U	ug/kg	18
Aroclor-1260	96	U	ug/kg	96	31		ug/kg	18	18		ug/kg	18	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 17 Surface Soil Data

Lab Sample Number:		M8801007			M8801008			R9955006			R9955008		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		17S01101			17S01201			17S01301			17S01401		
Collect Date:		11-APR-95			11-APR-95			23-MAY-95			23-MAY-95		
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	
PESTICIDES/PCBs	ug/kg												
alpha-BHC	.69	U	ug/kg	.69	36	U	ug/kg	36	.72	U	ug/kg	.72	1.5 U ug/kg 1.5
beta-BHC	1.3	U	ug/kg	1.3	69	U	ug/kg	69	1.4	U	ug/kg	1.4	2.8 U ug/kg 2.8
delta-BHC	.69	U	ug/kg	.69	36	U	ug/kg	36	.72	U	ug/kg	.72	1.5 U ug/kg 1.5
gamma-BHC (Lindane)	.69	U	ug/kg	.69	36	U	ug/kg	36	.72	U	ug/kg	.72	1.5 U ug/kg 1.5
Heptachlor	.69	U	ug/kg	.69	36	U	ug/kg	36	.72	U	ug/kg	.72	1.5 U ug/kg 1.5
Aldrin	.69	U	ug/kg	.69	36	U	ug/kg	36	.72	U	ug/kg	.72	1.5 U ug/kg 1.5
Heptachlor epoxide	.69	U	ug/kg	.69	36	U	ug/kg	36	.72	U	ug/kg	.72	1.5 U ug/kg 1.5
Endosulfan I	.69	U	ug/kg	.69	36	U	ug/kg	36	.72	U	ug/kg	.72	1.5 U ug/kg 1.5
Dieldrin	.69	U	ug/kg	.69	36	U	ug/kg	36	.72	U	ug/kg	.72	1.5 U ug/kg 1.5
4,4-DDE	2.2		ug/kg	.69	520		ug/kg	36	9.2		ug/kg	.72	200 ug/kg 1.5
Endrin	1.3	U	ug/kg	1.3	69	U	ug/kg	69	1.4	U	ug/kg	1.4	2.8 U ug/kg 2.8
Endosulfan II	1.3	U	ug/kg	1.3	69	U	ug/kg	69	1.4	U	ug/kg	1.4	2.8 U ug/kg 2.8
4,4-DDD	1.3	U	ug/kg	1.3	69	U	ug/kg	69	1.4	U	ug/kg	1.4	4.4 J ug/kg 2.8
Endosulfan sulfate	1.3	U	ug/kg	1.3	69	U	ug/kg	69	1.4	U	ug/kg	1.4	2.8 U ug/kg 2.8
4,4-DDT	1.3	J	ug/kg	1.3	220		ug/kg	69	3.7		ug/kg	1.4	130 ug/kg 2.8
Methoxychlor	2.8	U	ug/kg	2.8	140	U	ug/kg	140	2.9	U	ug/kg	2.9	5.9 U ug/kg 5.9
Endrin aldehyde	1.3	U	ug/kg	1.3	69	U	ug/kg	69	1.4	U	ug/kg	1.4	2.8 U ug/kg 2.8
Endrin ketone	1.3	U	ug/kg	1.3	69	U	ug/kg	69	1.4	U	ug/kg	1.4	2.8 U ug/kg 2.8
Chlordane	6.9	U	ug/kg	6.9	360	U	ug/kg	360	27		ug/kg	7.2	30 J ug/kg 15
Chlorobenzilate	21	U	ug/kg	21	1100	U	ug/kg	1100	21	U	ug/kg	21	44 U ug/kg 44
Diallate	41	U	ug/kg	41	2100	U	ug/kg	2100	43	U	ug/kg	43	87 U ug/kg 87
Toxaphene	34	U	ug/kg	34	1800	U	ug/kg	1800	35	U	ug/kg	35	72 U ug/kg 72
Isodrin	.69	U	ug/kg	.69	36	U	ug/kg	36	.72	U	ug/kg	.72	1.5 U ug/kg 1.5
Kepone	41	UJ	ug/kg	41	430	UJ	ug/kg	430	43	UJ	ug/kg	43	44 UJ ug/kg 44
Aroclor-1016	34	U	ug/kg	34	1800	U	ug/kg	1800	35	U	ug/kg	35	72 U ug/kg 72
Aroclor-1221	69	U	ug/kg	69	3600	U	ug/kg	3600	72	U	ug/kg	72	150 U ug/kg 150
Aroclor-1232	69	U	ug/kg	69	3600	U	ug/kg	3600	72	U	ug/kg	72	150 U ug/kg 150
Aroclor-1242	34	U	ug/kg	34	1800	U	ug/kg	1800	35	U	ug/kg	35	72 U ug/kg 72
Aroclor-1248	34	U	ug/kg	34	1800	U	ug/kg	1800	35	U	ug/kg	35	72 U ug/kg 72
Aroclor-1254	18	U	ug/kg	18	900	U	ug/kg	900	17	U	ug/kg	17	35 U ug/kg 35
Aroclor-1260	18	U	ug/kg	18	900	U	ug/kg	900	17	U	ug/kg	17	35 U ug/kg 35

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 17 Surface Soil Data

Lab Sample Number:	R9955010
Site	GROUP111
Locator	17S01501
Collect Date:	24-MAY-95

	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs ug/kg				
alpha-BHC	.74	U	ug/kg	.74
beta-BHC	1.4	U	ug/kg	1.4
delta-BHC	.74	U	ug/kg	.74
gamma-BHC (Lindane)	.74	U	ug/kg	.74
Heptachlor	.74	U	ug/kg	.74
Aldrin	.74	U	ug/kg	.74
Heptachlor epoxide	.74	U	ug/kg	.74
Endosulfan I	.74	U	ug/kg	.74
Dieldrin	.74	U	ug/kg	.74
4,4-DDE	.74	U	ug/kg	.74
Endrin	3.5		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	1.4	U	ug/kg	1.4
Methoxychlor	3	U	ug/kg	3
Endrin aldehyde	1.4	U	ug/kg	1.4
Endrin ketone	1.4	U	ug/kg	1.4
Chlordane	7.7	J	ug/kg	7.4
Chlorobenzilate	22	U	ug/kg	22
Diallate	44	U	ug/kg	44
Toxaphene	37	U	ug/kg	37
Isodrin	.74	U	ug/kg	.74
Kepone	44	UJ	ug/kg	44
Aroclor-1016	37	U	ug/kg	37
Aroclor-1221	74	U	ug/kg	74
Aroclor-1232	74	U	ug/kg	74
Aroclor-1242	37	U	ug/kg	37
Aroclor-1248	37	U	ug/kg	37
Aroclor-1254	18	U	ug/kg	18
Aroclor-1260	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 17 Surface Soil Data

Lab Sample Number:	M8801003				M8801004				M8801002				M8801001			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17S00101				17S00101D				17S00201				17S00301			
Collect Date:	11-APR-95				11-APR-95				11-APR-95				11-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	.82	UJ	mg/kg	.82	.99	J	mg/kg	.43	1.6	J	mg/kg	.44	.87	J	mg/kg	.45
Arsenic	1.4	J	mg/kg	.16	.73	J	mg/kg	.16	.64	J	mg/kg	.16	.81	J	mg/kg	.16
Barium	25	J	mg/kg	.12	17.4	J	mg/kg	.11	21.8	J	mg/kg	.12	13.1	J	mg/kg	.12
Beryllium	.07	J	mg/kg	.026	.07	J	mg/kg	.026	.04	J	mg/kg	.027	.04	J	mg/kg	.027
Cadmium	.52	U	mg/kg	.52	.52	U	mg/kg	.52	.53	U	mg/kg	.53	.53	U	mg/kg	.53
Chromium	6.7	J	mg/kg	.49	6.8	J	mg/kg	.49	20.2	J	mg/kg	.49	6.7	J	mg/kg	.5
Cobalt	.97	UJ	mg/kg	.97	.97	UJ	mg/kg	.97	.99	UJ	mg/kg	.99	1.6	J	mg/kg	1
Copper	12.4	J	mg/kg	.5	8.8	J	mg/kg	.5	14.3	J	mg/kg	.51	9.1	J	mg/kg	.52
Cyanide	.1	U	mg/kg	.1	.1	U	mg/kg	.1	.25	J	mg/kg	.1	.11	U	mg/kg	.11
Lead	110		mg/kg	3.5	118		mg/kg	3.5	252		mg/kg	3.6	144		mg/kg	3.6
Mercury	.03	U	mg/kg	.03	.04	J	mg/kg	.032	.03	J	mg/kg	.029	.04	J	mg/kg	.03
Nickel	2.3	UJ	mg/kg	2.3	1.1	U	mg/kg	1.1	10.4		mg/kg	1.1	4	UJ	mg/kg	4
Selenium	.26	J	mg/kg	.23	.23	U	mg/kg	.23	.23	U	mg/kg	.23	.23	U	mg/kg	.23
Silver	.48	U	mg/kg	.48	.48	U	mg/kg	.48	.48	U	mg/kg	.48	.49	U	mg/kg	.49
Thallium	.35	U	mg/kg	.35	.35	U	mg/kg	.35	.36	U	mg/kg	.36	.36	U	mg/kg	.36
Tin	3.5	J	mg/kg	1.6	69		mg/kg	1.6	3.2	J	mg/kg	1.6	1.6	U	mg/kg	1.6
Vanadium	7.2	J	mg/kg	.38	7.1	J	mg/kg	.38	7.3	J	mg/kg	.38	10.1	J	mg/kg	.39
Zinc	56.2		mg/kg	.13	52		mg/kg	.13	91.2		mg/kg	.14	55.6		mg/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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 17 Surface Soil Data

Lab Sample Number:		M8801005				R9955014				R9955013				M8801010			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		17S00401				17S00501				17S00601				17S00701			
Collect Date:		11-APR-95				24-MAY-95				24-MAY-95				11-APR-95			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg																
Antimony		2.1	J	mg/kg	.45	1.1	U	mg/kg	1.1	1.1	U	mg/kg	1.1	1	J	mg/kg	.46
Arsenic		.83	J	mg/kg	.16	.9	J	mg/kg	.6	.74	J	mg/kg	.6	1.8	J	mg/kg	.17
Barium		25.4	J	mg/kg	.12	8.4	J	mg/kg	.24	9.7	J	mg/kg	.24	12.5	J	mg/kg	.12
Beryllium		.03	UJ	mg/kg	.03	.13	J	mg/kg	.066	.15	J	mg/kg	.066	.07	J	mg/kg	.028
Cadmium		.54	U	mg/kg	.54	.32	J	mg/kg	.26	.26	U	mg/kg	.26	.77	J	mg/kg	.55
Chromium		7.8	J	mg/kg	.51	7.1		mg/kg	.37	7		mg/kg	.37	7.6	J	mg/kg	.51
Cobalt		1.1	J	mg/kg	1	.68	U	mg/kg	.68	.68	U	mg/kg	.68	1	UJ	mg/kg	1
Copper		18.4	J	mg/kg	.52	4.4	J	mg/kg	.22	3.5	UJ	mg/kg	3.5	14.6	J	mg/kg	.53
Cyanide		.11	U	mg/kg	.11	.09	J	mg/kg	1	.05	U	mg/kg	.05	.11	U	mg/kg	.11
Lead		104		mg/kg	3.7	42.3		mg/kg	2	16.2		mg/kg	.4	29.8	J	mg/kg	1.3
Mercury		.04	J	mg/kg	.03	.06	U	mg/kg	.06	.03	U	mg/kg	.03	.03	J	mg/kg	.029
Nickel		3.4	UJ	mg/kg	3.4	1.7	UJ	mg/kg	1.7	2.6	UJ	mg/kg	2.6	2.2	UJ	mg/kg	2.2
Selenium		.24	U	mg/kg	.24	.11	J	mg/kg	.5	.11	UJ	mg/kg	.11	.24	U	mg/kg	.24
Silver		.5	U	mg/kg	.5	.31	U	mg/kg	.31	.31	U	mg/kg	.31	.5	U	mg/kg	.5
Thallium		.37	U	mg/kg	.37	.13	U	mg/kg	.13	.13	U	mg/kg	.13	.37	U	mg/kg	.37
Tin		2.1	J	mg/kg	1.6	3	U	mg/kg	3	3	U	mg/kg	3	2.3	J	mg/kg	1.7
Vanadium		8.2	J	mg/kg	.4	6.2	J	mg/kg	.26	8.3	J	mg/kg	.26	12.2	J	mg/kg	.4
Zinc		86.8		mg/kg	.14	32		mg/kg	.46	16		mg/kg	.46	73.5		mg/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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 17 Surface Soil Data

Lab Sample Number:		M8801009				M8801011				M8801012				M8801006			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		17S00801				17S00901				17S00901D				17S01001			
Collect Date:		11-APR-95				11-APR-95				11-APR-95				11-APR-95			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg																
Antimony		2.1	J	mg/kg	.47	2.5	J	mg/kg	.44	.82	UJ	mg/kg	.82	.91	J	mg/kg	.45
Arsenic		.98	J	mg/kg	.17	.39	J	mg/kg	.16	.57	J	mg/kg	.16	.33	J	mg/kg	.16
Barium		21.3	J	mg/kg	.13	14.5	J	mg/kg	.12	15.5	J	mg/kg	.12	14.3	J	mg/kg	.12
Beryllium		.04	J	mg/kg	.028	.03	UJ	mg/kg	.03	.03	UJ	mg/kg	.03	.03	UJ	mg/kg	.03
Cadmium		1.2		mg/kg	.56	.53	U	mg/kg	.53	.68	J	mg/kg	.53	.54	U	mg/kg	.54
Chromium		11.2	J	mg/kg	.53	4.9	J	mg/kg	.5	5	J	mg/kg	.5	5.6	J	mg/kg	.5
Cobalt		1.1	J	mg/kg	1.1	1	UJ	mg/kg	1	1	UJ	mg/kg	1	1	UJ	mg/kg	1
Copper		16.8	J	mg/kg	.54	13.5	J	mg/kg	.51	12.9	J	mg/kg	.51	8.4	J	mg/kg	.52
Cyanide		.11	U	mg/kg	.11	.11	U	mg/kg	.11	.11	U	mg/kg	.11	.11	U	mg/kg	.11
Lead		19.3	J	mg/kg	.55	13.2	J	mg/kg	.52	15.6	J	mg/kg	2.1	10.5	J	mg/kg	.79
Mercury		.14		mg/kg	.032	.05	J	mg/kg	.03	.05	J	mg/kg	.03	.03	U	mg/kg	.03
Nickel		3	UJ	mg/kg	3	1.1	U	mg/kg	1.1	1.3	UJ	mg/kg	1.3	2.3	UJ	mg/kg	2.3
Selenium		.25	U	mg/kg	.25	.23	U	mg/kg	.23	.3	J	mg/kg	.23	.44	J	mg/kg	.23
Silver		.52	U	mg/kg	.52	.49	U	mg/kg	.49	.49	U	mg/kg	.49	.49	U	mg/kg	.49
Thallium		.38	U	mg/kg	.38	.36	U	mg/kg	.36	.36	U	mg/kg	.36	.36	U	mg/kg	.36
Tin		2	J	mg/kg	1.7	6.1	J	mg/kg	1.6	1.6	U	mg/kg	1.6	2.3	J	mg/kg	1.6
Vanadium		13.5	J	mg/kg	.41	3.5	J	mg/kg	.39	3.1	J	mg/kg	.39	3	J	mg/kg	.39
Zinc		65.8		mg/kg	.15	41.5		mg/kg	.14	42.6		mg/kg	.14	26.6		mg/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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 17 Surface Soil Data

Lab Sample Number:	M8801007				M8801008				R9955006				R9955008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17S01101				17S01201				17S01301				17S01401			
Collect Date:	11-APR-95				11-APR-95				23-MAY-95				23-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	.43	UJ	mg/kg	.43	.45	UJ	mg/kg	.45	1.1	U	mg/kg	1.1	1.1	U	mg/kg	1.1
Arsenic	.4	J	mg/kg	.16	.16	U	mg/kg	.16	.39	J	mg/kg	.6	.54	J	mg/kg	.6
Barium	5.1	J	mg/kg	.11	5	J	mg/kg	.12	14.2	J	mg/kg	.24	12.9	J	mg/kg	.24
Beryllium	.03	UJ	mg/kg	.03	.03	UJ	mg/kg	.03	.15	J	mg/kg	.064	.17	J	mg/kg	.065
Cadmium	.51	U	mg/kg	.51	.54	U	mg/kg	.54	.26	U	mg/kg	.26	.26	U	mg/kg	.26
Chromium	3	J	mg/kg	.48	1.9	J	mg/kg	.5	6.4		mg/kg	.36	7.5		mg/kg	.37
Cobalt	1.1	J	mg/kg	.97	1	UJ	mg/kg	1	.67	U	mg/kg	.67	.96	J	mg/kg	.68
Copper	3.4	J	mg/kg	.5	1.6	J	mg/kg	.52	2	UJ	mg/kg	2	5.7		mg/kg	.22
Cyanide	.1	U	mg/kg	.1	.11	U	mg/kg	.11	.05	U	mg/kg	.05	.05	U	mg/kg	.05
Lead	8.6		mg/kg	.25	64.3	J	mg/kg	2.6	6.8		mg/kg	.4	8.1		mg/kg	.4
Mercury	.03	U	mg/kg	.03	.03	U	mg/kg	.03	.03	U	mg/kg	.03	.03	U	mg/kg	.03
Nickel	1	U	mg/kg	1	2	UJ	mg/kg	2	1.6	UJ	mg/kg	1.6	3	UJ	mg/kg	3
Selenium	.22	U	mg/kg	.22	.23	U	mg/kg	.23	.11	UJ	mg/kg	.11	.11	UJ	mg/kg	.11
Silver	.47	U	mg/kg	.47	.49	U	mg/kg	.49	.3	U	mg/kg	.3	.31	U	mg/kg	.31
Thallium	.35	U	mg/kg	.35	.36	U	mg/kg	.36	.13	U	mg/kg	.13	.13	U	mg/kg	.13
Tin	2	J	mg/kg	1.6	1.6	U	mg/kg	1.6	3.6	J	mg/kg	2.9	3	U	mg/kg	3
Vanadium	3.1	J	mg/kg	.38	7.3	J	mg/kg	.39	6.8	J	mg/kg	.26	8.1	J	mg/kg	.26
Zinc	12.1		mg/kg	.13	32.9		mg/kg	.14	5.6		mg/kg	.45	10.8		mg/kg	.46

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.

Lab Sample Number:	R9955010
Site	GROUP111
Locator	17S01501
Collect Date:	24-MAY-95

	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg				
Antimony	1.1	U	mg/kg	1.1
Arsenic	.73	J	mg/kg	.6
Barium	14	J	mg/kg	.24
Beryllium	.17	J	mg/kg	.066
Cadmium	.27	U	mg/kg	.27
Chromium	7.1		mg/kg	.38
Cobalt	.88	J	mg/kg	.69
Copper	1.7	UJ	mg/kg	1.7
Cyanide	.09	J	mg/kg	1
Lead	5		mg/kg	2
Mercury	.06	U	mg/kg	.06
Nickel	2.9	UJ	mg/kg	2.9
Selenium	.11	UJ	mg/kg	.11
Silver	.31	U	mg/kg	.31
Thallium	.13	U	mg/kg	.13
Tin	3	U	mg/kg	3
Vanadium	8.5	J	mg/kg	.27
Zinc	7.5		mg/kg	.46

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 17

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 17 Sub-Surface Soil Data

Lab Sample Number:		R9955007			R9955009			R9955011			R9955012		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		17B01305			17B01405			17B01505			17B01505D		
Collect Date:		23-MAY-95			23-MAY-95			24-MAY-95			24-MAY-95		
		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	13 U	ug/kg	13	12 U	ug/kg	12	12 U	ug/kg	12
Bromomethane		11 U	ug/kg	11	13 U	ug/kg	13	12 UJ	ug/kg	12	12 U	ug/kg	12
Vinyl chloride		11 U	ug/kg	11	13 U	ug/kg	13	12 U	ug/kg	12	12 U	ug/kg	12
Chloroethane		11 U	ug/kg	11	13 U	ug/kg	13	12 U	ug/kg	12	12 U	ug/kg	12
Methylene chloride		6 U	ug/kg	6	8 U	ug/kg	8	6 U	ug/kg	6	6 U	ug/kg	6
Acetone		11 U	ug/kg	11	13 U	ug/kg	13	12 U	ug/kg	12	27 U	ug/kg	27
Carbon disulfide		6 U	ug/kg	6	6 U	ug/kg	6	3 J	ug/kg	6	6 U	ug/kg	6
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		11 U	ug/kg	11	13 U	ug/kg	13	12 U	ug/kg	12	6 J	ug/kg	12
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		6 U	ug/kg	6	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		11 U	ug/kg	11	13 U	ug/kg	13	12 U	ug/kg	12	12 U	ug/kg	12
2-Hexanone		11 U	ug/kg	11	13 U	ug/kg	13	12 U	ug/kg	12	12 U	ug/kg	12
Tetrachloroethene		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,1,2,2-Tetrachloroethane		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Toluene		6 U	ug/kg	6	2 J	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Chlorobenzene		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Ethylbenzene		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Styrene		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Xylenes (total)		2 J	ug/kg	6	2 J	ug/kg	6	3 J	ug/kg	6	2 J	ug/kg	6
Dichlorodifluoromethane		11 U	ug/kg	11	13 U	ug/kg	13	12 U	ug/kg	12	12 U	ug/kg	12
Trichlorofluoromethane		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,3-Dichlorobenzene		730 U	ug/kg	730	6 U	ug/kg	6	810 U	ug/kg	810	6 U	ug/kg	6
Acrolein		110 U	ug/kg	110	130 U	ug/kg	130	120 U	ug/kg	120	120 U	ug/kg	120
Iodomethane		11 UJ	ug/kg	11	13 UJ	ug/kg	13	12 UJ	ug/kg	12	12 UJ	ug/kg	12
1,4-Dichlorobenzene		730 U	ug/kg	730	6 U	ug/kg	6	810 U	ug/kg	810	6 U	ug/kg	6
Acrylonitrile		110 U	ug/kg	110	130 U	ug/kg	130	120 U	ug/kg	120	120 U	ug/kg	120
Dibromomethane		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,2-Dichlorobenzene		6 U	ug/kg	6	850 U	ug/kg	850	6 U	ug/kg	6	6 U	ug/kg	6
2-Chloroethylvinyl ether		11 U	ug/kg	11	13 U	ug/kg	13	12 U	ug/kg	12	12 U	ug/kg	12
Ethyl methacrylate		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,2,3-Trichloropropane		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
trans-1,4-Dichloro-2-butene		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Isobutyl alcohol		230 U	ug/kg	230	260 U	ug/kg	260	240 U	ug/kg	240	240 U	ug/kg	240
1,1,1,2-Tetrachloroethane		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,2-Dibromo-3-chloropropane		11 U	ug/kg	11	13 U	ug/kg	13	12 U	ug/kg	12	12 U	ug/kg	12
1,2-Dibromoethane		6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 17 Sub-Surface Soil Data

Lab Sample Number:	R9955007				R9955009				R9955011				R9955012			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17B01305				17B01405				17B01505				17B01505D			
Collect Date:	23-MAY-95				23-MAY-95				24-MAY-95				24-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	230	R	ug/kg	230	260	R	ug/kg	260	240	R	ug/kg	240	240	R	ug/kg	240
3-Chloropropene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
Acetonitrile	110	U	ug/kg	110	130	U	ug/kg	130	120	U	ug/kg	120	120	U	ug/kg	120
Chloroprene	230	U	ug/kg	230	260	U	ug/kg	260	240	U	ug/kg	240	240	U	ug/kg	240
Methacrylonitrile	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
Methyl methacrylate	11	U	ug/kg	11	13	U	ug/kg	13	12	U	ug/kg	12	12	U	ug/kg	12
Pentachloroethane	11	UJ	ug/kg	11	13	UJ	ug/kg	13	12	U	ug/kg	12	12	UJ	ug/kg	12
Propionitrile	110	U	ug/kg	110	130	U	ug/kg	130	120	U	ug/kg	120	120	U	ug/kg	120
Vinyl acetate	11	U	ug/kg	11	13	U	ug/kg	13	12	U	ug/kg	12	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.

US Naval Station, Mayport, RCRA Facil.., Investigation Group III Report
SWMU 17 Sub-Surface Soil Data

Lab Sample Number:		R9955007			R9955009			R9955011			R9955012		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		17B01305			17B01405			17B01505			17B01505D		
Collect Date:		23-MAY-95			23-MAY-95			24-MAY-95			24-MAY-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES	ug/kg												
N-Nitrosodimethylamine		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
Phenol		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
Aniline		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
bis(2-Chloroethyl) ether		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
Benzyl Alcohol		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
2-Methylphenol		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
bis(2-Chloroisopropyl) ether		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
N-Nitroso-di-n-propylamine		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
Hexachloroethane		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
Nitrobenzene		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
Isophorone		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
2-Nitrophenol		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
2,4-Dimethylphenol		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
Benzoic acid		3600 U	ug/kg	3600	4100 U	ug/kg	4100	4000 U	ug/kg	4000	3800 U	ug/kg	3800
bis(2-Chloroethoxy) methane		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
2,4-Dichlorophenol		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
1,2,4-Trichlorobenzene		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
Naphthalene		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
4-Chloroaniline		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
Hexachlorobutadiene		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
4-Chloro-3-methylphenol		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
2-Methylnaphthalene		730 U	ug/kg	730	850 U	ug/kg	850	170 J	ug/kg	810	130 J	ug/kg	790
Hexachlorocyclopentadiene		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
2,4,6-Trichlorophenol		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
Dimethylphthalate		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
2,4,5-Trichlorophenol		3600 U	ug/kg	3600	4100 U	ug/kg	4100	4000 U	ug/kg	4000	3800 U	ug/kg	3800
2-Chloronaphthalene		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
2-Nitroaniline		3600 U	ug/kg	3600	4100 U	ug/kg	4100	4000 U	ug/kg	4000	3800 U	ug/kg	3800
Acenaphthylene		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
2,6-Dinitrotoluene		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
3-Nitroaniline		3600 U	ug/kg	3600	4100 U	ug/kg	4100	4000 U	ug/kg	4000	3800 U	ug/kg	3800
Acenaphthene		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
2,4-Dinitrophenol		3600 U	ug/kg	3600	4100 U	ug/kg	4100	4000 U	ug/kg	4000	3800 U	ug/kg	3800
4-Nitrophenol		3600 U	ug/kg	3600	4100 U	ug/kg	4100	4000 U	ug/kg	4000	3800 U	ug/kg	3800
Dibenzofuran		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
2,4-Dinitrotoluene		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
Diethylphthalate		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
4-Chlorophenyl-phenylether		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
Fluorene		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
4-Nitroaniline		3600 U	ug/kg	3600	4100 U	ug/kg	4100	4000 U	ug/kg	4000	3800 U	ug/kg	3800
4,6-Dinitro-2-methylphenol		3600 U	ug/kg	3600	4100 U	ug/kg	4100	4000 U	ug/kg	4000	3800 U	ug/kg	3800
N-Nitrosodiphenylamine (1)		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
1,2-Diphenylhydrazine		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
4-Bromophenyl-phenylether		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
Hexachlorobenzene		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
Pentachlorophenol		3600 U	ug/kg	3600	4100 U	ug/kg	4100	4000 U	ug/kg	4000	3800 U	ug/kg	3800
Phenanthrene		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
Anthracene		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
Di-n-Butylphthalate		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790
Fluoranthene		730 U	ug/kg	730	850 U	ug/kg	850	810 U	ug/kg	810	790 U	ug/kg	790

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SWMU 17 Sub-Surface Soil Data

Lab Sample Number:	R9955007				R9955009				R9955011				R9955012			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17B01305				17B01405				17B01505				17B01505D			
Collect Date:	23-MAY-95				23-MAY-95				24-MAY-95				24-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Pyrene	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
Butylbenzylphthalate	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
3,3-Dichlorobenzidine	1500	U	ug/kg	1500	1700	U	ug/kg	1700	1600	U	ug/kg	1600	1600	U	ug/kg	1600
Benzo (a) anthracene	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
Chrysene	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
bis(2-Ethylhexyl) phthalate	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
Di-n-octylphthalate	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
Benzo (b) fluoranthene	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
Benzo (k) fluoranthene	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
Benzo (a) pyrene	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
Indeno (1,2,3-cd) pyrene	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
Dibenz (a,h) anthracene	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
Benzo (g,h,i) perylene	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
2-Picoline	3600	U	ug/kg	3600	4100	U	ug/kg	4100	4000	U	ug/kg	4000	3800	U	ug/kg	3800
Methyl methanesulfonate	730	UJ	ug/kg	730	850	UJ	ug/kg	850	810	UJ	ug/kg	810	790	UJ	ug/kg	790
Ethyl methanesulfonate	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
Acetophenone	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
N-Nitrosopiperidine	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
Phenyl-tert-butylamine	3600	UJ	ug/kg	3600	4100	UJ	ug/kg	4100	4000	UJ	ug/kg	4000	3800	UJ	ug/kg	3800
2,6-Dichlorophenol	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
N-Nitroso-di-n-butylamine	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
N-Nitrosodiethylamine	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
N-Nitrosopyrrolidine	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
Benzidine	3600	UJ	ug/kg	3600	4100	UJ	ug/kg	4100	4000	UJ	ug/kg	4000	3800	UJ	ug/kg	3800
1,2,4,5-Tetrachlorobenzene	3600	UJ	ug/kg	3600	4100	UJ	ug/kg	4100	4000	UJ	ug/kg	4000	3800	UJ	ug/kg	3800
Pentachlorobenzene	3600	UJ	ug/kg	3600	4100	UJ	ug/kg	4100	4000	UJ	ug/kg	4000	3800	UJ	ug/kg	3800
1-Naphthylamine	3600	U	ug/kg	3600	4100	U	ug/kg	4100	4000	U	ug/kg	4000	3800	U	ug/kg	3800
2-Naphthylamine	3600	U	ug/kg	3600	4100	U	ug/kg	4100	4000	U	ug/kg	4000	3800	U	ug/kg	3800
2,3,4,6-Tetrachlorophenol	730	UJ	ug/kg	730	850	UJ	ug/kg	850	810	UJ	ug/kg	810	790	UJ	ug/kg	790
Phenacetin	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
4-Aminobiphenyl	3600	U	ug/kg	3600	4100	U	ug/kg	4100	4000	U	ug/kg	4000	3800	U	ug/kg	3800
Pentachloronitrobenzene	3600	UJ	ug/kg	3600	4100	UJ	ug/kg	4100	4000	UJ	ug/kg	4000	3800	UJ	ug/kg	3800
Pronamide	730	UJ	ug/kg	730	850	UJ	ug/kg	850	810	UJ	ug/kg	810	790	UJ	ug/kg	790
p-(Dimethylamino)azobenzene	730	UJ	ug/kg	730	850	UJ	ug/kg	850	810	UJ	ug/kg	810	790	UJ	ug/kg	790
7,12-Dimethylbenz(A)Anthracene	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
3-Methylcholanthrene	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
Pyridine	3600	U	ug/kg	3600	4100	U	ug/kg	4100	4000	U	ug/kg	4000	3800	U	ug/kg	3800
N-Nitrosomethylethylamine	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
N-Nitrosomorpholine	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
o-Toluidine	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
Hexachloropropene	3600	UJ	ug/kg	3600	4100	UJ	ug/kg	4100	4000	UJ	ug/kg	4000	3800	UJ	ug/kg	3800
p-Phenylenediamine	36000	UJ	ug/kg	36000	41000	UJ	ug/kg	41000	40000	UJ	ug/kg	40000	38000	UJ	ug/kg	38000
Safrole	3600	U	ug/kg	3600	4100	U	ug/kg	4100	4000	U	ug/kg	4000	3800	U	ug/kg	3800
Isosafrole	3600	U	ug/kg	3600	4100	U	ug/kg	4100	4000	U	ug/kg	4000	3800	U	ug/kg	3800
1,4-Naphthoquinone	73000	R	ug/kg	73000	85000	R	ug/kg	85000	81000	R	ug/kg	81000	79000	R	ug/kg	79000
1,3-Dinitrobenzene	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
5-Nitro-o-toluidine	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
1,3,5-Trinitrobenzene	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
4-Nitroquinoline-1-oxide	36000	UJ	ug/kg	36000	41000	UJ	ug/kg	41000	40000	UJ	ug/kg	40000	38000	UJ	ug/kg	38000
Methapyrilene	3600	UJ	ug/kg	3600	4100	UJ	ug/kg	4100	4000	UJ	ug/kg	4000	3800	UJ	ug/kg	3800
3,3-Dimethylbenzidine	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
Hexachlorophene	36000	R	ug/kg	36000	41000	R	ug/kg	41000	40000	R	ug/kg	40000	38000	R	ug/kg	38000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 17 Sub-Surface Soil Data

Lab Sample Number:	R9955007				R9955009				R9955011				R9955012			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17B01305				17B01405				17B01505				17B01505D			
Collect Date:	23-MAY-95				23-MAY-95				24-MAY-95				24-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Aramite	3600	U	ug/kg	3600	4100	U	ug/kg	4100	4000	U	ug/kg	4000	3800	U	ug/kg	3800
2-Chlorophenol	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
3- & 4-Methylphenol (2)	730	U	ug/kg	730	850	U	ug/kg	850	810	U	ug/kg	810	790	U	ug/kg	790
Hexachloropropene	3600	UJ	ug/kg	3600	4100	UJ	ug/kg	4100	4000	UJ	ug/kg	4000	3800	UJ	ug/kg	3800
2-Acetylaminofluorene	730	UJ	ug/kg	730	850	UJ	ug/kg	850	810	UJ	ug/kg	810	790	UJ	ug/kg	790

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 17 Sub-Surface Soil Data

Lab Sample Number:	R9955007				R9955009				R9955011				R9955012			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17B01305				17B01405				17B01505				17B01505D			
Collect Date:	23-MAY-95				23-MAY-95				24-MAY-95				24-MAY-95			
	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	.86	U	ug/kg	.86	1.7	U	ug/kg	1.7	1.6	U	ug/kg	1.6
beta-BHC	1.5	U	ug/kg	1.5	1.7	U	ug/kg	1.7	3.2	U	ug/kg	3.2	3.1	U	ug/kg	3.1
delta-BHC	.75	U	ug/kg	.75	.86	U	ug/kg	.86	1.7	U	ug/kg	1.7	1.6	U	ug/kg	1.6
gamma-BHC (Lindane)	.75	U	ug/kg	.75	.86	U	ug/kg	.86	1.7	U	ug/kg	1.7	1.6	U	ug/kg	1.6
Heptachlor	.75	U	ug/kg	.75	.86	U	ug/kg	.86	1.7	U	ug/kg	1.7	1.6	U	ug/kg	1.6
Aldrin	.75	U	ug/kg	.75	.86	U	ug/kg	.86	1.7	U	ug/kg	1.7	1.6	U	ug/kg	1.6
Heptachlor epoxide	.75	U	ug/kg	.75	.86	U	ug/kg	.86	1.7	U	ug/kg	1.7	1.6	U	ug/kg	1.6
Endosulfan I	.75	U	ug/kg	.75	.86	U	ug/kg	.86	1.7	U	ug/kg	1.7	1.6	U	ug/kg	1.6
Dieldrin	.75	U	ug/kg	.75	.86	U	ug/kg	.86	1.7	U	ug/kg	1.7	1.6	U	ug/kg	1.6
4,4-DDE	.75	U	ug/kg	.75	16		ug/kg	.86	1.7	U	ug/kg	1.7	180		ug/kg	1.6
Endrin	1.5	U	ug/kg	1.5	1.7	U	ug/kg	1.7	200		ug/kg	3.2	3.1	U	ug/kg	3.1
Endosulfan II	1.5	U	ug/kg	1.5	1.7	U	ug/kg	1.7	3.2	U	ug/kg	3.2	3.1	U	ug/kg	3.1
4,4-DDD	1.5	U	ug/kg	1.5	4.7		ug/kg	1.7	53		ug/kg	3.2	65		ug/kg	3.1
Endosulfan sulfate	1.5	U	ug/kg	1.5	1.7	U	ug/kg	1.7	3.2	U	ug/kg	3.2	3.1	U	ug/kg	3.1
4,4-DDT	1.5	U	ug/kg	1.5	4.1		ug/kg	1.7	3.2	U	ug/kg	3.2	3.1	U	ug/kg	3.1
Methoxychlor	3	U	ug/kg	3	3.5	U	ug/kg	3.5	6.7	U	ug/kg	6.7	6.4	U	ug/kg	6.4
Endrin aldehyde	1.5	U	ug/kg	1.5	1.7	U	ug/kg	1.7	3.2	U	ug/kg	3.2	3.1	U	ug/kg	3.1
Endrin ketone	1.5	U	ug/kg	1.5	1.7	U	ug/kg	1.7	3.2	U	ug/kg	3.2	3.1	U	ug/kg	3.1
Chlordane	7.5	U	ug/kg	7.5	8.6	U	ug/kg	8.6	17	U	ug/kg	17	16	U	ug/kg	16
Chlorobenzilate	22	U	ug/kg	22	26	U	ug/kg	26	49	U	ug/kg	49	48	U	ug/kg	48
Diallate	45	U	ug/kg	45	51	U	ug/kg	51	99	U	ug/kg	99	95	U	ug/kg	95
Toxaphene	37	U	ug/kg	37	42	U	ug/kg	42	81	U	ug/kg	81	79	U	ug/kg	79
Isodrin	.75	U	ug/kg	.75	.86	U	ug/kg	.86	1.7	U	ug/kg	1.7	1.6	U	ug/kg	1.6
Kepone	45	UJ	ug/kg	45	51	UJ	ug/kg	51	49	UJ	ug/kg	49	48	UJ	ug/kg	48
Aroclor-1016	37	U	ug/kg	37	42	U	ug/kg	42	81	U	ug/kg	81	79	U	ug/kg	79
Aroclor-1221	75	U	ug/kg	75	86	U	ug/kg	86	170	U	ug/kg	170	160	U	ug/kg	160
Aroclor-1232	75	U	ug/kg	75	86	U	ug/kg	86	170	U	ug/kg	170	160	U	ug/kg	160
Aroclor-1242	37	U	ug/kg	37	42	U	ug/kg	42	81	U	ug/kg	81	79	U	ug/kg	79
Aroclor-1248	37	U	ug/kg	37	42	U	ug/kg	42	81	U	ug/kg	81	79	U	ug/kg	79
Aroclor-1254	18	U	ug/kg	18	21	U	ug/kg	21	40	U	ug/kg	40	38	U	ug/kg	38
Aroclor-1260	18	U	ug/kg	18	21	U	ug/kg	21	40	U	ug/kg	40	38	U	ug/kg	38

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 17 Sub-Surface Soil Data

Lab Sample Number:		R9955007				R9955009				R9955011				R9955012		
Site		GROUP111				GROUP111				GROUP111				GROUP111		
Locator		17B01305				17B01405				17B01505				17B01505D		
Collect Date:		23-MAY-95				23-MAY-95				24-MAY-95				24-MAY-95		
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg																
Antimony		1.1	U	mg/kg	1.1	1.3	U	mg/kg	1.3	1.2	U	mg/kg	1.2	1.2	U	mg/kg	1.2
Arsenic		.38	J	mg/kg	.6	.26	J	mg/kg	.6	.2	J	mg/kg	.6	.31	J	mg/kg	.6
Barium		4.2	J	mg/kg	.25	2.7	J	mg/kg	.28	2.9	J	mg/kg	.27	3	J	mg/kg	.26
Beryllium		.09	J	mg/kg	.067	.08	U	mg/kg	.08	.07	U	mg/kg	.07	.07	U	mg/kg	.07
Cadmium		.27	U	mg/kg	.27	.31	U	mg/kg	.31	.3	U	mg/kg	.3	.28	U	mg/kg	.28
Chromium		1.4	UJ	mg/kg	1.4	.63	UJ	mg/kg	.63	3.1		mg/kg	.42	4.1		mg/kg	.4
Cobalt		.69	U	mg/kg	.69	.8	U	mg/kg	.8	.76	U	mg/kg	.76	.74	U	mg/kg	.74
Copper		1.2	UJ	mg/kg	1.2	.79	UJ	mg/kg	.79	1.4	UJ	mg/kg	1.4	1.6	UJ	mg/kg	1.6
Cyanide		.09	J	mg/kg	1	1.8		mg/kg	1	1.2		mg/kg	1	.13	J	mg/kg	1
Lead		2.1		mg/kg	.4	3.3		mg/kg	.4	6.2		mg/kg	.4	6.6		mg/kg	.4
Mercury		.03	U	mg/kg	.03	.04	U	mg/kg	.04	.03	J	mg/kg	.1	.03	U	mg/kg	.03
Nickel		1.3	U	mg/kg	1.3	1.5	U	mg/kg	1.5	1.4	U	mg/kg	1.4	1.4	U	mg/kg	1.4
Selenium		.11	U	mg/kg	.11	.13	U	mg/kg	.13	.12	U	mg/kg	.12	.12	U	mg/kg	.12
Silver		.31	U	mg/kg	.31	.36	U	mg/kg	.36	.35	U	mg/kg	.35	.33	U	mg/kg	.33
Thallium		.13	U	mg/kg	.13	.15	U	mg/kg	.15	.15	U	mg/kg	.15	.14	U	mg/kg	.14
Tin		3	U	mg/kg	3	4	J	mg/kg	3.5	5.3	J	mg/kg	3.4	3.2	U	mg/kg	3.2
Vanadium		4.4	J	mg/kg	.27	1.1	J	mg/kg	.31	2.9	J	mg/kg	.3	3.2	J	mg/kg	.28
Zinc		4.7		mg/kg	.47	9.5		mg/kg	.54	4.7	J	mg/kg	.52	5		mg/kg	.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.

APPENDIX A-8

GROUNDWATER SAMPLE ANALYSES SWMU 17

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 17 Groundwater Data

Lab Sample Number:	RA044015			RA044016			RA044017			RA044018		
Site	GROUP111			GROUP111			GROUP111			GROUP111		
Locator	17G00101			17G00101D			17G00201			17G00301		
Collect Date:	18-JUN-95			18-JUN-95			18-JUN-95			18-JUN-95		
	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	10 U	ug/l	10	18 U	ug/l	18	10 U	ug/l	10	10 U	ug/l	10
Carbon disulfide	5 U	ug/l	5	5 U	ug/l	5	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 R	ug/l	10	10 R	ug/l	10	10 R	ug/l	10	10 R	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 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 U	ug/l	100	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	10 U	ug/l	10	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
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	5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
2-Chloroethylvinyl ether	10 UJ	ug/l	10	10 UJ	ug/l	10	10 UJ	ug/l	10	10 UJ	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	200 R	ug/l	200	200 R	ug/l	200	200 R	ug/l	200
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	10 UJ	ug/l	10	10 UJ	ug/l	10	10 UJ	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

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 17 Groundwater Data

Lab Sample Number:	RA044015				RA044016				RA044017				RA044018			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17G00101				17G00101D				17G00201				17G00301			
Collect Date:	18-JUN-95				18-JUN-95				18-JUN-95				18-JUN-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	200	R	ug/l	200	200	R	ug/l	200	200	R	ug/l	200	200	R	ug/l	200
3-Chloropropene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Acetonitrile	100	UJ	ug/l	100	100	UJ	ug/l	100	100	UJ	ug/l	100	100	UJ	ug/l	100
Chloroprene	200	U	ug/l	200	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	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Propionitrile	100	UJ	ug/l	100	100	UJ	ug/l	100	100	UJ	ug/l	100	100	UJ	ug/l	100
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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 17 Groundwater Data

Lab Sample Number:		RA044015			RA044016			RA044017			RA044018		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		17G00101			17G00101D			17G00201			17G00301		
Collect Date:		18-JUN-95			18-JUN-95			18-JUN-95			18-JUN-95		
	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	U	ug/l	10	
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	U	ug/l	10	
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	U	ug/l	50	
Acenaphthene	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	
4-Nitrophenol	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	
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	
4,6-Dinitro-2-methylphenol	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	
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	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	

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Lab Sample Number:	RA044015				RA044016				RA044017				RA044018			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17G00101				17G00101D				17G00201				17G00301			
Collect Date:	18-JUN-95				18-JUN-95				18-JUN-95				18-JUN-95			
	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	3	J	ug/l	10	10	U	ug/l	10	10	U	ug/l	10	8	J	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	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	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	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	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	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	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	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50
p-Phenylenediamine	500	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	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-Nephthoquinone	1000	R	ug/l	1000	1000	R	ug/l	1000	1000	R	ug/l	1000	1000	R	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	500	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	ug/l	500
Methapyrilene	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50
3,3-Dimethylbenzidine	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10
Hexachlorophene	500	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	ug/l	500

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SWMU 17 Groundwater Data

Lab Sample Number:	RA044015				RA044016				RA044017				RA044018			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17G00101				17G00101D				17G00201				17G00301			
Collect Date:	18-JUN-95				18-JUN-95				18-JUN-95				18-JUN-95			
	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	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50
2-Acetylaminofluorene	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 17 Groundwater Data

Lab Sample Number:	RA044015				RA044016				RA044017				RA044018			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17G00101				17G00101D				17G00201				17G00301			
Collect Date:	18-JUN-95				18-JUN-95				18-JUN-95				18-JUN-95			
	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	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

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 17 Groundwater Data

Lab Sample Number:	RA044015				RA044016				RA044017				RA044018			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	17G00101				17G00101D				17G00201				17G00301			
Collect Date:	18-JUN-95				18-JUN-95				18-JUN-95				18-JUN-95			
	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	UJ	ug/l	5
Arsenic	3.3	J	ug/l	.6	3.1	J	ug/l	.6	2.1	J	ug/l	.6	.7	J	ug/l	.6
Barium	16.8	J	ug/l	1.1	16.9	J	ug/l	1.1	21.9	J	ug/l	1.1	10.6	J	ug/l	1.1
Beryllium	.3	U	ug/l	.3	.3	U	ug/l	.3	.3	U	ug/l	.3	.3	U	ug/l	.3
Cadmium	1.2	U	ug/l	1.2	1.2	U	ug/l	1.2	1.2	U	ug/l	1.2	1.2	U	ug/l	1.2
Calcium	162000		ug/l	34.8	163000		ug/l	34.8	126000		ug/l	34.8	155000		ug/l	34.8
Chromium	1.7	U	ug/l	1.7	1.7	U	ug/l	1.7	1.7	U	ug/l	1.7	1.7	U	ug/l	1.7
Cobalt	3.1	U	ug/l	3.1	3.1	U	ug/l	3.1	3.1	U	ug/l	3.1	3.9	J	ug/l	3.1
Copper	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1	1.3	J	ug/l	1
Cyanide	1.5	U	ug/l	1.5	1.6	UJ	ug/l	1.6	1.5	U	ug/l	1.5	1.5	U	ug/l	1.5
Iron	988		ug/l	1.9	1110		ug/l	1.9	2220		ug/l	1.9	229		ug/l	1.9
Lead	.4	U	ug/l	.4	.8	UJ	ug/l	.8	.4	U	ug/l	.4	.4	U	ug/l	.4
Magnesium	10700		ug/l	19.8	10700		ug/l	19.8	6010		ug/l	19.8	9250		ug/l	19.8
Manganese	294		ug/l	.5	295		ug/l	.5	221		ug/l	.5	172		ug/l	.5
Mercury	.1	U	ug/l	.1	.1	U	ug/l	.1	.1	U	ug/l	.1	.1	U	ug/l	.1
Nickel	6.1	UJ	ug/l	6.1	6.1	UJ	ug/l	6.1	6.1	UJ	ug/l	6.1	6.1	UJ	ug/l	6.1
Selenium	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	U	ug/l	.5	.5	UJ	ug/l	.5
Silver	1.4	U	ug/l	1.4	1.4	U	ug/l	1.4	1.4	U	ug/l	1.4	1.4	U	ug/l	1.4
Sodium	21900		ug/l	19.5	22000		ug/l	19.5	19100		ug/l	19.5	25400		ug/l	19.5
Thallium	.6	U	ug/l	.6	.6	U	ug/l	.6	.6	U	ug/l	.6	.6	U	ug/l	.6
Tin	13.6	U	ug/l	13.6	13.6	U	ug/l	13.6	13.6	U	ug/l	13.6	13.6	U	ug/l	13.6
Vanadium	4.5	J	ug/l	1.2	5.2	J	ug/l	1.2	2.6	J	ug/l	1.2	8.2	J	ug/l	1.2
Zinc	5.2	UJ	ug/l	5.2	5.6	UJ	ug/l	5.6	5.7	UJ	ug/l	5.7	7.2	UJ	ug/l	7.2

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
SWMU 17 Groundwater Data

Lab Sample Number:		RA044015			RA044017			RA044018		
Site		GROUP111			GROUP111			GROUP111		
Locator		17G00101			17G00201			17G00301		
Collect Date:		18-JUN-95			18-JUN-95			18-JUN-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
GROUND WATER QUALITY	mg/l									
Alkalinity as CaCO3		389	mg/l	2	348	mg/l	2	453	mg/l	2
Ammonia-N		.4	mg/l	.3	1.5	mg/l	.3	11.5	mg/l	3
Chloride		34.9	mg/l	10	25.2	mg/l	10	28.8	mg/l	10
Hardness as CaCO3		462	mg/l	6	371	mg/l	8	421	mg/l	6
Nitrate/Nitrite-N		.1	mg/l	.1	.1 U	mg/l	.1	.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		1.04	mg/l	.2	.34	mg/l	.1	1.5	mg/l	.25
Sulfate		75.1	mg/l	10	6.5	mg/l	1	25.5	mg/l	10
Sulfide		1 U	mg/l	1	1 U	mg/l	1	4	mg/l	1
Total Dissolved Solids		581	mg/l	10	415	mg/l	10	571	mg/l	10
Total Kjeldahl Nitrogen		.7	mg/l	.3	1.9	mg/l	.3	12	mg/l	1.5
Total Organic Carbon		11.8	mg/l	1	10.8	mg/l	1	41.8	mg/l	1
COLOR	units									
Color		30	units	5	60	units	5	100	units	10
pH	units									
pH		7.24	units		7.23	units		6.96	units	

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-9

SURFACE SOIL SAMPLE ANALYSES, SWMUs 14 AND 18

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:		R9756007				R9756008				R9756001				R9756009		
Site		GROUP111				GROUP111				GROUP111				GROUP111		
Locator		14S00101				14S00201				14S00301				14S00401		
Collect Date:		09-APR-95				09-APR-95				09-APR-95				09-APR-95		
		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	11	UJ	ug/kg	11	11	U	ug/kg	11
Bromomethane		11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11
Vinyl chloride		11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11
Chloroethane		11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11
Methylene chloride		5	U	ug/kg	5	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	11	UJ	ug/kg	11	11	U	ug/kg	11
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		11	U	ug/kg	11	10	U	ug/kg	10	11	UJ	ug/kg	11	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		11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11
2-Hexanone		11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11	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		2	J	ug/kg	5	5	U	ug/kg	5	2	J	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		11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11	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		5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Acrolein		110	U	ug/kg	110	100	U	ug/kg	100	110	U	ug/kg	110	110	U	ug/kg	110
Iodomethane		11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11
1,4-Dichlorobenzene		5	U	ug/kg	5	5	U	ug/kg	5	710	U	ug/kg	710	690	U	ug/kg	690
Acrylonitrile		110	U	ug/kg	110	100	U	ug/kg	100	110	U	ug/kg	110	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		720	U	ug/kg	720	5	U	ug/kg	5	710	U	ug/kg	710	5	U	ug/kg	5
2-Chloroethylvinyl ether		11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11	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		220	R	ug/kg	220	210	R	ug/kg	210	220	R	ug/kg	220	210	R	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		11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11	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

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	R9756007				R9756008				R9756001				R9756009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S00101				14S00201				14S00301				14S00401			
Collect Date:	09-APR-95				09-APR-95				09-APR-95				09-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	220	R	ug/kg	220	210	R	ug/kg	210	220	R	ug/kg	220	210	R	ug/kg	210
3-Chloropropene	5	UJ	ug/kg	5	5	UJ	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5
Acetonitrile	110	U	ug/kg	110	100	U	ug/kg	100	110	U	ug/kg	110	110	U	ug/kg	110
Chloroprene	220	U	ug/kg	220	210	U	ug/kg	210	220	U	ug/kg	220	210	U	ug/kg	210
Methacrylonitrile	5	UJ	ug/kg	5	5	UJ	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5
Methyl methacrylate	11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11
Pentachloroethane	11	UJ	ug/kg	11	10	UJ	ug/kg	10	11	UJ	ug/kg	11	11	UJ	ug/kg	11
Propionitrile	110	U	ug/kg	110	100	U	ug/kg	100	110	UJ	ug/kg	110	110	U	ug/kg	110
Vinyl acetate	11	U	ug/kg	11	10	U	ug/kg	10	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	R9756002			R9756010			R9756011			R9756012		
Site	GROUP111			GROUP111			GROUP111			GROUP111		
Locator	14S00501			14S00601			14S00701			14S00801		
Collect Date:	09-APR-95			09-APR-95			09-APR-95			09-APR-95		
	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
VOLATILES ug/kg												
Chloromethane	11 UJ	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Bromomethane	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Vinyl chloride	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Chloroethane	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Methylene chloride	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Acetone	40 UJ	ug/kg	40	11 U	ug/kg	11	11 UJ	ug/kg	11	11 UJ	ug/kg	11
Carbon disulfide	5 U	ug/kg	5	5 U	ug/kg	5	5 UJ	ug/kg	5	6 UJ	ug/kg	6
1,1-Dichloroethane	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
1,1-Dichloroethene	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
1,2-Dichloroethene (total)	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Chloroform	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
1,2-Dichloroethane	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
2-Butanone	16 J	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
1,1,1-Trichloroethane	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Carbon tetrachloride	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Bromodichloromethane	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
1,2-Dichloropropane	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
cis-1,3-Dichloropropene	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Trichloroethene	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Dibromochloromethane	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
1,1,2-Trichloroethane	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Benzene	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
trans-1,3-Dichloropropene	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Bromoform	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
4-Methyl-2-pentanone	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
2-Hexanone	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Tetrachloroethene	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
1,1,2,2-Tetrachloroethane	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Toluene	32	ug/kg	5	5 U	ug/kg	5	2 J	ug/kg	5	6 U	ug/kg	6
Chlorobenzene	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Ethylbenzene	4 J	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Styrene	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Xylenes (total)	13	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
Dichlorodifluoromethane	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
Trichlorofluoromethane	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	6 U	ug/kg	6
1,3-Dichlorobenzene	5 U	ug/kg	5	5 U	ug/kg	5	690 U	ug/kg	690	750 U	ug/kg	750
Acrolein	110 U	ug/kg	110	110 U	ug/kg	110	110 U	ug/kg	110	110 U	ug/kg	110
Iodomethane	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11	11 U	ug/kg	11
1,4-Dichlorobenzene	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	750 U	ug/kg	750
Acrylonitrile	110 U	ug/kg	110	110 U	ug/kg	110	110 U	ug/kg	110	110 U	ug/kg	110

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	R9756002				R9756010				R9756011				R9756012			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S00501				14S00601				14S00701				14S00801			
Collect Date:	09-APR-95				09-APR-95				09-APR-95				09-APR-95			
	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	6	U	ug/kg	6
1,2-Dichlorobenzene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	750	U	ug/kg	750
2-Chloroethylvinyl ether	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Ethyl methacrylate	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,2,3-Trichloropropane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Isobutyl alcohol	220	R	ug/kg	220	210	R	ug/kg	210	210	R	ug/kg	210	230	R	ug/kg	230
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
1,2-Dibromoethane	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
1,4-Dioxane	220	R	ug/kg	220	210	R	ug/kg	210	210	R	ug/kg	210	230	R	ug/kg	230
3-Chloropropene	5	U	ug/kg	5	5	UJ	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Acetonitrile	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Chloroprene	220	U	ug/kg	220	210	U	ug/kg	210	210	U	ug/kg	210	230	U	ug/kg	230
Methacrylonitrile	5	U	ug/kg	5	5	UJ	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Methyl methacrylate	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Pentachloroethane	11	UJ	ug/kg	11	11	UJ	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Propionitrile	110	UJ	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Vinyl acetate	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:		R9756013			R9756014			R9756004			R9756005		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		14S00901			14S01001			14S01101			14S01101D		
Collect Date:		09-APR-95			09-APR-95			09-APR-95			09-APR-95		
		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	10 UJ	ug/kg	10	10 U	ug/kg	10
Bromomethane		11 U	ug/kg	11	11 U	ug/kg	11	10 U	ug/kg	10	10 U	ug/kg	10
Vinyl chloride		11 U	ug/kg	11	11 U	ug/kg	11	10 U	ug/kg	10	10 U	ug/kg	10
Chloroethane		11 U	ug/kg	11	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	5 U	ug/kg	5
Acetone		11 UJ	ug/kg	11	26 UJ	ug/kg	26	10 UJ	ug/kg	10	10 U	ug/kg	10
Carbon disulfide		5 UJ	ug/kg	5	5 UJ	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		11 U	ug/kg	11	4 J	ug/kg	11	10 UJ	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		11 U	ug/kg	11	11 U	ug/kg	11	10 U	ug/kg	10	10 U	ug/kg	10
2-Hexanone		11 U	ug/kg	11	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	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		11 U	ug/kg	11	11 U	ug/kg	11	10 U	ug/kg	10	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		5 U	ug/kg	5	720 U	ug/kg	720	3400 U	ug/kg	3400	680 U	ug/kg	680
Acrolein		110 U	ug/kg	110	110 U	ug/kg	110	100 U	ug/kg	100	100 U	ug/kg	100
Iodomethane		11 U	ug/kg	11	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	680 U	ug/kg	680
Acrylonitrile		110 U	ug/kg	110	110 U	ug/kg	110	100 U	ug/kg	100	100 U	ug/kg	100

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	R9756013				R9756014				R9756004				R9756005			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S00901				14S01001				14S01101				14S01101D			
Collect Date:	09-APR-95				09-APR-95				09-APR-95				09-APR-95			
	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	720	U	ug/kg	720	3400	U	ug/kg	3400	5	U	ug/kg	5
2-Chloroethylvinyl ether	11	U	ug/kg	11	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	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	R	ug/kg	210	220	R	ug/kg	220	210	R	ug/kg	210	200	R	ug/kg	200
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	11	U	ug/kg	11	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	5	U	ug/kg	5
1,4-Dioxane	210	R	ug/kg	210	220	R	ug/kg	220	210	R	ug/kg	210	200	R	ug/kg	200
3-Chloropropene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5
Acetonitrile	110	U	ug/kg	110	110	U	ug/kg	110	100	U	ug/kg	100	100	U	ug/kg	100
Chloroprene	210	U	ug/kg	210	220	U	ug/kg	220	210	U	ug/kg	210	200	U	ug/kg	200
Methacrylonitrile	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	UJ	ug/kg	5
Methyl methacrylate	11	U	ug/kg	11	11	U	ug/kg	11	10	U	ug/kg	10	10	U	ug/kg	10
Pentachloroethane	11	U	ug/kg	11	11	U	ug/kg	11	10	UJ	ug/kg	10	10	UJ	ug/kg	10
Propionitrile	110	U	ug/kg	110	110	U	ug/kg	110	100	UJ	ug/kg	100	100	U	ug/kg	100
Vinyl acetate	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	R9756006				R9756016				R9756003				M9000008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S01201				14S01301				14S01401				14S01501			
Collect Date:	09-APR-95				09-APR-95				09-APR-95				23-MAY-95			
	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	11	U	ug/kg	11	10	U	ug/kg	10
Bromomethane	11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11	10	U	ug/kg	10
Vinyl chloride	11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11	10	U	ug/kg	10
Chloroethane	11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11	10	U	ug/kg	10
Methylene chloride	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	6	U	ug/kg	6
Acetone	11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11
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	11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11	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	11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11	10	U	ug/kg	10
2-Hexanone	11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11	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	1	J	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	11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11	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	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Acrolein	110	U	ug/kg	110	100	U	ug/kg	100	110	U	ug/kg	110	100	U	ug/kg	100
Iodomethane	11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11	10	U	ug/kg	10
1,4-Dichlorobenzene	5	U	ug/kg	5	5	U	ug/kg	5	700	U	ug/kg	700	5	U	ug/kg	5
Acrylonitrile	110	U	ug/kg	110	100	U	ug/kg	100	110	U	ug/kg	110	100	U	ug/kg	100

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	R9756006				R9756016				R9756003				M9000008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S01201				14S01301				14S01401				14S01501			
Collect Date:	09-APR-95				09-APR-95				09-APR-95				23-MAY-95			
	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	5	U	ug/kg	5	3500	U	ug/kg	3500
2-Chloroethylvinyl ether	11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11	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-Trichloropropene	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	R	ug/kg	210	210	R	ug/kg	210	210	R	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	11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11	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	210	R	ug/kg	210	210	R	ug/kg	210	210	R	ug/kg	210
3-Chloropropene	5	UJ	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5	5	U	ug/kg	5
Acetonitrile	110	U	ug/kg	110	100	U	ug/kg	100	110	U	ug/kg	110	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	UJ	ug/kg	5	5	UJ	ug/kg	5	5	UJ	ug/kg	5	5	U	ug/kg	5
Methyl methacrylate	11	U	ug/kg	11	10	U	ug/kg	10	11	U	ug/kg	11	10	U	ug/kg	10
Pentachloroethane	11	UJ	ug/kg	11	10	UJ	ug/kg	10	11	UJ	ug/kg	11	10	U	ug/kg	10
Propionitrile	110	U	ug/kg	110	100	U	ug/kg	100	110	U	ug/kg	110	100	U	ug/kg	100
Vinyl acetate	11	U	ug/kg	11	10	U	ug/kg	10	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.

US Naval Station, Mayport, RCRA Facility Investigation Group 111 Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	R9756017				R9756018				R9756015				M8867004			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S01601				14S01601D				14S01701				14S01901			
Collect Date:	09-APR-95				09-APR-95				09-APR-95				24-APR-95			
	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	U	ug/kg	13	12	U	ug/kg	12	10	U	ug/kg	10
Bromomethane	13	U	ug/kg	13	13	U	ug/kg	13	12	U	ug/kg	12	10	U	ug/kg	10
Vinyl chloride	13	U	ug/kg	13	13	U	ug/kg	13	12	U	ug/kg	12	10	U	ug/kg	10
Chloroethane	13	U	ug/kg	13	13	U	ug/kg	13	12	U	ug/kg	12	10	U	ug/kg	10
Methylene chloride	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	6	U	ug/kg	6
Acetone	13	U	ug/kg	13	13	U	ug/kg	13	16	UJ	ug/kg	16	10	U	ug/kg	10
Carbon disulfide	6	U	ug/kg	6	7	U	ug/kg	7	6	UJ	ug/kg	6	5	U	ug/kg	5
1,1-Dichloroethene	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
1,1-Dichloroethene	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dichloroethene (total)	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
Chloroform	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dichloroethane	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
2-Butanone	13	U	ug/kg	13	13	U	ug/kg	13	12	U	ug/kg	12	10	U	ug/kg	10
1,1,1-Trichloroethane	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
Carbon tetrachloride	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
Bromodichloromethane	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dichloropropane	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
cis-1,3-Dichloropropene	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
Trichloroethene	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
Dibromochloromethane	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
1,1,2-Trichloroethane	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
Benzene	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
trans-1,3-Dichloropropene	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
Bromoform	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
4-Methyl-2-pentanone	13	U	ug/kg	13	13	U	ug/kg	13	12	U	ug/kg	12	10	U	ug/kg	10
2-Hexanone	13	U	ug/kg	13	13	U	ug/kg	13	12	U	ug/kg	12	10	U	ug/kg	10
Tetrachloroethene	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
1,1,2,2-Tetrachloroethane	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
Toluene	6	U	ug/kg	6	2	J	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
Chlorobenzene	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
Ethylbenzene	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
Styrene	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
Xylenes (total)	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	1	J	ug/kg	5
Dichlorodifluoromethane	13	U	ug/kg	13	13	U	ug/kg	13	12	U	ug/kg	12	10	U	ug/kg	10
Trichlorofluoromethane	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
1,3-Dichlorobenzene	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
Acrolein	130	U	ug/kg	130	130	U	ug/kg	130	120	U	ug/kg	120	100	UJ	ug/kg	100
Iodomethane	13	U	ug/kg	13	13	U	ug/kg	13	12	U	ug/kg	12	10	U	ug/kg	10
1,4-Dichlorobenzene	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	340	U	ug/kg	340
Acrylonitrile	130	U	ug/kg	130	130	U	ug/kg	130	120	U	ug/kg	120	100	U	ug/kg	100

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Lab Sample Number:	R9756017				R9756018				R9756015				MB867004			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S01601				14S01601D				14S01701				14S01901			
Collect Date:	09-APR-95				09-APR-95				09-APR-95				24-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dichlorobenzene	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
2-Chloroethylvinyl ether	13	U	ug/kg	13	13	U	ug/kg	13	12	U	ug/kg	12	10	U	ug/kg	10
Ethyl methacrylate	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
1,2,3-Trichloropropane	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
trans-1,4-Dichloro-2-butene	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
Isobutyl alcohol	260	R	ug/kg	260	260	R	ug/kg	260	240	R	ug/kg	240	200	U	ug/kg	200
1,1,1,2-Tetrachloroethane	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dibromo-3-chloropropane	13	U	ug/kg	13	13	U	ug/kg	13	12	U	ug/kg	12	10	U	ug/kg	10
1,2-Dibromoethane	6	U	ug/kg	6	7	U	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
1,4-Dioxane	260	R	ug/kg	260	260	R	ug/kg	260	240	R	ug/kg	240	200	R	ug/kg	200
3-Chloropropene	6	UJ	ug/kg	6	7	UJ	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
Acetonitrile	130	U	ug/kg	130	130	U	ug/kg	130	120	U	ug/kg	120	100	U	ug/kg	100
Chloroprene	260	U	ug/kg	260	260	U	ug/kg	260	240	U	ug/kg	240	200	U	ug/kg	200
Methacrylonitrile	6	UJ	ug/kg	6	7	UJ	ug/kg	7	6	U	ug/kg	6	5	U	ug/kg	5
Methyl methacrylate	13	U	ug/kg	13	13	U	ug/kg	13	12	U	ug/kg	12	10	U	ug/kg	10
Pentachloroethane	13	UJ	ug/kg	13	13	UJ	ug/kg	13	12	U	ug/kg	12	10	U	ug/kg	10
Propionitrile	130	U	ug/kg	130	130	U	ug/kg	130	120	U	ug/kg	120	100	U	ug/kg	100
Vinyl acetate	13	U	ug/kg	13	13	U	ug/kg	13	12	U	ug/kg	12	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	M8867002				M8867003				M8995001				M8995003			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S02001				14S02001D				14S02101				14S02201			
Collect Date:	24-APR-95				24-APR-95				20-MAY-95				21-MAY-95			
	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	11	U	ug/kg	11	11	U	ug/kg	11
Bromomethane	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Vinyl chloride	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Chloroethane	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Methylene chloride	5	U	ug/kg	5	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
Acetone	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
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	11	U	ug/kg	11	11	U	ug/kg	11	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	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
2-Hexanone	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	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)	1	J	ug/kg	5	1	J	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Dichlorodifluoromethane	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	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	5	U	ug/kg	5	350	U	ug/kg	350	5	U	ug/kg	5	5	U	ug/kg	5
Acrolein	100	UJ	ug/kg	100	110	UJ	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Iodomethane	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
1,4-Dichlorobenzene	5	U	ug/kg	5	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Acrylonitrile	100	U	ug/kg	100	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110

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Lab Sample Number:	M8867002				M8867003				M8995001				M8995003			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S02001				14S02001D				14S02101				14S02201			
Collect Date:	24-APR-95				24-APR-95				20-MAY-95				21-MAY-95			
	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	350	U	ug/kg	350	350	U	ug/kg	350	5	U	ug/kg	5	5	U	ug/kg	5
2-Chloroethylvinyl ether	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	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	220	U	ug/kg	220	220	U	ug/kg	220
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	11	U	ug/kg	11	11	U	ug/kg	11	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
1,4-Dioxane	210	R	ug/kg	210	210	R	ug/kg	210	220	R	ug/kg	220	220	R	ug/kg	220
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	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Chloroprene	210	U	ug/kg	210	210	U	ug/kg	210	220	U	ug/kg	220	220	U	ug/kg	220
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	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Pentachloroethane	10	U	ug/kg	10	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Propionitrile	100	U	ug/kg	100	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Vinyl acetate	10	U	ug/kg	10	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	M8995005				M8995007				M8867006				M8867005			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S02301				14S02401				18S00101				18S00201			
Collect Date:	21-MAY-95				21-MAY-95				24-APR-95				24-APR-95			
	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	U	ug/kg	11	11	U	ug/kg	11
Bromomethane	11	UJ	ug/kg	11	11	UJ	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Vinyl chloride	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Chloroethane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Methylene chloride	9	U	ug/kg	9	8	U	ug/kg	8	12	U	ug/kg	12	8	U	ug/kg	8
Acetone	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
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	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	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	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
2-Hexanone	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	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	1	J	ug/kg	5	1	J	ug/kg	5
Dichlorodifluoromethane	11	UJ	ug/kg	11	11	UJ	ug/kg	11	11	U	ug/kg	11	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	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Acrolein	110	U	ug/kg	110	110	U	ug/kg	110	110	UJ	ug/kg	110	110	UJ	ug/kg	110
Iodomethane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
1,4-Dichlorobenzene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Acrylonitrile	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	M8995005				M8995007				M8867006				M8867005			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S02301				14S02401				18S00101				18S00201			
Collect Date:	21-MAY-95				21-MAY-95				24-APR-95				24-APR-95			
	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	360	U	ug/kg	360	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
2-Chloroethylvinyl ether	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	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	220	U	ug/kg	220	220	U	ug/kg	220	220	U	ug/kg	220	220	U	ug/kg	220
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	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	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
1,4-Dioxane	220	R	ug/kg	220	220	R	ug/kg	220	220	R	ug/kg	220	220	R	ug/kg	220
3-Chloropropene	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Acetonitrile	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Chloroprene	220	U	ug/kg	220	220	U	ug/kg	220	220	U	ug/kg	220	220	U	ug/kg	220
Methacrylonitrile	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5	5	U	ug/kg	5
Methyl methacrylate	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Pentachloroethane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Propionitrile	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110	110	U	ug/kg	110
Vinyl acetate	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	M8995010			M8995011			R9955003			R9955004		
Site	GROUP111			GROUP111			GROUP111			GROUP111		
Locator	18S00301			18S00301D			18S00401			18S00401D		
Collect Date:	22-MAY-95			22-MAY-95			23-MAY-95			23-MAY-95		
	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 UJ	ug/kg	10	10 UJ	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	7 U	ug/kg	7	6 U	ug/kg	6	5 U	ug/kg	5	5 U	ug/kg	5
Acetone	10 U	ug/kg	10	10 U	ug/kg	10	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	2 J	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 UJ	ug/kg	10	10 UJ	ug/kg	10	10 U	ug/kg	10	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	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	690 U	ug/kg	690
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 UJ	ug/kg	10	10 UJ	ug/kg	10
1,4-Dichlorobenzene	5 U	ug/kg	5	5 U	ug/kg	5	5 U	ug/kg	5	690 U	ug/kg	690
Acrylonitrile	100 U	ug/kg	100	100 U	ug/kg	100	100 U	ug/kg	100	100 U	ug/kg	100

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	M8995010				M8995011				R9955003				R9955004			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	18S00301				18S00301D				18S00401				18S00401D			
Collect Date:	22-MAY-95				22-MAY-95				23-MAY-95				23-MAY-95			
	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	5	U	ug/kg	5	5	U	ug/kg	5
2-Chloroethylvinyl ether	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	210	R	ug/kg	210	210	R	ug/kg	210	210	R	ug/kg	210
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	UJ	ug/kg	10	10	UJ	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:		M9000008RE		
Site		GROUP111		
Locator		14S01501RE		
Collect Date:		23-MAY-95		
	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	3500	R	ug/kg	3500
Acrolein		-	ug/kg	
Iodomethane		-	ug/kg	
1,4-Dichlorobenzene	3500	R	ug/kg	3500
Acrylonitrile		-	ug/kg	

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Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	M9000008RE			
Site	GROUP111			
Locator	14S01501RE			
Collect Date:	23-MAY-95			
	VALUE	QUAL	UNITS	DL
Dibromomethane	-		ug/kg	
1,2-Dichlorobenzene	3500	R	ug/kg	3500
2-Chloroethylvinyl ether	-		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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	R9756007				R9756008				R9756001				R9756009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S00101				14S00201				14S00301				14S00401			
Collect Date:	09-APR-95				09-APR-95				09-APR-95				09-APR-95			
	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	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Phenol	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Aniline	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
bis(2-Chloroethyl) ether	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Benzyl Alcohol	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
2-Methylphenol	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
bis(2-Chloroisopropyl) ether	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
N-Nitroso-di-n-propylamine	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Hexachloroethane	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Nitrobenzene	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Isophorone	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
2-Nitrophenol	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
2,4-Dimethylphenol	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Benzoic acid	3500	U	ug/kg	3500	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3400	U	ug/kg	3400
bis(2-Chloroethoxy) methane	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
2,4-Dichlorophenol	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
1,2,4-Trichlorobenzene	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Naphthalene	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
4-Chloroaniline	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Hexachlorobutadiene	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
4-Chloro-3-methylphenol	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
2-Methylnaphthalene	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Hexachlorocyclopentadiene	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
2,4,6-Trichlorophenol	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Dimethylphthalate	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
2,4,5-Trichlorophenol	3500	U	ug/kg	3500	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3400	U	ug/kg	3400
2-Chloronaphthalene	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
2-Nitroaniline	3500	U	ug/kg	3500	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Acenaphthylene	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
2,6-Dinitrotoluene	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
3-Nitroaniline	3500	U	ug/kg	3500	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Acenaphthene	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
2,4-Dinitrophenol	3500	U	ug/kg	3500	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3400	U	ug/kg	3400
4-Nitrophenol	3500	U	ug/kg	3500	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Dibenzofuran	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
2,4-Dinitrotoluene	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Diethylphthalate	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
4-Chlorophenyl-phenylether	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Fluorene	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
4-Nitroaniline	3500	U	ug/kg	3500	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3400	U	ug/kg	3400
4,6-Dinitro-2-methylphenol	3500	U	ug/kg	3500	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3400	U	ug/kg	3400
N-Nitrosodiphenylamine (1)	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
1,2-Diphenylhydrazine	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
4-Bromophenyl-phenylether	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Hexachlorobenzene	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Pentachlorophenol	3500	U	ug/kg	3500	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Phenanthrene	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Anthracene	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Di-n-Butylphthalate	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Fluoranthene	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	R9756007				R9756008				R9756001				R9756009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S00101				14S00201				14S00301				14S00401			
Collect Date:	09-APR-95				09-APR-95				09-APR-95				09-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Pyrene	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Butylbenzylphthalate	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
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	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Chrysene	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
bis(2-Ethylhexyl) phthalate	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Di-n-octylphthalate	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Benzo (b) fluoranthene	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Benzo (k) fluoranthene	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Benzo (a) pyrene	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Indeno (1,2,3-cd) pyrene	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Dibenz (a,h) anthracene	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Benzo (g,h,i) perylene	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	UJ	ug/kg	690
2-Picoline	3500	UJ	ug/kg	3500	3300	UJ	ug/kg	3300	3400	U	ug/kg	3400	3400	UJ	ug/kg	3400
Methyl methanesulfonate	720	U	ug/kg	720	690	U	ug/kg	690	710	UJ	ug/kg	710	690	U	ug/kg	690
Ethyl methanesulfonate	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Acetophenone	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
N-Nitrosopiperidine	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Phenyl-tert-butylamine	3500	U	ug/kg	3500	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3400	U	ug/kg	3400
2,6-Dichlorophenol	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
N-Nitroso-di-n-butylamine	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
N-Nitrosodiethylamine	720	U	ug/kg	720	690	U	ug/kg	690	710	UJ	ug/kg	710	690	U	ug/kg	690
N-Nitrosopyrrolidine	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Benzidine	3500	UJ	ug/kg	3500	3300	UJ	ug/kg	3300	3400	U	ug/kg	3400	3400	UJ	ug/kg	3400
1,2,4,5-Tetrachlorobenzene	3500	U	ug/kg	3500	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Pentachlorobenzene	3500	U	ug/kg	3500	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3400	U	ug/kg	3400
1-Naphthylamine	3500	U	ug/kg	3500	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3400	U	ug/kg	3400
2-Naphthylamine	3500	U	ug/kg	3500	3300	U	ug/kg	3300	3400	UJ	ug/kg	3400	3400	U	ug/kg	3400
2,3,4,6-Tetrachlorophenol	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Phenacetin	720	UJ	ug/kg	720	690	UJ	ug/kg	690	710	UJ	ug/kg	710	690	UJ	ug/kg	690
4-Aminobiphenyl	3500	U	ug/kg	3500	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Pentachloronitrobenzene	3500	U	ug/kg	3500	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Pronamide	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
p-(Dimethylamino)azobenzene	720	U	ug/kg	720	690	U	ug/kg	690	710	UJ	ug/kg	710	690	U	ug/kg	690
7,12-Dimethylbenz(A)Anthracene	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
3-Methylcholanthrene	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Pyridine	3500	UJ	ug/kg	3500	3300	UJ	ug/kg	3300	3400	U	ug/kg	3400	3400	UJ	ug/kg	3400
N-Nitrosomethylethylamine	720	UJ	ug/kg	720	690	UJ	ug/kg	690	710	U	ug/kg	710	690	UJ	ug/kg	690
N-Nitrosomorpholine	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
o-Toluidine	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Hexachloropropene	3500	U	ug/kg	3500	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3400	U	ug/kg	3400
p-Phenylenediamine	35000	U	ug/kg	35000	33000	U	ug/kg	33000	34000	U	ug/kg	34000	34000	U	ug/kg	34000
Safrole	3500	U	ug/kg	3500	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3400	U	ug/kg	3400
Isosafrole	3500	U	ug/kg	3500	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3400	U	ug/kg	3400
1,4-Naphthoquinone	72000	R	ug/kg	72000	69000	R	ug/kg	69000	71000	U	ug/kg	71000	69000	R	ug/kg	69000
1,3-Dinitrobenzene	720	U	ug/kg	720	690	U	ug/kg	690	710	UJ	ug/kg	710	690	U	ug/kg	690
5-Nitro-o-toluidine	720	U	ug/kg	720	690	U	ug/kg	690	710	UJ	ug/kg	710	690	U	ug/kg	690
1,3,5-Trinitrobenzene	720	U	ug/kg	720	690	U	ug/kg	690	710	UJ	ug/kg	710	690	UJ	ug/kg	690
4-Nitroquinoline-1-oxide	35000	UJ	ug/kg	35000	33000	UJ	ug/kg	33000	34000	R	ug/kg	34000	34000	R	ug/kg	34000
Methapyrilene	3500	UJ	ug/kg	3500	3300	UJ	ug/kg	3300	3400	UJ	ug/kg	3400	3400	UJ	ug/kg	3400
3,3-Dimethylbenzidine	720	U	ug/kg	720	690	U	ug/kg	690	710	UJ	ug/kg	710	690	UJ	ug/kg	690
Hexachlorophene	35000	R	ug/kg	35000	33000	R	ug/kg	33000	34000	U	ug/kg	34000	34000	U	ug/kg	34000

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Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	R9756007				R9756008				R9756001				R9756009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S00101				14S00201				14S00301				14S00401			
Collect Date:	09-APR-95				09-APR-95				09-APR-95				09-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Aramite	3500	R	ug/kg	3500	3300	R	ug/kg	3300	3400	R	ug/kg	3400	3400	R	ug/kg	3400
2-Chlorophenol	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
3- & 4-Methylphenol (2)	720	U	ug/kg	720	690	U	ug/kg	690	710	U	ug/kg	710	690	U	ug/kg	690
Hexachloropropene	3500	U	ug/kg	3500	3300	U	ug/kg	3300	3400	U	ug/kg	3400	3400	U	ug/kg	3400
2-Acetylaminofluorene	720	UJ	ug/kg	720	690	UJ	ug/kg	690	710	UJ	ug/kg	710	690	UJ	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.

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Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:		R9756002			R9756010			R9756011			R9756012		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		14S00501			14S00601			14S00701			14S00801		
Collect Date:		09-APR-95			09-APR-95			09-APR-95			09-APR-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES	ug/kg												
N-Nitrosodimethylamine		7100 UJ	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
Phenol		7100 U	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
Aniline		7100 U	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
bis(2-Chloroethyl) ether		7100 U	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
Benzyl Alcohol		7100 UJ	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
2-Methylphenol		7100 U	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
bis(2-Chloroisopropyl) ether		7100 U	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
N-Nitroso-di-n-propylamine		7100 UJ	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
Hexachloroethane		7100 UJ	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
Nitrobenzene		7100 UJ	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
Isophorone		7100 U	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
2-Nitrophenol		7100 U	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
2,4-Dimethylphenol		7100 U	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
Benzoic acid		34000 U	ug/kg	34000	3400 U	ug/kg	3400	3400 U	ug/kg	3400	3600 U	ug/kg	3600
bis(2-Chloroethoxy) methane		7100 UJ	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
2,4-Dichlorophenol		7100 U	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
1,2,4-Trichlorobenzene		7100 U	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
Naphthalene		3700 J	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
4-Chloroaniline		7100 U	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
Hexachlorobutadiene		7100 U	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
4-Chloro-3-methylphenol		7100 U	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
2-Methylnaphthalene		13000	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
Hexachlorocyclopentadiene		7100 U	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
2,4,6-Trichlorophenol		7100 U	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
Dimethylphthalate		7100 U	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
2,4,5-Trichlorophenol		34000 U	ug/kg	34000	3400 U	ug/kg	3400	3400 U	ug/kg	3400	3600 U	ug/kg	3600
2-Chloronaphthalene		7100 U	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
2-Nitroaniline		34000 U	ug/kg	34000	3400 U	ug/kg	3400	3400 U	ug/kg	3400	3600 U	ug/kg	3600
Acenaphthylene		7100 U	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
2,6-Dinitrotoluene		7100 U	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
3-Nitroaniline		34000 U	ug/kg	34000	3400 U	ug/kg	3400	3400 U	ug/kg	3400	3600 U	ug/kg	3600
Acenaphthene		910 J	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
2,4-Dinitrophenol		34000 U	ug/kg	34000	3400 U	ug/kg	3400	3400 U	ug/kg	3400	3600 U	ug/kg	3600
4-Nitrophenol		34000 U	ug/kg	34000	3400 U	ug/kg	3400	3400 U	ug/kg	3400	3600 U	ug/kg	3600
Dibenzofuran		7100 U	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
2,4-Dinitrotoluene		7100 U	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
Diethylphthalate		7100 U	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
4-Chlorophenyl-phenylether		7100 U	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
Fluorene		2200 J	ug/kg	7100	690 U	ug/kg	690	690 U	ug/kg	690	750 U	ug/kg	750
4-Nitroaniline		34000 U	ug/kg	34000	3400 U	ug/kg	3400	3400 U	ug/kg	3400	3600 U	ug/kg	3600

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	R9756002				R9756010				R9756011				R9756012			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S00501				14S00601				14S00701				14S00801			
Collect Date:	09-APR-95				09-APR-95				09-APR-95				09-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	34000	U	ug/kg	34000	3400	U	ug/kg	3400	3400	U	ug/kg	3400	3600	U	ug/kg	3600
N-Nitrosodiphenylamine (1)	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
1,2-Diphenylhydrazine	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
4-Bromophenyl-phenylether	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
Hexachlorobenzene	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
Pentachlorophenol	34000	U	ug/kg	34000	3400	U	ug/kg	3400	3400	U	ug/kg	3400	3600	U	ug/kg	3600
Phenanthrene	3600	J	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
Anthracene	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
Di-n-Butylphthalate	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
Fluoranthene	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
Pyrene	1600	J	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
Butylbenzylphthalate	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
3,3-Dichlorobenzidine	14000	U	ug/kg	14000	1400	U	ug/kg	1400	1400	U	ug/kg	1400	1500	U	ug/kg	1500
Benzo (a) anthracene	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
Chrysene	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
bis(2-Ethylhexyl) phthalate	7100	UJ	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
Di-n-octylphthalate	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
Benzo (b) fluoranthene	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
Benzo (k) fluoranthene	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
Benzo (a) pyrene	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
Indeno (1,2,3-cd) pyrene	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
Dibenz (a,h) anthracene	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
Benzo (g,h,i) perylene	7100	U	ug/kg	7100	690	UJ	ug/kg	690	690	UJ	ug/kg	690	750	UJ	ug/kg	750
2-Picoline	34000	U	ug/kg	34000	3400	UJ	ug/kg	3400	3400	UJ	ug/kg	3400	3600	UJ	ug/kg	3600
Methyl methanesulfonate	7100	UJ	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
Ethyl methanesulfonate	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
Acetophenone	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
N-Nitrosopiperidine	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
Phenyl-tert-butylamine	34000	U	ug/kg	34000	3400	U	ug/kg	3400	3400	U	ug/kg	3400	3600	U	ug/kg	3600
2,6-Dichlorophenol	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
N-Nitroso-di-n-butylamine	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
N-Nitrosodiethylamine	7100	UJ	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
N-Nitrosopyrrolidine	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
Benzidine	34000	UJ	ug/kg	34000	3400	UJ	ug/kg	3400	3400	UJ	ug/kg	3400	3600	UJ	ug/kg	3600
1,2,4,5-Tetrachlorobenzene	34000	U	ug/kg	34000	3400	U	ug/kg	3400	3400	U	ug/kg	3400	3600	U	ug/kg	3600
Pentachlorobenzene	34000	U	ug/kg	34000	3400	U	ug/kg	3400	3400	U	ug/kg	3400	3600	U	ug/kg	3600
1-Naphthylamine	34000	U	ug/kg	34000	3400	U	ug/kg	3400	3400	U	ug/kg	3400	3600	U	ug/kg	3600
2-Naphthylamine	34000	UJ	ug/kg	34000	3400	U	ug/kg	3400	3400	U	ug/kg	3400	3600	U	ug/kg	3600
2,3,4,6-Tetrachlorophenol	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
Phenacetin	7100	U	ug/kg	7100	690	UJ	ug/kg	690	690	UJ	ug/kg	690	750	UJ	ug/kg	750
4-Aminobiphenyl	34000	UJ	ug/kg	34000	3400	U	ug/kg	3400	3400	U	ug/kg	3400	3600	U	ug/kg	3600
Pentachloronitrobenzene	34000	U	ug/kg	34000	3400	U	ug/kg	3400	3400	U	ug/kg	3400	3600	U	ug/kg	3600
Pronamide	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
p-(Dimethylamino)azobenzene	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
7,12-Dimethylbenz(A)Anthracene	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
3-Methylcholanthrene	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
Pyridine	34000	UJ	ug/kg	34000	3400	UJ	ug/kg	3400	3400	UJ	ug/kg	3400	3600	UJ	ug/kg	3600
N-Nitrosomethylethylamine	7100	U	ug/kg	7100	690	UJ	ug/kg	690	690	UJ	ug/kg	690	750	UJ	ug/kg	750
N-Nitrosomorpholine	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
o-Toluidine	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
Hexachloropropene	34000	UJ	ug/kg	34000	3400	U	ug/kg	3400	3400	U	ug/kg	3400	3600	U	ug/kg	3600
p-Phenylenediamine	340000	U	ug/kg	340000	34000	U	ug/kg	34000	34000	U	ug/kg	34000	36000	U	ug/kg	36000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	R9756002				R9756010				R9756011				R9756012			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S00501				14S00601				14S00701				14S00801			
Collect Date:	09-APR-95				09-APR-95				09-APR-95				09-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	34000	U	ug/kg	34000	3400	U	ug/kg	3400	3400	U	ug/kg	3400	3600	U	ug/kg	3600
Isosafrole	34000	U	ug/kg	34000	3400	U	ug/kg	3400	3400	U	ug/kg	3400	3600	U	ug/kg	3600
1,4-Naphthoquinone	710000	R	ug/kg	71000	69000	R	ug/kg	69000	69000	R	ug/kg	69000	75000	R	ug/kg	75000
1,3-Dinitrobenzene	7100	UJ	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
5-Nitro-o-toluidine	7100	UJ	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
1,3,5-Trinitrobenzene	7100	UJ	ug/kg	7100	690	UJ	ug/kg	690	690	UJ	ug/kg	690	750	UJ	ug/kg	750
4-Nitroquinoline-1-oxide	340000	U	ug/kg	340000	34000	R	ug/kg	34000	34000	R	ug/kg	34000	36000	R	ug/kg	36000
Methapyrilene	34000	UJ	ug/kg	34000	3400	UJ	ug/kg	3400	3400	UJ	ug/kg	3400	3600	UJ	ug/kg	3600
3,3-Dimethylbenzidine	7100	U	ug/kg	7100	690	UJ	ug/kg	690	690	UJ	ug/kg	690	750	UJ	ug/kg	750
Hexachlorophene	340000	R	ug/kg	34000	34000	U	ug/kg	34000	34000	U	ug/kg	34000	36000	U	ug/kg	36000
Aramite	34000	UJ	ug/kg	34000	3400	R	ug/kg	3400	3400	R	ug/kg	3400	3600	R	ug/kg	3600
2-Chlorophenol	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
3- & 4-Methylphenol (2)	7100	U	ug/kg	7100	690	U	ug/kg	690	690	U	ug/kg	690	750	U	ug/kg	750
Hexachloropropene	34000	UJ	ug/kg	34000	3400	U	ug/kg	3400	3400	U	ug/kg	3400	3600	U	ug/kg	3600
2-Acetylaminofluorene	7100	U	ug/kg	7100	690	UJ	ug/kg	690	690	UJ	ug/kg	690	750	UJ	ug/kg	750

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:		R9756013			R9756014			R9756004			R9756005		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		14S00901			14S01001			14S01101			14S01101D		
Collect Date:		09-APR-95			09-APR-95			09-APR-95			09-APR-95		
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	
SEMIVOLATILES	ug/kg												
N-Nitrosodimethylamine	700	U	ug/kg	700	720	U	ug/kg	720	3400	UJ	ug/kg	3400	680 U ug/kg 680
Phenol	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
Aniline	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
bis(2-Chloroethyl) ether	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
Benzyl Alcohol	700	U	ug/kg	700	720	U	ug/kg	720	3400	UJ	ug/kg	3400	680 U ug/kg 680
2-Methylphenol	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
bis(2-Chloroisopropyl) ether	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
N-Nitroso-di-n-propylamine	700	U	ug/kg	700	720	U	ug/kg	720	3400	UJ	ug/kg	3400	680 U ug/kg 680
Hexachloroethane	700	U	ug/kg	700	720	U	ug/kg	720	3400	UJ	ug/kg	3400	680 U ug/kg 680
Nitrobenzene	700	U	ug/kg	700	720	U	ug/kg	720	3400	UJ	ug/kg	3400	680 U ug/kg 680
Isophorone	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
2-Nitrophenol	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
2,4-Dimethylphenol	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
Benzoic acid	3400	U	ug/kg	3400	3500	U	ug/kg	3500	17000	U	ug/kg	17000	3300 U ug/kg 3300
bis(2-Chloroethoxy) methane	700	U	ug/kg	700	720	U	ug/kg	720	3400	UJ	ug/kg	3400	680 U ug/kg 680
2,4-Dichlorophenol	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
1,2,4-Trichlorobenzene	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
Naphthalene	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
4-Chloroaniline	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
Hexachlorobutadiene	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
4-Chloro-3-methylphenol	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
2-Methylnaphthalene	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
Hexachlorocyclopentadiene	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
2,4,6-Trichlorophenol	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
Dimethylphthalate	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
2,4,5-Trichlorophenol	3400	U	ug/kg	3400	3500	U	ug/kg	3500	17000	U	ug/kg	17000	3300 U ug/kg 3300
2-Chloronaphthalene	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
2-Nitroaniline	3400	U	ug/kg	3400	3500	U	ug/kg	3500	17000	U	ug/kg	17000	3300 U ug/kg 3300
Acenaphthylene	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
2,6-Dinitrotoluene	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
3-Nitroaniline	3400	U	ug/kg	3400	3500	U	ug/kg	3500	17000	U	ug/kg	17000	3300 U ug/kg 3300
Acenaphthene	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
2,4-Dinitrophenol	3400	U	ug/kg	3400	3500	U	ug/kg	3500	17000	U	ug/kg	17000	3300 U ug/kg 3300
4-Nitrophenol	3400	U	ug/kg	3400	3500	U	ug/kg	3500	17000	U	ug/kg	17000	3300 U ug/kg 3300
Dibenzofuran	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
2,4-Dinitrotoluene	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
Diethylphthalate	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
4-Chlorophenyl-phenylether	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
Fluorene	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680 U ug/kg 680
4-Nitroaniline	3400	U	ug/kg	3400	3500	U	ug/kg	3500	17000	U	ug/kg	17000	3300 U ug/kg 3300

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	R9756013				R9756014				R9756004				R9756005			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S00901				14S01001				14S01101				14S01101D			
Collect Date:	09-APR-95				09-APR-95				09-APR-95				09-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	3400	U	ug/kg	3400	3500	U	ug/kg	3500	17000	U	ug/kg	17000	3300	U	ug/kg	3300
N-Nitrosodiphenylamine (1)	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
1,2-Diphenylhydrazine	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
4-Bromophenyl-phenylether	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
Hexachlorobenzene	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
Pentachlorophenol	3400	U	ug/kg	3400	3500	U	ug/kg	3500	17000	U	ug/kg	17000	3300	U	ug/kg	3300
Phenanthrene	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
Anthracene	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
Di-n-Butylphthalate	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
Fluoranthene	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
Pyrene	700	U	ug/kg	700	2700		ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
Butylbenzylphthalate	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
3,3-Dichlorobenzidine	1400	U	ug/kg	1400	1400	U	ug/kg	1400	6900	U	ug/kg	6900	1400	U	ug/kg	1400
Benzo (a) anthracene	700	U	ug/kg	700	120	J	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
Chrysene	700	U	ug/kg	700	140	J	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
bis(2-Ethylhexyl) phthalate	700	U	ug/kg	700	720	U	ug/kg	720	3400	UJ	ug/kg	3400	680	U	ug/kg	680
Di-n-octylphthalate	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
Benzo (b) fluoranthene	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
Benzo (k) fluoranthene	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
Benzo (a) pyrene	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
Indeno (1,2,3-cd) pyrene	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
Dibenz (a,h) anthracene	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
Benzo (g,h,i) perylene	700	UJ	ug/kg	700	720	UJ	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
2-Picoline	3400	UJ	ug/kg	3400	3500	UJ	ug/kg	3500	17000	U	ug/kg	17000	3300	UJ	ug/kg	3300
Methyl methanesulfonate	700	U	ug/kg	700	720	U	ug/kg	720	3400	UJ	ug/kg	3400	680	U	ug/kg	680
Ethyl methanesulfonate	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
Acetophenone	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
N-Nitrosopiperidine	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
Phenyl-tert-butylamine	3400	U	ug/kg	3400	3500	U	ug/kg	3500	17000	U	ug/kg	17000	3300	U	ug/kg	3300
2,6-Dichlorophenol	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
N-Nitroso-di-n-butylamine	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
N-Nitrosodiethylamine	700	U	ug/kg	700	720	U	ug/kg	720	3400	UJ	ug/kg	3400	680	U	ug/kg	680
N-Nitrosopyrrolidine	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
Benzidine	3400	UJ	ug/kg	3400	3500	UJ	ug/kg	3500	17000	UJ	ug/kg	17000	3300	UJ	ug/kg	3300
1,2,4,5-Tetrachlorobenzene	3400	U	ug/kg	3400	3500	U	ug/kg	3500	17000	U	ug/kg	17000	3300	U	ug/kg	3300
Pentachlorobenzene	3400	U	ug/kg	3400	3500	U	ug/kg	3500	17000	U	ug/kg	17000	3300	U	ug/kg	3300
1-Naphthylamine	3400	U	ug/kg	3400	3500	U	ug/kg	3500	17000	U	ug/kg	17000	3300	U	ug/kg	3300
2-Naphthylamine	3400	U	ug/kg	3400	3500	U	ug/kg	3500	17000	UJ	ug/kg	17000	3300	U	ug/kg	3300
2,3,4,6-Tetrachlorophenol	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
Phenacetin	700	UJ	ug/kg	700	720	UJ	ug/kg	720	3400	U	ug/kg	3400	680	UJ	ug/kg	680
4-Aminobiphenyl	3400	U	ug/kg	3400	3500	U	ug/kg	3500	17000	UJ	ug/kg	17000	3300	U	ug/kg	3300
Pentachloronitrobenzene	3400	U	ug/kg	3400	3500	U	ug/kg	3500	17000	U	ug/kg	17000	3300	U	ug/kg	3300
Pronamide	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
p-(Dimethylamino)azobenzene	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
7,12-Dimethylbenz(A)Anthracene	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
3-Methylcholanthrene	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
Pyridine	3400	UJ	ug/kg	[illegible]	3500	UJ	ug/kg	3500	17000	UJ	ug/kg	17000	3300	UJ	ug/kg	3300
N-Nitrosomethylethylamine	700	UJ	ug/kg	700	720	UJ	ug/kg	720	3400	U	ug/kg	3400	680	UJ	ug/kg	680
N-Nitrosomorpholine	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
o-Toluidine	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
Hexachloropropene	3400	U	ug/kg	3400	3500	U	ug/kg	3500	17000	UJ	ug/kg	17000	3300	U	ug/kg	3300
p-Phenylenediamine	34000	U	ug/kg	34000	35000	U	ug/kg	35000	170000	U	ug/kg	170000	33000	U	ug/kg	33000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	R9756013				R9756014				R9756004				R9756005			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S00901				14S01001				14S01101				14S011010			
Collect Date:	09-APR-95				09-APR-95				09-APR-95				09-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	3400	U	ug/kg	3400	3500	U	ug/kg	3500	17000	U	ug/kg	17000	3300	U	ug/kg	3300
Isosafrole	3400	U	ug/kg	3400	3500	U	ug/kg	3500	17000	U	ug/kg	17000	3300	U	ug/kg	3300
1,4-Naphthoquinone	70000	R	ug/kg	70000	72000	R	ug/kg	72000	340000	R	ug/kg	34000	68000	R	ug/kg	68000
1,3-Dinitrobenzene	700	U	ug/kg	700	720	U	ug/kg	720	3400	UJ	ug/kg	3400	680	U	ug/kg	680
5-Nitro-o-toluidine	700	U	ug/kg	700	720	U	ug/kg	720	3400	UJ	ug/kg	3400	680	U	ug/kg	680
1,3,5-Trinitrobenzene	700	UJ	ug/kg	700	720	UJ	ug/kg	720	3400	UJ	ug/kg	3400	680	U	ug/kg	680
4-Nitroquinoline-1-oxide	34000	R	ug/kg	34000	35000	R	ug/kg	35000	170000	U	ug/kg	170000	33000	UJ	ug/kg	33000
Methapyrilene	3400	UJ	ug/kg	3400	3500	UJ	ug/kg	3500	17000	UJ	ug/kg	17000	3300	UJ	ug/kg	3300
3,3-Dimethylbenzidine	700	UJ	ug/kg	700	720	UJ	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
Hexachlorophene	34000	U	ug/kg	34000	35000	U	ug/kg	35000	170000	R	ug/kg	17000	33000	R	ug/kg	33000
Aramite	3400	R	ug/kg	3400	3500	R	ug/kg	3500	17000	UJ	ug/kg	17000	3300	R	ug/kg	3300
2-Chlorophenol	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
3- & 4-Methylphenol (2)	700	U	ug/kg	700	720	U	ug/kg	720	3400	U	ug/kg	3400	680	U	ug/kg	680
Hexachloropropene	3400	U	ug/kg	3400	3500	U	ug/kg	3500	17000	UJ	ug/kg	17000	3300	U	ug/kg	3300
2-Acetylaminofluorene	700	UJ	ug/kg	700	720	UJ	ug/kg	720	3400	U	ug/kg	3400	680	UJ	ug/kg	680

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:		R9756006			R9756016			R9756003			M9000008		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		14S01201			14S01301			14S01401			14S01501		
Collect Date:		09-APR-95			09-APR-95			09-APR-95			23-MAY-95		
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	
SEMIVOLATILES	ug/kg												
N-Nitrosodimethylamine	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
Phenol	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
Aniline	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
bis(2-Chloroethyl) ether	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
Benzyl Alcohol	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
2-Methylphenol	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
bis(2-Chloroisopropyl) ether	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
N-Nitroso-di-n-propylamine	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
Hexachloroethane	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
Nitrobenzene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
Isophorone	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
2-Nitrophenol	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
2,4-Dimethylphenol	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
Benzoic acid	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3400	U	ug/kg	3400	17000 U ug/kg 17000
bis(2-Chloroethoxy) methane	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
2,4-Dichlorophenol	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
1,2,4-Trichlorobenzene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
Naphthalene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
4-Chloroaniline	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
Hexachlorobutadiene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
4-Chloro-3-methylphenol	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
2-Methylnaphthalene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
Hexachlorocyclopentadiene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
2,4,6-Trichlorophenol	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
Dimethylphthalate	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
2,4,5-Trichlorophenol	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3400	U	ug/kg	3400	17000 U ug/kg 17000
2-Chloronaphthalene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
2-Nitroaniline	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3400	U	ug/kg	3400	17000 U ug/kg 17000
Acenaphthylene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
2,6-Dinitrotoluene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
3-Nitroaniline	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3400	U	ug/kg	3400	17000 U ug/kg 17000
Acenaphthene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
2,4-Dinitrophenol	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3400	U	ug/kg	3400	17000 U ug/kg 17000
4-Nitrophenol	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3400	U	ug/kg	3400	17000 U ug/kg 17000
Dibenzofuran	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
2,4-Dinitrotoluene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
Diethylphthalate	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
4-Chlorophenyl-phenylether	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
Fluorene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500 U ug/kg 3500
4-Nitroaniline	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3400	U	ug/kg	3400	17000 U ug/kg 17000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	R9756006				R9756016				R9756003				M9000008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S01201				14S01301				14S01401				14S01501			
Collect Date:	09-APR-95				09-APR-95				09-APR-95				23-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3400	U	ug/kg	3400	17000	U	ug/kg	17000
N-Nitrosodiphenylamine (1)	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
1,2-Diphenylhydrazine	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
4-Bromophenyl-phenylether	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
Hexachlorobenzene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
Pentachlorophenol	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3400	U	ug/kg	3400	17000	U	ug/kg	17000
Phenanthrene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
Anthracene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
Di-n-Butylphthalate	690	U	ug/kg	690	480	J	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
Fluoranthene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
Pyrene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
Butylbenzylphthalate	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
3,3-Dichlorobenzidine	1400	U	ug/kg	1400	1400	U	ug/kg	1400	1400	U	ug/kg	1400	6900	U	ug/kg	6900
Benzo (a) anthracene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
Chrysene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
bis(2-Ethylhexyl) phthalate	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
Di-n-octylphthalate	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
Benzo (b) fluoranthene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
Benzo (k) fluoranthene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
Benzo (a) pyrene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
Indeno (1,2,3-cd) pyrene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
Dibenz (a,h) anthracene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
Benzo (g,h,i) perylene	690	U	ug/kg	690	690	UJ	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
2-Picoline	3400	UJ	ug/kg	3400	3300	UJ	ug/kg	3300	3400	UJ	ug/kg	3400	17000	U	ug/kg	17000
Methyl methanesulfonate	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
Ethyl methanesulfonate	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
Acetophenone	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
N-Nitrosopiperidine	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
Phenyl-tert-butylamine	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3400	U	ug/kg	3400	17000	U	ug/kg	17000
2,6-Dichlorophenol	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
N-Nitroso-di-n-butylamine	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
N-Nitrosodiethylamine	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
N-Nitrosopyrrolidine	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
Benzidine	3400	UJ	ug/kg	3400	3300	UJ	ug/kg	3300	3400	UJ	ug/kg	3400	17000	U	ug/kg	17000
1,2,4,5-Tetrachlorobenzene	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3400	U	ug/kg	3400	17000	U	ug/kg	17000
Pentachlorobenzene	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3400	U	ug/kg	3400	17000	U	ug/kg	17000
1-Naphthylamine	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3400	U	ug/kg	3400	17000	U	ug/kg	17000
2-Naphthylamine	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3400	U	ug/kg	3400	17000	U	ug/kg	17000
2,3,4,6-Tetrachlorophenol	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
Phenacetin	690	UJ	ug/kg	690	690	UJ	ug/kg	690	700	UJ	ug/kg	700	3500	U	ug/kg	3500
4-Aminobiphenyl	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3400	U	ug/kg	3400	17000	U	ug/kg	17000
Pentachloronitrobenzene	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3400	U	ug/kg	3400	17000	U	ug/kg	17000
Pronamide	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
p-(Dimethylamino)azobenzene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
7,12-Dimethylbenz(A)Anthracene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
3-Methylcholanthrene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
Pyridine	3400	UJ	ug/kg	3400	3300	UJ	ug/kg	3300	3400	UJ	ug/kg	3400	17000	U	ug/kg	17000
N-Nitrosomethylethylamine	690	UJ	ug/kg	690	690	UJ	ug/kg	690	700	UJ	ug/kg	700	3500	U	ug/kg	3500
N-Nitrosomorpholine	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
o-Toluidine	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
Hexachloropropene	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3400	U	ug/kg	3400	17000	U	ug/kg	17000
p-Phenylenediamine	34000	U	ug/kg	34000	33000	U	ug/kg	33000	34000	U	ug/kg	34000	170000	U	ug/kg	170000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	R9756006				R9756016				R9756003				M9000008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S01201				14S01301				14S01401				14S01501			
Collect Date:	09-APR-95				09-APR-95				09-APR-95				23-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3400	U	ug/kg	3400	17000	U	ug/kg	17000
Isosafrole	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3400	U	ug/kg	3400	17000	U	ug/kg	17000
1,4-Naphthoquinone	69000	R	ug/kg	69000	69000	R	ug/kg	69000	70000	R	ug/kg	70000	350000	U	ug/kg	350000
1,3-Dinitrobenzene	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
5-Nitro-o-toluidine	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
1,3,5-Trinitrobenzene	690	U	ug/kg	690	690	UJ	ug/kg	690	700	U	ug/kg	700	3500	UJ	ug/kg	3500
4-Nitroquinoline-1-oxide	34000	UJ	ug/kg	34000	33000	R	ug/kg	33000	34000	UJ	ug/kg	34000	170000	R	ug/kg	17000
Methapyrilene	3400	UJ	ug/kg	3400	3300	UJ	ug/kg	3300	3400	UJ	ug/kg	3400	17000	U	ug/kg	17000
3,3-Dimethylbenzidine	690	U	ug/kg	690	690	UJ	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
Hexachlorophene	34000	R	ug/kg	34000	33000	U	ug/kg	33000	34000	R	ug/kg	34000	170000	U	ug/kg	170000
Aramite	3400	R	ug/kg	3400	3300	R	ug/kg	3300	3400	R	ug/kg	3400	17000	U	ug/kg	17000
2-Chlorophenol	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
3- & 4-Methylphenol (2)	690	U	ug/kg	690	690	U	ug/kg	690	700	U	ug/kg	700	3500	U	ug/kg	3500
Hexachloropropene	3400	U	ug/kg	3400	3300	U	ug/kg	3300	3400	U	ug/kg	3400	17000	U	ug/kg	17000
2-Acetylaminofluorene	690	UJ	ug/kg	690	690	UJ	ug/kg	690	700	UJ	ug/kg	700	3500	U	ug/kg	3500

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:		R9756017			R9756018			R9756015			M8867004		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		14S01601			14S01601D			14S01701			14S01901		
Collect Date:		09-APR-95			09-APR-95			09-APR-95			24-APR-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES	ug/kg												
N-Nitrosodimethylamine		860 U	ug/kg	860	870 U	ug/kg	870	800 UJ	ug/kg	800	340 U	ug/kg	340
Phenol		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
Aniline		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
bis(2-Chloroethyl) ether		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
Benzyl Alcohol		860 U	ug/kg	860	870 U	ug/kg	870	800 UJ	ug/kg	800	340 U	ug/kg	340
2-Methylphenol		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
bis(2-Chloroisopropyl) ether		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
N-Nitroso-di-n-propylamine		860 U	ug/kg	860	870 U	ug/kg	870	800 UJ	ug/kg	800	340 U	ug/kg	340
Hexachloroethane		860 U	ug/kg	860	870 U	ug/kg	870	800 UJ	ug/kg	800	340 U	ug/kg	340
Nitrobenzene		860 U	ug/kg	860	870 U	ug/kg	870	800 UJ	ug/kg	800	340 U	ug/kg	340
Isophorone		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
2-Nitrophenol		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
2,4-Dimethylphenol		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
Benzoic acid		4200 U	ug/kg	4200	4200 U	ug/kg	4200	3900 U	ug/kg	3900	1700 UJ	ug/kg	1700
bis(2-Chloroethoxy) methane		860 U	ug/kg	860	870 U	ug/kg	870	800 UJ	ug/kg	800	340 U	ug/kg	340
2,4-Dichlorophenol		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
1,2,4-Trichlorobenzene		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
Naphthalene		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
4-Chloroaniline		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
Hexachlorobutadiene		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
4-Chloro-3-methylphenol		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
2-Methylnaphthalene		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
Hexachlorocyclopentadiene		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
2,4,6-Trichlorophenol		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
Dimethylphthalate		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
2,4,5-Trichlorophenol		4200 U	ug/kg	4200	4200 U	ug/kg	4200	3900 U	ug/kg	3900	1700 U	ug/kg	1700
2-Chloronaphthalene		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
2-Nitroaniline		4200 U	ug/kg	4200	4200 U	ug/kg	4200	3900 U	ug/kg	3900	1700 U	ug/kg	1700
Acenaphthylene		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
2,6-Dinitrotoluene		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
3-Nitroaniline		4200 U	ug/kg	4200	4200 U	ug/kg	4200	3900 U	ug/kg	3900	1700 U	ug/kg	1700
Acenaphthene		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
2,4-Dinitrophenol		4200 U	ug/kg	4200	4200 U	ug/kg	4200	3900 U	ug/kg	3900	1700 U	ug/kg	1700
4-Nitrophenol		4200 U	ug/kg	4200	4200 U	ug/kg	4200	3900 U	ug/kg	3900	1700 U	ug/kg	1700
Dibenzofuran		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
2,4-Dinitrotoluene		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
Diethylphthalate		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
4-Chlorophenyl-phenylether		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
Fluorene		860 U	ug/kg	860	870 U	ug/kg	870	800 U	ug/kg	800	340 U	ug/kg	340
4-Nitroaniline		4200 U	ug/kg	4200	4200 U	ug/kg	4200	3900 U	ug/kg	3900	1700 U	ug/kg	1700

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	R9756017				R9756018				R9756015				MB867004			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S01601				14S01601D				14S01701				14S01901			
Collect Date:	09-APR-95				09-APR-95				09-APR-95				24-APR-95			
	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	4200	U	ug/kg	4200	3900	U	ug/kg	3900	1700	U	ug/kg	1700
N-Nitrosodiphenylamine (1)	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
1,2-Diphenylhydrazine	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
4-Bromophenyl-phenylether	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
Hexachlorobenzene	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
Pentachlorophenol	4200	U	ug/kg	4200	4200	U	ug/kg	4200	3900	U	ug/kg	3900	1700	U	ug/kg	1700
Phenanthrene	860	U	ug/kg	860	870	U	ug/kg	870	300	J	ug/kg	800	340	U	ug/kg	340
Anthracene	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
Di-n-Butylphthalate	370	J	ug/kg	860	210	J	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
Fluoranthene	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
Pyrene	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
Butylbenzylphthalate	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
3,3-Dichlorobenzidine	1700	U	ug/kg	1700	1700	U	ug/kg	1700	1600	U	ug/kg	1600	680	U	ug/kg	680
Benzo (a) anthracene	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
Chrysene	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
bis(2-Ethylhexyl) phthalate	860	U	ug/kg	860	870	U	ug/kg	870	140	J	ug/kg	800	340	U	ug/kg	340
Di-n-octylphthalate	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
Benzo (b) fluoranthene	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
Benzo (k) fluoranthene	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
Benzo (a) pyrene	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
Indeno (1,2,3-cd) pyrene	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
Dibenz (a,h) anthracene	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
Benzo (g,h,i) perylene	860	UJ	ug/kg	860	870	UJ	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
2-Picoline	4200	UJ	ug/kg	4200	4200	UJ	ug/kg	4200	3900	U	ug/kg	3900	1700	U	ug/kg	1700
Methyl methanesulfonate	860	U	ug/kg	860	870	U	ug/kg	870	800	UJ	ug/kg	800	340	U	ug/kg	340
Ethyl methanesulfonate	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
Acetophenone	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
N-Nitrosopiperidine	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
Phenyl-tert-butylamine	4200	U	ug/kg	4200	4200	U	ug/kg	4200	3900	U	ug/kg	3900	1700	U	ug/kg	1700
2,6-Dichlorophenol	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
N-Nitroso-di-n-butylamine	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
N-Nitrosodiethylamine	860	U	ug/kg	860	870	U	ug/kg	870	800	UJ	ug/kg	800	340	U	ug/kg	340
N-Nitrosopyrrolidine	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
Benzidine	4200	UJ	ug/kg	4200	4200	UJ	ug/kg	4200	3900	UJ	ug/kg	3900	1700	U	ug/kg	1700
1,2,4,5-Tetrachlorobenzene	4200	U	ug/kg	4200	4200	U	ug/kg	4200	3900	U	ug/kg	3900	1700	U	ug/kg	1700
Pentachlorobenzene	4200	U	ug/kg	4200	4200	U	ug/kg	4200	3900	U	ug/kg	3900	1700	U	ug/kg	1700
1-Naphthylamine	4200	U	ug/kg	4200	4200	U	ug/kg	4200	3900	U	ug/kg	3900	1700	U	ug/kg	1700
2-Naphthylamine	4200	U	ug/kg	4200	4200	U	ug/kg	4200	3900	UJ	ug/kg	3900	1700	U	ug/kg	1700
2,3,4,6-Tetrachlorophenol	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
Phenacetin	860	UJ	ug/kg	860	870	UJ	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
4-Aminobiphenyl	4200	U	ug/kg	4200	4200	U	ug/kg	4200	3900	UJ	ug/kg	3900	1700	U	ug/kg	1700
Pentachloronitrobenzene	4200	U	ug/kg	4200	4200	U	ug/kg	4200	3900	U	ug/kg	3900	1700	U	ug/kg	1700
Pronamide	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
p-(Dimethylamino)azobenzene	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
7,12-Dimethylbenz(A)Anthracene	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
3-Methylcholanthrene	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
Pyridine	4200	UJ	ug/kg	4200	4200	UJ	ug/kg	4200	3900	UJ	ug/kg	3900	1700	U	ug/kg	1700
N-Nitrosomethylethylamine	860	UJ	ug/kg	860	870	UJ	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
N-Nitrosomorpholine	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
o-Toluidine	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
Hexachloropropene	4200	U	ug/kg	4200	4200	U	ug/kg	4200	3900	UJ	ug/kg	3900	1700	U	ug/kg	1700
p-Phenylenediamine	42000	U	ug/kg	42000	42000	U	ug/kg	42000	39000	U	ug/kg	39000	17000	UJ	ug/kg	17000

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Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	R9756017				R9756018				R9756015				M8867004			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S01601				14S01601D				14S01701				14S01901			
Collect Date:	09-APR-95				09-APR-95				09-APR-95				24-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	4200	U	ug/kg	4200	4200	U	ug/kg	4200	3900	U	ug/kg	3900	1700	U	ug/kg	1700
Isosafrole	4200	U	ug/kg	4200	4200	U	ug/kg	4200	3900	U	ug/kg	3900	1700	U	ug/kg	1700
1,4-Naphthoquinone	86000	R	ug/kg	86000	87000	R	ug/kg	87000	80000	R	ug/kg	80000	34000	U	ug/kg	34000
1,3-Dinitrobenzene	860	U	ug/kg	860	870	U	ug/kg	870	800	UJ	ug/kg	800	340	U	ug/kg	340
5-Nitro-o-toluidine	860	U	ug/kg	860	870	U	ug/kg	870	800	UJ	ug/kg	800	340	U	ug/kg	340
1,3,5-Trinitrobenzene	860	UJ	ug/kg	860	870	UJ	ug/kg	870	800	UJ	ug/kg	800	340	U	ug/kg	340
4-Nitroquinoline-1-oxide	42000	R	ug/kg	42000	42000	R	ug/kg	42000	39000	U	ug/kg	39000	17000	U	ug/kg	17000
Methapyrilene	4200	UJ	ug/kg	4200	4200	UJ	ug/kg	4200	3900	UJ	ug/kg	3900	1700	U	ug/kg	1700
3,3-Dimethylbenzidine	860	UJ	ug/kg	860	870	UJ	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
Hexachlorophene	42000	U	ug/kg	42000	42000	U	ug/kg	42000	39000	R	ug/kg	39000	17000	U	ug/kg	17000
Aramite	4200	R	ug/kg	4200	4200	R	ug/kg	4200	3900	UJ	ug/kg	3900	1700	U	ug/kg	1700
2-Chlorophenol	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
3- & 4-Methylphenol (2)	860	U	ug/kg	860	870	U	ug/kg	870	800	U	ug/kg	800	340	U	ug/kg	340
Hexachloropropene	4200	U	ug/kg	4200	4200	U	ug/kg	4200	3900	UJ	ug/kg	3900	1700	U	ug/kg	1700
2-Acetylaminofluorene	860	UJ	ug/kg	860	870	UJ	ug/kg	870	800	U	ug/kg	800	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.

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Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	M8867002				M8867003				M8995001				M8995003			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S02001				14S02001D				14S02101				14S02201			
Collect Date:	24-APR-95				24-APR-95				20-MAY-95				21-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/kg																
N-Nitrosodimethylamine	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Phenol	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Aniline	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
bis(2-Chloroethyl) ether	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Benzyl Alcohol	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
2-Methylphenol	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
bis(2-Chloroisopropyl) ether	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
N-Nitroso-di-n-propylamine	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Hexachloroethane	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Nitrobenzene	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Isophorone	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
2-Nitrophenol	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
2,4-Dimethylphenol	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Benzoic acid	1700	UJ	ug/kg	1700	1800	UJ	ug/kg	1800	18000	U	ug/kg	18000	1800	U	ug/kg	1800
bis(2-Chloroethoxy) methane	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
2,4-Dichlorophenol	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
1,2,4-Trichlorobenzene	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Naphthalene	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
4-Chloroaniline	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Hexachlorobutadiene	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
4-Chloro-3-methylphenol	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
2-Methylnaphthalene	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Hexachlorocyclopentadiene	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
2,4,6-Trichlorophenol	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Dimethylphthalate	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
2,4,5-Trichlorophenol	1700	U	ug/kg	1700	1800	U	ug/kg	1800	18000	U	ug/kg	18000	1800	U	ug/kg	1800
2-Chloronaphthalene	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
2-Nitroaniline	1700	U	ug/kg	1700	1800	U	ug/kg	1800	18000	U	ug/kg	18000	1800	U	ug/kg	1800
Acenaphthylene	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
2,6-Dinitrotoluene	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
3-Nitroaniline	1700	U	ug/kg	1700	1800	U	ug/kg	1800	18000	U	ug/kg	18000	1800	U	ug/kg	1800
Acenaphthene	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
2,4-Dinitrophenol	1700	U	ug/kg	1700	1800	U	ug/kg	1800	18000	U	ug/kg	18000	1800	U	ug/kg	1800
4-Nitrophenol	1700	U	ug/kg	1700	1800	U	ug/kg	1800	18000	U	ug/kg	18000	1800	U	ug/kg	1800
Dibenzofuran	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
2,4-Dinitrotoluene	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Diethylphthalate	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
4-Chlorophenyl-phenylether	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Fluorene	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
4-Nitroaniline	1700	U	ug/kg	1700	1800	U	ug/kg	1800	18000	U	ug/kg	18000	1800	U	ug/kg	1800

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Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	M8867002				M8867003				M8995001				M8995003			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S02001				14S02001D				14S02101				14S02201			
Collect Date:	24-APR-95				24-APR-95				20-MAY-95				21-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	1700	U	ug/kg	1700	1800	U	ug/kg	1800	18000	U	ug/kg	18000	1800	U	ug/kg	1800
N-Nitrosodiphenylamine (1)	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
1,2-Diphenylhydrazine	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
4-Bromophenyl-phenylether	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Hexachlorobenzene	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Pentachlorophenol	1700	U	ug/kg	1700	1800	U	ug/kg	1800	18000	U	ug/kg	18000	1800	U	ug/kg	1800
Phenanthrene	26	J	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Anthracene	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Di-n-Butylphthalate	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Fluoranthene	120	J	ug/kg	350	54	J	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Pyrene	100	J	ug/kg	350	56	J	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Butylbenzylphthalate	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
3,3-Dichlorobenzidine	690	U	ug/kg	690	710	U	ug/kg	710	7200	U	ug/kg	7200	720	U	ug/kg	720
Benzo (a) anthracene	46	J	ug/kg	350	21	J	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Chrysene	83	J	ug/kg	350	45	J	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
bis(2-Ethylhexyl) phthalate	350	U	ug/kg	350	31	J	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Di-n-octylphthalate	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Benzo (b) fluoranthene	110	J	ug/kg	350	69	J	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Benzo (k) fluoranthene	92	J	ug/kg	350	51	J	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Benzo (a) pyrene	87	J	ug/kg	350	49	J	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Indeno (1,2,3-cd) pyrene	82	J	ug/kg	350	51	J	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Dibenz (a,h) anthracene	18	J	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Benzo (g,h,i) perylene	99	J	ug/kg	350	65	J	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
2-Picoline	1700	U	ug/kg	1700	1800	U	ug/kg	1800	18000	U	ug/kg	18000	1800	U	ug/kg	1800
Methyl methanesulfonate	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Ethyl methanesulfonate	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Acetophenone	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
N-Nitrosopiperidine	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Phenyl-tert-butylamine	1700	U	ug/kg	1700	1800	U	ug/kg	1800	18000	U	ug/kg	18000	1800	U	ug/kg	1800
2,6-Dichlorophenol	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
N-Nitroso-di-n-butylamine	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
N-Nitrosodiethylamine	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
N-Nitrosopyrrolidine	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Benzidine	1700	U	ug/kg	1700	1800	U	ug/kg	1800	18000	U	ug/kg	18000	1800	U	ug/kg	1800
1,2,4,5-Tetrachlorobenzene	1700	U	ug/kg	1700	1800	U	ug/kg	1800	18000	U	ug/kg	18000	1800	U	ug/kg	1800
Pentachlorobenzene	1700	U	ug/kg	1700	1800	U	ug/kg	1800	18000	U	ug/kg	18000	1800	U	ug/kg	1800
1-Naphthylamine	1700	U	ug/kg	1700	1800	U	ug/kg	1800	18000	U	ug/kg	18000	1800	U	ug/kg	1800
2-Naphthylamine	1700	U	ug/kg	1700	1800	U	ug/kg	1800	18000	U	ug/kg	18000	1800	U	ug/kg	1800
2,3,4,6-Tetrachlorophenol	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Phenacetin	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
4-Aminobiphenyl	1700	U	ug/kg	1700	1800	U	ug/kg	1800	18000	U	ug/kg	18000	1800	U	ug/kg	1800
Pentachloronitrobenzene	1700	U	ug/kg	1700	1800	U	ug/kg	1800	18000	U	ug/kg	18000	1800	U	ug/kg	1800
Pronamide	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
p-(Dimethylamino)azobenzene	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
7,12-Dimethylbenz(A)Anthracene	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
3-Methylcholanthrene	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Pyridine	1700	U	ug/kg	1700	1800	U	ug/kg	1800	18000	U	ug/kg	18000	1800	U	ug/kg	1800
N-Nitrosomethylethylamine	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
N-Nitrosomorpholine	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
o-Toluidine	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Hexachloropropene	1700	U	ug/kg	1700	1800	U	ug/kg	1800	18000	U	ug/kg	18000	1800	U	ug/kg	1800
p-Phenylenediamine	17000	UJ	ug/kg	17000	18000	UJ	ug/kg	18000	180000	U	ug/kg	180000	18000	U	ug/kg	18000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	M8867002				M8867003				M8995001				M8995003			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S02001				14S02001D				14S02101				14S02201			
Collect Date:	24-APR-95				24-APR-95				20-MAY-95				21-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	1700	U	ug/kg	1700	1800	U	ug/kg	1800	18000	U	ug/kg	18000	1800	U	ug/kg	1800
Isosafrole	1700	U	ug/kg	1700	1800	U	ug/kg	1800	18000	U	ug/kg	18000	1800	U	ug/kg	1800
1,4-Naphthoquinone	35000	U	ug/kg	35000	35000	U	ug/kg	35000	360000	U	ug/kg	360000	36000	U	ug/kg	36000
1,3-Dinitrobenzene	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
5-Nitro-o-toluidine	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
1,3,5-Trinitrobenzene	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
4-Nitroquinoline-1-oxide	17000	U	ug/kg	17000	18000	U	ug/kg	18000	180000	R	ug/kg	18000	18000	R	ug/kg	18000
Methapyrilene	1700	U	ug/kg	1700	1800	U	ug/kg	1800	18000	U	ug/kg	18000	1800	U	ug/kg	1800
3,3-Dimethylbenzidine	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Hexachlorophene	17000	U	ug/kg	17000	18000	U	ug/kg	18000	180000	U	ug/kg	180000	18000	U	ug/kg	18000
Aramite	1700	U	ug/kg	1700	1800	U	ug/kg	1800	18000	U	ug/kg	18000	1800	U	ug/kg	1800
2-Chlorophenol	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
3- & 4-Methylphenol (2)	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	360	U	ug/kg	360
Hexachloropropene	1700	U	ug/kg	1700	1800	U	ug/kg	1800	18000	U	ug/kg	18000	1800	U	ug/kg	1800
2-Acetylaminofluorene	350	U	ug/kg	350	350	U	ug/kg	350	3600	U	ug/kg	3600	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:		M8995005			M8995007			M8867006			M8867005		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		14S02301			14S02401			18S00101			18S00201		
Collect Date:		21-MAY-95			21-MAY-95			24-APR-95			24-APR-95		
		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	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
Phenol		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
Aniline		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
bis(2-Chloroethyl) ether		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
Benzyl Alcohol		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
2-Methylphenol		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
bis(2-Chloroisopropyl) ether		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
N-Nitroso-di-n-propylamine		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
Hexachloroethane		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
Nitrobenzene		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
Isophorone		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
2-Nitrophenol		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
2,4-Dimethylphenol		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
Benzoic acid		1800 U	ug/kg	1800	1800 U	ug/kg	1800	1800 UJ	ug/kg	1800	1800 UJ	ug/kg	1800
bis(2-Chloroethoxy) methane		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
2,4-Dichlorophenol		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
1,2,4-Trichlorobenzene		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
Naphthalene		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
4-Chloroaniline		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
Hexachlorobutadiene		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
4-Chloro-3-methylphenol		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
2-Methylnaphthalene		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
Hexachlorocyclopentadiene		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
2,4,6-Trichlorophenol		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
Dimethylphthalate		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
2,4,5-Trichlorophenol		1800 U	ug/kg	1800	1800 U	ug/kg	1800	1800 U	ug/kg	1800	1800 U	ug/kg	1800
2-Chloronaphthalene		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
2-Nitroaniline		1800 U	ug/kg	1800	1800 U	ug/kg	1800	1800 U	ug/kg	1800	1800 U	ug/kg	1800
Acenaphthylene		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
2,6-Dinitrotoluene		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
3-Nitroaniline		1800 U	ug/kg	1800	1800 U	ug/kg	1800	1800 U	ug/kg	1800	1800 U	ug/kg	1800
Acenaphthene		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
2,4-Dinitrophenol		1800 U	ug/kg	1800	1800 U	ug/kg	1800	1800 U	ug/kg	1800	1800 U	ug/kg	1800
4-Nitrophenol		1800 U	ug/kg	1800	1800 U	ug/kg	1800	1800 U	ug/kg	1800	1800 U	ug/kg	1800
Dibenzofuran		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
2,4-Dinitrotoluene		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
Diethylphthalate		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
4-Chlorophenyl-phenylether		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
Fluorene		360 U	ug/kg	360	370 U	ug/kg	370	360 U	ug/kg	360	360 U	ug/kg	360
4-Nitroaniline		1800 U	ug/kg	1800	1800 U	ug/kg	1800	1800 U	ug/kg	1800	1800 U	ug/kg	1800

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	M8995005				M8995007				M8867006				M8867005			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S02301				14S02401				18S00101				18S00201			
Collect Date:	21-MAY-95				21-MAY-95				24-APR-95				24-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
N-Nitrosodiphenylamine (1)	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
1,2-Diphenylhydrazine	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
4-Bromophenyl-phenylether	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
Hexachlorobenzene	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
Pentachlorophenol	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Phenanthrene	44	J	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
Anthracene	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
Di-n-Butylphthalate	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
Fluoranthene	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
Pyrene	360	U	ug/kg	360	370	U	ug/kg	370	20	J	ug/kg	360	360	U	ug/kg	360
Butylbenzylphthalate	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
3,3-Dichlorobenzidine	720	U	ug/kg	720	730	U	ug/kg	730	720	U	ug/kg	720	720	U	ug/kg	720
Benzo (a) anthracene	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
Chrysene	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
bis(2-Ethylhexyl) phthalate	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	25	J	ug/kg	360
Di-n-octylphthalate	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
Benzo (b) fluoranthene	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
Benzo (k) fluoranthene	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
Benzo (a) pyrene	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
Indeno (1,2,3-cd) pyrene	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
Dibenz (a,h) anthracene	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
Benzo (g,h,i) perylene	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
2-Picoline	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Methyl methanesulfonate	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
Ethyl methanesulfonate	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
Acetophenone	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
N-Nitrosopiperidine	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
Phenyl-tert-butylamine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2,6-Dichlorophenol	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
N-Nitroso-di-n-butylamine	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
N-Nitrosodiethylamine	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
N-Nitrosopyrrolidine	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
Benzidine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
1,2,4,5-Tetrachlorobenzene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Pentachlorobenzene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
1-Naphthylamine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2-Naphthylamine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2,3,4,6-Tetrachlorophenol	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
Phenacetin	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
4-Aminobiphenyl	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Pentachloronitrobenzene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Pronamide	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
p-(Dimethylamino)azobenzene	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
7,12-Dimethylbenz(A)Anthracene	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
3-Methylcholanthrene	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
Pyridine	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
N-Nitrosomethylethylamine	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
N-Nitrosomorpholine	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
o-Toluidine	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
Hexachloropropene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
p-Phenylenediamine	18000	U	ug/kg	18000	18000	U	ug/kg	18000	18000	UJ	ug/kg	18000	18000	UJ	ug/kg	18000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	M8995005				M8995007				M8867006				M8867005			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S02301				14S02401				18S00101				18S00201			
Collect Date:	21-MAY-95				21-MAY-95				24-APR-95				24-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
Isosafrole	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
1,4-Naphthoquinone	36000	U	ug/kg	36000	37000	U	ug/kg	37000	36000	U	ug/kg	36000	36000	U	ug/kg	36000
1,3-Dinitrobenzene	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
5-Nitro-o-toluidine	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
1,3,5-Trinitrobenzene	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
4-Nitroquinoline-1-oxide	18000	R	ug/kg	18000	18000	R	ug/kg	18000	18000	U	ug/kg	18000	18000	U	ug/kg	18000
Methapyrilene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
3,3-Dimethylbenzidine	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
Hexachlorophene	18000	U	ug/kg	18000	18000	U	ug/kg	18000	18000	U	ug/kg	18000	18000	U	ug/kg	18000
Aramite	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2-Chlorophenol	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
3- & 4-Methylphenol (2)	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	360	U	ug/kg	360
Hexachloropropene	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800	1800	U	ug/kg	1800
2-Acetylaminofluorene	360	U	ug/kg	360	370	U	ug/kg	370	360	U	ug/kg	360	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	M8995010				M8995011				R9955003				R9955004			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	18S00301				18S00301D				18S00401				18S00401D			
Collect Date:	22-MAY-95				22-MAY-95				23-MAY-95				23-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/kg																
N-Nitrosodimethylamine	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Phenol	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Aniline	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
bis(2-Chloroethyl) ether	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Benzyl Alcohol	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
2-Methylphenol	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
bis(2-Chloroisopropyl) ether	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
N-Nitroso-di-n-propylamine	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Hexachloroethane	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Nitrobenzene	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Isophorone	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
2-Nitrophenol	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
2,4-Dimethylphenol	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Benzoic acid	1700	U	ug/kg	1700	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3300	U	ug/kg	3300
bis(2-Chloroethoxy) methane	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
2,4-Dichlorophenol	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
1,2,4-Trichlorobenzene	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Naphthalene	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
4-Chloroaniline	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Hexachlorobutadiene	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
4-Chloro-3-methylphenol	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
2-Methylnaphthalene	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Hexachlorocyclopentadiene	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
2,4,6-Trichlorophenol	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Dimethylphthalate	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
2,4,5-Trichlorophenol	1700	U	ug/kg	1700	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3300	U	ug/kg	3300
2-Chloronaphthalene	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
2 Nitroaniline	1700	U	ug/kg	1700	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3300	U	ug/kg	3300
Acenaphthylene	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
2,6-Dinitrotoluene	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
3-Nitroaniline	1700	U	ug/kg	1700	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3300	U	ug/kg	3300
Acenaphthene	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
2,4-Dinitrophenol	1700	U	ug/kg	1700	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3300	U	ug/kg	3300
4-Nitrophenol	1700	U	ug/kg	1700	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3300	U	ug/kg	3300
Dibenzofuran	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
2,4-Dinitrotoluene	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Diethylphthalate	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
4-Chlorophenyl-phenylether	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Fluorene	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
4-Nitroaniline	1700	U	ug/kg	1700	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3300	U	ug/kg	3300

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	M8995010				M8995011				R9955003				R9955004			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	18S00301				18S00301D				18S00401				18S00401D			
Collect Date:	22-MAY-95				22-MAY-95				23-MAY-95				23-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	1700	U	ug/kg	1700	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3300	U	ug/kg	3300
N-Nitrosodiphenylamine (1)	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
1,2-Diphenylhydrazine	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
4-Bromophenyl-phenylether	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Hexachlorobenzene	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Pentachlorophenol	1700	U	ug/kg	1700	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3300	U	ug/kg	3300
Phenanthrene	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Anthracene	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Di-n-Butylphthalate	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Fluoranthene	55	J	ug/kg	350	41	J	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Pyrene	66	J	ug/kg	350	50	J	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Butylbenzylphthalate	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
3,3-Dichlorobenzidine	690	U	ug/kg	690	690	U	ug/kg	690	1400	U	ug/kg	1400	1400	U	ug/kg	1400
Benzo (a) anthracene	68	J	ug/kg	350	55	J	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Chrysene	78	J	ug/kg	350	67	J	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
bis(2-Ethylhexyl) phthalate	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Di-n-octylphthalate	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Benzo (b) fluoranthene	92	J	ug/kg	350	79	J	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Benzo (k) fluoranthene	81	J	ug/kg	350	73	J	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Benzo (a) pyrene	55	J	ug/kg	350	50	J	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Indeno (1,2,3-cd) pyrene	40	J	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Dibenz (a,h) anthracene	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Benzo (g,h,i) perylene	35	J	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
2-Picoline	1700	U	ug/kg	1700	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3300	U	ug/kg	3300
Methyl methanesulfonate	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	UJ	ug/kg	690
Ethyl methanesulfonate	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Acetophenone	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
N-Nitrosopiperidine	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Phenyl-tert-butylamine	1700	U	ug/kg	1700	1700	U	ug/kg	1700	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300
2,6-Dichlorophenol	350	U	ug/kg	350	350	U	ug/kg	350	690	UJ	ug/kg	690	690	U	ug/kg	690
N-Nitroso-di-n-butylamine	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
N-Nitrosodiethylamine	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
N-Nitrosopyrrolidine	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Benzidine	1700	U	ug/kg	1700	1700	U	ug/kg	1700	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300
1,2,4,5-Tetrachlorobenzene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300
Pentachlorobenzene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300
1-Naphthylamine	1700	U	ug/kg	1700	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3300	U	ug/kg	3300
2-Naphthylamine	1700	U	ug/kg	1700	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3300	U	ug/kg	3300
2,3,4,6-Tetrachlorophenol	350	U	ug/kg	350	350	U	ug/kg	350	690	UJ	ug/kg	690	690	UJ	ug/kg	690
Phenacetin	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
4-Aminobiphenyl	1700	U	ug/kg	1700	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3300	U	ug/kg	3300
Pentachloronitrobenzene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300
Pronamide	350	U	ug/kg	350	350	U	ug/kg	350	690	UJ	ug/kg	690	690	UJ	ug/kg	690
p-(Dimethylamino)azobenzene	350	U	ug/kg	350	350	U	ug/kg	350	690	UJ	ug/kg	690	690	UJ	ug/kg	690
7,12-Dimethylbenz(A)Anthracene	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
3-Methylcholanthrene	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Pyridine	1700	U	ug/kg	1700	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3300	U	ug/kg	3300
N-Nitrosomethylethylamine	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
N-Nitrosomorpholine	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
o-Toluidine	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Hexachloropropene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300
p-Phenylenediamine	17000	U	ug/kg	17000	17000	U	ug/kg	17000	33000	UJ	ug/kg	33000	33000	UJ	ug/kg	33000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	M8995010				M8995011				R9955003				R9955004			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	18S00301				18S00301D				18S00401				18S00401D			
Collect Date:	22-MAY-95				22-MAY-95				23-MAY-95				23-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	1700	U	ug/kg	1700	1700	U	ug/kg	1700	3300	UJ	ug/kg	3300	3300	U	ug/kg	3300
Isosafrole	1700	U	ug/kg	1700	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3300	U	ug/kg	3300
1,4-Naphthoquinone	35000	U	ug/kg	35000	35000	U	ug/kg	35000	69000	U	ug/kg	69000	69000	R	ug/kg	69000
1,3-Dinitrobenzene	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
5-Nitro-o-toluidine	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
1,3,5-Trinitrobenzene	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
4-Nitroquinoline-1-oxide	17000	R	ug/kg	17000	17000	R	ug/kg	17000	33000	U	ug/kg	33000	33000	UJ	ug/kg	33000
Methapyrilene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300
3,3-Dimethylbenzidine	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Hexachlorophene	17000	U	ug/kg	17000	17000	U	ug/kg	17000	33000	R	ug/kg	33000	33000	R	ug/kg	33000
Aramite	1700	U	ug/kg	1700	1700	U	ug/kg	1700	3300	U	ug/kg	3300	3300	U	ug/kg	3300
2-Chlorophenol	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
3- & 4-Methylphenol (2)	350	U	ug/kg	350	350	U	ug/kg	350	690	U	ug/kg	690	690	U	ug/kg	690
Hexachloropropene	1700	U	ug/kg	1700	1700	U	ug/kg	1700	3300	UJ	ug/kg	3300	3300	UJ	ug/kg	3300
2-Acetylaminofluorene	350	U	ug/kg	350	350	U	ug/kg	350	690	UJ	ug/kg	690	690	UJ	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	M9000008RE
Site	GROUP111
Locator	14S01501RE
Collect Date:	23-MAY-95

		VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg				
N-Nitrosodimethylamine		3500	R	ug/kg	3500
Phenol		3500	R	ug/kg	3500
Aniline		3500	R	ug/kg	3500
bis(2-Chloroethyl) ether		3500	R	ug/kg	3500
Benzyl Alcohol		3500	R	ug/kg	3500
2-Methylphenol		3500	R	ug/kg	3500
bis(2-Chloroisopropyl) ether		3500	R	ug/kg	3500
N-Nitroso-di-n-propylamine		3500	R	ug/kg	3500
Hexachloroethane		3500	R	ug/kg	3500
Nitrobenzene		3500	R	ug/kg	3500
Isophorone		3500	R	ug/kg	3500
2-Nitrophenol		3500	R	ug/kg	3500
2,4-Dimethylphenol		3500	R	ug/kg	3500
Benzoic acid		17000	R	ug/kg	17000
bis(2-Chloroethoxy) methane		3500	R	ug/kg	3500
2,4-Dichlorophenol		3500	R	ug/kg	3500
1,2,4-Trichlorobenzene		3500	R	ug/kg	3500
Naphthalene		3500	R	ug/kg	3500
4-Chloroaniline		3500	R	ug/kg	3500
Hexachlorobutadiene		3500	R	ug/kg	3500
4-Chloro-3-methylphenol		3500	R	ug/kg	3500
2-Methylnaphthalene		3500	R	ug/kg	3500
Hexachlorocyclopentadiene		3500	R	ug/kg	3500
2,4,6-Trichlorophenol		3500	R	ug/kg	3500
Dimethylphthalate		3500	R	ug/kg	3500
2,4,5-Trichlorophenol		17000	R	ug/kg	17000
2-Chloronaphthalene		3500	R	ug/kg	3500
2-Nitroaniline		17000	R	ug/kg	17000
Acenaphthylene		3500	R	ug/kg	3500
2,6-Dinitrotoluene		3500	R	ug/kg	3500
3-Nitroaniline		17000	R	ug/kg	17000
Acenaphthene		3500	R	ug/kg	3500
2,4-Dinitrophenol		17000	R	ug/kg	17000
4-Nitrophenol		17000	R	ug/kg	17000
Dibenzofuran		3500	R	ug/kg	3500
2,4-Dinitrotoluene		3500	R	ug/kg	3500
Diethylphthalate		3500	R	ug/kg	3500
4-Chlorophenyl-phenylether		3500	R	ug/kg	3500
Fluorene		3500	R	ug/kg	3500
4-Nitroaniline		17000	R	ug/kg	17000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	M900000BRE			
Site	GROUP111			
Locator	14S01501RE			
Collect Date:	23-MAY-95			
	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	17000	R	ug/kg	17000
N-Nitrosodiphenylamine (1)	3500	R	ug/kg	3500
1,2-Diphenylhydrazine	3500	R	ug/kg	3500
4-Bromophenyl-phenylether	3500	R	ug/kg	3500
Hexachlorobenzene	3500	R	ug/kg	3500
Pentachlorophenol	17000	R	ug/kg	17000
Phenanthrene	3500	R	ug/kg	3500
Anthracene	3500	R	ug/kg	3500
Di-n-Butylphthalate	3500	R	ug/kg	3500
Fluoranthene	3500	R	ug/kg	3500
Pyrene	3500	R	ug/kg	3500
Butylbenzylphthalate	3500	R	ug/kg	3500
3,3-Dichlorobenzidine	6900	R	ug/kg	6900
Benzo (a) anthracene	3500	R	ug/kg	3500
Chrysene	3500	R	ug/kg	3500
bis(2-Ethylhexyl) phthalate	3500	R	ug/kg	3500
Di-n-octylphthalate	3500	R	ug/kg	3500
Benzo (b) fluoranthene	3500	R	ug/kg	3500
Benzo (k) fluoranthene	3500	R	ug/kg	3500
Benzo (a) pyrene	3500	R	ug/kg	3500
Indeno (1,2,3-cd) pyrene	3500	R	ug/kg	3500
Dibenz (a,h) anthracene	3500	R	ug/kg	3500
Benzo (g,h,i) perylene	3500	R	ug/kg	3500
2-Picoline	17000	R	ug/kg	17000
Methyl methanesulfonate	3500	R	ug/kg	3500
Ethyl methanesulfonate	3500	R	ug/kg	3500
Acetophenone	3500	R	ug/kg	3500
N-Nitrosopiperidine	3500	R	ug/kg	3500
Phenyl-tert-butylamine	17000	R	ug/kg	17000
2,6-Dichlorophenol	3500	R	ug/kg	3500
N-Nitroso-di-n-butylamine	3500	R	ug/kg	3500
N-Nitrosodiethylamine	3500	R	ug/kg	3500
N-Nitrosopyrrolidine	3500	R	ug/kg	3500
Benzidine	17000	R	ug/kg	17000
1,2,4,5-Tetrachlorobenzene	17000	R	ug/kg	17000
Pentachlorobenzene	17000	R	ug/kg	17000
1-Naphthylamine	17000	R	ug/kg	17000
2-Naphthylamine	17000	R	ug/kg	17000
2,3,4,6-Tetrachlorophenol	3500	R	ug/kg	3500
Phenacetin	3500	R	ug/kg	3500
4-Aminobiphenyl	17000	R	ug/kg	17000
Pentachloronitrobenzene	17000	R	ug/kg	17000
Pronamide	3500	R	ug/kg	3500
p-(Dimethylamino)azobenzene	3500	R	ug/kg	3500
7,12-Dimethylbenz(A)Anthracene	3500	R	ug/kg	3500
3-Methylcholanthrene	3500	R	ug/kg	3500
Pyridine	17000	R	ug/kg	17000
N-Nitrosomethylethylamine	3500	R	ug/kg	3500
N-Nitrosomorpholine	3500	R	ug/kg	3500
o-Toluidine	3500	R	ug/kg	3500
Hexachloropropene	17000	R	ug/kg	17000
p-Phenylenediamine	170000	R	ug/kg	17000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	M9000008RE			
Site	GROUP111			
Locator	14S01501RE			
Collect Date:	23-MAY-95			
	VALUE	QUAL	UNITS	DL
Safrole	17000	R	ug/kg	17000
Isosafrole	17000	R	ug/kg	17000
1,4-Naphthoquinone	350000	R	ug/kg	35000
1,3-Dinitrobenzene	3500	R	ug/kg	3500
5-Nitro-o-toluidine	3500	R	ug/kg	3500
1,3,5-Trinitrobenzene	3500	R	ug/kg	3500
4-Nitroquinoline-1-oxide	170000	R	ug/kg	17000
Methapyrilene	17000	R	ug/kg	17000
3,3-Dimethylbenzidine	3500	R	ug/kg	3500
Hexachlorophene	170000	R	ug/kg	17000
Aramite	17000	R	ug/kg	17000
2-Chlorophenol	3500	R	ug/kg	3500
3- & 4-Methylphenol (2)	3500	R	ug/kg	3500
Hexachloropropene	17000	R	ug/kg	17000
2-Acetylaminofluorene	3500	R	ug/kg	3500

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	R9756007				R9756008				R9756001				R9756009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S00101				14S00201				14S00301				14S00401			
Collect Date:	09-APR-95				09-APR-95				09-APR-95				09-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs ug/kg																
alpha-BHC	4.5	U	ug/kg	4.5	.7	U	ug/kg	.7	1.4	U	ug/kg	1.4	.7	U	ug/kg	.7
beta-BHC	8.7	U	ug/kg	8.7	1.4	U	ug/kg	1.4	2.8	U	ug/kg	2.8	1.4	U	ug/kg	1.4
delta-BHC	4.5	U	ug/kg	4.5	.7	U	ug/kg	.7	1.4	U	ug/kg	1.4	.7	U	ug/kg	.7
gamma-BHC (Lindane)	4.5	U	ug/kg	4.5	.7	U	ug/kg	.7	1.4	U	ug/kg	1.4	.7	U	ug/kg	.7
Heptachlor	4.5	U	ug/kg	4.5	.7	U	ug/kg	.7	1.4	U	ug/kg	1.4	.7	U	ug/kg	.7
Aldrin	4.5	U	ug/kg	4.5	.7	U	ug/kg	.7	1.4	U	ug/kg	1.4	.7	U	ug/kg	.7
Heptachlor epoxide	4.5	U	ug/kg	4.5	.7	U	ug/kg	.7	1.4	U	ug/kg	1.4	.7	U	ug/kg	.7
Endosulfan I	4.5	U	ug/kg	4.5	.7	U	ug/kg	.7	1.4	U	ug/kg	1.4	.7	U	ug/kg	.7
Dieldrin	4.5	U	ug/kg	4.5	.7	U	ug/kg	.7	1.4	U	ug/kg	1.4	.7	U	ug/kg	.7
4,4-DDE	4.5	U	ug/kg	4.5	.7	U	ug/kg	.7	1.4	U	ug/kg	1.4	.7	U	ug/kg	.7
Endrin	8.7	U	ug/kg	8.7	1.4	U	ug/kg	1.4	2.8	U	ug/kg	2.8	1.4	U	ug/kg	1.4
Endosulfan II	8.7	U	ug/kg	8.7	1.4	U	ug/kg	1.4	2.8	U	ug/kg	2.8	1.4	U	ug/kg	1.4
4,4-DDD	8.7	U	ug/kg	8.7	1.4	U	ug/kg	1.4	2.8	U	ug/kg	2.8	1.4	U	ug/kg	1.4
Endosulfan sulfate	8.7	U	ug/kg	8.7	1.4	U	ug/kg	1.4	2.8	U	ug/kg	2.8	1.4	U	ug/kg	1.4
4,4-DDT	8.7	U	ug/kg	8.7	1.4	U	ug/kg	1.4	2.8	U	ug/kg	2.8	1.4	U	ug/kg	1.4
Methoxychlor	18	U	ug/kg	18	2.8	U	ug/kg	2.8	5.8	U	ug/kg	5.8	2.8	U	ug/kg	2.8
Endrin aldehyde	8.7	U	ug/kg	8.7	1.4	U	ug/kg	1.4	2.8	U	ug/kg	2.8	1.4	U	ug/kg	1.4
Endrin ketone	8.7	U	ug/kg	8.7	1.4	U	ug/kg	1.4	2.8	U	ug/kg	2.8	1.4	U	ug/kg	1.4
Chlordane	150		ug/kg	45	7	U	ug/kg	7	14	U	ug/kg	14	7	U	ug/kg	7
Chlorobenzilate	130	U	ug/kg	130	21	U	ug/kg	21	43	U	ug/kg	43	21	U	ug/kg	21
Diallate	270	U	ug/kg	270	42	U	ug/kg	42	86	U	ug/kg	86	42	U	ug/kg	42
Toxaphene	220	U	ug/kg	220	35	U	ug/kg	35	69	U	ug/kg	69	35	U	ug/kg	35
Isodrin	4.5	U	ug/kg	4.5	.7	U	ug/kg	.7	1.4	U	ug/kg	1.4	.7	U	ug/kg	.7
Kepone	270	UJ	ug/kg	270	42	UJ	ug/kg	42	86	UJ	ug/kg	86	42	UJ	ug/kg	42
Aroclor-1016	220	U	ug/kg	220	35	U	ug/kg	35	69	U	ug/kg	69	35	U	ug/kg	35
Aroclor-1221	450	U	ug/kg	450	70	U	ug/kg	70	140	U	ug/kg	140	70	U	ug/kg	70
Aroclor-1232	450	U	ug/kg	450	70	U	ug/kg	70	140	U	ug/kg	140	70	U	ug/kg	70
Aroclor-1242	220	U	ug/kg	220	35	U	ug/kg	35	69	U	ug/kg	69	35	U	ug/kg	35
Aroclor-1248	220	U	ug/kg	220	35	U	ug/kg	35	69	U	ug/kg	69	35	U	ug/kg	35
Aroclor-1254	110	U	ug/kg	110	18	U	ug/kg	18	72		ug/kg	36	18	U	ug/kg	18
Aroclor-1260	110	U	ug/kg	110	18	U	ug/kg	18	36	U	ug/kg	36	18	U	ug/kg	18

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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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:		R9756002				R9756010				R9756011				R9756012			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		14S00501				14S00601				14S00701				14S00801			
Collect Date:		09-APR-95				09-APR-95				09-APR-95				09-APR-95			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg																
alpha-BHC		14	UJ	ug/kg	14	.7	U	ug/kg	.7	.7	U	ug/kg	.7	.7	U	ug/kg	.7
beta-BHC		28	UJ	ug/kg	28	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
delta-BHC		14	UJ	ug/kg	14	.7	U	ug/kg	.7	.7	U	ug/kg	.7	.7	U	ug/kg	.7
gamma-BHC (Lindane)		14	UJ	ug/kg	14	.7	U	ug/kg	.7	.7	U	ug/kg	.7	.7	U	ug/kg	.7
Heptachlor		14	UJ	ug/kg	14	.7	U	ug/kg	.7	.7	U	ug/kg	.7	.7	U	ug/kg	.7
Aldrin		14	UJ	ug/kg	14	.7	U	ug/kg	.7	.7	U	ug/kg	.7	.7	U	ug/kg	.7
Heptachlor epoxide		14	UJ	ug/kg	14	.7	U	ug/kg	.7	.7	U	ug/kg	.7	.7	U	ug/kg	.7
Endosulfan I		14	UJ	ug/kg	14	.7	U	ug/kg	.7	.7	U	ug/kg	.7	.7	U	ug/kg	.7
Dieldrin		14	UJ	ug/kg	14	.7	U	ug/kg	.7	.7	U	ug/kg	.7	.7	U	ug/kg	.7
4,4-DDE		14	UJ	ug/kg	14	.7	U	ug/kg	.7	.7	U	ug/kg	.7	.7	U	ug/kg	.7
Endrin		14	U	ug/kg	14	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endosulfan II		14	U	ug/kg	14	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
4,4-DDD		14	U	ug/kg	14	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endosulfan sulfate		14	U	ug/kg	14	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
4,4-DDT		14	U	ug/kg	14	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Methoxychlor		28	U	ug/kg	28	2.8	U	ug/kg	2.8	2.8	U	ug/kg	2.8	2.8	U	ug/kg	2.8
Endrin aldehyde		14	U	ug/kg	14	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endrin ketone		14	U	ug/kg	14	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Chlordane		70	U	ug/kg	70	7	U	ug/kg	7	7	U	ug/kg	7	7	U	ug/kg	7
Chlorobenzilate		210	U	ug/kg	210	21	U	ug/kg	21	21	U	ug/kg	21	21	U	ug/kg	21
Diallate		420	U	ug/kg	420	42	U	ug/kg	42	42	U	ug/kg	42	42	U	ug/kg	42
Toxaphene		350	U	ug/kg	350	34	U	ug/kg	34	35	U	ug/kg	35	35	U	ug/kg	35
Isodrin		7	U	ug/kg	7	.7	U	ug/kg	.7	.7	U	ug/kg	.7	.7	U	ug/kg	.7
Kepone		420	UJ	ug/kg	420	42	UJ	ug/kg	42	42	UJ	ug/kg	42	42	UJ	ug/kg	42
Aroclor-1016		700	UJ	ug/kg	700	34	U	ug/kg	34	35	U	ug/kg	35	35	U	ug/kg	35
Aroclor-1221		1400	UJ	ug/kg	1400	70	U	ug/kg	70	70	U	ug/kg	70	70	U	ug/kg	70
Aroclor-1232		1400	UJ	ug/kg	1400	70	U	ug/kg	70	70	U	ug/kg	70	70	U	ug/kg	70
Aroclor-1242		700	UJ	ug/kg	700	34	U	ug/kg	34	35	U	ug/kg	35	35	U	ug/kg	35
Aroclor-1248		700	UJ	ug/kg	700	34	U	ug/kg	34	35	U	ug/kg	35	35	U	ug/kg	35
Aroclor-1254		180	U	ug/kg	180	18	U	ug/kg	18	18	U	ug/kg	18	18	U	ug/kg	18
Aroclor-1260		180	U	ug/kg	180	18	U	ug/kg	18	18	U	ug/kg	18	18	U	ug/kg	18

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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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:		R9756013				R9756014				R9756004				R9756005		
Site		GROUP111				GROUP111				GROUP111				GROUP111		
Locator		14S00901				14S01001				14S01101				14S01101D		
Collect Date:		09-APR-95				09-APR-95				09-APR-95				09-APR-95		
		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	3.5	U	ug/kg	3.5	1.4	U	ug/kg	1.4	.69	U	ug/kg	.69
beta-BHC		1.4	U	ug/kg	1.4	6.8	U	ug/kg	6.8	2.6	U	ug/kg	2.6	1.3	U	ug/kg	1.3
delta-BHC		.7	U	ug/kg	.7	3.5	U	ug/kg	3.5	1.4	U	ug/kg	1.4	.69	U	ug/kg	.69
gamma-BHC (Lindane)		.7	U	ug/kg	.7	3.5	U	ug/kg	3.5	1.4	U	ug/kg	1.4	.69	U	ug/kg	.69
Heptachlor		.7	U	ug/kg	.7	3.5	U	ug/kg	3.5	1.4	U	ug/kg	1.4	1.3	UJ	ug/kg	1.3
Aldrin		.7	U	ug/kg	.7	3.5	U	ug/kg	3.5	1.4	U	ug/kg	1.4	.69	U	ug/kg	.69
Heptachlor epoxide		.7	U	ug/kg	.7	3.5	U	ug/kg	3.5	1.4	U	ug/kg	1.4	.69	U	ug/kg	.69
Endosulfan I		.7	U	ug/kg	.7	7	UJ	ug/kg	7	1.4	U	ug/kg	1.4	.69	U	ug/kg	.69
Dieldrin		.7	U	ug/kg	.7	3.5	U	ug/kg	3.5	1.4	U	ug/kg	1.4	.69	U	ug/kg	.69
4,4-DDE		.7	U	ug/kg	.7	3.5	U	ug/kg	3.5	1.4	U	ug/kg	1.4	.69	U	ug/kg	.69
Endrin		1.4	U	ug/kg	1.4	6.8	U	ug/kg	6.8	2.6	U	ug/kg	2.6	1.3	U	ug/kg	1.3
Endosulfan II		1.4	U	ug/kg	1.4	6.8	U	ug/kg	6.8	2.6	U	ug/kg	2.6	1.3	U	ug/kg	1.3
4,4-DDD		1.4	U	ug/kg	1.4	6.8	U	ug/kg	6.8	2.6	U	ug/kg	2.6	1.3	U	ug/kg	1.3
Endosulfan sulfate		1.4	U	ug/kg	1.4	6.8	U	ug/kg	6.8	2.6	U	ug/kg	2.6	1.3	U	ug/kg	1.3
4,4-DDT		1.4	U	ug/kg	1.4	6.8	U	ug/kg	6.8	2.6	U	ug/kg	2.6	1.3	U	ug/kg	1.3
Methoxychlor		2.8	U	ug/kg	2.8	14	U	ug/kg	14	5.4	U	ug/kg	5.4	2.8	U	ug/kg	2.8
Endrin aldehyde		1.4	U	ug/kg	1.4	6.8	U	ug/kg	6.8	2.6	U	ug/kg	2.6	1.3	U	ug/kg	1.3
Endrin ketone		1.4	U	ug/kg	1.4	6.8	U	ug/kg	6.8	2.6	U	ug/kg	2.6	1.3	U	ug/kg	1.3
Chlordane		7	U	ug/kg	7	70	UJ	ug/kg	70	12	J	ug/kg	14	6.9	U	ug/kg	6.9
Chlorobenzilate		21	U	ug/kg	21	100	U	ug/kg	100	40	U	ug/kg	40	21	U	ug/kg	21
Diallate		42	U	ug/kg	42	210	U	ug/kg	210	80	U	ug/kg	80	41	U	ug/kg	41
Toxaphene		35	U	ug/kg	35	170	U	ug/kg	170	67	U	ug/kg	67	34	U	ug/kg	34
Isodrin		.7	U	ug/kg	.7	3.5	U	ug/kg	3.5	1.4	U	ug/kg	1.4	.69	U	ug/kg	.69
Kepone		42	UJ	ug/kg	42	42	UJ	ug/kg	42	40	UJ	ug/kg	40	41	UJ	ug/kg	41
Aroclor-1016		35	U	ug/kg	35	170	U	ug/kg	170	67	U	ug/kg	67	34	U	ug/kg	34
Aroclor-1221		70	U	ug/kg	70	350	U	ug/kg	350	140	U	ug/kg	140	69	U	ug/kg	69
Aroclor-1232		70	U	ug/kg	70	350	U	ug/kg	350	140	U	ug/kg	140	69	U	ug/kg	69
Aroclor-1242		35	U	ug/kg	35	170	U	ug/kg	170	67	U	ug/kg	67	34	U	ug/kg	34
Aroclor-1248		35	U	ug/kg	35	340	UJ	ug/kg	340	67	U	ug/kg	67	34	U	ug/kg	34
Aroclor-1254		18	U	ug/kg	18	89	U	ug/kg	89	34	U	ug/kg	34	18	U	ug/kg	18
Aroclor-1260		18	U	ug/kg	18	89	U	ug/kg	89	34	U	ug/kg	34	18	U	ug/kg	18

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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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:		R9756006			R9756016			R9756003			M9000008		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		14S01201			14S01301			14S01401			14S01501		
Collect Date:		09-APR-95			09-APR-95			09-APR-95			23-MAY-95		
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	
PESTICIDES/PCBs	ug/kg												
alpha-BHC	.7	U	ug/kg	.7	3.6	U	ug/kg	3.6	.72	U	ug/kg	.72	.7 U ug/kg .7
beta-BHC	1.4	U	ug/kg	1.4	6.9	U	ug/kg	6.9	1.4	U	ug/kg	1.4	1.4 U ug/kg 1.4
delta-BHC	.7	U	ug/kg	.7	3.6	U	ug/kg	3.6	.72	U	ug/kg	.72	.7 U ug/kg .7
gamma-BHC (Lindane)	.7	U	ug/kg	.7	3.6	U	ug/kg	3.6	.72	U	ug/kg	.72	.7 U ug/kg .7
Heptachlor	.7	U	ug/kg	.7	3.6	U	ug/kg	3.6	.72	U	ug/kg	.72	.77 ug/kg .7
Aldrin	.7	U	ug/kg	.7	3.6	U	ug/kg	3.6	.72	U	ug/kg	.72	.7 U ug/kg .7
Heptachlor epoxide	.7	U	ug/kg	.7	3.6	U	ug/kg	3.6	.72	U	ug/kg	.72	.7 U ug/kg .7
Endosulfan I	.7	U	ug/kg	.7	3.6	U	ug/kg	3.6	.72	U	ug/kg	.72	.7 U ug/kg .7
Dieldrin	.7	U	ug/kg	.7	3.6	U	ug/kg	3.6	.72	U	ug/kg	.72	.7 U ug/kg .7
4,4-DDE	.7	U	ug/kg	.7	3.6	U	ug/kg	3.6	.72	U	ug/kg	.72	.7 U ug/kg .7
Endrin	1.4	U	ug/kg	1.4	6.9	U	ug/kg	6.9	1.4	U	ug/kg	1.4	1.4 U ug/kg 1.4
Endosulfan II	1.4	U	ug/kg	1.4	6.9	U	ug/kg	6.9	1.4	U	ug/kg	1.4	1.4 U ug/kg 1.4
4,4-DDD	1.4	U	ug/kg	1.4	6.9	U	ug/kg	6.9	1.4	U	ug/kg	1.4	1.4 U ug/kg 1.4
Endosulfan sulfate	1.4	U	ug/kg	1.4	6.9	U	ug/kg	6.9	1.4	U	ug/kg	1.4	1.4 U ug/kg 1.4
4,4-DDT	1.4	U	ug/kg	1.4	6.9	U	ug/kg	6.9	1.4	U	ug/kg	1.4	1.4 U ug/kg 1.4
Methoxychlor	2.8	U	ug/kg	2.8	14	U	ug/kg	14	2.9	U	ug/kg	2.9	2.8 U ug/kg 2.8
Endrin aldehyde	1.4	U	ug/kg	1.4	6.9	U	ug/kg	6.9	1.4	U	ug/kg	1.4	1.4 U ug/kg 1.4
Endrin ketone	1.4	U	ug/kg	1.4	6.9	U	ug/kg	6.9	1.4	U	ug/kg	1.4	1.4 U ug/kg 1.4
Chlordane	7	U	ug/kg	7	36	U	ug/kg	36	7.2	U	ug/kg	7.2	7 U ug/kg 7
Chlorobenzilate	21	U	ug/kg	21	110	U	ug/kg	110	22	U	ug/kg	22	21 U ug/kg 21
Diallate	42	U	ug/kg	42	210	U	ug/kg	210	42	U	ug/kg	42	43 U ug/kg 43
Toxaphene	35	U	ug/kg	35	180	U	ug/kg	180	35	U	ug/kg	35	34 U ug/kg 34
Isodrin	.7	U	ug/kg	.7	3.6	U	ug/kg	3.6	.72	U	ug/kg	.72	.7 U ug/kg .7
Kepone	42	UJ	ug/kg	42	43	UJ	ug/kg	43	43	UJ	ug/kg	43	42 U ug/kg 42
Aroclor-1016	35	U	ug/kg	35	180	U	ug/kg	180	35	U	ug/kg	35	34 U ug/kg 34
Aroclor-1221	70	U	ug/kg	70	360	U	ug/kg	360	70	U	ug/kg	70	70 U ug/kg 70
Aroclor-1232	70	U	ug/kg	70	360	U	ug/kg	360	70	U	ug/kg	70	70 U ug/kg 70
Aroclor-1242	35	U	ug/kg	35	180	U	ug/kg	180	35	U	ug/kg	35	34 U ug/kg 34
Aroclor-1248	35	U	ug/kg	35	180	U	ug/kg	180	35	U	ug/kg	35	34 U ug/kg 34
Aroclor-1254	18	U	ug/kg	18	90	U	ug/kg	90	18	U	ug/kg	18	18 U ug/kg 18
Aroclor-1260	18	U	ug/kg	18	90	U	ug/kg	90	18	U	ug/kg	18	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:		R9756017			R9756018			R9756015			M8867004		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		14S01601			14S01601D			14S01701			14S01901		
Collect Date:		09-APR-95			09-APR-95			09-APR-95			24-APR-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg												
alpha-BHC		3.5 U	ug/kg	3.5	3.5 U	ug/kg	3.5	.71 U	ug/kg	.71	.68 U	ug/kg	.68
beta-BHC		6.8 U	ug/kg	6.8	6.8 U	ug/kg	6.8	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3
delta-BHC		3.5 U	ug/kg	3.5	3.5 U	ug/kg	3.5	.71 U	ug/kg	.71	.68 U	ug/kg	.68
gamma-BHC (Lindane)		3.5 U	ug/kg	3.5	3.5 U	ug/kg	3.5	.71 U	ug/kg	.71	.68 U	ug/kg	.68
Heptachlor		3.5 U	ug/kg	3.5	3.5 U	ug/kg	3.5	.71 U	ug/kg	.71	.68 U	ug/kg	.68
Aldrin		3.5 U	ug/kg	3.5	3.5 U	ug/kg	3.5	.71 U	ug/kg	.71	.68 U	ug/kg	.68
Heptachlor epoxide		3.5 U	ug/kg	3.5	3.5 U	ug/kg	3.5	.71 U	ug/kg	.71	.68 U	ug/kg	.68
Endosulfan I		3.5 U	ug/kg	3.5	3.5 U	ug/kg	3.5	.71 U	ug/kg	.71	.68 U	ug/kg	.68
Dieldrin		3.5 U	ug/kg	3.5	3.5 U	ug/kg	3.5	.71 U	ug/kg	.71	.68 U	ug/kg	.68
4,4-DDE		3.5 U	ug/kg	3.5	3.5 U	ug/kg	3.5	.71 U	ug/kg	.71	.68 U	ug/kg	.68
Endrin		6.8 U	ug/kg	6.8	6.8 U	ug/kg	6.8	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3
Endosulfan II		6.8 U	ug/kg	6.8	6.8 U	ug/kg	6.8	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3
4,4-DDD		6.8 U	ug/kg	6.8	6.8 U	ug/kg	6.8	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3
Endosulfan sulfate		6.8 U	ug/kg	6.8	6.8 U	ug/kg	6.8	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3
4,4-DDT		6.8 U	ug/kg	6.8	6.8 U	ug/kg	6.8	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3
Methoxychlor		14 U	ug/kg	14	14 U	ug/kg	14	2.9 U	ug/kg	2.9	2.8 U	ug/kg	2.8
Endrin aldehyde		6.8 U	ug/kg	6.8	6.8 U	ug/kg	6.8	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3
Endrin ketone		6.8 U	ug/kg	6.8	6.8 U	ug/kg	6.8	1.4 U	ug/kg	1.4	1.3 U	ug/kg	1.3
Chlordane		3.5 U	ug/kg	3.5	35 U	ug/kg	35	7.1 U	ug/kg	7.1	6.8 U	ug/kg	6.8
Chlorobenzilate		100 U	ug/kg	100	100 U	ug/kg	100	21 U	ug/kg	21	20 U	ug/kg	20
Diallate		210 U	ug/kg	210	210 U	ug/kg	210	42 U	ug/kg	42	41 U	ug/kg	41
Toxaphene		170 U	ug/kg	170	170 U	ug/kg	170	35 U	ug/kg	35	34 U	ug/kg	34
Isodrin		3.5 U	ug/kg	3.5	3.5 U	ug/kg	3.5	.71 U	ug/kg	.71	.68 U	ug/kg	.68
Kepone		42 UJ	ug/kg	42	42 UJ	ug/kg	42	43 UJ	ug/kg	43	41 U	ug/kg	41
Aroclor-1016		170 U	ug/kg	170	170 U	ug/kg	170	35 U	ug/kg	35	34 U	ug/kg	34
Aroclor-1221		350 U	ug/kg	350	350 U	ug/kg	350	71 U	ug/kg	71	68 U	ug/kg	68
Aroclor-1232		350 U	ug/kg	350	350 U	ug/kg	350	71 U	ug/kg	71	68 U	ug/kg	68
Aroclor-1242		170 U	ug/kg	170	170 U	ug/kg	170	35 U	ug/kg	35	34 U	ug/kg	34
Aroclor-1248		170 U	ug/kg	170	170 U	ug/kg	170	35 U	ug/kg	35	34 U	ug/kg	34
Aroclor-1254		88 U	ug/kg	88	88 U	ug/kg	88	18 U	ug/kg	18	17 U	ug/kg	17
Aroclor-1260		88 U	ug/kg	88	88 U	ug/kg	88	18 U	ug/kg	18	17 U	ug/kg	17

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:		M8867002			M8867003			M8995001			M8995003		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		14S02001			14S02001D			14S02101			14S02201		
Collect Date:		24-APR-95			24-APR-95			20-MAY-95			21-MAY-95		
		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	.71 U	ug/kg	.71	3.6 U	ug/kg	3.6	.72 U	ug/kg	.72
beta-BHC		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	7.1 U	ug/kg	7.1	1.4 U	ug/kg	1.4
delta-BHC		.7 U	ug/kg	.7	.71 U	ug/kg	.71	3.6 U	ug/kg	3.6	.74 U	ug/kg	.74
gamma-BHC (Lindane)		.7 U	ug/kg	.7	.71 U	ug/kg	.71	3.6 U	ug/kg	3.6	.74 U	ug/kg	.74
Heptachlor		.7 U	ug/kg	.7	.71 U	ug/kg	.71	3.6 U	ug/kg	3.6	.74 U	ug/kg	.74
Aldrin		.7 U	ug/kg	.7	.71 U	ug/kg	.71	3.6 U	ug/kg	3.6	.74 U	ug/kg	.74
Heptachlor epoxide		.7 U	ug/kg	.7	.71 U	ug/kg	.71	3.6 U	ug/kg	3.6	.74 U	ug/kg	.74
Endosulfan I		.7 U	ug/kg	.7	.71 U	ug/kg	.71	3.6 U	ug/kg	3.6	.74 U	ug/kg	.74
Dieldrin		.7 U	ug/kg	.7	.71 U	ug/kg	.71	3.6 U	ug/kg	3.6	.74 U	ug/kg	.74
4,4-DDE		.7 U	ug/kg	.7	.71 U	ug/kg	.71	3.6 U	ug/kg	3.6	.74 U	ug/kg	.74
Endrin		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	7.1 U	ug/kg	7.1	1.4 U	ug/kg	1.4
Endosulfan II		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	7.1 U	ug/kg	7.1	1.4 U	ug/kg	1.4
4,4-DDD		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	7.1 U	ug/kg	7.1	1.4 U	ug/kg	1.4
Endosulfan sulfate		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	7.1 U	ug/kg	7.1	1.4 U	ug/kg	1.4
4,4-DDT		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	7.1 U	ug/kg	7.1	1.4 U	ug/kg	1.4
Methoxychlor		2.8 U	ug/kg	2.8	2.9 U	ug/kg	2.9	15 U	ug/kg	15	2.9 U	ug/kg	2.9
Endrin aldehyde		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	7.1 U	ug/kg	7.1	1.4 U	ug/kg	1.4
Endrin ketone		1.4 U	ug/kg	1.4	1.4 U	ug/kg	1.4	7.1 U	ug/kg	7.1	1.4 U	ug/kg	1.4
Chlordane		7 U	ug/kg	7	7.1 U	ug/kg	7.1	36 U	ug/kg	36	7.4 U	ug/kg	7.4
Chlorobenzilate		21 U	ug/kg	21	21 U	ug/kg	21	110 U	ug/kg	110	22 U	ug/kg	22
Diallate		42 U	ug/kg	42	43 U	ug/kg	43	220 U	ug/kg	220	43 U	ug/kg	43
Toxaphene		34 U	ug/kg	34	35 U	ug/kg	35	180 U	ug/kg	180	35 U	ug/kg	35
Isodrin		.7 U	ug/kg	.7	.71 U	ug/kg	.71	3.6 U	ug/kg	3.6	.74 U	ug/kg	.74
Kepone		42 U	ug/kg	42	43 U	ug/kg	43	220 U	ug/kg	220	43 U	ug/kg	43
Aroclor-1016		34 U	ug/kg	34	35 U	ug/kg	35	180 U	ug/kg	180	35 U	ug/kg	35
Aroclor-1221		70 U	ug/kg	70	71 U	ug/kg	71	360 U	ug/kg	360	74 U	ug/kg	74
Aroclor-1232		70 U	ug/kg	70	71 U	ug/kg	71	360 U	ug/kg	360	74 U	ug/kg	74
Aroclor-1242		34 U	ug/kg	34	35 U	ug/kg	35	180 U	ug/kg	180	35 U	ug/kg	35
Aroclor-1248		34 U	ug/kg	34	35 U	ug/kg	35	180 U	ug/kg	180	35 U	ug/kg	35
Aroclor-1254		18 U	ug/kg	18	18 U	ug/kg	18	92 U	ug/kg	92	18 U	ug/kg	18
Aroclor-1260		18 U	ug/kg	18	18 U	ug/kg	18	92 U	ug/kg	92	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:		M8995005			M8995007			M8867006			M8867005		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		14S02301			14S02401			18S00101			18S00201		
Collect Date:		21-MAY-95			21-MAY-95			24-APR-95			24-APR-95		
	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	.74	U	ug/kg	.74	.72	U	ug/kg	.72	.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	.74	U	ug/kg	.74	.72	U	ug/kg	.72	.72	U	ug/kg	.72
gamma-BHC (Lindane)	.72	U	ug/kg	.72	.74	U	ug/kg	.74	.72	U	ug/kg	.72	.72	U	ug/kg	.72
Heptachlor	.72	U	ug/kg	.72	.74	U	ug/kg	.74	.72	U	ug/kg	.72	.72	U	ug/kg	.72
Aldrin	.72	U	ug/kg	.72	.74	U	ug/kg	.74	.72	U	ug/kg	.72	.72	U	ug/kg	.72
Heptachlor epoxide	.72	U	ug/kg	.72	.74	U	ug/kg	.74	.72	U	ug/kg	.72	.72	U	ug/kg	.72
Endosulfan I	.72	U	ug/kg	.72	.74	U	ug/kg	.74	.72	U	ug/kg	.72	.72	U	ug/kg	.72
Dieldrin	.72	U	ug/kg	.72	.74	U	ug/kg	.74	6.1		ug/kg	.72	.72	U	ug/kg	.72
4,4-DDE	.72	U	ug/kg	.72	.74	U	ug/kg	.74	.72	U	ug/kg	.72	.72	U	ug/kg	.72
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	1.4	U	ug/kg	1.4
Methoxychlor	2.9	U	ug/kg	2.9	3	U	ug/kg	3	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	7.4	U	ug/kg	7.4	7.2	U	ug/kg	7.2	7.2	U	ug/kg	7.2
Chlorobenzilate	22	U	ug/kg	22	22	U	ug/kg	22	22	U	ug/kg	22	22	U	ug/kg	22
Diallate	43	U	ug/kg	43	44	U	ug/kg	44	43	U	ug/kg	43	43	U	ug/kg	43
Toxaphene	35	U	ug/kg	35	36	U	ug/kg	36	35	U	ug/kg	35	35	U	ug/kg	35
Isodrin	.72	U	ug/kg	.72	.74	U	ug/kg	.74	.72	U	ug/kg	.72	.72	U	ug/kg	.72
Kepone	43	U	ug/kg	43	44	U	ug/kg	44	43	U	ug/kg	43	43	U	ug/kg	43
Aroclor-1016	35	U	ug/kg	35	36	U	ug/kg	36	35	U	ug/kg	35	35	U	ug/kg	35
Aroclor-1221	72	U	ug/kg	72	74	U	ug/kg	74	72	U	ug/kg	72	72	U	ug/kg	72
Aroclor-1232	72	U	ug/kg	72	74	U	ug/kg	74	72	U	ug/kg	72	72	U	ug/kg	72
Aroclor-1242	35	U	ug/kg	35	36	U	ug/kg	36	35	U	ug/kg	35	35	U	ug/kg	35
Aroclor-1248	35	U	ug/kg	35	36	U	ug/kg	36	35	U	ug/kg	35	35	U	ug/kg	35
Aroclor-1254	18	U	ug/kg	18	19	U	ug/kg	19	18	U	ug/kg	18	18	U	ug/kg	18
Aroclor-1260	18	U	ug/kg	18	19	U	ug/kg	19	18	U	ug/kg	18	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:		M8995010				M8995011				R9955003				R9955004		
Site		GROUP111				GROUP111				GROUP111				GROUP111		
Locator		18S00301				18S00301D				18S00401				18S00401D		
Collect Date:		22-MAY-95				22-MAY-95				23-MAY-95				23-MAY-95		
		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	7	U	ug/kg	7	.7	U	ug/kg	.7	.7	U	ug/kg	.7
beta-BHC		2.7	U	ug/kg	2.7	14	U	ug/kg	14	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
delta-BHC		1.4	U	ug/kg	1.4	7	U	ug/kg	7	.7	U	ug/kg	.7	.7	U	ug/kg	.7
gamma-BHC (Lindane)		1.4	U	ug/kg	1.4	7	U	ug/kg	7	.7	U	ug/kg	.7	.7	U	ug/kg	.7
Heptachlor		1.4	U	ug/kg	1.4	7	U	ug/kg	7	.7	U	ug/kg	.7	.7	U	ug/kg	.7
Aldrin		1.4	U	ug/kg	1.4	7	U	ug/kg	7	.7	U	ug/kg	.7	.7	U	ug/kg	.7
Heptachlor epoxide		1.4	U	ug/kg	1.4	7	U	ug/kg	7	.7	U	ug/kg	.7	.7	U	ug/kg	.7
Endosulfan I		1.4	U	ug/kg	1.4	7	U	ug/kg	7	.7	U	ug/kg	.7	.7	U	ug/kg	.7
Dieldrin		29		ug/kg	1.4	110		ug/kg	7	.7	U	ug/kg	.7	.7	U	ug/kg	.7
4,4-DDE		1.4	U	ug/kg	1.4	7	U	ug/kg	7	.7	U	ug/kg	.7	.7	U	ug/kg	.7
Endrin		2.7	U	ug/kg	2.7	14	U	ug/kg	14	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endosulfan II		2.7	U	ug/kg	2.7	14	U	ug/kg	14	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
4,4-DDD		2.7	U	ug/kg	2.7	14	U	ug/kg	14	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endosulfan sulfate		2.7	U	ug/kg	2.7	14	U	ug/kg	14	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
4,4-DDT		2.7	U	ug/kg	2.7	14	U	ug/kg	14	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Methoxychlor		5.6	U	ug/kg	5.6	28	U	ug/kg	28	2.8	U	ug/kg	2.8	2.8	U	ug/kg	2.8
Endrin aldehyde		2.7	U	ug/kg	2.7	14	U	ug/kg	14	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Endrin ketone		2.7	U	ug/kg	2.7	14	U	ug/kg	14	1.4	U	ug/kg	1.4	1.4	U	ug/kg	1.4
Chlordane		14	U	ug/kg	14	70	U	ug/kg	70	7	U	ug/kg	7	7	U	ug/kg	7
Chlorobenzilate		42	U	ug/kg	42	210	U	ug/kg	210	21	U	ug/kg	21	21	U	ug/kg	21
Diallate		83	U	ug/kg	83	420	U	ug/kg	420	42	U	ug/kg	42	42	U	ug/kg	42
Toxaphene		69	U	ug/kg	69	340	U	ug/kg	340	35	U	ug/kg	35	34	U	ug/kg	34
Isodrin		1.4	U	ug/kg	1.4	7	U	ug/kg	7	.7	U	ug/kg	.7	.7	U	ug/kg	.7
Kepone		210	U	ug/kg	210	420	U	ug/kg	420	42	UJ	ug/kg	42	42	UJ	ug/kg	42
Aroclor-1016		69	U	ug/kg	69	340	U	ug/kg	340	35	U	ug/kg	35	34	U	ug/kg	34
Aroclor-1221		140	U	ug/kg	140	700	U	ug/kg	700	70	U	ug/kg	70	70	U	ug/kg	70
Aroclor-1232		140	U	ug/kg	140	700	U	ug/kg	700	70	U	ug/kg	70	70	U	ug/kg	70
Aroclor-1242		69	U	ug/kg	69	340	U	ug/kg	340	35	U	ug/kg	35	34	U	ug/kg	34
Aroclor-1248		69	U	ug/kg	69	340	U	ug/kg	340	35	U	ug/kg	35	34	U	ug/kg	34
Aroclor-1254		35	U	ug/kg	35	180	U	ug/kg	180	17	U	ug/kg	17	17	U	ug/kg	17
Aroclor-1260		35	U	ug/kg	35	180	U	ug/kg	180	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	R9756007				R9756008				R9756001				R9756009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S00101				14S00201				14S00301				14S00401			
Collect Date:	09-APR-95				09-APR-95				09-APR-95				09-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	1.1	U	mg/kg	1.1	1	U	mg/kg	1	1.1	U	mg/kg	1.1	1	U	mg/kg	1
Arsenic	1.4	J	mg/kg	.7	.6	J	mg/kg	.7	1.3	J	mg/kg	.7	.44	J	mg/kg	.7
Barium	9.2	J	mg/kg	.087	10.1	J	mg/kg	.083	14	J	mg/kg	.086	5.2	J	mg/kg	.084
Beryllium	.08	J	mg/kg	.043	.1	J	mg/kg	.041	.14	J	mg/kg	.043	.06	J	mg/kg	.042
Cadmium	.4	J	mg/kg	.28	.27	U	mg/kg	.27	.29	J	mg/kg	.28	.27	U	mg/kg	.27
Chromium	6.1		mg/kg	.46	2.2		mg/kg	.44	6.5		mg/kg	.45	1.2	J	mg/kg	.44
Cobalt	.89	J	mg/kg	.59	.56	U	mg/kg	.56	.89	J	mg/kg	.58	.57	U	mg/kg	.57
Copper	12.5		mg/kg	.33	9.1		mg/kg	.31	8.3		mg/kg	.32	3.2	J	mg/kg	.31
Cyanide	.13	J	mg/kg	1	.06	J	mg/kg	1	.13	J	mg/kg	1	.09	J	mg/kg	1
Lead	16.2		mg/kg	.5	3.8		mg/kg	.5	6.8		mg/kg	.5	1		mg/kg	.5
Mercury	.03	U	mg/kg	.03	.03	U	mg/kg	.03	.03	U	mg/kg	.03	.03	U	mg/kg	.03
Nickel	3.4	J	mg/kg	1.1	1.4	J	mg/kg	1.1	1.8	J	mg/kg	1.1	1.1	U	mg/kg	1.1
Selenium	.13	U	mg/kg	.13	.12	U	mg/kg	.12	.13	U	mg/kg	.13	.13	U	mg/kg	.13
Silver	.5	U	mg/kg	.5	.48	U	mg/kg	.48	.49	U	mg/kg	.49	.48	U	mg/kg	.48
Thallium	.13	U	mg/kg	.13	.12	U	mg/kg	.12	.13	U	mg/kg	.13	.13	U	mg/kg	.13
Tin	2.2	J	mg/kg	2.1	2	U	mg/kg	2	2.1	U	mg/kg	2.1	2.1	U	mg/kg	2.1
Vanadium	3.6	J	mg/kg	.33	2	J	mg/kg	.31	.8	J	mg/kg	.32	1.9	J	mg/kg	.31
Zinc	46.2		mg/kg	.26	98.6		mg/kg	.25	26		mg/kg	.26	44.8		mg/kg	.25

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:		R9756002				R9756010				R9756011				R9756012			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		14S00501				14S00601				14S00701				14S00801			
Collect Date:		09-APR-95				09-APR-95				09-APR-95				09-APR-95			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg																
Antimony		1.1	UJ	mg/kg	1.1	1	U	mg/kg	1	1.1	U	mg/kg	1.1	1.1	U	mg/kg	1.1
Arsenic		.95	J	mg/kg	.7	.48	J	mg/kg	.7	.57	J	mg/kg	.7	2.2	J	mg/kg	.7
Barium		12.8	J	mg/kg	.086	4.6	J	mg/kg	.084	5.2	J	mg/kg	.084	6.2	J	mg/kg	.091
Beryllium		.14	J	mg/kg	.043	.1	J	mg/kg	.042	.1	J	mg/kg	.042	.22	J	mg/kg	.045
Cadmium		.29	J	mg/kg	.28	.27	U	mg/kg	.27	.27	U	mg/kg	.27	.29	U	mg/kg	.29
Chromium		5.4		mg/kg	.45	2.7		mg/kg	.44	3.1		mg/kg	.44	7.1		mg/kg	.48
Cobalt		.59	J	mg/kg	.58	.57	U	mg/kg	.57	.57	U	mg/kg	.57	.61	U	mg/kg	.61
Copper		5.9		mg/kg	.32	5	J	mg/kg	.31	5.8		mg/kg	.32	4.6	J	mg/kg	.34
Cyanide		.13	J	mg/kg	1	.06	J	mg/kg	1	.05	U	mg/kg	.05	.17	J	mg/kg	1
Lead		7.3		mg/kg	.5	3		mg/kg	.5	6.1		mg/kg	.5	5.1		mg/kg	.5
Mercury		.03	U	mg/kg	.03	.03	U	mg/kg	.03	.03	U	mg/kg	.03	.03	U	mg/kg	.03
Nickel		1.5	J	mg/kg	1.1	1.1	J	mg/kg	1.1	1.1	U	mg/kg	1.1	2.2	J	mg/kg	1.2
Selenium		.13	UJ	mg/kg	.13	.13	U	mg/kg	.13	.13	U	mg/kg	.13	.18	J	mg/kg	.6
Silver		.5	U	mg/kg	.5	.48	U	mg/kg	.48	.48	U	mg/kg	.48	.52	U	mg/kg	.52
Thallium		.13	U	mg/kg	.13	.13	U	mg/kg	.13	.13	U	mg/kg	.13	.14	U	mg/kg	.14
Tin		2.1	U	mg/kg	2.1	2.1	U	mg/kg	2.1	2.1	U	mg/kg	2.1	2.2	U	mg/kg	2.2
Vanadium		5.9	J	mg/kg	.32	2.3	J	mg/kg	.31	2.4	J	mg/kg	.32	7.5	J	mg/kg	.34
Zinc		51.1		mg/kg	.26	119		mg/kg	.25	26.1		mg/kg	.25	15.5		mg/kg	.27

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	R9756013				R9756014				R9756004				R9756005			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S00901				14S01001				14S01101				14S01101D			
Collect Date:	09-APR-95				09-APR-95				09-APR-95				09-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	1.1	U	mg/kg	1.1	1.1	U	mg/kg	1.1	1	U	mg/kg	1	1	U	mg/kg	1
Arsenic	1	J	mg/kg	.7	.44	J	mg/kg	.7	.39	J	mg/kg	.7	.43	J	mg/kg	.7
Barium	5.6	J	mg/kg	.085	4.9	J	mg/kg	.087	3.4	J	mg/kg	.083	4.1	J	mg/kg	.083
Beryllium	.1	J	mg/kg	.042	.06	J	mg/kg	.044	.05	J	mg/kg	.041	.06	J	mg/kg	.041
Cadmium	.28	U	mg/kg	.28	.28	U	mg/kg	.28	.27	U	mg/kg	.27	.27	U	mg/kg	.27
Chromium	2.4		mg/kg	.45	2.5		mg/kg	.46	1.8	J	mg/kg	.44	2	J	mg/kg	.43
Cobalt	.57	U	mg/kg	.57	.59	U	mg/kg	.59	.56	U	mg/kg	.56	.56	U	mg/kg	.56
Copper	1.9	J	mg/kg	.32	4.7	J	mg/kg	.33	1.7	J	mg/kg	.31	2	J	mg/kg	.31
Cyanide	.06	J	mg/kg	1	.05	U	mg/kg	.05	.06	J	mg/kg	1	.12	J	mg/kg	1
Lead	1.4		mg/kg	.5	3.2		mg/kg	.5	.89		mg/kg	.5	1		mg/kg	.5
Mercury	.03	U	mg/kg	.03	.03	U	mg/kg	.03	.03	U	mg/kg	.03	.03	U	mg/kg	.03
Nickel	1.1	U	mg/kg	1.1	1.1	U	mg/kg	1.1	1.1	U	mg/kg	1.1	1.1	U	mg/kg	1.1
Selenium	.13	U	mg/kg	.13	.13	U	mg/kg	.13	.12	U	mg/kg	.12	.12	U	mg/kg	.12
Silver	.49	U	mg/kg	.49	.5	U	mg/kg	.5	.48	U	mg/kg	.48	.48	U	mg/kg	.48
Thallium	.13	U	mg/kg	.13	.13	U	mg/kg	.13	.12	U	mg/kg	.12	.12	U	mg/kg	.12
Tin	2.1	U	mg/kg	2.1	2.1	U	mg/kg	2.1	2	U	mg/kg	2	2	U	mg/kg	2
Vanadium	3.7	J	mg/kg	.32	1.7	J	mg/kg	.33	2	J	mg/kg	.31	2.4	J	mg/kg	.31
Zinc	4.8		mg/kg	.25	20.7		mg/kg	.26	5.5		mg/kg	.25	5		mg/kg	.25

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	R9756006				R9756016				R9756003				M9000008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S01201				14S01301				14S01401				14S01501			
Collect Date:	09-APR-95				09-APR-95				09-APR-95				23-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	1.1	U	mg/kg	1.1	1	U	mg/kg	1	1.1	U	mg/kg	1.1	.6	UJ	mg/kg	.6
Arsenic	.36	J	mg/kg	.7	.36	J	mg/kg	.7	.66	J	mg/kg	.7	.63	UJ	mg/kg	.63
Barium	3.3	J	mg/kg	.084	4.4	J	mg/kg	.084	6.4	J	mg/kg	.085	5.5	J	mg/kg	.083
Beryllium	.06	J	mg/kg	.042	.1	J	mg/kg	.042	.06	J	mg/kg	.042	.15	J	mg/kg	.029
Cadmium	.27	U	mg/kg	.27	.27	U	mg/kg	.27	.28	U	mg/kg	.28	.6	U	mg/kg	.6
Chromium	2.2		mg/kg	.44	3.4		mg/kg	.44	3		mg/kg	.44	4.2		mg/kg	1.2
Cobalt	.57	U	mg/kg	.57	.56	U	mg/kg	.56	.76	J	mg/kg	.57	.93	J	mg/kg	.77
Copper	1.2	J	mg/kg	.32	3.9	J	mg/kg	.31	9.8		mg/kg	.32	1.2	J	mg/kg	.33
Cyanide	.16	J	mg/kg	1	.06	J	mg/kg	1	.09	J	mg/kg	1	.1	U	mg/kg	.1
Lead	1.2		mg/kg	.5	9.4		mg/kg	.5	3.9		mg/kg	.5	2	J	mg/kg	.22
Mercury	.03	U	mg/kg	.03	.03	U	mg/kg	.03	.03	U	mg/kg	.03	.07	U	mg/kg	.07
Nickel	1.1	U	mg/kg	1.1	1.1	U	mg/kg	1.1	1.3	J	mg/kg	1.1	1.5	U	mg/kg	1.5
Selenium	.13	U	mg/kg	.13	.13	U	mg/kg	.13	.13	U	mg/kg	.13	.34	J	mg/kg	.23
Silver	.48	U	mg/kg	.48	.48	U	mg/kg	.48	.49	U	mg/kg	.49	.43	J	mg/kg	.37
Thallium	.13	U	mg/kg	.13	.13	U	mg/kg	.13	.13	U	mg/kg	.13	.35	U	mg/kg	.35
Tin	2.1	U	mg/kg	2.1	2	U	mg/kg	2	2.1	U	mg/kg	2.1	3.9	J	mg/kg	1.9
Vanadium	1.9	J	mg/kg	.32	2.4	J	mg/kg	.31	2.7	J	mg/kg	.32	3.3	J	mg/kg	.41
Zinc	5.5		mg/kg	.25	29		mg/kg	.25	12.5		mg/kg	.25	4.2	UJ	mg/kg	4.2

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:		R9756017			R9756018			R9756015			M8867004		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		14S01601			14S01601D			14S01701			14S01901		
Collect Date:		09-APR-95			09-APR-95			09-APR-95			24-APR-95		
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	
INORGANICS (SOIL)	mg/kg												
Antimony	1.3	U	mg/kg	1.3	1.3	U	mg/kg	1.3	1.2	U	mg/kg	1.2	.59 UJ mg/kg .59
Arsenic	.52	J	mg/kg	.7	.42	J	mg/kg	.7	.7	J	mg/kg	.7	.8 J mg/kg .16
Barium	5.6	J	mg/kg	.1	4.8	J	mg/kg	.1	21.3	J	mg/kg	.096	4.5 J mg/kg .084
Beryllium	.1	J	mg/kg	.052	.07	J	mg/kg	.052	.18	J	mg/kg	.048	.09 J mg/kg .029
Cadmium	.34	U	mg/kg	.34	.34	U	mg/kg	.34	1.4		mg/kg	.31	.61 U mg/kg .61
Chromium	3.7		mg/kg	.55	5.1		mg/kg	.55	14.8		mg/kg	.5	4.2 mg/kg 1.2
Cobalt	.7	U	mg/kg	.7	.74	J	mg/kg	.71	.96	J	mg/kg	.65	.78 U mg/kg .78
Copper	5.7	J	mg/kg	.39	4.8	J	mg/kg	.39	25.7		mg/kg	.36	3 J mg/kg .34
Cyanide	.07	U	mg/kg	.07	.07	U	mg/kg	.07	.18	J	mg/kg	1	.11 UJ mg/kg .11
Lead	12		mg/kg	.5	14.1		mg/kg	.5	24.8		mg/kg	2.5	3.6 mg/kg .26
Mercury	.04	U	mg/kg	.04	.04	J	mg/kg	.1	.04	J	mg/kg	.1	.04 U mg/kg .04
Nickel	1.4	U	mg/kg	1.4	1.4	U	mg/kg	1.4	2.3	J	mg/kg	1.2	1.5 U mg/kg 1.5
Selenium	.16	U	mg/kg	.16	.16	U	mg/kg	.16	.14	U	mg/kg	.14	.23 U mg/kg .23
Silver	.6	U	mg/kg	.6	.6	U	mg/kg	.6	.55	U	mg/kg	.55	.38 U mg/kg .38
Thallium	.16	U	mg/kg	.16	.16	U	mg/kg	.16	.14	U	mg/kg	.14	.35 U mg/kg .35
Tin	2.6	U	mg/kg	2.6	2.6	U	mg/kg	2.6	2.4	U	mg/kg	2.4	1.9 U mg/kg 1.9
Vanadium	3	J	mg/kg	.39	2.6	J	mg/kg	.39	.7	J	mg/kg	.36	2.8 J mg/kg .42
Zinc	41.6		mg/kg	.31	47		mg/kg	.31	152		mg/kg	.29	8.6 mg/kg .29

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	M8867002				M8867003				M8995001				M8995003			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S02001				14S02001D				14S02101				14S02201			
Collect Date:	24-APR-95				24-APR-95				20-MAY-95				21-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	.8	UJ	mg/kg	.8	.45	U	mg/kg	.45	.68	UJ	mg/kg	.68	.44	U	mg/kg	.44
Arsenic	.5	J	mg/kg	.16	1	J	mg/kg	.16	1.6	J	mg/kg	.16	.78	J	mg/kg	.16
Barium	3.9	J	mg/kg	.083	3.8	J	mg/kg	.086	4.4	J	mg/kg	.086	4.2	J	mg/kg	.084
Beryllium	.06	J	mg/kg	.029	.06	J	mg/kg	.03	.09	J	mg/kg	.03	.1	J	mg/kg	.029
Cadmium	.6	U	mg/kg	.6	.62	U	mg/kg	.62	.62	U	mg/kg	.62	.61	U	mg/kg	.61
Chromium	2.8		mg/kg	1.2	2.8		mg/kg	1.3	6.5		mg/kg	1.3	3.2		mg/kg	1.2
Cobalt	.77	U	mg/kg	.77	.79	U	mg/kg	.79	.79	U	mg/kg	.79	.78	U	mg/kg	.78
Copper	1.9	J	mg/kg	.33	2	J	mg/kg	.34	2.7	J	mg/kg	.34	.42	J	mg/kg	.34
Cyanide	.1	UJ	mg/kg	.1	.11	UJ	mg/kg	.11	.1	U	mg/kg	.1	.1	U	mg/kg	.1
Lead	3.3		mg/kg	.26	3.9		mg/kg	.26	1	J	mg/kg	.23	1.8	J	mg/kg	.22
Mercury	.03	U	mg/kg	.03	.03	U	mg/kg	.03	.07	UJ	mg/kg	.07	.07	UJ	mg/kg	.07
Nickel	1.5	U	mg/kg	1.5	1.5	U	mg/kg	1.5	1.5	U	mg/kg	1.5	1.5	U	mg/kg	1.5
Selenium	.23	U	mg/kg	.23	.23	U	mg/kg	.23	.23	UJ	mg/kg	.23	.23	UJ	mg/kg	.23
Silver	.37	U	mg/kg	.37	.39	U	mg/kg	.39	.4	J	mg/kg	.39	.38	U	mg/kg	.38
Thallium	.35	U	mg/kg	.35	.36	U	mg/kg	.36	.36	U	mg/kg	.36	.35	U	mg/kg	.35
Tin	1.9	U	mg/kg	1.9	4.5	J	mg/kg	1.9	15.5		mg/kg	1.9	2	J	mg/kg	1.9
Vanadium	1.8	J	mg/kg	.42	1.7	J	mg/kg	.43	6.5	J	mg/kg	.43	2.3	J	mg/kg	.42
Zinc	7.3		mg/kg	.29	7.2		mg/kg	.3	3.9	UJ	mg/kg	3.9	5.6	UJ	mg/kg	5.6

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	M8995005				M8995007				M8867006				M8867005			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14S02301				14S02401				18S00101				18S00201			
Collect Date:	21-MAY-95				21-MAY-95				24-APR-95				24-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	.54	UJ	mg/kg	.54	.54	UJ	mg/kg	.54	.45	UJ	mg/kg	.45	.85	UJ	mg/kg	.85
Arsenic	.87	J	mg/kg	.16	.49	UJ	mg/kg	.49	.58	J	mg/kg	.16	.6	J	mg/kg	.16
Barium	4.1	J	mg/kg	.085	8.3	J	mg/kg	.087	7.5	J	mg/kg	.086	3.3	J	mg/kg	.084
Beryllium	.09	J	mg/kg	.03	.22	J	mg/kg	.03	.05	J	mg/kg	.03	.05	J	mg/kg	.029
Cadmium	.62	U	mg/kg	.62	.63	U	mg/kg	.63	.62	U	mg/kg	.62	.61	U	mg/kg	.61
Chromium	6		mg/kg	1.3	8.7		mg/kg	1.3	3.7		mg/kg	1.3	3.4		mg/kg	1.2
Cobalt	.79	U	mg/kg	.79	1.5	J	mg/kg	.8	.79	U	mg/kg	.79	.77	U	mg/kg	.77
Copper	1.9	J	mg/kg	.34	1.8	J	mg/kg	.35	3.2	J	mg/kg	.34	3.5	J	mg/kg	.33
Cyanide	.1	U	mg/kg	.1	.1	U	mg/kg	.1	.11	UJ	mg/kg	.11	.11	UJ	mg/kg	.11
Lead	1.3	J	mg/kg	.23	3.1	J	mg/kg	.23	4.3		mg/kg	.26	5.8		mg/kg	.26
Mercury	.07	UJ	mg/kg	.07	.07	UJ	mg/kg	.07	.03	U	mg/kg	.03	.03	U	mg/kg	.03
Nickel	1.5	U	mg/kg	1.5	2	J	mg/kg	1.6	1.5	U	mg/kg	1.5	1.5	U	mg/kg	1.5
Selenium	.23	UJ	mg/kg	.23	.24	UJ	mg/kg	.24	.23	U	mg/kg	.23	.23	U	mg/kg	.23
Silver	.38	U	mg/kg	.38	.39	U	mg/kg	.39	.39	U	mg/kg	.39	.38	U	mg/kg	.38
Thallium	.36	U	mg/kg	.36	.37	U	mg/kg	.37	.36	U	mg/kg	.36	.35	U	mg/kg	.35
Tin	1.9	U	mg/kg	1.9	3	J	mg/kg	2	2.4	J	mg/kg	1.9	1.9	U	mg/kg	1.9
Vanadium	4.7	J	mg/kg	.43	7.8	J	mg/kg	.43	2.2	J	mg/kg	.43	2.2	J	mg/kg	.42
Zinc	4.3	UJ	mg/kg	4.3	8.9	UJ	mg/kg	8.9	6		mg/kg	.3	12.7		mg/kg	.29

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Soil Data

Lab Sample Number:	M8995010				M8995011				R9955003				R9955004			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	18S00301				18S00301D				18S00401				18S00401D			
Collect Date:	22-MAY-95				22-MAY-95				23-MAY-95				23-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	.54	UJ	mg/kg	.54	.43	UJ	mg/kg	.43	1	U	mg/kg	1	1	U	mg/kg	1
Arsenic	.23	UJ	mg/kg	.23	.43	UJ	mg/kg	.43	.63	J	mg/kg	.6	.77	J	mg/kg	.6
Barium	8.5	J	mg/kg	.082	9.8	J	mg/kg	.083	4.8	J	mg/kg	.23	5	J	mg/kg	.23
Beryllium	.07	J	mg/kg	.029	.08	J	mg/kg	.029	.11	J	mg/kg	.063	.11	J	mg/kg	.063
Cadmium	.6	U	mg/kg	.6	.6	U	mg/kg	.6	.25	U	mg/kg	.25	.25	U	mg/kg	.25
Chromium	4.2		mg/kg	1.2	4.9		mg/kg	1.2	.8	UJ	mg/kg	.8	1.3	UJ	mg/kg	1.3
Cobalt	.76	U	mg/kg	.76	.99	J	mg/kg	.76	.65	U	mg/kg	.65	.65	U	mg/kg	.65
Copper	1.8	J	mg/kg	.33	1.9	J	mg/kg	.33	6.8		mg/kg	.21	5.9		mg/kg	.21
Cyanide	.1	U	mg/kg	.1	.1	U	mg/kg	.1	.08	J	mg/kg	1	.05	U	mg/kg	.05
Lead	3.9	J	mg/kg	.22	9.5	J	mg/kg	.22	2.7		mg/kg	.4	2.8		mg/kg	.4
Mercury	.07	U	mg/kg	.07	.07	U	mg/kg	.07	.06	U	mg/kg	.06	.03	U	mg/kg	.03
Nickel	1.5	U	mg/kg	1.5	1.9	J	mg/kg	1.5	1.2	U	mg/kg	1.2	1.2	U	mg/kg	1.2
Selenium	.24	J	mg/kg	.22	.23	UJ	mg/kg	.23	.1	U	mg/kg	.1	.1	U	mg/kg	.1
Silver	.37	U	mg/kg	.37	.37	U	mg/kg	.37	.29	U	mg/kg	.29	.29	U	mg/kg	.29
Thallium	.35	U	mg/kg	.35	.35	U	mg/kg	.35	.13	U	mg/kg	.13	.13	U	mg/kg	.13
Tin	3.2	J	mg/kg	1.9	4.2	J	mg/kg	1.9	2.8	U	mg/kg	2.8	3.2	J	mg/kg	2.8
Vanadium	3.1	J	mg/kg	.41	3.5	J	mg/kg	.41	2	J	mg/kg	.25	2.2	J	mg/kg	.25
Zinc	6.8	UJ	mg/kg	6.8	3.4	UJ	mg/kg	3.4	13		mg/kg	.44	11.9		mg/kg	.44

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

SUBSURFACE SOIL SAMPLE ANALYSES, SWMUs 14 AND 18

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:		M9000003			R9955001			M9000009			R9955002		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		14B00204			14B00604			14B00704			14B00804		
Collect Date:		22-MAY-95			23-MAY-95			23-MAY-95			23-MAY-95		
	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	12	U	ug/kg	12	
Bromomethane	12	U	ug/kg	12	12	U	ug/kg	12	12	U	ug/kg	12	
Vinyl chloride	12	U	ug/kg	12	12	U	ug/kg	12	12	U	ug/kg	12	
Chloroethane	12	U	ug/kg	12	12	U	ug/kg	12	12	U	ug/kg	12	
Methylene chloride	12	U	ug/kg	12	6	U	ug/kg	6	8	U	ug/kg	8	
Acetone	12	U	ug/kg	12	12	U	ug/kg	12	12	U	ug/kg	12	
Carbon disulfide	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	
1,1-Dichloroethane	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	
1,2-Dichloroethene (total)	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	
1,2-Dichloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	
2-Butanone	12	U	ug/kg	12	12	U	ug/kg	12	12	U	ug/kg	12	
1,1,1-Trichloroethane	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	
Bromodichloromethane	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	
cis-1,3-Dichloropropene	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	
Dibromochloromethane	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	
Benzene	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	
Bromoform	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	
4-Methyl-2-pentanone	12	U	ug/kg	12	12	U	ug/kg	12	12	U	ug/kg	12	
2-Hexanone	12	U	ug/kg	12	12	U	ug/kg	12	12	U	ug/kg	12	
Tetrachloroethene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	
1,1,2,2-Tetrachloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	
Toluene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	
Chlorobenzene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	
Ethylbenzene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	
Styrene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	
Xylenes (total)	6	U	ug/kg	6	1	J	ug/kg	6	6	U	ug/kg	6	
Dichlorodifluoromethane	12	U	ug/kg	12	12	U	ug/kg	12	12	U	ug/kg	12	
Trichlorofluoromethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	
1,3-Dichlorobenzene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	
Acrolein	120	U	ug/kg	120	120	U	ug/kg	120	120	U	ug/kg	120	
Iodomethane	12	U	ug/kg	12	12	UJ	ug/kg	12	12	U	ug/kg	12	
1,4-Dichlorobenzene	6	U	ug/kg	6	6	U	ug/kg	6	820	U	ug/kg	820	
Acrylonitrile	120	U	ug/kg	120	120	U	ug/kg	120	120	U	ug/kg	120	
Dibromomethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	
1,2-Dichlorobenzene	6	U	ug/kg	6	800	U	ug/kg	800	6	U	ug/kg	6	
2-Chloroethylvinyl ether	12	U	ug/kg	12	12	U	ug/kg	12	12	U	ug/kg	12	
Ethyl methacrylate	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	
1,2,3-Trichloropropane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	
trans-1,4-Dichloro-2-butene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	
Isobutyl alcohol	240	U	ug/kg	240	240	U	ug/kg	240	250	U	ug/kg	250	
1,1,1,2-Tetrachloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	
1,2-Dibromo-3-chloropropane	12	U	ug/kg	12	12	U	ug/kg	12	12	U	ug/kg	12	
1,2-Dibromoethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:	M9000003				R9955001				M9000009				R9955002			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14B00204				14B00604				14B00704				14B00804			
Collect Date:	22-MAY-95				23-MAY-95				23-MAY-95				23-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	240	R	ug/kg	240	240	R	ug/kg	240	250	R	ug/kg	250	240	R	ug/kg	240
3-Chloropropene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
Acetonitrile	120	U	ug/kg	120	120	U	ug/kg	120	120	U	ug/kg	120	120	U	ug/kg	120
Chloroprene	240	U	ug/kg	240	240	U	ug/kg	240	250	U	ug/kg	250	240	U	ug/kg	240
Methacrylonitrile	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
Methyl methacrylate	12	U	ug/kg	12	12	U	ug/kg	12	12	U	ug/kg	12	12	U	ug/kg	12
Pentachloroethane	12	U	ug/kg	12	12	UJ	ug/kg	12	12	U	ug/kg	12	12	UJ	ug/kg	12
Propionitrile	120	U	ug/kg	120	120	U	ug/kg	120	120	U	ug/kg	120	120	U	ug/kg	120
Vinyl acetate	12	U	ug/kg	12	12	U	ug/kg	12	12	U	ug/kg	12	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:	M9000006				M9000002				M9000007				M8995002			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14801004				14801404				14801904				14802105			
Collect Date:	22-MAY-95				22-MAY-95				23-MAY-95				20-MAY-95			
	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	12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11
Bromomethane	13	U	ug/kg	13	12	UJ	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11
Vinyl chloride	13	U	ug/kg	13	12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11
Chloroethane	13	U	ug/kg	13	12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11
Methylene chloride	7	U	ug/kg	7	10	U	ug/kg	10	8	U	ug/kg	8	8	U	ug/kg	8
Acetone	13	U	ug/kg	13	12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11
Carbon disulfide	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,1-Dichloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,1-Dichloroethene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dichloroethene (total)	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Chloroform	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dichloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
2-Butanone	13	U	ug/kg	13	12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11
1,1,1-Trichloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Carbon tetrachloride	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Bromodichloromethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dichloropropane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
cis-1,3-Dichloropropene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Trichloroethene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Dibromochloromethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,1,2-Trichloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Benzene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
trans-1,3-Dichloropropene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Bromoform	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
4-Methyl-2-pentanone	13	U	ug/kg	13	12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11
2-Hexanone	13	U	ug/kg	13	12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11
Tetrachloroethene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,1,2,2-Tetrachloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Toluene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Chlorobenzene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Ethylbenzene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Styrene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Xylenes (total)	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Dichlorodifluoromethane	13	U	ug/kg	13	12	UJ	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11
Trichlorofluoromethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,3-Dichlorobenzene	6	U	ug/kg	6	410	U	ug/kg	410	6	U	ug/kg	6	5	U	ug/kg	5
Acrolein	130	U	ug/kg	130	120	U	ug/kg	120	120	U	ug/kg	120	110	U	ug/kg	110
Iodomethane	13	U	ug/kg	13	12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11
1,4-Dichlorobenzene	6	U	ug/kg	6	6	U	ug/kg	6	400	U	ug/kg	400	5	U	ug/kg	5
Acrylonitrile	130	U	ug/kg	130	120	U	ug/kg	120	120	U	ug/kg	120	110	U	ug/kg	110

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:	M9000006				M9000002				M9000007				M8995002			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14B01004				14B01404				14B01904				14B02105			
Collect Date:	22-MAY-95				22-MAY-95				23-MAY-95				20-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dichlorobenzene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
2-Chloroethylvinyl ether	13	U	ug/kg	13	12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11
Ethyl methacrylate	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,2,3-Trichloropropane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
trans-1,4-Dichloro-2-butene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Isobutyl alcohol	250	U	ug/kg	250	250	U	ug/kg	250	240	U	ug/kg	240	220	U	ug/kg	220
1,1,1,2-Tetrachloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dibromo-3-chloropropane	13	U	ug/kg	13	12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11
1,2-Dibromoethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,4-Dioxane	250	R	ug/kg	250	250	R	ug/kg	250	240	R	ug/kg	240	220	R	ug/kg	220
3-Chloropropene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Acetonitrile	130	U	ug/kg	130	120	U	ug/kg	120	120	U	ug/kg	120	110	U	ug/kg	110
Chloroprene	250	U	ug/kg	250	250	U	ug/kg	250	240	U	ug/kg	240	220	U	ug/kg	220
Methacrylonitrile	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Methyl methacrylate	13	U	ug/kg	13	12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11
Pentachloroethane	13	U	ug/kg	13	12	U	ug/kg	12	12	U	ug/kg	12	11	U	ug/kg	11
Propionitrile	130	U	ug/kg	130	120	U	ug/kg	120	120	U	ug/kg	120	110	U	ug/kg	110
Vinyl acetate	13	U	ug/kg	13	12	U	ug/kg	12	12	U	ug/kg	12	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:	M8995004				M8995006				M8995008				M899500BRE			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14B02203				14B02303				14B02403				14B02403RE			
Collect Date:	21-MAY-95				21-MAY-95				21-MAY-95				21-MAY-95			
	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	12	U	ug/kg	12	12	R	ug/kg	12	12	R	ug/kg	12
Bromomethane	13	UJ	ug/kg	13	12	UJ	ug/kg	12	12	R	ug/kg	12	12	R	ug/kg	12
Vinyl chloride	13	U	ug/kg	13	12	U	ug/kg	12	12	R	ug/kg	12	12	R	ug/kg	12
Chloroethane	13	U	ug/kg	13	12	U	ug/kg	12	12	R	ug/kg	12	12	R	ug/kg	12
Methylene chloride	9	U	ug/kg	9	9	U	ug/kg	9	23	R	ug/kg	6	23	R	ug/kg	6
Acetone	13	U	ug/kg	13	13	U	ug/kg	13	12	R	ug/kg	12	12	R	ug/kg	12
Carbon disulfide	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
1,1-Dichloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
1,1-Dichloroethene	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
1,2-Dichloroethene (total)	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
Chloroform	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
1,2-Dichloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
2-Butanone	13	U	ug/kg	13	12	U	ug/kg	12	12	R	ug/kg	12	12	R	ug/kg	12
1,1,1-Trichloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
Carbon tetrachloride	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
Bromodichloromethane	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
1,2-Dichloropropane	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
cis-1,3-Dichloropropene	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
Trichloroethene	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
Dibromochloromethane	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
1,1,2-Trichloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
Benzene	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
trans-1,3-Dichloropropene	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
Bromoform	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
4-Methyl-2-pentanone	13	U	ug/kg	13	12	U	ug/kg	12	12	R	ug/kg	12	12	R	ug/kg	12
2-Hexanone	13	U	ug/kg	13	12	U	ug/kg	12	12	R	ug/kg	12	12	R	ug/kg	12
Tetrachloroethene	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
1,1,2,2-Tetrachloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
Toluene	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
Chlorobenzene	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
Ethylbenzene	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
Styrene	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
Xylenes (total)	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
Dichlorodifluoromethane	13	UJ	ug/kg	13	12	UJ	ug/kg	12	12	R	ug/kg	12	12	R	ug/kg	12
Trichlorofluoromethane	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
1,3-Dichlorobenzene	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
Acrolein	130	U	ug/kg	130	120	U	ug/kg	120	120	R	ug/kg	120	120	R	ug/kg	120
Iodomethane	13	U	ug/kg	13	12	U	ug/kg	12	12	R	ug/kg	12	12	R	ug/kg	12
1,4-Dichlorobenzene	6	U	ug/kg	6	6	U	ug/kg	6	400	U	ug/kg	400	6	R	ug/kg	6
Acrylonitrile	130	U	ug/kg	130	120	U	ug/kg	120	120	R	ug/kg	120	120	R	ug/kg	120

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:	M8995004				M8995006				M8995008				M8995008RE			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14B02203				14B02303				14B02403				14B02403RE			
Collect Date:	21-MAY-95				21-MAY-95				21-MAY-95				21-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
1,2-Dichlorobenzene	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
2-Chloroethylvinyl ether	13	U	ug/kg	13	12	U	ug/kg	12	12	R	ug/kg	12	12	R	ug/kg	12
Ethyl methacrylate	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
1,2,3-Trichloropropane	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
trans-1,4-Dichloro-2-butene	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
Isobutyl alcohol	260	U	ug/kg	260	240	U	ug/kg	240	240	R	ug/kg	240	240	R	ug/kg	240
1,1,1,2-Tetrachloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
1,2-Dibromo-3-chloropropane	13	U	ug/kg	13	12	U	ug/kg	12	12	R	ug/kg	12	12	R	ug/kg	12
1,2-Dibromoethane	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
1,4-Dioxane	260	R	ug/kg	260	240	R	ug/kg	240	240	R	ug/kg	240	240	R	ug/kg	240
3-Chloropropene	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
Acetonitrile	130	U	ug/kg	130	120	U	ug/kg	120	120	R	ug/kg	120	120	R	ug/kg	120
Chloroprene	260	U	ug/kg	260	240	U	ug/kg	240	240	R	ug/kg	240	240	R	ug/kg	240
Methacrylonitrile	6	U	ug/kg	6	6	U	ug/kg	6	6	R	ug/kg	6	6	R	ug/kg	6
Methyl methacrylate	13	U	ug/kg	13	12	U	ug/kg	12	12	R	ug/kg	12	12	R	ug/kg	12
Pentachloroethane	13	U	ug/kg	13	12	U	ug/kg	12	12	R	ug/kg	12	12	R	ug/kg	12
Propionitrile	130	U	ug/kg	130	120	U	ug/kg	120	120	R	ug/kg	120	120	R	ug/kg	120
Vinyl acetate	13	U	ug/kg	13	12	U	ug/kg	12	12	R	ug/kg	12	12	R	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.

US Naval Station, Mayport, RCRA Facility Investigation Group [1] Report
Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:	M8995008RE			M8995009			M9000004			M9000005		
Site	GROUP111			GROUP111			GROUP111			GROUP111		
Locator	14B02403RE2			14B02504			18B00204			18B00204D		
Collect Date:	21-MAY-95			22-MAY-95			22-MAY-95			22-MAY-95		
	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
VOLATILES ug/kg												
Chloromethane	12 UJ	ug/kg	12	11 U	ug/kg	11	12 U	ug/kg	12	12 U	ug/kg	12
Bromomethane	12 UJ	ug/kg	12	11 UJ	ug/kg	11	12 U	ug/kg	12	12 U	ug/kg	12
Vinyl chloride	12 UJ	ug/kg	12	11 U	ug/kg	11	12 U	ug/kg	12	12 U	ug/kg	12
Chloroethane	12 UJ	ug/kg	12	11 U	ug/kg	11	12 U	ug/kg	12	12 U	ug/kg	12
Methylene chloride	6 UJ	ug/kg	6	9 U	ug/kg	9	11 U	ug/kg	11	9 U	ug/kg	9
Acetone	33 UJ	ug/kg	33	11 U	ug/kg	11	12 U	ug/kg	12	12 U	ug/kg	12
Carbon disulfide	6 UJ	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,1-Dichloroethane	6 UJ	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,1-Dichloroethene	6 UJ	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,2-Dichloroethene (total)	6 UJ	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Chloroform	6 UJ	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,2-Dichloroethane	6 UJ	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
2-Butanone	8 UJ	ug/kg	8	11 U	ug/kg	11	12 U	ug/kg	12	12 U	ug/kg	12
1,1,1-Trichloroethane	6 UJ	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Carbon tetrachloride	6 UJ	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Bromodichloromethane	6 UJ	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,2-Dichloropropane	6 UJ	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
cis-1,3-Dichloropropene	6 UJ	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Trichloroethene	6 UJ	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Dibromochloromethane	6 UJ	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,1,2-Trichloroethane	6 UJ	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Benzene	6 UJ	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
trans-1,3-Dichloropropene	6 UJ	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Bromoform	6 UJ	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	11 U	ug/kg	11	12 U	ug/kg	12	12 U	ug/kg	12
2-Hexanone	12 UJ	ug/kg	12	11 U	ug/kg	11	12 U	ug/kg	12	12 U	ug/kg	12
Tetrachloroethene	6 UJ	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,1,2,2-Tetrachloroethane	6 UJ	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Toluene	6 UJ	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Chlorobenzene	6 UJ	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Ethylbenzene	6 UJ	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Styrene	6 UJ	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Xylenes (total)	1 J	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Dichlorodifluoromethane	12 UJ	ug/kg	12	11 UJ	ug/kg	11	12 U	ug/kg	12	12 U	ug/kg	12
Trichlorofluoromethane	6 UJ	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
1,3-Dichlorobenzene	6 UJ	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Acrolein	120 UJ	ug/kg	120	110 U	ug/kg	110	120 U	ug/kg	120	120 U	ug/kg	120
Iodomethane	12 UJ	ug/kg	12	11 U	ug/kg	11	12 U	ug/kg	12	12 U	ug/kg	12
1,4-Dichlorobenzene	6 UJ	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6	6 U	ug/kg	6
Acrylonitrile	120 UJ	ug/kg	120	110 U	ug/kg	110	120 U	ug/kg	120	120 U	ug/kg	120

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:	M8995008RE				M8995009				M9000004				M9000005			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14B02403RE2				14B02504				18B00204				18B00204D			
Collect Date:	21-MAY-95				22-MAY-95				22-MAY-95				22-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	6	UJ	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
1,2-Dichlorobenzene	6	UJ	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
2-Chloroethylvinyl ether	12	UJ	ug/kg	12	11	U	ug/kg	11	12	U	ug/kg	12	12	U	ug/kg	12
Ethyl methacrylate	6	UJ	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
1,2,3-Trichloropropane	6	UJ	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
trans-1,4-Dichloro-2-butene	6	UJ	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
Isobutyl alcohol	240	UJ	ug/kg	240	230	U	ug/kg	230	240	U	ug/kg	240	240	U	ug/kg	240
1,1,1,2-Tetrachloroethane	6	UJ	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
1,2-Dibromo-3-chloropropane	12	UJ	ug/kg	12	11	U	ug/kg	11	12	U	ug/kg	12	12	U	ug/kg	12
1,2-Dibromoethane	6	UJ	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
1,4-Dioxane	240	R	ug/kg	240	230	R	ug/kg	230	240	R	ug/kg	240	240	R	ug/kg	240
3-Chloropropene	6	UJ	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
Acetonitrile	120	UJ	ug/kg	120	110	U	ug/kg	110	120	U	ug/kg	120	120	U	ug/kg	120
Chloroprene	240	UJ	ug/kg	240	230	U	ug/kg	230	240	U	ug/kg	240	240	U	ug/kg	240
Methacrylonitrile	6	UJ	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6
Methyl methacrylate	12	UJ	ug/kg	12	11	U	ug/kg	11	12	U	ug/kg	12	12	U	ug/kg	12
Pentachloroethane	12	UJ	ug/kg	12	11	U	ug/kg	11	12	U	ug/kg	12	12	U	ug/kg	12
Propionitrile	120	UJ	ug/kg	120	110	U	ug/kg	110	120	U	ug/kg	120	120	U	ug/kg	120
Vinyl acetate	12	UJ	ug/kg	12	11	U	ug/kg	11	12	U	ug/kg	12	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:	M8995012				R9955005			
Site	GROUP111				GROUP111			
Locator	18B00304				18B00404			
Collect Date:	22-MAY-95				23-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES ug/kg								
Chloromethane	11	U	ug/kg	11	12	U	ug/kg	12
Bromomethane	11	UJ	ug/kg	11	12	U	ug/kg	12
Vinyl chloride	11	U	ug/kg	11	12	U	ug/kg	12
Chloroethane	11	U	ug/kg	11	12	U	ug/kg	12
Methylene chloride	7	U	ug/kg	7	6	U	ug/kg	6
Acetone	11	U	ug/kg	11	12	U	ug/kg	12
Carbon disulfide	6	U	ug/kg	6	6	U	ug/kg	6
1,1-Dichloroethane	6	U	ug/kg	6	6	U	ug/kg	6
1,1-Dichloroethene	6	U	ug/kg	6	6	U	ug/kg	6
1,2-Dichloroethene (total)	6	U	ug/kg	6	6	U	ug/kg	6
Chloroform	6	U	ug/kg	6	6	U	ug/kg	6
1,2-Dichloroethane	6	U	ug/kg	6	6	U	ug/kg	6
2-Butanone	11	U	ug/kg	11	12	U	ug/kg	12
1,1,1-Trichloroethane	6	U	ug/kg	6	6	U	ug/kg	6
Carbon tetrachloride	6	U	ug/kg	6	6	U	ug/kg	6
Bromodichloromethane	6	U	ug/kg	6	6	U	ug/kg	6
1,2-Dichloropropane	6	U	ug/kg	6	6	U	ug/kg	6
cis-1,3-Dichloropropene	6	U	ug/kg	6	6	U	ug/kg	6
Trichloroethene	6	U	ug/kg	6	6	U	ug/kg	6
Dibromochloromethane	6	U	ug/kg	6	6	U	ug/kg	6
1,1,2-Trichloroethane	6	U	ug/kg	6	6	U	ug/kg	6
Benzene	6	U	ug/kg	6	6	U	ug/kg	6
trans-1,3-Dichloropropene	6	U	ug/kg	6	6	U	ug/kg	6
Bromoform	6	U	ug/kg	6	6	U	ug/kg	6
4-Methyl-2-pentanone	11	U	ug/kg	11	12	U	ug/kg	12
2-Hexanone	11	U	ug/kg	11	12	U	ug/kg	12
Tetrachloroethene	6	U	ug/kg	6	6	U	ug/kg	6
1,1,2,2-Tetrachloroethane	6	U	ug/kg	6	6	U	ug/kg	6
Toluene	6	U	ug/kg	6	6	U	ug/kg	6
Chlorobenzene	6	U	ug/kg	6	6	U	ug/kg	6
Ethylbenzene	6	U	ug/kg	6	6	U	ug/kg	6
Styrene	6	U	ug/kg	6	6	U	ug/kg	6
Xylenes (total)	6	U	ug/kg	6	6	U	ug/kg	6
Dichlorodifluoromethane	11	UJ	ug/kg	11	12	U	ug/kg	12
Trichlorofluoromethane	6	U	ug/kg	6	6	U	ug/kg	6
1,3-Dichlorobenzene	380	U	ug/kg	380	6	U	ug/kg	6
Acrolein	110	U	ug/kg	110	120	U	ug/kg	120
Iodomethane	11	U	ug/kg	11	12	UJ	ug/kg	12
1,4-Dichlorobenzene	6	U	ug/kg	6	6	U	ug/kg	6
Acrylonitrile	110	U	ug/kg	110	120	U	ug/kg	120

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Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:	MB995012				R9955005			
Site	GROUP111				GROUP111			
Locator	18B00304				18B00404			
Collect Date:	22-MAY-95				23-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	6	U	ug/kg	6	6	U	ug/kg	6
1,2-Dichlorobenzene	6	U	ug/kg	6	6	U	ug/kg	6
2-Chloroethylvinyl ether	11	U	ug/kg	11	12	U	ug/kg	12
Ethyl methacrylate	6	U	ug/kg	6	6	U	ug/kg	6
1,2,3-Trichloropropane	6	U	ug/kg	6	6	U	ug/kg	6
trans-1,4-Dichloro-2-butene	6	U	ug/kg	6	6	U	ug/kg	6
Isobutyl alcohol	230	U	ug/kg	230	250	U	ug/kg	250
1,1,1,2-Tetrachloroethane	6	U	ug/kg	6	6	U	ug/kg	6
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11	12	U	ug/kg	12
1,2-Dibromoethane	6	U	ug/kg	6	6	U	ug/kg	6
1,4-Dioxane	230	R	ug/kg	230	250	R	ug/kg	250
3-Chloropropene	6	U	ug/kg	6	6	U	ug/kg	6
Acetonitrile	110	U	ug/kg	110	120	U	ug/kg	120
Chloroprene	230	U	ug/kg	230	250	U	ug/kg	250
Methacrylonitrile	6	U	ug/kg	6	6	U	ug/kg	6
Methyl methacrylate	11	U	ug/kg	11	12	U	ug/kg	12
Pentachloroethane	11	U	ug/kg	11	12	UJ	ug/kg	12
Propionitrile	110	U	ug/kg	110	120	U	ug/kg	120
Vinyl acetate	11	U	ug/kg	11	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:	M9000003				R9955001				M9000009				R9955002			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14B00204				14B00604				14B00704				14B00804			
Collect Date:	22-MAY-95				23-MAY-95				23-MAY-95				23-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/kg																
N-Nitrosodimethylamine	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Phenol	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Aniline	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
bis(2-Chloroethyl) ether	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Benzyl Alcohol	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
2-Methylphenol	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
bis(2-Chloroisopropyl) ether	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
N-Nitroso-di-n-propylamine	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Hexachloroethane	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Nitrobenzene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Isophorone	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
2-Nitrophenol	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
2,4-Dimethylphenol	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Benzoic acid	2000	U	ug/kg	2000	3900	U	ug/kg	3900	4100	U	ug/kg	4100	3800	U	ug/kg	3800
bis(2-Chloroethoxy) methane	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
2,4-Dichlorophenol	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
1,2,4-Trichlorobenzene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Naphthalene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
4-Chloroaniline	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Hexachlorobutadiene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
4-Chloro-3-methylphenol	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
2-Methylnaphthalene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Hexachlorocyclopentadiene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
2,4,6-Trichlorophenol	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Dimethylphthalate	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
2,4,5-Trichlorophenol	2000	U	ug/kg	2000	3900	U	ug/kg	3900	4100	U	ug/kg	4100	3800	U	ug/kg	3800
2-Chloronaphthalene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
2-Nitroaniline	2000	U	ug/kg	2000	3900	U	ug/kg	3900	4100	U	ug/kg	4100	3800	U	ug/kg	3800
Acenaphthylene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
2,6-Dinitrotoluene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
3-Nitroaniline	2000	U	ug/kg	2000	3900	U	ug/kg	3900	4100	U	ug/kg	4100	3800	U	ug/kg	3800
Acenaphthene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
2,4-Dinitrophenol	2000	U	ug/kg	2000	3900	U	ug/kg	3900	4100	U	ug/kg	4100	3800	U	ug/kg	3800
4-Nitrophenol	2000	U	ug/kg	2000	3900	U	ug/kg	3900	4100	U	ug/kg	4100	3800	U	ug/kg	3800
Dibenzofuran	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
2,4-Dinitrotoluene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Diethylphthalate	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
4-Chlorophenyl-phenylether	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Fluorene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
4-Nitroaniline	2000	U	ug/kg	2000	3900	U	ug/kg	3900	4100	U	ug/kg	4100	3800	U	ug/kg	3800
4,6-Dinitro-2-methylphenol	2000	U	ug/kg	2000	3900	U	ug/kg	3900	4100	U	ug/kg	4100	3800	U	ug/kg	3800
N-Nitrosodiphenylamine (1)	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
1,2-Diphenylhydrazine	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
4-Bromophenyl-phenylether	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Hexachlorobenzene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Pentachlorophenol	2000	U	ug/kg	2000	3900	U	ug/kg	3900	4100	U	ug/kg	4100	3800	U	ug/kg	3800
Phenanthrene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Anthracene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Di-n-Butylphthalate	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Fluoranthene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:	M9000003				R9955001				M9000009				R9955002			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14B00204				14B00604				14B00704				14B00804			
Collect Date:	22-MAY-95				23-MAY-95				23-MAY-95				23-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Pyrene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Butylbenzylphthalate	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
3,3-Dichlorobenzidine	810	U	ug/kg	810	1600	U	ug/kg	1600	1600	U	ug/kg	1600	1600	U	ug/kg	1600
Benzo (a) anthracene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Chrysene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
bis(2-Ethylhexyl) phthalate	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Di-n-octylphthalate	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Benzo (b) fluoranthene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Benzo (k) fluoranthene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Benzo (a) pyrene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Indeno (1,2,3-cd) pyrene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Dibenz (a,h) anthracene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Benzo (g,h,i) perylene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
2-Picoline	2000	U	ug/kg	2000	3900	U	ug/kg	3900	4100	U	ug/kg	4100	3800	U	ug/kg	3800
Methyl methanesulfonate	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Ethyl methanesulfonate	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Acetophenone	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
N-Nitrosopiperidine	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Phenyl-tert-butylamine	2000	U	ug/kg	2000	3900	UJ	ug/kg	3900	4100	U	ug/kg	4100	3800	UJ	ug/kg	3800
2,6-Dichlorophenol	410	U	ug/kg	410	800	UJ	ug/kg	800	820	U	ug/kg	820	780	UJ	ug/kg	780
N-Nitroso-di-n-butylamine	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
N-Nitrosodiethylamine	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
N-Nitrosopyrrolidine	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Benzidine	2000	U	ug/kg	2000	3900	UJ	ug/kg	3900	4100	U	ug/kg	4100	3800	UJ	ug/kg	3800
1,2,4,5-Tetrachlorobenzene	2000	U	ug/kg	2000	3900	UJ	ug/kg	3900	4100	U	ug/kg	4100	3800	UJ	ug/kg	3800
Pentachlorobenzene	2000	U	ug/kg	2000	3900	UJ	ug/kg	3900	4100	U	ug/kg	4100	3800	UJ	ug/kg	3800
1-Naphthylamine	2000	U	ug/kg	2000	3900	U	ug/kg	3900	4100	U	ug/kg	4100	3800	U	ug/kg	3800
2-Naphthylamine	2000	U	ug/kg	2000	3900	U	ug/kg	3900	4100	U	ug/kg	4100	3800	U	ug/kg	3800
2,3,4,6-Tetrachlorophenol	410	U	ug/kg	410	800	UJ	ug/kg	800	820	U	ug/kg	820	780	UJ	ug/kg	780
Phenacetin	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
4-Aminobiphenyl	2000	U	ug/kg	2000	3900	U	ug/kg	3900	4100	U	ug/kg	4100	3800	U	ug/kg	3800
Pentachloronitrobenzene	2000	U	ug/kg	2000	3900	UJ	ug/kg	3900	4100	U	ug/kg	4100	3800	UJ	ug/kg	3800
Pronamide	410	U	ug/kg	410	800	UJ	ug/kg	800	820	U	ug/kg	820	780	UJ	ug/kg	780
p-(Dimethylamino)azobenzene	410	U	ug/kg	410	800	UJ	ug/kg	800	820	U	ug/kg	820	780	UJ	ug/kg	780
7,12-Dimethylbenz(A)Anthracene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
3-Methylcholanthrene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Pyridine	2000	U	ug/kg	2000	3900	U	ug/kg	3900	4100	U	ug/kg	4100	3800	U	ug/kg	3800
N-Nitrosomethylethylamine	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
N-Nitrosomorpholine	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
o-Toluidine	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Hexachloropropene	2000	U	ug/kg	2000	3900	UJ	ug/kg	3900	4100	U	ug/kg	4100	3800	UJ	ug/kg	3800
p-Phenylenediamine	20000	U	ug/kg	20000	39000	UJ	ug/kg	39000	41000	U	ug/kg	41000	38000	UJ	ug/kg	38000
Safrole	2000	U	ug/kg	2000	3900	UJ	ug/kg	3900	4100	U	ug/kg	4100	3800	UJ	ug/kg	3800
Isosafrole	2000	U	ug/kg	2000	3900	U	ug/kg	3900	4100	U	ug/kg	4100	3800	U	ug/kg	3800
1,4-Naphthoquinone	41000	U	ug/kg	41000	80000	U	ug/kg	80000	82000	U	ug/kg	82000	78000	U	ug/kg	78000
1,3-Dinitrobenzene	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
5-Nitro-o-toluidine	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
1,3,5-Trinitrobenzene	410	UJ	ug/kg	410	800	U	ug/kg	800	820	UJ	ug/kg	820	780	U	ug/kg	780
4-Nitroquinoline-1-oxide	20000	R	ug/kg	20000	39000	U	ug/kg	39000	41000	R	ug/kg	41000	38000	U	ug/kg	38000
Methapyrilene	2000	U	ug/kg	2000	3900	UJ	ug/kg	3900	4100	U	ug/kg	4100	3800	UJ	ug/kg	3800
3,3-Dimethylbenzidine	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Hexachlorophene	20000	U	ug/kg	20000	39000	R	ug/kg	39000	41000	U	ug/kg	41000	38000	R	ug/kg	38000

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Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:	M9000003				R9955001				M9000009				R9955002			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14800204				14800604				14800704				14800804			
Collect Date:	22-MAY-95				23-MAY-95				23-MAY-95				23-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Aramite	2000	U	ug/kg	2000	3900	U	ug/kg	3900	4100	U	ug/kg	4100	3800	U	ug/kg	3800
2-Chlorophenol	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
3- & 4-Methylphenol (2)	410	U	ug/kg	410	800	U	ug/kg	800	820	U	ug/kg	820	780	U	ug/kg	780
Hexachloropropene	2000	U	ug/kg	2000	3900	UJ	ug/kg	3900	4100	U	ug/kg	4100	3800	UJ	ug/kg	3800
2-Acetylaminofluorene	410	U	ug/kg	410	800	UJ	ug/kg	800	820	U	ug/kg	820	780	UJ	ug/kg	780

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:		M9000006			M9000002			M9000007			M8995002		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		14B01004			14B01404			14B01904			14B02105		
Collect Date:		22-MAY-95			22-MAY-95			23-MAY-95			20-MAY-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES	ug/kg												
N-Nitrosodimethylamine		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
Phenol		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
Aniline		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
bis(2-Chloroethyl) ether		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
Benzyl Alcohol		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
2-Methylphenol		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
bis(2-Chloroisopropyl) ether		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
N-Nitroso-di-n-propylamine		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
Hexachloroethane		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
Nitrobenzene		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
Isophorone		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
2-Nitrophenol		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
2,4-Dimethylphenol		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
Benzoic acid		2100 U	ug/kg	2100	2000 U	ug/kg	2000	2000 U	ug/kg	2000	1800 U	ug/kg	1800
bis(2-Chloroethoxy) methane		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
2,4-Dichlorophenol		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
1,2,4-Trichlorobenzene		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
Naphthalene		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
4-Chloroaniline		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
Hexachlorobutadiene		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
4-Chloro-3-methylphenol		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
2-Methylnaphthalene		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
Hexachlorocyclopentadiene		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
2,4,6-Trichlorophenol		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
Dimethylphthalate		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
2,4,5-Trichlorophenol		2100 U	ug/kg	2100	2000 U	ug/kg	2000	2000 U	ug/kg	2000	1800 U	ug/kg	1800
2-Chloronaphthalene		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
2-Nitroaniline		2100 U	ug/kg	2100	2000 U	ug/kg	2000	2000 U	ug/kg	2000	1800 U	ug/kg	1800
Acenaphthylene		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
2,6-Dinitrotoluene		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
3-Nitroaniline		2100 U	ug/kg	2100	2000 U	ug/kg	2000	2000 U	ug/kg	2000	1800 U	ug/kg	1800
Acenaphthene		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
2,4-Dinitrophenol		2100 U	ug/kg	2100	2000 U	ug/kg	2000	2000 U	ug/kg	2000	1800 U	ug/kg	1800
4-Nitrophenol		2100 U	ug/kg	2100	2000 U	ug/kg	2000	2000 U	ug/kg	2000	1800 U	ug/kg	1800
Dibenzofuran		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
2,4-Dinitrotoluene		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
Diethylphthalate		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
4-Chlorophenyl-phenylether		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
Fluorene		420 U	ug/kg	420	410 U	ug/kg	410	400 U	ug/kg	400	370 U	ug/kg	370
4-Nitroaniline		2100 U	ug/kg	2100	2000 U	ug/kg	2000	2000 U	ug/kg	2000	1800 U	ug/kg	1800

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:	M9000006				M9000002				M9000007				M8995002			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14B01004				14B01404				14B01904				14B02105			
Collect Date:	22-MAY-95				22-MAY-95				23-MAY-95				20-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1800	U	ug/kg	1800
N-Nitrosodiphenylamine (1)	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
1,2-Diphenylhydrazine	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
4-Bromophenyl-phenylether	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
Hexachlorobenzene	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
Pentachlorophenol	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1800	U	ug/kg	1800
Phenanthrene	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
Anthracene	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
Di-n-Butylphthalate	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
Fluoranthene	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
Pyrene	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
Butylbenzylphthalate	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
3,3-Dichlorobenzidine	840	U	ug/kg	840	820	U	ug/kg	820	790	U	ug/kg	790	730	U	ug/kg	730
Benzo (a) anthracene	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
Chrysene	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
bis(2-Ethylhexyl) phthalate	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
Di-n-octylphthalate	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
Benzo (b) fluoranthene	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
Benzo (k) fluoranthene	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
Benzo (a) pyrene	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
Indeno (1,2,3-cd) pyrene	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
Dibenz (a,h) anthracene	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
Benzo (g,h,i) perylene	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
2-Picoline	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1800	U	ug/kg	1800
Methyl methanesulfonate	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
Ethyl methanesulfonate	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
Acetophenone	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
N-Nitrosopiperidine	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
Phenyl-tert-butylamine	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1800	U	ug/kg	1800
2,6-Dichlorophenol	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
N-Nitroso-di-n-butylamine	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
N-Nitrosodiethylamine	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
N-Nitrosopyrrolidine	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
Benzidine	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1800	U	ug/kg	1800
1,2,4,5-Tetrachlorobenzene	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1800	U	ug/kg	1800
Pentachlorobenzene	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1800	U	ug/kg	1800
1-Naphthylamine	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1800	U	ug/kg	1800
2-Naphthylamine	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1800	U	ug/kg	1800
2,3,4,6-Tetrachlorophenol	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
Phenacetin	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
4-Aminobiphenyl	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1800	U	ug/kg	1800
Pentachloronitrobenzene	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1800	U	ug/kg	1800
Pronamide	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
p-(Dimethylamino)azobenzene	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
7,12-Dimethylbenz(A)Anthracene	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
3-Methylcholanthrene	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
Pyridine	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1800	U	ug/kg	1800
N-Nitrosomethylethylamine	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
N-Nitrosomorpholine	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
o-Toluidine	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
Hexachloropropene	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1800	U	ug/kg	1800
p-Phenylenediamine	21000	U	ug/kg	21000	20000	U	ug/kg	20000	20000	U	ug/kg	20000	18000	U	ug/kg	18000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:	M9000006				M9000002				M9000007				M8995002			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14B01004				14B01404				14B01904				14B02105			
Collect Date:	22-MAY-95				22-MAY-95				23-MAY-95				20-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1800	U	ug/kg	1800
Isosafrole	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1800	U	ug/kg	1800
1,4-Naphthoquinone	42000	U	ug/kg	42000	41000	U	ug/kg	41000	40000	U	ug/kg	40000	37000	U	ug/kg	37000
1,3-Dinitrobenzene	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
5-Nitro-o-toluidine	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
1,3,5-Trinitrobenzene	420	UJ	ug/kg	420	410	UJ	ug/kg	410	400	UJ	ug/kg	400	370	U	ug/kg	370
4-Nitroquinoline-1-oxide	21000	R	ug/kg	21000	20000	R	ug/kg	20000	20000	R	ug/kg	20000	18000	R	ug/kg	18000
Methapyrilene	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1800	U	ug/kg	1800
3,3-Dimethylbenzidine	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
Hexachlorophene	21000	U	ug/kg	21000	20000	U	ug/kg	20000	20000	U	ug/kg	20000	18000	U	ug/kg	18000
Aramite	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1800	U	ug/kg	1800
2-Chlorophenol	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
3- & 4-Methylphenol (2)	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	370	U	ug/kg	370
Hexachloropropene	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1800	U	ug/kg	1800
2-Acetylaminofluorene	420	U	ug/kg	420	410	U	ug/kg	410	400	U	ug/kg	400	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:		M8995004			M8995006			M8995008			M8995009		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		14B02203			14B02303			14B02403			14B02504		
Collect Date:		21-MAY-95			21-MAY-95			21-MAY-95			22-MAY-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
SEMIVOLATILES	ug/kg												
N-Nitrosodimethylamine		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
Phenol		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
Aniline		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
bis(2-Chloroethyl) ether		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
Benzyl Alcohol		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
2-Methylphenol		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
bis(2-Chloroisopropyl) ether		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
N-Nitroso-di-n-propylamine		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
Hexachloroethane		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
Nitrobenzene		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
Isophorone		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
2-Nitrophenol		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
2,4-Dimethylphenol		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
Benzoic acid		2100 U	ug/kg	2100	2000 U	ug/kg	2000	2000 U	ug/kg	2000	1900 U	ug/kg	1900
bis(2-Chloroethoxy) methane		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
2,4-Dichlorophenol		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
1,2,4-Trichlorobenzene		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
Naphthalene		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
4-Chloroaniline		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
Hexachlorobutadiene		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
4-Chloro-3-methylphenol		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
2-Methylnaphthalene		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
Hexachlorocyclopentadiene		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
2,4,6-Trichlorophenol		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
Dimethylphthalate		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
2,4,5-Trichlorophenol		2100 U	ug/kg	2100	2000 U	ug/kg	2000	2000 U	ug/kg	2000	1900 U	ug/kg	1900
2-Chloronaphthalene		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
2-Nitroaniline		2100 U	ug/kg	2100	2000 U	ug/kg	2000	2000 U	ug/kg	2000	1900 U	ug/kg	1900
Acenaphthylene		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
2,6-Dinitrotoluene		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
3-Nitroaniline		2100 U	ug/kg	2100	2000 U	ug/kg	2000	2000 U	ug/kg	2000	1900 U	ug/kg	1900
Acenaphthene		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
2,4-Dinitrophenol		2100 U	ug/kg	2100	2000 U	ug/kg	2000	2000 U	ug/kg	2000	1900 U	ug/kg	1900
4-Nitrophenol		2100 U	ug/kg	2100	2000 U	ug/kg	2000	2000 U	ug/kg	2000	1900 U	ug/kg	1900
Dibenzofuran		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
2,4-Dinitrotoluene		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
Diethylphthalate		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
4-Chlorophenyl-phenylether		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
Fluorene		430 U	ug/kg	430	400 U	ug/kg	400	400 U	ug/kg	400	380 U	ug/kg	380
4-Nitroaniline		2100 U	ug/kg	2100	2000 U	ug/kg	2000	2000 U	ug/kg	2000	1900 U	ug/kg	1900

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:	M8995004				M8995006				M8995008				M8995009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14B02203				14B02303				14B02403				14B02504			
Collect Date:	21-MAY-95				21-MAY-95				21-MAY-95				22-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1900	U	ug/kg	1900
N-Nitrosodiphenylamine (1)	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
1,2-Diphenylhydrazine	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
4-Bromophenyl-phenylether	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
Hexachlorobenzene	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
Pentachlorophenol	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1900	U	ug/kg	1900
Phenanthrene	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
Anthracene	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
Di-n-Butylphthalate	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
Fluoranthene	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
Pyrene	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
Butylbenzylphthalate	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
3,3-Dichlorobenzidine	860	U	ug/kg	860	790	U	ug/kg	790	790	U	ug/kg	790	770	U	ug/kg	770
Benzo (a) anthracene	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
Chrysene	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
bis(2-Ethylhexyl) phthalate	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
Di-n-octylphthalate	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
Benzo (b) fluoranthene	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
Benzo (k) fluoranthene	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
Benzo (a) pyrene	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
Indeno (1,2,3-cd) pyrene	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
Dibenz (a,h) anthracene	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
Benzo (g,h,i) perylene	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
2-Picoline	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1900	U	ug/kg	1900
Methyl methanesulfonate	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
Ethyl methanesulfonate	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
Acetophenone	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
N-Nitrosopiperidine	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
Phenyl-tert-butylamine	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1900	U	ug/kg	1900
2,6-Dichlorophenol	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
N-Nitroso-di-n-butylamine	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
N-Nitrosodiethylamine	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
N-Nitrosopyrrolidine	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
Benzidine	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1900	U	ug/kg	1900
1,2,4,5-Tetrachlorobenzene	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1900	U	ug/kg	1900
Pentachlorobenzene	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1900	U	ug/kg	1900
1-Naphthylamine	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1900	U	ug/kg	1900
2-Naphthylamine	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1900	U	ug/kg	1900
2,3,4,6-Tetrachlorophenol	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
Phenacetin	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
4-Aminobiphenyl	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1900	U	ug/kg	1900
Pentachloronitrobenzene	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1900	U	ug/kg	1900
Pronamide	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
p-(Dimethylamino)azobenzene	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
7,12-Dimethylbenz(A)Anthracene	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
3-Methylcholanthrene	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
Pyridine	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1900	U	ug/kg	1900
N-Nitrosomethylethylamine	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
N-Nitrosomorpholine	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
o-Toluidine	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
Hexachloropropene	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1900	U	ug/kg	1900
p-Phenylenediamine	21000	U	ug/kg	21000	20000	U	ug/kg	20000	20000	U	ug/kg	20000	19000	U	ug/kg	19000

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Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:	M8995004				M8995006				M8995008				M8995009			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14B02203				14B02303				14B02403				14B02504			
Collect Date:	21-MAY-95				21-MAY-95				21-MAY-95				22-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1900	U	ug/kg	1900
Isosafrole	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1900	U	ug/kg	1900
1,4-Naphthoquinone	43000	U	ug/kg	43000	40000	U	ug/kg	40000	40000	U	ug/kg	40000	38000	U	ug/kg	38000
1,3-Dinitrobenzene	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
5-Nitro-o-toluidine	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
1,3,5-Trinitrobenzene	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
4-Nitroquinoline-1-oxide	21000	R	ug/kg	21000	20000	R	ug/kg	20000	20000	R	ug/kg	20000	19000	R	ug/kg	19000
Methapyrilene	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1900	U	ug/kg	1900
3,3-Dimethylbenzidine	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
Hexachlorophene	21000	U	ug/kg	21000	20000	U	ug/kg	20000	20000	U	ug/kg	20000	19000	U	ug/kg	19000
Aramite	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1900	U	ug/kg	1900
2-Chlorophenol	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
3- & 4-Methylphenol (2)	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380
Hexachloropropene	2100	U	ug/kg	2100	2000	U	ug/kg	2000	2000	U	ug/kg	2000	1900	U	ug/kg	1900
2-Acetylaminofluorene	430	U	ug/kg	430	400	U	ug/kg	400	400	U	ug/kg	400	380	U	ug/kg	380

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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Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:		M9000004			M9000005			M8995012			R9955005		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		18B00204			18B00204D			18B00304			18B00404		
Collect Date:		22-MAY-95			22-MAY-95			22-MAY-95			23-MAY-95		
	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	
SEMIVOLATILES ug/kg													
N-Nitrosodimethylamine	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
Phenol	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
Aniline	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
bis(2-Chloroethyl) ether	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
Benzyl Alcohol	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
2-Methylphenol	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
bis(2-Chloroisopropyl) ether	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
N-Nitroso-di-n-propylamine	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
Hexachloroethane	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
Nitrobenzene	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
Isophorone	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
2-Nitrophenol	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
2,4-Dimethylphenol	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
Benzoic acid	1900	U ug/kg	1900	2000	U ug/kg	2000	1900	U ug/kg	1900	3900	U ug/kg	3900	
bis(2-Chloroethoxy) methane	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
2,4-Dichlorophenol	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
1,2,4-Trichlorobenzene	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
Naphthalene	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
4-Chloroaniline	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
Hexachlorobutadiene	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
4-Chloro-3-methylphenol	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
2-Methylnaphthalene	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
Hexachlorocyclopentadiene	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
2,4,6-Trichlorophenol	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
Dimethylphthalate	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
2,4,5-Trichlorophenol	1900	U ug/kg	1900	2000	U ug/kg	2000	1900	U ug/kg	1900	3900	U ug/kg	3900	
2-Chloronaphthalene	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
2-Nitroaniline	1900	U ug/kg	1900	2000	U ug/kg	2000	1900	U ug/kg	1900	3900	U ug/kg	3900	
Acenaphthylene	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
2,6-Dinitrotoluene	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
3-Nitroaniline	1900	U ug/kg	1900	2000	U ug/kg	2000	1900	U ug/kg	1900	3900	U ug/kg	3900	
Acenaphthene	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
2,4-Dinitrophenol	1900	U ug/kg	1900	2000	U ug/kg	2000	1900	U ug/kg	1900	3900	U ug/kg	3900	
4-Nitrophenol	1900	U ug/kg	1900	2000	U ug/kg	2000	1900	U ug/kg	1900	3900	U ug/kg	3900	
Dibenzofuran	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
2,4-Dinitrotoluene	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
Diethylphthalate	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
4-Chlorophenyl-phenylether	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
Fluorene	390	U ug/kg	390	400	U ug/kg	400	380	U ug/kg	380	800	U ug/kg	800	
4-Nitroaniline	1900	U ug/kg	1900	2000	U ug/kg	2000	1900	U ug/kg	1900	3900	U ug/kg	3900	

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Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:	M9000004				M9000005				M8995012				R9955005			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	18B00204				18B00204D				18B00304				18B00404			
Collect Date:	22-MAY-95				22-MAY-95				22-MAY-95				23-MAY-95			
	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	2000	U	ug/kg	2000	1900	U	ug/kg	1900	3900	U	ug/kg	3900
N-Nitrosodiphenylamine (1)	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
1,2-Diphenylhydrazine	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
4-Bromophenyl-phenylether	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
Hexachlorobenzene	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
Pentachlorophenol	1900	U	ug/kg	1900	2000	U	ug/kg	2000	1900	U	ug/kg	1900	3900	U	ug/kg	3900
Phenanthrene	390	U	ug/kg	390	400	U	ug/kg	400	74	J	ug/kg	380	800	U	ug/kg	800
Anthracene	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
Di-n-Butylphthalate	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
Fluoranthene	390	U	ug/kg	390	400	U	ug/kg	400	89	J	ug/kg	380	800	U	ug/kg	800
Pyrene	390	U	ug/kg	390	400	U	ug/kg	400	96	J	ug/kg	380	800	U	ug/kg	800
Butylbenzylphthalate	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
3,3-Dichlorobenzidine	780	U	ug/kg	780	790	U	ug/kg	790	770	U	ug/kg	770	1600	U	ug/kg	1600
Benzo (a) anthracene	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
Chrysene	390	U	ug/kg	390	400	U	ug/kg	400	58	J	ug/kg	380	800	U	ug/kg	800
bis(2-Ethylhexyl) phthalate	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
Di-n-octylphthalate	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
Benzo (b) fluoranthene	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
Benzo (k) fluoranthene	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
Benzo (a) pyrene	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
Indeno (1,2,3-cd) pyrene	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
Dibenz (a,h) anthracene	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
Benzo (g,h,i) perylene	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
2-Picoline	1900	U	ug/kg	1900	2000	U	ug/kg	2000	1900	U	ug/kg	1900	3900	U	ug/kg	3900
Methyl methanesulfonate	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	UJ	ug/kg	800
Ethyl methanesulfonate	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
Acetophenone	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
N-Nitrosopiperidine	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
Phenyl-tert-butylamine	1900	U	ug/kg	1900	2000	U	ug/kg	2000	1900	U	ug/kg	1900	3900	UJ	ug/kg	3900
2,6-Dichlorophenol	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
N-Nitroso-di-n-butylamine	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
N-Nitrosodiethylamine	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
N-Nitrosopyrrolidine	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
Benzidine	1900	U	ug/kg	1900	2000	U	ug/kg	2000	1900	U	ug/kg	1900	3900	UJ	ug/kg	3900
1,2,4,5-Tetrachlorobenzene	1900	U	ug/kg	1900	2000	U	ug/kg	2000	1900	U	ug/kg	1900	3900	UJ	ug/kg	3900
Pentachlorobenzene	1900	U	ug/kg	1900	2000	U	ug/kg	2000	1900	U	ug/kg	1900	3900	UJ	ug/kg	3900
1-Naphthylamine	1900	U	ug/kg	1900	2000	U	ug/kg	2000	1900	U	ug/kg	1900	3900	U	ug/kg	3900
2-Naphthylamine	1900	U	ug/kg	1900	2000	U	ug/kg	2000	1900	U	ug/kg	1900	3900	U	ug/kg	3900
2,3,4,6-Tetrachlorophenol	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	UJ	ug/kg	800
Phenacetin	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
4-Aminobiphenyl	1900	U	ug/kg	1900	2000	U	ug/kg	2000	1900	U	ug/kg	1900	3900	U	ug/kg	3900
Pentachloronitrobenzene	1900	U	ug/kg	1900	2000	U	ug/kg	2000	1900	U	ug/kg	1900	3900	UJ	ug/kg	3900
Pronamide	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	UJ	ug/kg	800
p-(Dimethylamino)azobenzene	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	UJ	ug/kg	800
7,12-Dimethylbenz(A)Anthracene	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
3-Methylcholanthrene	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
Pyridine	1900	U	ug/kg	1900	2000	U	ug/kg	2000	1900	U	ug/kg	1900	3900	U	ug/kg	3900
N-Nitrosomethylethylamine	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
N-Nitrosomorpholine	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
o-Toluidine	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
Hexachloropropene	1900	U	ug/kg	1900	2000	U	ug/kg	2000	1900	U	ug/kg	1900	3900	UJ	ug/kg	3900
p-Phenylenediamine	19000	U	ug/kg	19000	20000	U	ug/kg	20000	19000	U	ug/kg	19000	39000	UJ	ug/kg	39000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:	M9000004				M9000005				M8995012				R9955005			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	18B00204				18B00204D				18B00304				18B00404			
Collect Date:	22-MAY-95				22-MAY-95				22-MAY-95				23-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	1900	U	ug/kg	1900	2000	U	ug/kg	2000	1900	U	ug/kg	1900	3900	U	ug/kg	3900
Isosafrole	1900	U	ug/kg	1900	2000	U	ug/kg	2000	1900	U	ug/kg	1900	3900	U	ug/kg	3900
1,4-Naphthoquinone	39000	U	ug/kg	39000	40000	U	ug/kg	40000	38000	U	ug/kg	38000	80000	R	ug/kg	80000
1,3-Dinitrobenzene	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
5-Nitro-o-toluidine	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
1,3,5-Trinitrobenzene	390	UJ	ug/kg	390	400	UJ	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
4-Nitroquinoline-1-oxide	19000	R	ug/kg	19000	20000	R	ug/kg	20000	19000	R	ug/kg	19000	39000	UJ	ug/kg	39000
Methapyrilene	1900	U	ug/kg	1900	2000	U	ug/kg	2000	1900	U	ug/kg	1900	3900	UJ	ug/kg	3900
3,3-Dimethylbenzidine	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
Hexachlorophene	19000	U	ug/kg	19000	20000	U	ug/kg	20000	19000	U	ug/kg	19000	39000	R	ug/kg	39000
Aramite	1900	U	ug/kg	1900	2000	U	ug/kg	2000	1900	U	ug/kg	1900	3900	U	ug/kg	3900
2-Chlorophenol	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
3- & 4-Methylphenol (2)	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	U	ug/kg	800
Hexachloropropene	1900	U	ug/kg	1900	2000	U	ug/kg	2000	1900	U	ug/kg	1900	3900	UJ	ug/kg	3900
2-Acetylaminofluorene	390	U	ug/kg	390	400	U	ug/kg	400	380	U	ug/kg	380	800	UJ	ug/kg	800

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:		M9000003			R9955001			M9000009			R9955002		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		14B00204			14B00604			14B00704			14B00804		
Collect Date:		22-MAY-95			23-MAY-95			23-MAY-95			23-MAY-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg												
alpha-BHC		.82 U	ug/kg	.82	.82 U	ug/kg	.82	.83 U	ug/kg	.83	.79 U	ug/kg	.79
beta-BHC		1.6 U	ug/kg	1.6	1.6 U	ug/kg	1.6	1.6 U	ug/kg	1.6	1.5 U	ug/kg	1.5
delta-BHC		.82 U	ug/kg	.82	.82 U	ug/kg	.82	.83 U	ug/kg	.83	.79 U	ug/kg	.79
gamma-BHC (Lindane)		.82 U	ug/kg	.82	.82 U	ug/kg	.82	.83 U	ug/kg	.83	.79 U	ug/kg	.79
Heptachlor		.82 U	ug/kg	.82	.82 U	ug/kg	.82	.83 U	ug/kg	.83	.79 U	ug/kg	.79
Aldrin		.82 U	ug/kg	.82	.82 U	ug/kg	.82	.83 U	ug/kg	.83	.79 U	ug/kg	.79
Heptachlor epoxide		.82 U	ug/kg	.82	.82 U	ug/kg	.82	.83 U	ug/kg	.83	.79 U	ug/kg	.79
Endosulfan I		.82 U	ug/kg	.82	.82 U	ug/kg	.82	.83 U	ug/kg	.83	.79 U	ug/kg	.79
Dieldrin		.82 U	ug/kg	.82	.82 U	ug/kg	.82	.83 U	ug/kg	.83	.79 U	ug/kg	.79
4,4-DDE		.82 U	ug/kg	.82	.82 U	ug/kg	.82	.83 U	ug/kg	.83	.79 U	ug/kg	.79
Endrin		1.6 U	ug/kg	1.6	1.6 U	ug/kg	1.6	1.6 U	ug/kg	1.6	1.5 U	ug/kg	1.5
Endosulfan II		1.6 U	ug/kg	1.6	1.6 U	ug/kg	1.6	1.6 U	ug/kg	1.6	1.5 U	ug/kg	1.5
4,4-DDD		1.6 U	ug/kg	1.6	1.6 U	ug/kg	1.6	1.6 U	ug/kg	1.6	1.5 U	ug/kg	1.5
Endosulfan sulfate		1.6 U	ug/kg	1.6	1.6 U	ug/kg	1.6	1.6 U	ug/kg	1.6	1.5 U	ug/kg	1.5
4,4-DDT		1.6 U	ug/kg	1.6	1.6 U	ug/kg	1.6	1.6 U	ug/kg	1.6	1.5 U	ug/kg	1.5
Methoxychlor		3.3 U	ug/kg	3.3	3.3 U	ug/kg	3.3	3.3 U	ug/kg	3.3	3.2 U	ug/kg	3.2
Endrin aldehyde		1.6 U	ug/kg	1.6	1.6 U	ug/kg	1.6	1.6 U	ug/kg	1.6	1.5 U	ug/kg	1.5
Endrin ketone		1.6 U	ug/kg	1.6	1.6 U	ug/kg	1.6	1.6 U	ug/kg	1.6	1.5 U	ug/kg	1.5
Chlordane		8.2 U	ug/kg	8.2	8.2 U	ug/kg	8.2	8.3 U	ug/kg	8.3	7.9 U	ug/kg	7.9
Chlorobenzilate		24 U	ug/kg	24	24 U	ug/kg	24	25 U	ug/kg	25	24 U	ug/kg	24
Diallate		49 U	ug/kg	49	49 U	ug/kg	49	49 U	ug/kg	49	47 U	ug/kg	47
Toxaphene		40 U	ug/kg	40	40 U	ug/kg	40	41 U	ug/kg	41	39 U	ug/kg	39
Isodrin		.82 U	ug/kg	.82	.82 U	ug/kg	.82	.83 U	ug/kg	.83	.79 U	ug/kg	.79
Kepone		49 U	ug/kg	49	49 UJ	ug/kg	49	49 U	ug/kg	49	47 UJ	ug/kg	47
Aroclor-1016		40 U	ug/kg	40	40 U	ug/kg	40	41 U	ug/kg	41	39 U	ug/kg	39
Aroclor-1221		82 U	ug/kg	82	82 U	ug/kg	82	83 U	ug/kg	83	79 U	ug/kg	79
Aroclor-1232		82 U	ug/kg	82	82 U	ug/kg	82	83 U	ug/kg	83	79 U	ug/kg	79
Aroclor-1242		40 U	ug/kg	40	40 U	ug/kg	40	41 U	ug/kg	41	39 U	ug/kg	39
Aroclor-1248		40 U	ug/kg	40	40 U	ug/kg	40	41 U	ug/kg	41	39 U	ug/kg	39
Aroclor-1254		21 U	ug/kg	21	20 U	ug/kg	20	21 U	ug/kg	21	19 U	ug/kg	19
Aroclor-1260		21 U	ug/kg	21	20 U	ug/kg	20	21 U	ug/kg	21	19 U	ug/kg	19

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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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:	M9000006				M9000002				M9000007				M8995002			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14B01004				14B01404				14B01904				14B02105			
Collect Date:	22-MAY-95				22-MAY-95				23-MAY-95				20-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs ug/kg																
alpha-BHC	.85	U	ug/kg	.85	.83	U	ug/kg	.83	.8	U	ug/kg	.8	.74	U	ug/kg	.74
beta-BHC	1.6	U	ug/kg	1.6	1.6	U	ug/kg	1.6	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4
delta-BHC	.85	U	ug/kg	.85	.83	U	ug/kg	.83	.8	U	ug/kg	.8	.74	U	ug/kg	.74
gamma-BHC (Lindane)	.85	U	ug/kg	.85	.83	U	ug/kg	.83	.8	U	ug/kg	.8	.74	U	ug/kg	.74
Heptachlor	.85	U	ug/kg	.85	.83	U	ug/kg	.83	.8	U	ug/kg	.8	.74	U	ug/kg	.74
Aldrin	.85	U	ug/kg	.85	.83	U	ug/kg	.83	.8	U	ug/kg	.8	.74	U	ug/kg	.74
Heptachlor epoxide	.85	U	ug/kg	.85	.83	U	ug/kg	.83	.8	U	ug/kg	.8	.74	U	ug/kg	.74
Endosulfan I	.85	U	ug/kg	.85	.83	U	ug/kg	.83	.8	U	ug/kg	.8	.74	U	ug/kg	.74
Dieldrin	.85	U	ug/kg	.85	.83	U	ug/kg	.83	.8	U	ug/kg	.8	.74	U	ug/kg	.74
4,4-DDE	.85	U	ug/kg	.85	.83	U	ug/kg	.83	.8	U	ug/kg	.8	.74	U	ug/kg	.74
Endrin	1.6	U	ug/kg	1.6	1.6	U	ug/kg	1.6	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4
Endosulfan II	1.6	U	ug/kg	1.6	1.6	U	ug/kg	1.6	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4
4,4-DDD	1.6	U	ug/kg	1.6	1.6	U	ug/kg	1.6	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4
Endosulfan sulfate	1.6	U	ug/kg	1.6	1.6	U	ug/kg	1.6	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4
4,4-DDT	1.6	U	ug/kg	1.6	1.6	U	ug/kg	1.6	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4
Methoxychlor	3.4	U	ug/kg	3.4	3.3	U	ug/kg	3.3	3.2	U	ug/kg	3.2	3	U	ug/kg	3
Endrin aldehyde	1.6	U	ug/kg	1.6	1.6	U	ug/kg	1.6	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4
Endrin ketone	1.6	U	ug/kg	1.6	1.6	U	ug/kg	1.6	1.5	U	ug/kg	1.5	1.4	U	ug/kg	1.4
Chlordane	8.5	U	ug/kg	8.5	8.3	U	ug/kg	8.3	8	U	ug/kg	8	7.4	U	ug/kg	7.4
Chlorobenzilate	25	U	ug/kg	25	25	U	ug/kg	25	24	U	ug/kg	24	22	U	ug/kg	22
Diallate	51	U	ug/kg	51	49	U	ug/kg	49	48	U	ug/kg	48	44	U	ug/kg	44
Toxaphene	42	U	ug/kg	42	41	U	ug/kg	41	39	U	ug/kg	39	36	U	ug/kg	36
Isodrin	.85	U	ug/kg	.85	.83	U	ug/kg	.83	.8	U	ug/kg	.8	.74	U	ug/kg	.74
Kepone	51	U	ug/kg	51	49	U	ug/kg	49	48	U	ug/kg	48	44	U	ug/kg	44
Aroclor-1016	42	U	ug/kg	42	41	U	ug/kg	41	39	U	ug/kg	39	36	U	ug/kg	36
Aroclor-1221	85	U	ug/kg	85	83	U	ug/kg	83	80	U	ug/kg	80	74	U	ug/kg	74
Aroclor-1232	85	U	ug/kg	85	83	U	ug/kg	83	80	U	ug/kg	80	74	U	ug/kg	74
Aroclor-1242	42	U	ug/kg	42	41	U	ug/kg	41	39	U	ug/kg	39	36	U	ug/kg	36
Aroclor-1248	42	U	ug/kg	42	41	U	ug/kg	41	39	U	ug/kg	39	36	U	ug/kg	36
Aroclor-1254	22	U	ug/kg	22	21	U	ug/kg	21	20	U	ug/kg	20	19	U	ug/kg	19
Aroclor-1260	22	U	ug/kg	22	21	U	ug/kg	21	20	U	ug/kg	20	19	U	ug/kg	19

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US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:		M8995004			M8995006			M8995008			M8995009		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		14802203			14802303			14802403			14802504		
Collect Date:		21-MAY-95			21-MAY-95			21-MAY-95			22-MAY-95		
		VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL
PESTICIDES/PCBs	ug/kg												
alpha-BHC		.87	U ug/kg	.87	.8	U ug/kg	.8	.8	U ug/kg	.8	.77	U ug/kg	.77
beta-BHC		1.7	U ug/kg	1.7	1.5	U ug/kg	1.5	1.5	U ug/kg	1.5	1.5	U ug/kg	1.5
delta-BHC		.87	U ug/kg	.87	.8	U ug/kg	.8	.8	U ug/kg	.8	.77	U ug/kg	.77
gamma-BHC (Lindane)		.87	U ug/kg	.87	.8	U ug/kg	.8	.8	U ug/kg	.8	.77	U ug/kg	.77
Heptachlor		.87	U ug/kg	.87	3.2	UJ ug/kg	3.2	.8	U ug/kg	.8	.77	U ug/kg	.77
Aldrin		.87	U ug/kg	.87	.8	U ug/kg	.8	.8	U ug/kg	.8	.77	U ug/kg	.77
Heptachlor epoxide		.87	U ug/kg	.87	.8	U ug/kg	.8	.8	U ug/kg	.8	.77	U ug/kg	.77
Endosulfan I		.87	U ug/kg	.87	.8	U ug/kg	.8	.8	U ug/kg	.8	.77	U ug/kg	.77
Dieldrin		.87	U ug/kg	.87	.8	U ug/kg	.8	.8	U ug/kg	.8	.77	U ug/kg	.77
4,4-DDE		.87	U ug/kg	.87	.8	U ug/kg	.8	.8	U ug/kg	.8	.77	U ug/kg	.77
Endrin		1.7	U ug/kg	1.7	1.5	U ug/kg	1.5	1.5	U ug/kg	1.5	1.5	U ug/kg	1.5
Endosulfan II		1.7	U ug/kg	1.7	1.5	U ug/kg	1.5	1.5	U ug/kg	1.5	1.5	U ug/kg	1.5
4,4-DDD		1.7	U ug/kg	1.7	1.5	U ug/kg	1.5	1.5	U ug/kg	1.5	1.5	U ug/kg	1.5
Endosulfan sulfate		1.7	U ug/kg	1.7	1.5	U ug/kg	1.5	1.5	U ug/kg	1.5	1.5	U ug/kg	1.5
4,4-DDT		1.7	U ug/kg	1.7	1.5	U ug/kg	1.5	1.5	U ug/kg	1.5	1.5	U ug/kg	1.5
Methoxychlor		3.5	U ug/kg	3.5	3.2	U ug/kg	3.2	3.2	U ug/kg	3.2	3.1	U ug/kg	3.1
Endrin aldehyde		1.7	U ug/kg	1.7	1.5	U ug/kg	1.5	1.5	U ug/kg	1.5	1.5	U ug/kg	1.5
Endrin ketone		1.7	U ug/kg	1.7	1.5	U ug/kg	1.5	1.5	U ug/kg	1.5	1.5	U ug/kg	1.5
Chlordane		8.7	U ug/kg	8.7	8	U ug/kg	8	8	U ug/kg	8	7.7	U ug/kg	7.7
Chlorobenzilate		26	U ug/kg	26	24	U ug/kg	24	24	U ug/kg	24	23	U ug/kg	23
Diallate		52	U ug/kg	52	48	U ug/kg	48	48	U ug/kg	48	46	U ug/kg	46
Toxaphene		43	U ug/kg	43	39	U ug/kg	39	39	U ug/kg	39	38	U ug/kg	38
Isodrin		.87	U ug/kg	.87	.8	U ug/kg	.8	.8	U ug/kg	.8	.77	U ug/kg	.77
Kepone		52	U ug/kg	52	48	U ug/kg	48	48	U ug/kg	48	46	U ug/kg	46
Aroclor-1016		43	U ug/kg	43	39	U ug/kg	39	39	U ug/kg	39	38	U ug/kg	38
Aroclor-1221		87	U ug/kg	87	80	U ug/kg	80	80	U ug/kg	80	77	U ug/kg	77
Aroclor-1232		87	U ug/kg	87	80	U ug/kg	80	80	U ug/kg	80	77	U ug/kg	77
Aroclor-1242		43	U ug/kg	43	39	U ug/kg	39	39	U ug/kg	39	38	U ug/kg	38
Aroclor-1248		43	U ug/kg	43	39	U ug/kg	39	39	U ug/kg	39	38	U ug/kg	38
Aroclor-1254		22	U ug/kg	22	20	U ug/kg	20	20	U ug/kg	20	20	U ug/kg	20
Aroclor-1260		22	U ug/kg	22	20	U ug/kg	20	20	U ug/kg	20	20	U ug/kg	20

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US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:	M9000004			M9000005			M8995012			R9955005		
Site	GROUP111			GROUP111			GROUP111			GROUP111		
Locator	18B00204			18B00204D			18B00304			18B00404		
Collect Date:	22-MAY-95			22-MAY-95			22-MAY-95			23-MAY-95		
	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
PESTICIDES/PCBs ug/kg												
alpha-BHC	.79 U	ug/kg	.79	.8 U	ug/kg	.8	.77 U	ug/kg	.77	.82 U	ug/kg	.82
beta-BHC	1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.6 U	ug/kg	1.6
delta-BHC	.79 U	ug/kg	.79	.8 U	ug/kg	.8	.77 U	ug/kg	.77	.82 U	ug/kg	.82
gamma-BHC (Lindane)	.79 U	ug/kg	.79	.8 U	ug/kg	.8	.77 U	ug/kg	.77	.82 U	ug/kg	.82
Heptachlor	.79 U	ug/kg	.79	.8 U	ug/kg	.8	.77 U	ug/kg	.77	.82 U	ug/kg	.82
Aldrin	.79 U	ug/kg	.79	.8 U	ug/kg	.8	.77 U	ug/kg	.77	.82 U	ug/kg	.82
Heptachlor epoxide	.79 U	ug/kg	.79	.8 U	ug/kg	.8	.77 U	ug/kg	.77	.82 U	ug/kg	.82
Endosulfan I	.79 U	ug/kg	.79	.8 U	ug/kg	.8	.77 U	ug/kg	.77	.82 U	ug/kg	.82
Dieldrin	.79 U	ug/kg	.79	.8 U	ug/kg	.8	5.3	ug/kg	.77	.82 U	ug/kg	.82
4,4-DDE	.79 U	ug/kg	.79	.8 U	ug/kg	.8	.77 U	ug/kg	.77	.82 U	ug/kg	.82
Endrin	1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.6 U	ug/kg	1.6
Endosulfan II	1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.6 U	ug/kg	1.6
4,4-DDD	1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.6 U	ug/kg	1.6
Endosulfan sulfate	1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.6 U	ug/kg	1.6
4,4-DDT	1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.6 U	ug/kg	1.6
Methoxychlor	3.2 U	ug/kg	3.2	3.2 U	ug/kg	3.2	6.2 UJ	ug/kg	6.2	3.3 U	ug/kg	3.3
Endrin aldehyde	1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.6 U	ug/kg	1.6
Endrin ketone	1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.5 U	ug/kg	1.5	1.6 U	ug/kg	1.6
Chlordane	7.9 U	ug/kg	7.9	8 U	ug/kg	8	7.7 U	ug/kg	7.7	8.2 U	ug/kg	8.2
Chlorobenzilate	24 U	ug/kg	24	24 U	ug/kg	24	23 U	ug/kg	23	24 U	ug/kg	24
Diallate	47 U	ug/kg	47	48 U	ug/kg	48	46 U	ug/kg	46	49 U	ug/kg	49
Toxaphene	39 U	ug/kg	39	39 U	ug/kg	39	38 U	ug/kg	38	40 U	ug/kg	40
Isodrin	.79 U	ug/kg	.79	.8 U	ug/kg	.8	.77 U	ug/kg	.77	.82 U	ug/kg	.82
Kepone	47 U	ug/kg	47	48 U	ug/kg	48	46 U	ug/kg	46	49 UJ	ug/kg	49
Aroclor-1016	39 U	ug/kg	39	39 U	ug/kg	39	38 U	ug/kg	38	40 U	ug/kg	40
Aroclor-1221	79 U	ug/kg	79	80 U	ug/kg	80	77 U	ug/kg	77	82 U	ug/kg	82
Aroclor-1232	79 U	ug/kg	79	80 U	ug/kg	80	77 U	ug/kg	77	82 U	ug/kg	82
Aroclor-1242	39 U	ug/kg	39	39 U	ug/kg	39	38 U	ug/kg	38	40 U	ug/kg	40
Aroclor-1248	39 U	ug/kg	39	39 U	ug/kg	39	38 U	ug/kg	38	40 U	ug/kg	40
Aroclor-1254	20 U	ug/kg	20	20 U	ug/kg	20	20 U	ug/kg	20	20 U	ug/kg	20
Aroclor-1260	20 U	ug/kg	20	20 U	ug/kg	20	20 U	ug/kg	20	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:	M9000003				R9955001				M9000009				R9955002			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14B00204				14B00604				14B00704				14B00804			
Collect Date:	22-MAY-95				23-MAY-95				23-MAY-95				23-MAY-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	.71	UJ	mg/kg	.71	1.2	U	mg/kg	1.2	.52	U	mg/kg	.52	1.2	U	mg/kg	1.2
Arsenic	.86	J	mg/kg	.18	.34	J	mg/kg	.6	.27	UJ	mg/kg	.27	.68	J	mg/kg	.6
Barium	1.9	J	mg/kg	.095	3.2	J	mg/kg	.27	4.6	J	mg/kg	.1	2.7	J	mg/kg	.26
Beryllium	.09	J	mg/kg	.033	.08	J	mg/kg	.073	.11	J	mg/kg	.035	.15	J	mg/kg	.07
Cadmium	.69	U	mg/kg	.69	.29	U	mg/kg	.29	.72	U	mg/kg	.72	.28	U	mg/kg	.28
Chromium	2	J	mg/kg	1.4	1.9	J	mg/kg	.42	3.1		mg/kg	1.5	2.9		mg/kg	.4
Cobalt	.88	U	mg/kg	.88	.76	U	mg/kg	.76	.92	U	mg/kg	.92	.73	U	mg/kg	.73
Copper	.38	U	mg/kg	.38	6.7		mg/kg	.24	2.7	J	mg/kg	.4	4.2	J	mg/kg	.23
Cyanide	.11	U	mg/kg	.11	.06	U	mg/kg	.06	.12	U	mg/kg	.12	.09	J	mg/kg	1
Lead	1.4		mg/kg	.25	2.9		mg/kg	.4	1.9		mg/kg	.27	2		mg/kg	.4
Mercury	.07	U	mg/kg	.07	.03	U	mg/kg	.03	.08	U	mg/kg	.08	.07	U	mg/kg	.07
Nickel	1.7	U	mg/kg	1.7	1.4	U	mg/kg	1.4	1.8	U	mg/kg	1.8	1.3	U	mg/kg	1.3
Selenium	.31	J	mg/kg	.26	.12	U	mg/kg	.12	.27	UJ	mg/kg	.27	.12	U	mg/kg	.12
Silver	.43	U	mg/kg	.43	.34	U	mg/kg	.34	.45	U	mg/kg	.45	.33	U	mg/kg	.33
Thallium	.4	U	mg/kg	.4	.15	U	mg/kg	.15	.42	U	mg/kg	.42	.14	U	mg/kg	.14
Tin	2.9	J	mg/kg	2.1	3.4	J	mg/kg	3.3	31.3		mg/kg	2.2	3.2	U	mg/kg	3.2
Vanadium	1.3	J	mg/kg	.47	1.5	J	mg/kg	.29	1.8	J	mg/kg	.5	2	J	mg/kg	.28
Zinc	2.9	UJ	mg/kg	2.9	11.9		mg/kg	.51	17.1	J	mg/kg	.35	3.6	UJ	mg/kg	3.6

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:		M9000006				M9000002				M9000007				M8995002		
Site		GROUP111				GROUP111				GROUP111				GROUP111		
Locator		14B01004				14B01404				14B01904				14B02105		
Collect Date:		22-MAY-95				22-MAY-95				23-MAY-95				20-MAY-95		
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg																
Antimony		.66	UJ	mg/kg	.66	.54	UJ	mg/kg	.54	.9	UJ	mg/kg	.9	.47	U	mg/kg	.47
Arsenic		.79	J	mg/kg	.19	.73	UJ	mg/kg	.73	.57	UJ	mg/kg	.57	.64	UJ	mg/kg	.64
Barium		3.2	J	mg/kg	.1	2	J	mg/kg	.095	5.6	J	mg/kg	.095	1.3	J	mg/kg	.09
Beryllium		.11	J	mg/kg	.036	.09	J	mg/kg	.033	.19	J	mg/kg	.033	.07	J	mg/kg	.032
Cadmium		.74	U	mg/kg	.74	.69	U	mg/kg	.69	.69	U	mg/kg	.69	.65	U	mg/kg	.65
Chromium		3.2		mg/kg	1.5	2.2	J	mg/kg	1.4	5.8		mg/kg	1.4	1.8	J	mg/kg	1.3
Cobalt		.94	U	mg/kg	.94	.88	U	mg/kg	.88	.88	U	mg/kg	.88	.84	J	mg/kg	.83
Copper		.87	J	mg/kg	.41	.38	U	mg/kg	.38	1.1	J	mg/kg	.38	.36	U	mg/kg	.36
Cyanide		.12	U	mg/kg	.12	.11	U	mg/kg	.11	.11	U	mg/kg	.11	.11	U	mg/kg	.11
Lead		1.3		mg/kg	.27	1.1		mg/kg	.25	3		mg/kg	.25	.93		mg/kg	.24
Mercury		.07	U	mg/kg	.07	.08	U	mg/kg	.08	.07	U	mg/kg	.07	.07	UJ	mg/kg	.07
Nickel		1.8	U	mg/kg	1.8	1.7	U	mg/kg	1.7	1.9	J	mg/kg	1.7	1.6	U	mg/kg	1.6
Selenium		.31	J	mg/kg	.28	.26	UJ	mg/kg	.26	.26	UJ	mg/kg	.26	.24	UJ	mg/kg	.24
Silver		.46	U	mg/kg	.46	.43	U	mg/kg	.43	.43	U	mg/kg	.43	.4	U	mg/kg	.4
Thallium		.43	U	mg/kg	.43	.4	U	mg/kg	.4	.4	U	mg/kg	.4	.38	U	mg/kg	.38
Tin		3.5	J	mg/kg	2.3	3.6	J	mg/kg	2.1	3.9	J	mg/kg	2.1	6.6	J	mg/kg	2
Vanadium		2.2	J	mg/kg	.51	1.4	J	mg/kg	.47	3.4	J	mg/kg	.47	1.4	J	mg/kg	.45
Zinc		3	UJ	mg/kg	3	2.8	UJ	mg/kg	2.8	3.6	UJ	mg/kg	3.6	2.8	UJ	mg/kg	2.8

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:		M8995004			M8995006			M8995008			M8995009		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		14B02203			14B02303			14B02403			14B02504		
Collect Date:		21-MAY-95			21-MAY-95			21-MAY-95			22-MAY-95		
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	
INORGANICS (SOIL)	mg/kg												
Antimony	.54	U	mg/kg	.54	.5	U	mg/kg	.5	.49	U	mg/kg	.49	.54
Arsenic	.65	UJ	mg/kg	.65	1.1	J	mg/kg	.18	1.3	J	mg/kg	.18	.76
Barium	3.3	J	mg/kg	.1	2.8	J	mg/kg	.096	4.3	J	mg/kg	.094	2.4
Beryllium	.13	J	mg/kg	.036	.1	J	mg/kg	.034	.13	J	mg/kg	.033	.09
Cadmium	.74	U	mg/kg	.74	.7	U	mg/kg	.7	.68	U	mg/kg	.68	.66
Chromium	3.4		mg/kg	1.5	2	J	mg/kg	1.4	3.6		mg/kg	1.4	3
Cobalt	.95	U	mg/kg	.95	.89	U	mg/kg	.89	1	J	mg/kg	.87	.84
Copper	.41	U	mg/kg	.41	.38	U	mg/kg	.38	.43	J	mg/kg	.38	1.1
Cyanide	.12	U	mg/kg	.12	.12	U	mg/kg	.12	.11	U	mg/kg	.11	.11
Lead	1.3		mg/kg	.27	2.4		mg/kg	.26	1.6		mg/kg	.25	1.9
Mercury	.08	UJ	mg/kg	.08	.08	UJ	mg/kg	.08	.07	UJ	mg/kg	.07	.07
Nickel	1.8	U	mg/kg	1.8	1.7	U	mg/kg	1.7	1.7	U	mg/kg	1.7	1.6
Selenium	.28	UJ	mg/kg	.28	.26	UJ	mg/kg	.26	.26	UJ	mg/kg	.26	.25
Silver	.46	U	mg/kg	.46	.43	U	mg/kg	.43	.42	U	mg/kg	.42	.41
Thallium	.43	U	mg/kg	.43	.41	U	mg/kg	.41	.4	U	mg/kg	.4	.38
Tin	3.2	J	mg/kg	2.3	2.6	J	mg/kg	2.2	5.4	J	mg/kg	2.1	4.4
Vanadium	2.3	J	mg/kg	.51	1.9	J	mg/kg	.48	3.6	J	mg/kg	.47	2.2
Zinc	2.9	UJ	mg/kg	2.9	3.6	UJ	mg/kg	3.6	3.2	UJ	mg/kg	3.2	3.2

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sub-Surface Soil Data

Lab Sample Number:		M9000004				M9000005				M8995012				R9955005		
Site		GROUP111				GROUP111				GROUP111				GROUP111		
Locator		18B00204				18B00204D				18B00304				18B00404		
Collect Date:		22-MAY-95				22-MAY-95				22-MAY-95				23-MAY-95		
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg															
Antimony	.53	U	mg/kg	.53	1.6	UJ	mg/kg	1.6	.47	U	mg/kg	.47	1.2	U	mg/kg	1.2
Arsenic	.89		mg/kg	.19	.8	J	mg/kg	.18	.4	UJ	mg/kg	.4	.39	J	mg/kg	.6
Barium	3.3	J	mg/kg	.1	2.7	J	mg/kg	.094	2.3	J	mg/kg	.091	3.8	J	mg/kg	.27
Beryllium	.1	J	mg/kg	.036	.06	J	mg/kg	.033	.07	J	mg/kg	.032	.1	J	mg/kg	.073
Cadmium	.74	U	mg/kg	.74	.68	U	mg/kg	.68	.66	U	mg/kg	.66	.29	U	mg/kg	.29
Chromium	2.9		mg/kg	1.5	2.5		mg/kg	1.4	2.1	J	mg/kg	1.3	3.2		mg/kg	.41
Cobalt	.94	U	mg/kg	.94	.87	U	mg/kg	.87	.84	U	mg/kg	.84	.75	U	mg/kg	.75
Copper	.52	J	mg/kg	.41	.66	J	mg/kg	.37	.36	J	mg/kg	.36	2.8	UJ	mg/kg	2.8
Cyanide	.12	U	mg/kg	.12	.11	U	mg/kg	.11	.11	U	mg/kg	.11	.17	J	mg/kg	1
Lead	1.8		mg/kg	.27	1.8		mg/kg	.25	3		mg/kg	.24	2.7		mg/kg	.4
Mercury	.08	U	mg/kg	.08	.08	U	mg/kg	.08	.07	U	mg/kg	.07	.03	U	mg/kg	.03
Nickel	1.8	U	mg/kg	1.8	1.7	U	mg/kg	1.7	1.6	U	mg/kg	1.6	1.4	U	mg/kg	1.4
Selenium	.28	UJ	mg/kg	.28	.26	UJ	mg/kg	.26	.25	UJ	mg/kg	.25	.12	U	mg/kg	.12
Silver	.46	U	mg/kg	.46	.42	U	mg/kg	.42	.41	U	mg/kg	.41	.34	U	mg/kg	.34
Thallium	.43	U	mg/kg	.43	.4	U	mg/kg	.4	.38	U	mg/kg	.38	.15	U	mg/kg	.15
Tin	4.4	J	mg/kg	2.3	2.8	J	mg/kg	2.1	2.3	J	mg/kg	2	4.8	J	mg/kg	3.3
Vanadium	2.2	J	mg/kg	.51	2	J	mg/kg	.47	1.2	J	mg/kg	.45	1.7	J	mg/kg	.29
Zinc	3.1	UJ	mg/kg	3.1	2.8	UJ	mg/kg	2.8	3.1	UJ	mg/kg	3.1	5.2		mg/kg	.51

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

SURFACE WATER SAMPLE ANALYSES, SWMU 14

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Water Data

Lab Sample Number:		R9807003				R9807004				R9807005			
Site		GROUP111				GROUP111				GROUP111			
Locator		14W004				14W004D				14W005			
Collect Date:		21-APR-95				21-APR-95				21-APR-95			
		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
Bromomethane		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
Chloroethane		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
Acetone		10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Carbon disulfide		5	U	ug/l	5	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
1,1-Dichloroethene		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
Chloroform		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2-Dichloroethane		5	UJ	ug/l	5	5	UJ	ug/l	5	5	UJ	ug/l	5
2-Butanone		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
Carbon tetrachloride		5	UJ	ug/l	5	5	UJ	ug/l	5	5	UJ	ug/l	5
Bromodichloromethane		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
cis-1,3-Dichloropropene		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
Dibromochloromethane		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
Benzene		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
Bromoform		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
2-Hexanone		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
1,1,2,2-Tetrachloroethane		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
Chlorobenzene		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
Styrene		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
Dichlorodifluoromethane		10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10
Trichlorofluoromethane		5	UJ	ug/l	5	5	UJ	ug/l	5	5	UJ	ug/l	5
1,3-Dichlorobenzene		10	U	ug/l	10	10	U	ug/l	10	5	U	ug/l	5
Acrolein		100	UJ	ug/l	100	100	UJ	ug/l	100	100	UJ	ug/l	100
Iodomethane		10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10
1,4-Dichlorobenzene		5	U	ug/l	5	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
Dibromomethane		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
2-Chloroethylvinyl ether		10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10
Ethyl methacrylate		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
trans-1,4-Dichloro-2-butene		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Isobutyl alcohol		200	R	ug/l	200	200	R	ug/l	200	200	R	ug/l	200
1,1,1,2-Tetrachloroethane		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
1,2-Dibromoethane		5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Water Data

Lab Sample Number:	R9807003				R9807004				R9807005			
Site	GROUP111				GROUP111				GROUP111			
Locator	14W004				14W004D				14W005			
Collect Date:	21-APR-95				21-APR-95				21-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	200	R	ug/l	200	200	R	ug/l	200	200	R	ug/l	200
3-Chloropropene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Acetonitrile	100	UJ	ug/l	100	100	UJ	ug/l	100	100	UJ	ug/l	100
Chloroprene	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
Methyl methacrylate	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Pentachloroethane	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Propionitrile	100	U	ug/l	100	100	U	ug/l	100	100	U	ug/l	100
Vinyl acetate	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Water Data

Lab Sample Number:	R9807003				R9807004				R9807005			
Site	GROUP111				GROUP111				GROUP111			
Locator	14W004				14W004D				14W005			
Collect Date:	21-APR-95				21-APR-95				21-APR-95			
	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	U	ug/l	10
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	U	ug/l	10
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	U	ug/l	50
Acenaphthene	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
4-Nitrophenol	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
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	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50
4,6-Dinitro-2-methylphenol	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
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	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

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Water Data

Lab Sample Number:	R9807003				R9807004				R9807005			
Site	GROUP111				GROUP111				GROUP111			
Locator	14W004				14W004D				14W005			
Collect Date:	21-APR-95				21-APR-95				21-APR-95			
	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
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	57	UJ	ug/l	57	10	UJ	ug/l	10	10	UJ	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	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	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	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
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	U	ug/l	10
Phenyl-tert-butylamine	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
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	U	ug/l	50
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	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50
2-Naphthylamine	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	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	U	ug/l	10
4-Aminobiphenyl	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	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	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	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	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
Isosafrole	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
1,3-Dinitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
5-Nitro-o-toluidine	10	UJ	ug/l	10	10	UJ	ug/l	10	10	UJ	ug/l	10
1,3,5-Trinitrobenzene	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
4-Nitroquinoline-1-oxide	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
3,3-Dimethylbenzidine	10	U	ug/l	10	10	U	ug/l	10	10	U	ug/l	10
Hexachlorophene	500	UJ	ug/l	500	500	UJ	ug/l	500	500	UJ	ug/l	500

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Water Data

Lab Sample Number:	R9807003				R9807004				R9807005			
Site	GROUP111				GROUP111				GROUP111			
Locator	14W004				14W004D				14W005			
Collect Date:	21-APR-95				21-APR-95				21-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Aramite	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50
2-Chlorophenol	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
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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Water Data

Lab Sample Number:	R9807003			R9807004			R9807005		
Site	GROUP111			GROUP111			GROUP111		
Locator	14W004			14W004D			14W005		
Collect Date:	21-APR-95			21-APR-95			21-APR-95		
	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
beta-BHC	.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
gamma-BHC (Lindane)	.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
Aldrin	.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
Endosulfan I	.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
4,4-DDE	.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
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	.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
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	1 U	ug/l	1
Aroclor-1221	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
Aroclor-1242	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
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

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Surface Water Data

Lab Sample Number:	R9807003				R9807004				R9807005			
Site	GROUP111				GROUP111				GROUP111			
Locator	14W004				14W004D				14W005			
Collect Date:	21-APR-95				21-APR-95				21-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (WATER) ug/l												
Antimony	50	UJ	ug/l	50	50	UJ	ug/l	50	50	UJ	ug/l	50
Arsenic	6	UJ	ug/l	6	6	UJ	ug/l	6	6	UJ	ug/l	6
Barium	9.1	J	ug/l	1.1	11.1	J	ug/l	1.1	8.7	J	ug/l	1.1
Beryllium	.3	U	ug/l	.3	.3	U	ug/l	.3	.3	U	ug/l	.3
Cadmium	1.2	U	ug/l	1.2	1.2	U	ug/l	1.2	1.2	U	ug/l	1.2
Calcium	207000		ug/l	34.8	196000		ug/l	34.8	206000		ug/l	34.8
Chromium	1.7	U	ug/l	1.7	1.7	U	ug/l	1.7	1.7	U	ug/l	1.7
Cobalt	3.1	UJ	ug/l	3.1	3.1	UJ	ug/l	3.1	3.1	UJ	ug/l	3.1
Copper	1	U	ug/l	1	5.4	UJ	ug/l	5.4	1	U	ug/l	1
Cyanide	3	UJ	ug/l	3	3	UJ	ug/l	3	3	UJ	ug/l	3
Iron	115	J	ug/l	1.9	989	J	ug/l	1.9	103	J	ug/l	1.9
Lead	4	U	ug/l	4	4	J	ug/l	4	4	U	ug/l	4
Magnesium	674000		ug/l	19.8	581000		ug/l	19.8	661000		ug/l	19.8
Manganese	4.8	J	ug/l	.5	16.3		ug/l	.5	5.1	J	ug/l	.5
Mercury	.1	U	ug/l	.1	.1	U	ug/l	.1	.1	U	ug/l	.1
Nickel	5.7	U	ug/l	5.7	5.7	U	ug/l	5.7	5.7	U	ug/l	5.7
Selenium	5	UJ	ug/l	5	50	UJ	ug/l	50	50	UJ	ug/l	50
Silver	1.4	U	ug/l	1.4	1.4	U	ug/l	1.4	1.4	U	ug/l	1.4
Sodium	5050000		ug/l	390	4690000		ug/l	390	5540000		ug/l	390
Thallium	6	UJ	ug/l	6	6	UJ	ug/l	6	6	UJ	ug/l	6
Tin	272	U	ug/l	272	272	U	ug/t	272	272	U	ug/l	272
Vanadium	3	J	ug/l	1.2	8.4	J	ug/l	1.2	4.6	J	ug/l	1.2
Zinc	4.6	UJ	ug/l	4.6	20.2		ug/l	2.1	4.8	UJ	ug/l	4.8

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

SEDIMENT SAMPLE ANALYSES, SWMUs 14 AND 18

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number:		R9800005				R9800006				R9800007				R9800014		
Site		GROUP111				GROUP111				GROUP111				GROUP111		
Locator		14D00101				14D00201				14D00301				14D00401		
Collect Date:		19-APR-95				19-APR-95				19-APR-95				21-APR-95		
		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	62	U	ug/kg	62	13	U	ug/kg	13	64	U	ug/kg	64
Bromomethane		12	U	ug/kg	12	62	U	ug/kg	62	13	U	ug/kg	13	64	U	ug/kg	64
Vinyl chloride		12	U	ug/kg	12	62	U	ug/kg	62	13	U	ug/kg	13	64	U	ug/kg	64
Chloroethane		12	U	ug/kg	12	62	U	ug/kg	62	13	U	ug/kg	13	64	U	ug/kg	64
Methylene chloride		6	U	ug/kg	6	26	U	ug/kg	26	7	U	ug/kg	7	23	U	ug/kg	23
Acetone		12	U	ug/kg	12	72		ug/kg	62	26		ug/kg	13	64	U	ug/kg	64
Carbon disulfide		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
1,1-Dichloroethane		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
1,1-Dichloroethene		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
1,2-Dichloroethene (total)		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
Chloroform		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
1,2-Dichloroethane		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
2-Butanone		12	U	ug/kg	12	62	U	ug/kg	62	6	J	ug/kg	13	64	U	ug/kg	64
1,1,1-Trichloroethane		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
Carbon tetrachloride		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
Bromodichloromethane		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
1,2-Dichloropropane		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
cis-1,3-Dichloropropene		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
Trichloroethene		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
Dibromochloromethane		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
1,1,2-Trichloroethane		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
Benzene		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
trans-1,3-Dichloropropene		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
Bromoform		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
4-Methyl-2-pentanone		12	U	ug/kg	12	62	U	ug/kg	62	13	U	ug/kg	13	64	U	ug/kg	64
2-Hexanone		12	U	ug/kg	12	62	U	ug/kg	62	13	U	ug/kg	13	64	U	ug/kg	64
Tetrachloroethene		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
1,1,2,2-Tetrachloroethane		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
Toluene		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
Chlorobenzene		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
Ethylbenzene		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
Styrene		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
Xylenes (total)		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
Dichlorodifluoromethane		12	U	ug/kg	12	62	U	ug/kg	62	13	U	ug/kg	13	64	U	ug/kg	64
Trichlorofluoromethane		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
1,3-Dichlorobenzene		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
Acrolein		120	UJ	ug/kg	120	620	UJ	ug/kg	620	130	UJ	ug/kg	130	640	UJ	ug/kg	640
Iodomethane		12	U	ug/kg	12	62	U	ug/kg	62	13	U	ug/kg	13	64	U	ug/kg	64
1,4-Dichlorobenzene		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
Acrylonitrile		120	UJ	ug/kg	120	620	UJ	ug/kg	620	130	U	ug/kg	130	640	UJ	ug/kg	640
Dibromomethane		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
1,2-Dichlorobenzene		6	U	ug/kg	6	31	U	ug/kg	31	1800	U	ug/kg	1800	860	U	ug/kg	860
2-Chloroethylvinyl ether		12	U	ug/kg	12	62	U	ug/kg	62	13	U	ug/kg	13	64	U	ug/kg	64
Ethyl methacrylate		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
1,2,3-Trichloropropane		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
trans-1,4-Dichloro-2-butene		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
Isobutyl alcohol		240	U	ug/kg	240	1200	U	ug/kg	1200	260	U	ug/kg	260	1300	U	ug/kg	1300
1,1,1,2-Tetrachloroethane		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
1,2-Dibromo-3-chloropropane		12	U	ug/kg	12	62	U	ug/kg	62	13	U	ug/kg	13	64	U	ug/kg	64
1,2-Dibromoethane		6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number:	R9800005				R9800006				R9800007				R9800014			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14D00101				14D00201				14D00301				14D00401			
Collect Date:	19-APR-95				19-APR-95				19-APR-95				21-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,4-Dioxane	240	R	ug/kg	240	1200	R	ug/kg	1200	260	R	ug/kg	260	1300	R	ug/kg	1300
3-Chloropropene	6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
Acetonitrile	120	U	ug/kg	120	620	U	ug/kg	620	130	U	ug/kg	130	640	U	ug/kg	640
Chloroprene	240	U	ug/kg	240	1200	U	ug/kg	1200	260	U	ug/kg	260	1300	U	ug/kg	1300
Methacrylonitrile	6	U	ug/kg	6	31	U	ug/kg	31	6	U	ug/kg	6	32	U	ug/kg	32
Methyl methacrylate	12	U	ug/kg	12	62	U	ug/kg	62	13	U	ug/kg	13	64	U	ug/kg	64
Pentachloroethane	12	U	ug/kg	12	62	U	ug/kg	62	13	U	ug/kg	13	64	U	ug/kg	64
Propionitrile	120	U	ug/kg	120	620	U	ug/kg	620	130	U	ug/kg	130	640	U	ug/kg	640
Vinyl acetate	12	U	ug/kg	12	62	U	ug/kg	62	13	U	ug/kg	13	64	U	ug/kg	64

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number:	R9800015				R9800016				R9800017				R9800008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14D00501				14D00601				14D00601D				14D00701			
Collect Date:	21-APR-95				21-APR-95				21-APR-95				20-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
VOLATILES ug/kg																
Chloromethane	62	U	ug/kg	62	66	U	ug/kg	66	64	U	ug/kg	64	12	U	ug/kg	12
Bromomethane	62	U	ug/kg	62	66	U	ug/kg	66	64	U	ug/kg	64	12	U	ug/kg	12
Vinyl chloride	62	U	ug/kg	62	66	U	ug/kg	66	64	U	ug/kg	64	12	U	ug/kg	12
Chloroethane	62	U	ug/kg	62	66	U	ug/kg	66	64	U	ug/kg	64	12	U	ug/kg	12
Methylene chloride	23	U	ug/kg	23	24	U	ug/kg	24	22	U	ug/kg	22	6	U	ug/kg	6
Acetone	24	U	ug/kg	24	140		ug/kg	66	39	U	ug/kg	39	12	U	ug/kg	12
Carbon disulfide	31	U	ug/kg	31	8	J	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
1,1-Dichloroethane	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
1,1-Dichloroethene	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
1,2-Dichloroethene (total)	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
Chloroform	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
1,2-Dichloroethane	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
2-Butanone	62	U	ug/kg	62	30	J	ug/kg	66	64	U	ug/kg	64	12	U	ug/kg	12
1,1,1-Trichloroethane	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
Carbon tetrachloride	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
Bromodichloromethane	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
1,2-Dichloropropane	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
cis-1,3-Dichloropropene	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
Trichloroethene	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
Dibromochloromethane	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
1,1,2-Trichloroethane	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
Benzene	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
trans-1,3-Dichloropropene	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
Bromoform	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
4-Methyl-2-pentanone	62	U	ug/kg	62	66	U	ug/kg	66	64	U	ug/kg	64	12	U	ug/kg	12
2-Hexanone	62	U	ug/kg	62	66	U	ug/kg	66	64	U	ug/kg	64	12	U	ug/kg	12
Tetrachloroethene	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
1,1,2,2-Tetrachloroethane	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
Toluene	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
Chlorobenzene	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
Ethylbenzene	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
Styrene	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
Xylenes (total)	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
Dichlorodifluoromethane	62	U	ug/kg	62	66	U	ug/kg	66	64	U	ug/kg	64	12	U	ug/kg	12
Trichlorofluoromethane	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
1,3-Dichlorobenzene	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
Acrolein	620	UJ	ug/kg	620	660	UJ	ug/kg	660	640	UJ	ug/kg	640	120	UJ	ug/kg	120
Iodomethane	62	U	ug/kg	62	66	U	ug/kg	66	64	U	ug/kg	64	12	U	ug/kg	12
1,4-Dichlorobenzene	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
Acrylonitrile	620	UJ	ug/kg	620	660	UJ	ug/kg	660	640	UJ	ug/kg	640	120	UJ	ug/kg	120

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number:	R9800015				R9800016				R9800017				R9800008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14D00501				14D00601				14D00601D				14D00701			
Collect Date:	21-APR-95				21-APR-95				21-APR-95				20-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
1,2-Dichlorobenzene	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
2-Chloroethylvinyl ether	62	U	ug/kg	62	66	U	ug/kg	66	64	U	ug/kg	64	12	U	ug/kg	12
Ethyl methacrylate	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
1,2,3-Trichloropropane	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
trans-1,4-Dichloro-2-butene	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
Isobutyl alcohol	1200	U	ug/kg	1200	1300	U	ug/kg	1300	1300	U	ug/kg	1300	250	U	ug/kg	250
1,1,1,2-Tetrachloroethane	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
1,2-Dibromo-3-chloropropane	62	U	ug/kg	62	66	U	ug/kg	66	64	U	ug/kg	64	12	U	ug/kg	12
1,2-Dibromoethane	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
1,4-Dioxane	1200	R	ug/kg	1200	1300	R	ug/kg	1300	1300	R	ug/kg	1300	250	R	ug/kg	250
3-Chloropropene	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
Acetonitrile	620	U	ug/kg	620	660	U	ug/kg	660	640	U	ug/kg	640	120	U	ug/kg	120
Chloroprene	1200	U	ug/kg	1200	1300	U	ug/kg	1300	1300	U	ug/kg	1300	250	U	ug/kg	250
Methacrylonitrile	31	U	ug/kg	31	33	U	ug/kg	33	32	U	ug/kg	32	6	U	ug/kg	6
Methyl methacrylate	62	U	ug/kg	62	66	U	ug/kg	66	64	U	ug/kg	64	12	U	ug/kg	12
Pentachloroethane	62	U	ug/kg	62	66	U	ug/kg	66	64	U	ug/kg	64	12	U	ug/kg	12
Propionitrile	620	U	ug/kg	620	660	U	ug/kg	660	640	U	ug/kg	640	120	U	ug/kg	120
Vinyl acetate	62	U	ug/kg	62	66	U	ug/kg	66	64	U	ug/kg	64	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number:	R9800009				R9800002				R9800003				R9800001			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14D00801				18D00101				18D00101D				18D00201			
Collect Date:	20-APR-95				19-APR-95				19-APR-95				19-APR-95			
	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	12	U	ug/kg	12	12	U	ug/kg	12	10	U	ug/kg	10
Bromomethane	13	U	ug/kg	13	12	U	ug/kg	12	12	U	ug/kg	12	10	U	ug/kg	10
Vinyl chloride	13	U	ug/kg	13	12	U	ug/kg	12	12	U	ug/kg	12	10	U	ug/kg	10
Chloroethane	13	U	ug/kg	13	12	U	ug/kg	12	12	U	ug/kg	12	10	U	ug/kg	10
Methylene chloride	6	U	ug/kg	6	6	U	ug/kg	6	13	U	ug/kg	13	5	U	ug/kg	5
Acetone	13	U	ug/kg	13	12	U	ug/kg	12	10	J	ug/kg	12	10	U	ug/kg	10
Carbon disulfide	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,1-Dichloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,1-Dichloroethene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dichloroethene (total)	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Chloroform	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dichloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
2-Butanone	13	U	ug/kg	13	12	U	ug/kg	12	12	U	ug/kg	12	4	J	ug/kg	10
1,1,1-Trichloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Carbon tetrachloride	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Bromodichloromethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dichloropropane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
cis-1,3-Dichloropropene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Trichloroethene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Dibromochloromethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,1,2-Trichloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Benzene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
trans-1,3-Dichloropropene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Bromoform	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
4-Methyl-2-pentanone	13	U	ug/kg	13	12	U	ug/kg	12	12	U	ug/kg	12	10	U	ug/kg	10
2-Hexanone	13	U	ug/kg	13	12	U	ug/kg	12	12	U	ug/kg	12	10	U	ug/kg	10
Tetrachloroethene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,1,2,2-Tetrachloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Toluene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Chlorobenzene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Ethylbenzene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Styrene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Xylenes (total)	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Dichlorodifluoromethane	13	U	ug/kg	13	12	U	ug/kg	12	12	U	ug/kg	12	10	U	ug/kg	10
Trichlorofluoromethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,3-Dichlorobenzene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	750	U	ug/kg	750
Acrolein	130	UJ	ug/kg	130	120	UJ	ug/kg	120	120	UJ	ug/kg	120	100	UJ	ug/kg	100
Iodomethane	13	U	ug/kg	13	12	U	ug/kg	12	12	U	ug/kg	12	10	U	ug/kg	10
1,4-Dichlorobenzene	6	U	ug/kg	6	770	U	ug/kg	770	6	U	ug/kg	6	5	U	ug/kg	5
Acrylonitrile	130	UJ	ug/kg	130	120	UJ	ug/kg	120	120	U	ug/kg	120	100	UJ	ug/kg	100

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number:	R9800009				R9800002				R9800003				R9800001			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14D00801				18D00101				18D00101D				18D00201			
Collect Date:	20-APR-95				19-APR-95				19-APR-95				19-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Dibromomethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dichlorobenzene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	750	U	ug/kg	750
2-Chloroethylvinyl ether	13	U	ug/kg	13	12	U	ug/kg	12	12	U	ug/kg	12	10	U	ug/kg	10
Ethyl methacrylate	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,2,3-Trichloropropene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
trans-1,4-Dichloro-2-butene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Isobutyl alcohol	250	U	ug/kg	250	230	U	ug/kg	230	230	U	ug/kg	230	210	U	ug/kg	210
1,1,1,2-Tetrachloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dibromo-3-chloropropane	13	U	ug/kg	13	12	U	ug/kg	12	12	U	ug/kg	12	10	U	ug/kg	10
1,2-Dibromoethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,4-Dioxane	250	R	ug/kg	250	230	R	ug/kg	230	230	R	ug/kg	230	210	R	ug/kg	210
3-Chloropropene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Acetonitrile	130	U	ug/kg	130	120	U	ug/kg	120	120	U	ug/kg	120	100	U	ug/kg	100
Chloroprene	250	U	ug/kg	250	230	U	ug/kg	230	230	U	ug/kg	230	210	U	ug/kg	210
Methacrylonitrile	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Methyl methacrylate	13	U	ug/kg	13	12	U	ug/kg	12	12	U	ug/kg	12	10	U	ug/kg	10
Pentachloroethane	13	U	ug/kg	13	12	U	ug/kg	12	12	U	ug/kg	12	10	U	ug/kg	10
Propionitrile	130	U	ug/kg	130	120	U	ug/kg	120	120	U	ug/kg	120	100	U	ug/kg	100
Vinyl acetate	13	U	ug/kg	13	12	U	ug/kg	12	12	U	ug/kg	12	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number:	R9800004
Site	GROUP111
Locator	18000301
Collect Date:	19-APR-95

		VALUE	QUAL	UNITS	DL
VOLATILES	ug/kg				
Chloromethane		11	U	ug/kg	11
Bromomethane		11	U	ug/kg	11
Vinyl chloride		11	U	ug/kg	11
Chloroethane		11	U	ug/kg	11
Methylene chloride		5	U	ug/kg	5
Acetone		11	U	ug/kg	11
Carbon disulfide		5	U	ug/kg	5
1,1-Dichloroethane		5	U	ug/kg	5
1,1-Dichloroethene		5	U	ug/kg	5
1,2-Dichloroethene (total)		5	U	ug/kg	5
Chloroform		5	U	ug/kg	5
1,2-Dichloroethane		5	U	ug/kg	5
2-Butanone		11	U	ug/kg	11
1,1,1-Trichloroethane		5	U	ug/kg	5
Carbon tetrachloride		5	U	ug/kg	5
Bromodichloromethane		5	U	ug/kg	5
1,2-Dichloropropane		5	U	ug/kg	5
cis-1,3-Dichloropropene		5	U	ug/kg	5
Trichloroethene		5	U	ug/kg	5
Dibromochloromethane		5	U	ug/kg	5
1,1,2-Trichloroethane		5	U	ug/kg	5
Benzene		5	U	ug/kg	5
trans-1,3-Dichloropropene		5	U	ug/kg	5
Bromoform		5	U	ug/kg	5
4-Methyl-2-pentanone		11	U	ug/kg	11
2-Hexanone		11	U	ug/kg	11
Tetrachloroethene		5	U	ug/kg	5
1,1,2,2-Tetrachloroethane		5	U	ug/kg	5
Toluene		2	J	ug/kg	5
Chlorobenzene		5	U	ug/kg	5
Ethylbenzene		5	U	ug/kg	5
Styrene		5	U	ug/kg	5
Xylenes (total)		5	U	ug/kg	5
Dichlorodifluoromethane		11	U	ug/kg	11
Trichlorofluoromethane		5	U	ug/kg	5
1,3-Dichlorobenzene		5	U	ug/kg	5
Acrolein		110	UJ	ug/kg	110
Iodomethane		11	U	ug/kg	11
1,4-Dichlorobenzene		5	U	ug/kg	5
Acrylonitrile		110	UJ	ug/kg	110

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number: R9800004
Site GROUP111
Locator 18D00301
Collect Date: 19-APR-95

	VALUE	QUAL	UNITS	DL
Dibromomethane	5	U	ug/kg	5
1,2-Dichlorobenzene	5	U	ug/kg	5
2-Chloroethylvinyl ether	11	U	ug/kg	11
Ethyl methacrylate	5	U	ug/kg	5
1,2,3-Trichloropropane	5	U	ug/kg	5
trans-1,4-Dichloro-2-butene	5	U	ug/kg	5
Isobutyl alcohol	220	U	ug/kg	220
1,1,1,2-Tetrachloroethane	5	U	ug/kg	5
1,2-Dibromo-3-chloropropane	11	U	ug/kg	11
1,2-Dibromoethane	5	U	ug/kg	5
1,4-Dioxane	220	R	ug/kg	220
3-Chloropropene	5	U	ug/kg	5
Acetonitrile	110	U	ug/kg	110
Chloroprene	220	U	ug/kg	220
Methacrylonitrile	5	U	ug/kg	5
Methyl methacrylate	11	U	ug/kg	11
Pentachloroethane	11	U	ug/kg	11
Propionitrile	110	U	ug/kg	110
Vinyl acetate	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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number:	R9800005				R9800006				R9800007				R9800014			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14D00101				14D00201				14D00301				14D00401			
Collect Date:	19-APR-95				19-APR-95				19-APR-95				21-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/kg																
N-Nitrosodimethylamine	1600	UJ	ug/kg	1600	1800	UJ	ug/kg	1800	1800	UJ	ug/kg	1800	860	UJ	ug/kg	860
Phenol	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
Aniline	1600	U	ug/kg	1600	1800	UJ	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
bis(2-Chloroethyl) ether	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
Benzyl Alcohol	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
2-Methylphenol	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
bis(2-Chloroisopropyl) ether	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
N-Nitroso-di-n-propylamine	1600	UJ	ug/kg	1600	1800	U	ug/kg	1800	1800	UJ	ug/kg	1800	860	UJ	ug/kg	860
Hexachloroethane	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
Nitrobenzene	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
Isophorone	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
2-Nitrophenol	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
2,4-Dimethylphenol	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
Benzoic acid	7800	U	ug/kg	7800	8600	U	ug/kg	8600	8800	U	ug/kg	8800	4200	U	ug/kg	4200
bis(2-Chloroethoxy) methane	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
2,4-Dichlorophenol	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
1,2,4-Trichlorobenzene	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
Naphthalene	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
4-Chloroaniline	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
Hexachlorobutadiene	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
4-Chloro-3-methylphenol	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
2-Methylnaphthalene	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
Hexachlorocyclopentadiene	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
2,4,6-Trichlorophenol	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
Dimethylphthalate	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
2,4,5-Trichlorophenol	7800	U	ug/kg	7800	8600	U	ug/kg	8600	8800	U	ug/kg	8800	4200	U	ug/kg	4200
2-Chloronaphthalene	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
2-Nitroaniline	7800	U	ug/kg	7800	8600	U	ug/kg	8600	8800	U	ug/kg	8800	4200	U	ug/kg	4200
Acenaphthylene	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
2,6-Dinitrotoluene	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
3-Nitroaniline	7800	U	ug/kg	7800	8600	U	ug/kg	8600	8800	U	ug/kg	8800	4200	U	ug/kg	4200
Acenaphthene	1600	U	ug/kg	1600	190	J	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
2,4-Dinitrophenol	7800	U	ug/kg	7800	8600	U	ug/kg	8600	8800	U	ug/kg	8800	4200	U	ug/kg	4200
4-Nitrophenol	7800	U	ug/kg	7800	8600	U	ug/kg	8600	8800	U	ug/kg	8800	4200	U	ug/kg	4200
Dibenzofuran	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
2,4-Dinitrotoluene	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
Diethylphthalate	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
4-Chlorophenyl-phenylether	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
Fluorene	1600	U	ug/kg	1600	290	J	ug/kg	1800	1800	U	ug/kg	1800	320	J	ug/kg	860
4-Nitroaniline	7800	U	ug/kg	7800	8600	U	ug/kg	8600	8800	U	ug/kg	8800	4200	U	ug/kg	4200
4,6-Dinitro-2-methylphenol	7800	U	ug/kg	7800	8600	U	ug/kg	8600	8800	U	ug/kg	8800	4200	U	ug/kg	4200
N-Nitrosodiphenylamine (1)	1600	U	ug/kg	1600	1600	J	ug/kg	1800	270	J	ug/kg	1800	860	U	ug/kg	860
1,2-Diphenylhydrazine	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
4-Bromophenyl-phenylether	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
Hexachlorobenzene	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
Pentachlorophenol	7800	U	ug/kg	7800	8600	U	ug/kg	8600	8800	U	ug/kg	8800	4200	U	ug/kg	4200
Phenanthrene	1600	U	ug/kg	1600	840	J	ug/kg	1800	760	J	ug/kg	1800	1800		ug/kg	860
Anthracene	1600	U	ug/kg	1600	1800	U	ug/kg	1800	220	J	ug/kg	1800	860	U	ug/kg	860
Di-n-Butylphthalate	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
Fluoranthene	1600	U	ug/kg	1600	4400		ug/kg	1800	4200		ug/kg	1800	1700		ug/kg	860

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number:	R9800005				R9800006				R9800007				R9800014			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14D00101				14D00201				14D00301				14D00401			
Collect Date:	19-APR-95				19-APR-95				19-APR-95				21-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Pyrene	2100		ug/kg	1600	6000		ug/kg	1800	2900		ug/kg	1800	2500		ug/kg	860
Butylbenzylphthalate	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
3,3-Dichlorobenzidine	3200	U	ug/kg	3200	3600	U	ug/kg	3600	3600	U	ug/kg	3600	1700	U	ug/kg	1700
Benzo (a) anthracene	270	J	ug/kg	1600	1900		ug/kg	1900	1500	J	ug/kg	1800	700	J	ug/kg	860
Chrysene	310	J	ug/kg	1600	3700		ug/kg	1800	2700		ug/kg	1800	1500		ug/kg	860
bis(2-Ethylhexyl) phthalate	1600	U	ug/kg	1600	1100	J	ug/kg	1800	2400		ug/kg	1800	790	J	ug/kg	860
Di-n-octylphthalate	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
Benzo (b) fluoranthene	1600	U	ug/kg	1600	3500		ug/kg	1800	2100		ug/kg	1800	1200		ug/kg	860
Benzo (k) fluoranthene	1600	U	ug/kg	1600	3200		ug/kg	1800	2700		ug/kg	1800	1500		ug/kg	860
Benzo (a) pyrene	1600	U	ug/kg	1600	2100		ug/kg	1800	1700	J	ug/kg	1800	860		ug/kg	860
Indeno (1,2,3-cd) pyrene	1600	U	ug/kg	1600	1400	J	ug/kg	1800	1100	J	ug/kg	0	540	J	ug/kg	860
Dibenz (a,h) anthracene	1600	U	ug/kg	1600	230	J	ug/kg	1800	1800	U	ug/kg	1800	95	J	ug/kg	860
Benzo (g,h,i) perylene	1600	UJ	ug/kg	1600	1400	J	ug/kg	1800	1100	J	ug/kg	1800	510	J	ug/kg	860
2-Picoline	7800	UJ	ug/kg	7800	8600	UJ	ug/kg	8600	8800	UJ	ug/kg	8800	4200	UJ	ug/kg	4200
Methyl methanesulfonate	1600	UJ	ug/kg	1600	1800	U	ug/kg	1800	1800	UJ	ug/kg	1800	860	UJ	ug/kg	860
Ethyl methanesulfonate	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
Acetophenone	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
N-Nitrosopiperidine	1600	UJ	ug/kg	1600	1800	U	ug/kg	1800	1800	UJ	ug/kg	1800	860	UJ	ug/kg	860
Phenyl-tert-butylamine	7800	U	ug/kg	7800	8600	U	ug/kg	8600	8800	U	ug/kg	8800	4200	U	ug/kg	4200
2,6-Dichlorophenol	1600	U	ug/kg	1600	1800	UJ	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
N-Nitroso-di-n-butylamine	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
N-Nitrosodiethylamine	1600	UJ	ug/kg	1600	1800	UJ	ug/kg	1800	1800	UJ	ug/kg	1800	860	UJ	ug/kg	860
N-Nitrosopyrrolidine	1600	UJ	ug/kg	1600	1800	UJ	ug/kg	1800	1800	UJ	ug/kg	1800	860	UJ	ug/kg	860
Benzidine	7800	U	ug/kg	7800	8600	UJ	ug/kg	8600	8800	U	ug/kg	8800	4200	U	ug/kg	4200
1,2,4,5-Tetrachlorobenzene	7800	U	ug/kg	7800	8600	U	ug/kg	8600	8800	U	ug/kg	8800	4200	U	ug/kg	4200
Pentachlorobenzene	7800	U	ug/kg	7800	8600	U	ug/kg	8600	8800	U	ug/kg	8800	4200	U	ug/kg	4200
1-Naphthylamine	7800	U	ug/kg	7800	8600	U	ug/kg	8600	8800	U	ug/kg	8800	4200	U	ug/kg	4200
2-Naphthylamine	7800	UJ	ug/kg	7800	8600	U	ug/kg	8600	8800	UJ	ug/kg	8800	4200	UJ	ug/kg	4200
2,3,4,6-Tetrachlorophenol	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
Phenacetin	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
4-Aminobiphenyl	7800	U	ug/kg	7800	8600	U	ug/kg	8600	8800	U	ug/kg	8800	4200	U	ug/kg	4200
Pentachloronitrobenzene	7800	U	ug/kg	7800	8600	U	ug/kg	8600	8800	U	ug/kg	8800	4200	U	ug/kg	4200
Pronamide	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
p-(Dimethylamino)azobenzene	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
7,12-Dimethylbenz(A)Anthracene	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
3-Methylcholanthrene	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
Pyridine	7800	UJ	ug/kg	7800	8600	UJ	ug/kg	8600	8800	UJ	ug/kg	8800	4200	UJ	ug/kg	4200
N-Nitrosomethylethylamine	1600	UJ	ug/kg	1600	1800	UJ	ug/kg	1800	1800	UJ	ug/kg	1800	860	UJ	ug/kg	860
N-Nitrosomorpholine	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
o-Toluidine	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
Hexachloropropene	7800	UJ	ug/kg	7800	8600	U	ug/kg	8600	8800	UJ	ug/kg	8800	4200	UJ	ug/kg	4200
p-Phenylenediamine	78000	U	ug/kg	78000	86000	U	ug/kg	86000	88000	U	ug/kg	88000	42000	U	ug/kg	42000
Safrole	7800	U	ug/kg	7800	8600	UJ	ug/kg	8600	8800	U	ug/kg	8800	4200	U	ug/kg	4200
Isosafrole	7800	U	ug/kg	7800	8600	U	ug/kg	8600	8800	U	ug/kg	8800	4200	U	ug/kg	4200
1,4-Naphthoquinone	160000	U	ug/kg	160000	180000	U	ug/kg	180000	180000	U	ug/kg	180000	86000	U	ug/kg	86000
1,3-Dinitrobenzene	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
5-Nitro-o-toluidine	1600	UJ	ug/kg	1600	1800	UJ	ug/kg	1800	1800	UJ	ug/kg	1800	860	UJ	ug/kg	860
1,3,5-Trinitrobenzene	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
4-Nitroquinoline-1-oxide	78000	R	ug/kg	78000	86000	R	ug/kg	86000	88000	R	ug/kg	88000	42000	R	ug/kg	42000
Methapyrilene	7800	UJ	ug/kg	7800	8600	UJ	ug/kg	8600	8800	UJ	ug/kg	8800	4200	UJ	ug/kg	4200
3,3-Dimethylbenzidine	1600	UJ	ug/kg	1600	1800	UJ	ug/kg	1800	1800	UJ	ug/kg	1800	860	UJ	ug/kg	860
Hexachlorophene	78000	UJ	ug/kg	78000	86000	R	ug/kg	86000	88000	UJ	ug/kg	88000	42000	UJ	ug/kg	42000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number:	R9800005				R9800006				R9800007				R9800014			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14D00101				14D00201				14D00301				14D00401			
Collect Date:	19-APR-95				19-APR-95				19-APR-95				21-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Aramite	7800	R	ug/kg	7800	8600	R	ug/kg	8600	8800	R	ug/kg	8800	4200	R	ug/kg	4200
2-Chlorophenol	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
3- & 4-Methylphenol (2)	1600	U	ug/kg	1600	1800	U	ug/kg	1800	1800	U	ug/kg	1800	860	U	ug/kg	860
Hexachloropropene	7800	UJ	ug/kg	7800	8600	U	ug/kg	8600	8800	UJ	ug/kg	8800	4200	UJ	ug/kg	4200
2-Acetylaminofluorene	1600	UJ	ug/kg	1600	1800	UJ	ug/kg	1800	1800	UJ	ug/kg	1800	860	UJ	ug/kg	860

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number:	R9800015				R9800016				R9800017				R9800008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14D00501				14D00601				14D00601D				14D00701			
Collect Date:	21-APR-95				21-APR-95				21-APR-95				20-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
SEMIVOLATILES ug/kg																
N-Nitrosodimethylamine	850	UJ	ug/kg	850	880	U	ug/kg	880	870	UJ	ug/kg	870	860	UJ	ug/kg	860
Phenol	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
Aniline	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
bis(2-Chloroethyl) ether	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
Benzyl Alcohol	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
2-Methylphenol	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
bis(2-Chloroisopropyl) ether	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
N-Nitroso-di-n-propylamine	850	UJ	ug/kg	850	880	U	ug/kg	880	870	UJ	ug/kg	870	860	UJ	ug/kg	860
Hexachloroethane	850	U	ug/kg	850	880	UJ	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
Nitrobenzene	850	U	ug/kg	850	880	UJ	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
Isophorone	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
2-Nitrophenol	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
2,4-Dimethylphenol	850	U	ug/kg	850	880	UJ	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
Benzoic acid	4100	U	ug/kg	4100	4300	UJ	ug/kg	4300	4200	U	ug/kg	4200	4200	U	ug/kg	4200
bis(2-Chloroethoxy) methane	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
2,4-Dichlorophenol	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
1,2,4-Trichlorobenzene	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
Naphthalene	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
4-Chloroaniline	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
Hexachlorobutadiene	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
4-Chloro-3-methylphenol	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
2-Methylnaphthalene	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
Hexachlorocyclopentadiene	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
2,4,6-Trichlorophenol	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
Dimethylphthalate	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
2,4,5-Trichlorophenol	4100	U	ug/kg	4100	4300	U	ug/kg	4300	4200	U	ug/kg	4200	4200	U	ug/kg	4200
2-Chloronaphthalene	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
2-Nitroaniline	4100	U	ug/kg	4100	4300	UJ	ug/kg	4300	4200	U	ug/kg	4200	4200	U	ug/kg	4200
Acenaphthylene	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
2,6-Dinitrotoluene	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
3-Nitroaniline	4100	U	ug/kg	4100	4300	U	ug/kg	4300	4200	U	ug/kg	4200	4200	U	ug/kg	4200
Acenaphthene	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
2,4-Dinitrophenol	4100	U	ug/kg	4100	4300	U	ug/kg	4300	4200	U	ug/kg	4200	4200	U	ug/kg	4200
4-Nitrophenol	4100	U	ug/kg	4100	4300	U	ug/kg	4300	4200	U	ug/kg	4200	4200	U	ug/kg	4200
Dibenzofuran	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
2,4-Dinitrotoluene	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
Diethylphthalate	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
4-Chlorophenyl-phenylether	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
Fluorene	850	U	ug/kg	850	160	J	ug/kg	880	130	J	ug/kg	870	860	U	ug/kg	860
4-Nitroaniline	4100	U	ug/kg	4100	4300	UJ	ug/kg	4300	4200	U	ug/kg	4200	4200	U	ug/kg	4200

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number:	R9800015				R9800016				R9800017				R9800008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14D00501				14D00601				14D00601D				14D00701			
Collect Date:	21-APR-95				21-APR-95				21-APR-95				20-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	4100	U	ug/kg	4100	4300	U	ug/kg	4300	4200	U	ug/kg	4200	4200	U	ug/kg	4200
N-Nitrosodiphenylamine (1)	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
1,2-Diphenylhydrazine	850	U	ug/kg	850	880	UJ	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
4-Bromophenyl-phenylether	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
Hexachlorobenzene	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
Pentachlorophenol	4100	U	ug/kg	4100	4300	U	ug/kg	4300	4200	U	ug/kg	4200	4200	U	ug/kg	4200
Phenanthrene	110	J	ug/kg	850	740	J	ug/kg	880	750	J	ug/kg	870	860	U	ug/kg	860
Anthracene	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
Di-n-Butylphthalate	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
Fluoranthene	530	J	ug/kg	850	750	J	ug/kg	880	640	J	ug/kg	870	860	U	ug/kg	860
Pyrene	520	J	ug/kg	850	940		ug/kg	880	840	J	ug/kg	870	860	U	ug/kg	860
Butylbenzylphthalate	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
3,3-Dichlorobenzidine	1700	U	ug/kg	1700	1800	U	ug/kg	1800	1700	U	ug/kg	1700	1700	U	ug/kg	1700
Benzo (a) anthracene	250	J	ug/kg	850	310	J	ug/kg	880	260	J	ug/kg	870	860	U	ug/kg	860
Chrysene	460	J	ug/kg	850	660	J	ug/kg	880	550	J	ug/kg	870	860	U	ug/kg	860
bis(2-Ethylhexyl) phthalate	110	J	ug/kg	850	240	J	ug/kg	880	270	J	ug/kg	870	860	U	ug/kg	860
Di-n-octylphthalate	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
Benzo (b) fluoranthene	400	J	ug/kg	850	590	J	ug/kg	880	530	J	ug/kg	870	860	U	ug/kg	860
Benzo (k) fluoranthene	440	J	ug/kg	850	470	J	ug/kg	880	540	J	ug/kg	870	860	U	ug/kg	860
Benzo (a) pyrene	290	J	ug/kg	850	360	J	ug/kg	880	340	J	ug/kg	870	860	U	ug/kg	860
Indeno (1,2,3-cd) pyrene	200	J	ug/kg	850	340	J	ug/kg	880	230	J	ug/kg	870	860	U	ug/kg	860
Dibenz (a,h) anthracene	850	U	ug/kg	850	170	J	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
Benzo (g,h,i) perylene	200	J	ug/kg	850	410	J	ug/kg	880	240	J	ug/kg	870	860	UJ	ug/kg	860
2-Picoline	4100	UJ	ug/kg	4100	4300	U	ug/kg	4300	4200	UJ	ug/kg	4200	4200	UJ	ug/kg	4200
Methyl methanesulfonate	850	UJ	ug/kg	850	880	UJ	ug/kg	880	870	UJ	ug/kg	870	860	UJ	ug/kg	860
Ethyl methanesulfonate	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
Acetophenone	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
N-Nitrosopiperidine	850	UJ	ug/kg	850	880	U	ug/kg	880	870	UJ	ug/kg	870	860	UJ	ug/kg	860
Phenyl-tert-butylamine	4100	U	ug/kg	4100	4300	U	ug/kg	4300	4200	U	ug/kg	4200	4200	U	ug/kg	4200
2,6-Dichlorophenol	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
N-Nitroso-di-n-butylamine	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
N-Nitrosodiethylamine	850	UJ	ug/kg	850	880	UJ	ug/kg	880	870	UJ	ug/kg	870	860	UJ	ug/kg	860
N-Nitrosopyrrolidine	850	UJ	ug/kg	850	880	U	ug/kg	880	870	UJ	ug/kg	870	860	UJ	ug/kg	860
Benzidine	4100	U	ug/kg	4100	4300	U	ug/kg	4300	4200	U	ug/kg	4200	4200	U	ug/kg	4200
1,2,4,5-Tetrachlorobenzene	4100	U	ug/kg	4100	4300	U	ug/kg	4300	4200	U	ug/kg	4200	4200	U	ug/kg	4200
Pentachlorobenzene	4100	U	ug/kg	4100	4300	U	ug/kg	4300	4200	U	ug/kg	4200	4200	U	ug/kg	4200
1-Naphthylamine	4100	U	ug/kg	4100	4300	U	ug/kg	4300	4200	U	ug/kg	4200	4200	U	ug/kg	4200
2-Naphthylamine	4100	UJ	ug/kg	4100	4300	UJ	ug/kg	4300	4200	UJ	ug/kg	4200	4200	UJ	ug/kg	4200
2,3,4,6-Tetrachlorophenol	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
Phenacetin	850	U	ug/kg	850	880	UJ	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
4-Aminobiphenyl	4100	U	ug/kg	4100	4300	U	ug/kg	4300	4200	U	ug/kg	4200	4200	U	ug/kg	4200
Pentachloronitrobenzene	4100	U	ug/kg	4100	4300	U	ug/kg	4300	4200	U	ug/kg	4200	4200	U	ug/kg	4200
Pronamide	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
p-(Dimethylamino)azobenzene	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
7,12-Dimethylbenz(A)Anthracene	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
3-Methylcholanthrene	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
Pyridine	4100	UJ	ug/kg	4100	4300	U	ug/kg	4300	4200	UJ	ug/kg	4200	4200	UJ	ug/kg	4200
N-Nitrosomethylethylamine	850	UJ	ug/kg	850	880	U	ug/kg	880	870	UJ	ug/kg	870	860	UJ	ug/kg	860
N-Nitrosomorpholine	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
o-Toluidine	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
Hexachloropropene	4100	UJ	ug/kg	4100	4300	UJ	ug/kg	4300	4200	UJ	ug/kg	4200	4200	UJ	ug/kg	4200
p-Phenylenediamine	41000	U	ug/kg	41000	43000	U	ug/kg	43000	42000	U	ug/kg	42000	42000	U	ug/kg	42000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number:	R9800015				R9800016				R9800017				R9800008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14D00501				14D00601				14D00601D				14D00701			
Collect Date:	21-APR-95				21-APR-95				21-APR-95				20-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	4100	U	ug/kg	4100	4300	U	ug/kg	4300	4200	U	ug/kg	4200	4200	U	ug/kg	4200
Isosafrole	4100	U	ug/kg	4100	4300	U	ug/kg	4300	4200	U	ug/kg	4200	4200	U	ug/kg	4200
1,4-Naphthoquinone	85000	U	ug/kg	85000	88000	U	ug/kg	88000	87000	U	ug/kg	87000	86000	U	ug/kg	86000
1,3-Dinitrobenzene	850	U	ug/kg	850	880	UJ	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
5-Nitro-o-toluidine	850	UJ	ug/kg	850	880	U	ug/kg	880	870	UJ	ug/kg	870	860	UJ	ug/kg	860
1,3,5-Trinitrobenzene	850	U	ug/kg	850	880	UJ	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
4-Nitroquinoline-1-oxide	41000	R	ug/kg	41000	43000	R	ug/kg	43000	42000	R	ug/kg	42000	42000	R	ug/kg	42000
Methapyrilene	4100	UJ	ug/kg	4100	4300	UJ	ug/kg	4300	4200	UJ	ug/kg	4200	4200	UJ	ug/kg	4200
3,3-Dimethylbenzidine	850	UJ	ug/kg	850	880	U	ug/kg	880	870	UJ	ug/kg	870	860	UJ	ug/kg	860
Hexachlorophene	41000	UJ	ug/kg	41000	43000	UJ	ug/kg	43000	42000	UJ	ug/kg	42000	42000	UJ	ug/kg	42000
Aramite	4100	R	ug/kg	4100	4300	U	ug/kg	4300	4200	R	ug/kg	4200	4200	R	ug/kg	4200
2-Chlorophenol	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
3- & 4-Methylphenol (2)	850	U	ug/kg	850	880	U	ug/kg	880	870	U	ug/kg	870	860	U	ug/kg	860
Hexachloropropene	4100	UJ	ug/kg	4100	4300	UJ	ug/kg	4300	4200	UJ	ug/kg	4200	4200	UJ	ug/kg	4200
2-Acetylaminofluorene	850	UJ	ug/kg	850	880	U	ug/kg	880	870	UJ	ug/kg	870	860	UJ	ug/kg	860

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number:		R9800009			R9800002			R9800003			R9800001		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		14D00801			18D00101			18D00101D			18D00201		
Collect Date:		20-APR-95			19-APR-95			19-APR-95			19-APR-95		
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	
SEMIVOLATILES	ug/kg												
N-Nitrosodimethylamine	850	UJ	ug/kg	850	770	UJ	ug/kg	770	850	UJ	ug/kg	850	750 UJ ug/kg 750
Phenol	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
Aniline	850	U	ug/kg	850	770	UJ	ug/kg	770	850	UJ	ug/kg	850	750 UJ ug/kg 750
bis(2-Chloroethyl) ether	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
Benzyl Alcohol	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
2-Methylphenol	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
bis(2-Chloroisopropyl) ether	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
N-Nitroso-di-n-propylamine	850	UJ	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
Hexachloroethane	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
Nitrobenzene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
Isophorone	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
2-Nitrophenol	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
2,4-Dimethylphenol	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
Benzoic acid	4100	U	ug/kg	4100	3700	U	ug/kg	3700	4100	U	ug/kg	4100	3600 U ug/kg 3600
bis(2-Chloroethoxy) methane	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
2,4-Dichlorophenol	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
1,2,4-Trichlorobenzene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
Naphthalene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
4-Chloroaniline	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
Hexachlorobutadiene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
4-Chloro-3-methylphenol	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
2-Methylnaphthalene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
Hexachlorocyclopentadiene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
2,4,6-Trichlorophenol	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
Dimethylphthalate	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
2,4,5-Trichlorophenol	4100	U	ug/kg	4100	3700	U	ug/kg	3700	4100	U	ug/kg	4100	3600 U ug/kg 3600
2-Chloronaphthalene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
2-Nitroaniline	4100	U	ug/kg	4100	3700	U	ug/kg	3700	4100	U	ug/kg	4100	3600 U ug/kg 3600
Acenaphthylene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
2,6-Dinitrotoluene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
3-Nitroaniline	4100	U	ug/kg	4100	3700	U	ug/kg	3700	4100	U	ug/kg	4100	3600 U ug/kg 3600
Acenaphthene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
2,4-Dinitrophenol	4100	U	ug/kg	4100	3700	U	ug/kg	3700	4100	U	ug/kg	4100	3600 U ug/kg 3600
4-Nitrophenol	4100	U	ug/kg	4100	3700	U	ug/kg	3700	4100	U	ug/kg	4100	3600 U ug/kg 3600
Dibenzofuran	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
2,4-Dinitrotoluene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
Diethylphthalate	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
4-Chlorophenyl-phenylether	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
Fluorene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750 U ug/kg 750
4-Nitroaniline	4100	U	ug/kg	4100	3700	U	ug/kg	3700	4100	U	ug/kg	4100	3600 U ug/kg 3600

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number:	R9800009				R9800002				R9800003				R9800001			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14D00801				18D00101				18D00101D				18D00201			
Collect Date:	20-APR-95				19-APR-95				19-APR-95				19-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	4100	U	ug/kg	4100	3700	U	ug/kg	3700	4100	U	ug/kg	4100	3600	U	ug/kg	3600
N-Nitrosodiphenylamine (1)	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
1,2-Diphenylhydrazine	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
4-Bromophenyl-phenylether	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
Hexachlorobenzene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
Pentachlorophenol	4100	U	ug/kg	4100	3700	U	ug/kg	3700	4100	U	ug/kg	4100	3600	U	ug/kg	3600
Phenanthrene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
Anthracene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
Di-n-Butylphthalate	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
Fluoranthene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
Pyrene	850	U	ug/kg	850	770	U	ug/kg	770	85	J	ug/kg	850	750	U	ug/kg	750
Butylbenzylphthalate	850	U	ug/kg	850	770	U	ug/kg	770	230	J	ug/kg	850	750	U	ug/kg	750
3,3-Dichlorobenzidine	1700	U	ug/kg	1700	1500	U	ug/kg	1500	1700	U	ug/kg	1700	1500	U	ug/kg	1500
Benzo (a) anthracene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
Chrysene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
bis(2-Ethylhexyl) phthalate	850	U	ug/kg	850	270	J	ug/kg	770	290	J	ug/kg	850	750	U	ug/kg	750
Di-n-octylphthalate	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
Benzo (b) fluoranthene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
Benzo (k) fluoranthene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
Benzo (a) pyrene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
Indeno (1,2,3-cd) pyrene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
Dibenz (a,h) anthracene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
Benzo (g,h,i) perylene	850	UJ	ug/kg	850	770	UJ	ug/kg	770	850	UJ	ug/kg	850	750	UJ	ug/kg	750
2-Picoline	4100	UJ	ug/kg	4100	3700	UJ	ug/kg	3700	4100	UJ	ug/kg	4100	3600	UJ	ug/kg	3600
Methyl methanesulfonate	850	UJ	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
Ethyl methanesulfonate	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
Acetophenone	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
N-Nitrosopiperidine	850	UJ	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
Phenyl-tert-butylamine	4100	U	ug/kg	4100	3700	U	ug/kg	3700	4100	U	ug/kg	4100	3600	U	ug/kg	3600
2,6-Dichlorophenol	850	U	ug/kg	850	770	UJ	ug/kg	770	850	UJ	ug/kg	850	750	UJ	ug/kg	750
N-Nitroso-di-n-butylamine	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
N-Nitrosodiethylamine	850	UJ	ug/kg	850	770	UJ	ug/kg	770	850	UJ	ug/kg	850	750	UJ	ug/kg	750
N-Nitrosopyrrolidine	850	UJ	ug/kg	850	770	UJ	ug/kg	770	850	UJ	ug/kg	850	750	UJ	ug/kg	750
Benzidine	4100	U	ug/kg	4100	3700	UJ	ug/kg	3700	4100	UJ	ug/kg	4100	3600	UJ	ug/kg	3600
1,2,4,5-Tetrachlorobenzene	4100	U	ug/kg	4100	3700	U	ug/kg	3700	4100	U	ug/kg	4100	3600	U	ug/kg	3600
Pentachlorobenzene	4100	U	ug/kg	4100	3700	U	ug/kg	3700	4100	U	ug/kg	4100	3600	U	ug/kg	3600
1-Naphthylamine	4100	U	ug/kg	4100	3700	U	ug/kg	3700	4100	U	ug/kg	4100	3600	U	ug/kg	3600
2-Naphthylamine	4100	UJ	ug/kg	4100	3700	U	ug/kg	3700	4100	U	ug/kg	4100	3600	U	ug/kg	3600
2,3,4,6-Tetrachlorophenol	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
Phenacetin	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
4-Aminobiphenyl	4100	U	ug/kg	4100	3700	U	ug/kg	3700	4100	U	ug/kg	4100	3600	U	ug/kg	3600
Pentachloronitrobenzene	4100	U	ug/kg	4100	3700	U	ug/kg	3700	4100	U	ug/kg	4100	3600	U	ug/kg	3600
Pronamide	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
p-(Dimethylamino)azobenzene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
7,12-Dimethylbenz(A)Anthracene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
3-Methylcholanthrene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
Pyridine	4100	UJ	ug/kg	4100	3700	UJ	ug/kg	3700	4100	UJ	ug/kg	4100	3600	UJ	ug/kg	3600
N-Nitrosomethylethylamine	850	UJ	ug/kg	850	770	UJ	ug/kg	770	850	UJ	ug/kg	850	750	UJ	ug/kg	750
N-Nitrosomorpholine	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
o-Toluidine	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
Hexachloropropene	4100	UJ	ug/kg	4100	3700	U	ug/kg	3700	4100	U	ug/kg	4100	3600	U	ug/kg	3600
p-Phenylenediamine	41000	U	ug/kg	41000	37000	U	ug/kg	37000	41000	U	ug/kg	41000	36000	U	ug/kg	36000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number:	R9800009				R9800002				R9800003				R9800001			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14D00801				18D00101				18D00101D				18D00201			
Collect Date:	20-APR-95				19-APR-95				19-APR-95				19-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Safrole	4100	U	ug/kg	4100	3700	UJ	ug/kg	3700	4100	UJ	ug/kg	4100	3600	UJ	ug/kg	3600
Isosafrole	4100	U	ug/kg	4100	3700	U	ug/kg	3700	4100	U	ug/kg	4100	3600	U	ug/kg	3600
1,4-Naphthoquinone	85000	U	ug/kg	85000	77000	U	ug/kg	77000	85000	U	ug/kg	85000	75000	U	ug/kg	75000
1,3-Dinitrobenzene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
5-Nitro-o-toluidine	850	UJ	ug/kg	850	770	UJ	ug/kg	770	850	UJ	ug/kg	850	750	UJ	ug/kg	750
1,3,5-Trinitrobenzene	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
4-Nitroquinoline-1-oxide	41000	R	ug/kg	41000	37000	R	ug/kg	37000	41000	R	ug/kg	41000	36000	R	ug/kg	36000
Methapyrilene	4100	UJ	ug/kg	4100	3700	UJ	ug/kg	3700	4100	UJ	ug/kg	4100	3600	UJ	ug/kg	3600
3,3-Dimethylbenzidine	850	UJ	ug/kg	850	770	UJ	ug/kg	770	850	UJ	ug/kg	850	750	UJ	ug/kg	750
Hexachlorophene	41000	UJ	ug/kg	41000	37000	R	ug/kg	37000	41000	R	ug/kg	41000	36000	R	ug/kg	36000
Aramite	4100	R	ug/kg	4100	3700	R	ug/kg	3700	4100	R	ug/kg	4100	3600	R	ug/kg	3600
2-Chlorophenol	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
3- & 4-Methylphenol (2)	850	U	ug/kg	850	770	U	ug/kg	770	850	U	ug/kg	850	750	U	ug/kg	750
Hexachloropropene	4100	UJ	ug/kg	4100	3700	U	ug/kg	3700	4100	U	ug/kg	4100	3600	U	ug/kg	3600
2-Acetylaminofluorene	850	UJ	ug/kg	850	770	UJ	ug/kg	770	850	UJ	ug/kg	850	750	UJ	ug/kg	750

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number:	R9800004
Site	GROUP111
Locator	18D00301
Collect Date:	19-APR-95

		VALUE	QUAL	UNITS	DL
SEMIVOLATILES	ug/kg				
N-Nitrosodimethylamine		710	UJ	ug/kg	710
Phenol		710	U	ug/kg	710
Aniline		710	U	ug/kg	710
bis(2-Chloroethyl) ether		710	U	ug/kg	710
Benzyl Alcohol		710	U	ug/kg	710
2-Methylphenol		710	U	ug/kg	710
bis(2-Chloroisopropyl) ether		710	U	ug/kg	710
N-Nitroso-di-n-propylamine		710	UJ	ug/kg	710
Hexachloroethane		710	U	ug/kg	710
Nitrobenzene		710	U	ug/kg	710
Isophorone		710	U	ug/kg	710
2-Nitrophenol		710	U	ug/kg	710
2,4-Dimethylphenol		710	U	ug/kg	710
Benzoic acid		3400	U	ug/kg	3400
bis(2-Chloroethoxy) methane		710	U	ug/kg	710
2,4-Dichlorophenol		710	U	ug/kg	710
1,2,4-Trichlorobenzene		710	U	ug/kg	710
Naphthalene		710	U	ug/kg	710
4-Chloroaniline		710	U	ug/kg	710
Hexachlorobutadiene		710	U	ug/kg	710
4-Chloro-3-methylphenol		710	U	ug/kg	710
2-Methylnaphthalene		710	U	ug/kg	710
Hexachlorocyclopentadiene		710	U	ug/kg	710
2,4,6-Trichlorophenol		710	U	ug/kg	710
Dimethylphthalate		710	U	ug/kg	710
2,4,5-Trichlorophenol		3400	U	ug/kg	3400
2-Chloronaphthalene		710	U	ug/kg	710
2-Nitroaniline		3400	U	ug/kg	3400
Acenaphthylene		710	U	ug/kg	710
2,6-Dinitrotoluene		710	U	ug/kg	710
3-Nitroaniline		3400	U	ug/kg	3400
Acenaphthene		710	U	ug/kg	710
2,4-Dinitrophenol		3400	U	ug/kg	3400
4-Nitrophenol		3400	U	ug/kg	3400
Dibenzofuran		710	U	ug/kg	710
2,4-Dinitrotoluene		710	U	ug/kg	710
Diethylphthalate		710	U	ug/kg	710
4-Chlorophenyl-phenylether		710	U	ug/kg	710
Fluorene		710	U	ug/kg	710
4-Nitroaniline		3400	U	ug/kg	3400

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number:	R9800004
Site	GROUP111
Locator	18D00301
Collect Date:	19-APR-95

	VALUE	QUAL	UNITS	DL
4,6-Dinitro-2-methylphenol	3400	U	ug/kg	3400
N-Nitrosodiphenylamine (1)	710	U	ug/kg	710
1,2-Diphenylhydrazine	710	U	ug/kg	710
4-Bromophenyl-phenylether	710	U	ug/kg	710
Hexachlorobenzene	710	U	ug/kg	710
Pentachlorophenol	3400	U	ug/kg	3400
Phenanthrene	270	J	ug/kg	710
Anthracene	710	U	ug/kg	710
Di-n-Butylphthalate	710	U	ug/kg	710
Fluoranthene	2600		ug/kg	710
Pyrene	1400		ug/kg	710
Butylbenzylphthalate	710	U	ug/kg	710
3,3-Dichlorobenzidine	1400	U	ug/kg	1400
Benzo (a) anthracene	1000		ug/kg	710
Chrysene	1500		ug/kg	710
bis(2-Ethylhexyl) phthalate	710	U	ug/kg	710
Di-n-octylphthalate	710	U	ug/kg	710
Benzo (b) fluoranthene	1300		ug/kg	710
Benzo (k) fluoranthene	1300		ug/kg	710
Benzo (a) pyrene	1100		ug/kg	710
Indeno (1,2,3-cd) pyrene	710		ug/kg	710
Dibenz (a,h) anthracene	270	J	ug/kg	710
Benzo (g,h,i) perylene	770	J	ug/kg	710
2-Picoline	3400	UJ	ug/kg	3400
Methyl methanesulfonate	710	UJ	ug/kg	710
Ethyl methanesulfonate	710	U	ug/kg	710
Acetophenone	710	U	ug/kg	710
N-Nitrosopiperidine	710	UJ	ug/kg	710
Phenyl-tert-butylamine	3400	U	ug/kg	3400
2,6-Dichlorophenol	710	U	ug/kg	710
N-Nitroso-di-n-butylamine	710	U	ug/kg	710
N-Nitrosodiethylamine	710	UJ	ug/kg	710
N-Nitrosopyrrolidine	710	UJ	ug/kg	710
Benzidine	3400	U	ug/kg	3400
1,2,4,5-Tetrachlorobenzene	3400	U	ug/kg	3400
Pentachlorobenzene	3400	U	ug/kg	3400
1-Naphthylamine	3400	U	ug/kg	3400
2-Naphthylamine	3400	UJ	ug/kg	3400
2,3,4,6-Tetrachlorophenol	710	U	ug/kg	710
Phenacetin	710	U	ug/kg	710
4-Aminobiphenyl	3400	U	ug/kg	3400
Pentachloronitrobenzene	3400	U	ug/kg	3400
Pronamide	710	U	ug/kg	710
p-(Dimethylamino)azobenzene	710	U	ug/kg	710
7,12-Dimethylbenz(A)Anthracene	710	U	ug/kg	710
3-Methylcholanthrene	710	U	ug/kg	710
Pyridine	3400	UJ	ug/kg	3400
N-Nitrosomethylethylamine	710	UJ	ug/kg	710
N-Nitrosomorpholine	710	U	ug/kg	710
o-Toluidine	710	U	ug/kg	710
Hexachloropropene	3400	UJ	ug/kg	3400
p-Phenylenediamine	34000	U	ug/kg	34000

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number:	R9800004
Site	GROUP111
Locator	18000301
Collect Date:	19-APR-95

	VALUE	QUAL	UNITS	DL
Safrole	3400	U	ug/kg	3400
Isosafrole	3400	U	ug/kg	3400
1,4-Naphthoquinone	71000	U	ug/kg	71000
1,3-Dinitrobenzene	710	U	ug/kg	710
5-Nitro-o-toluidine	710	UJ	ug/kg	710
1,3,5-Trinitrobenzene	710	U	ug/kg	710
4-Nitroquinoline-1-oxide	34000	R	ug/kg	34000
Methapyrilene	3400	UJ	ug/kg	3400
3,3-Dimethylbenzidine	710	UJ	ug/kg	710
Hexachlorophene	34000	UJ	ug/kg	34000
Aramite	3400	R	ug/kg	3400
2-Chlorophenol	710	U	ug/kg	710
3- & 4-Methylphenol (2)	710	U	ug/kg	710
Hexachloropropene	3400	UJ	ug/kg	3400
2-Acetylaminofluorene	710	UJ	ug/kg	710

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number:		R9800005				R9800006				R9800007				R9800014			
Site		GROUP111				GROUP111				GROUP111				GROUP111			
Locator		14D00101				14D00201				14D00301				14D00401			
Collect Date:		19-APR-95				19-APR-95				19-APR-95				21-APR-95			
		VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg																
alpha-BHC		8.1	U	ug/kg	8.1	9	U	ug/kg	9	.97	U	ug/kg	.97	4.4	U	ug/kg	4.4
beta-BHC		16	U	ug/kg	16	18	U	ug/kg	18	1.9	U	ug/kg	1.9	8.6	U	ug/kg	8.6
delta-BHC		8.1	U	ug/kg	8.1	9	U	ug/kg	9	.97	U	ug/kg	.97	4.4	U	ug/kg	4.4
gamma-BHC (Lindane)		8.1	U	ug/kg	8.1	9	U	ug/kg	9	.97	U	ug/kg	.97	4.4	U	ug/kg	4.4
Heptachlor		8.1	U	ug/kg	8.1	9	U	ug/kg	9	.97	U	ug/kg	.97	4.4	U	ug/kg	4.4
Aldrin		8.1	U	ug/kg	8.1	9	U	ug/kg	9	.97	U	ug/kg	.97	4.4	U	ug/kg	4.4
Heptachlor epoxide		8.1	U	ug/kg	8.1	9	U	ug/kg	9	.97	U	ug/kg	.97	4.4	U	ug/kg	4.4
Endosulfan I		8.1	U	ug/kg	8.1	9	U	ug/kg	9	.97	U	ug/kg	.97	4.4	U	ug/kg	4.4
Dieldrin		8.1	U	ug/kg	8.1	9	U	ug/kg	9	.97	U	ug/kg	.97	4.4	U	ug/kg	4.4
4,4-DDE		8.1	U	ug/kg	8.1	9	U	ug/kg	9	1.1		ug/kg	.97	4.4	U	ug/kg	4.4
Endrin		16	U	ug/kg	16	18	U	ug/kg	18	1.9	U	ug/kg	1.9	8.6	U	ug/kg	8.6
Endosulfan II		16	U	ug/kg	16	18	U	ug/kg	18	1.9	U	ug/kg	1.9	8.6	U	ug/kg	8.6
4,4-DDD		16	U	ug/kg	16	18	U	ug/kg	18	1.9	U	ug/kg	1.9	8.6	U	ug/kg	8.6
Endosulfan sulfate		16	U	ug/kg	16	18	U	ug/kg	18	1.9	U	ug/kg	1.9	8.6	U	ug/kg	8.6
4,4-DDT		16	U	ug/kg	16	18	U	ug/kg	18	1.2	J	ug/kg	1.9	8.6	U	ug/kg	8.6
Methoxychlor		33	U	ug/kg	33	72	UJ	ug/kg	72	3.9	U	ug/kg	3.9	36	UJ	ug/kg	36
Endrin aldehyde		16	U	ug/kg	16	18	U	ug/kg	18	1.9	U	ug/kg	1.9	8.6	U	ug/kg	8.6
Endrin ketone		16	U	ug/kg	16	18	U	ug/kg	18	1.9	U	ug/kg	1.9	8.6	U	ug/kg	8.6
Chlordane		160	UJ	ug/kg	160	90	U	ug/kg	90	9.7	U	ug/kg	9.7	88	UJ	ug/kg	88
Chlorobenzilate		240	U	ug/kg	240	270	U	ug/kg	270	29	U	ug/kg	29	130	U	ug/kg	130
Dicofol		490	U	ug/kg	490	540	U	ug/kg	540	58	U	ug/kg	58	260	U	ug/kg	260
Toxaphene		400	U	ug/kg	400	450	U	ug/kg	450	48	U	ug/kg	48	220	U	ug/kg	220
Isodrin		16	UJ	ug/kg	16	9	U	ug/kg	9	.97	U	ug/kg	.97	4.4	U	ug/kg	4.4
Kepone		490	U	ug/kg	490	540	U	ug/kg	540	58	U	ug/kg	58	260	U	ug/kg	260
Aroclor-1016		800	UJ	ug/kg	800	900	UJ	ug/kg	900	48	U	ug/kg	48	440	UJ	ug/kg	440
Aroclor-1221		820	U	ug/kg	820	1800	UJ	ug/kg	1800	97	U	ug/kg	97	880	UJ	ug/kg	880
Aroclor-1232		820	U	ug/kg	820	1800	UJ	ug/kg	1800	97	U	ug/kg	97	880	UJ	ug/kg	880
Aroclor-1242		800	UJ	ug/kg	800	900	UJ	ug/kg	900	48	U	ug/kg	48	440	UJ	ug/kg	440
Aroclor-1248		800	UJ	ug/kg	800	900	UJ	ug/kg	900	48	U	ug/kg	48	440	UJ	ug/kg	440
Aroclor-1254		420	UJ	ug/kg	420	230	U	ug/kg	230	25	U	ug/kg	25	110	U	ug/kg	110
Aroclor-1260		210	U	ug/kg	210	230	U	ug/kg	230	25	U	ug/kg	25	110	U	ug/kg	110

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number:		R9800015			R9800016			R9800017			R9800008		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		14D00501			14D00601			14D00601D			14D00701		
Collect Date:		21-APR-95			21-APR-95			21-APR-95			20-APR-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg												
alpha-BHC		1.7 U	ug/kg	1.7	4.5 UJ	ug/kg	4.5	4.4 UJ	ug/kg	4.4	.85 U	ug/kg	.85
beta-BHC		3.2 U	ug/kg	3.2	8.7 UJ	ug/kg	8.7	8.4 UJ	ug/kg	8.4	1.6 U	ug/kg	1.6
delta-BHC		1.7 U	ug/kg	1.7	4.5 UJ	ug/kg	4.5	4.4 UJ	ug/kg	4.4	.85 U	ug/kg	.85
gamma-BHC (Lindane)		1.7 U	ug/kg	1.7	4.5 UJ	ug/kg	4.5	4.4 UJ	ug/kg	4.4	.85 U	ug/kg	.85
Heptachlor		1.7 U	ug/kg	1.7	4.5 UJ	ug/kg	4.5	4.4 UJ	ug/kg	4.4	.85 U	ug/kg	.85
Aldrin		1.7 U	ug/kg	1.7	4.5 UJ	ug/kg	4.5	4.4 UJ	ug/kg	4.4	.85 U	ug/kg	.85
Heptachlor epoxide		1.7 U	ug/kg	1.7	4.5 UJ	ug/kg	4.5	4.4 UJ	ug/kg	4.4	.85 U	ug/kg	.85
Endosulfan I		1.7 U	ug/kg	1.7	4.5 UJ	ug/kg	4.5	4.4 UJ	ug/kg	4.4	.85 U	ug/kg	.85
Dieldrin		1.7 U	ug/kg	1.7	4.5 UJ	ug/kg	4.5	4.4 UJ	ug/kg	4.4	.81 J	ug/kg	.85
4,4-DDE		1.7 U	ug/kg	1.7	4.5 UJ	ug/kg	4.5	4.4 UJ	ug/kg	4.4	6.3	ug/kg	.85
Endrin		3.2 U	ug/kg	3.2	8.7 UJ	ug/kg	8.7	8.4 UJ	ug/kg	8.4	1.6 U	ug/kg	1.6
Endosulfan II		3.2 U	ug/kg	3.2	8.7 UJ	ug/kg	8.7	8.4 UJ	ug/kg	8.4	1.6 U	ug/kg	1.6
4,4-DDD		3.2 U	ug/kg	3.2	8.7 UJ	ug/kg	8.7	8.4 UJ	ug/kg	8.4	1 J	ug/kg	1.6
Endosulfan sulfate		3.2 U	ug/kg	3.2	8.7 UJ	ug/kg	8.7	8.4 UJ	ug/kg	8.4	1.6 U	ug/kg	1.6
4,4-DDT		3.2 U	ug/kg	3.2	8.7 UJ	ug/kg	8.7	8.4 UJ	ug/kg	8.4	4.7	ug/kg	1.6
Methoxychlor		13 UJ	ug/kg	13	18 UJ	ug/kg	18	18 UJ	ug/kg	18	3.4 U	ug/kg	3.4
Endrin aldehyde		3.2 U	ug/kg	3.2	8.7 UJ	ug/kg	8.7	8.4 UJ	ug/kg	8.4	1.6 U	ug/kg	1.6
Endrin ketone		3.2 U	ug/kg	3.2	8.7 UJ	ug/kg	8.7	8.4 UJ	ug/kg	8.4	1.6 U	ug/kg	1.6
Chlordane		34 UJ	ug/kg	34	45 UJ	ug/kg	45	44 UJ	ug/kg	44	8.5 U	ug/kg	8.5
Chlorobenzilate		50 U	ug/kg	50	130 UJ	ug/kg	130	130 UJ	ug/kg	130	25 U	ug/kg	25
Dialiate		100 U	ug/kg	100	270 UJ	ug/kg	270	260 UJ	ug/kg	260	51 U	ug/kg	51
Toxaphene		82 U	ug/kg	82	220 UJ	ug/kg	220	220 UJ	ug/kg	220	42 U	ug/kg	42
Isodrin		1.7 U	ug/kg	1.7	4.5 UJ	ug/kg	4.5	4.4 UJ	ug/kg	4.4	.85 U	ug/kg	.85
Kepone		100 U	ug/kg	100	110 U	ug/kg	110	130 U	ug/kg	130	51 U	ug/kg	51
Aroclor-1016		160 UJ	ug/kg	160	220 UJ	ug/kg	220	220 UJ	ug/kg	220	42 U	ug/kg	42
Aroclor-1221		340 UJ	ug/kg	340	450 UJ	ug/kg	450	440 UJ	ug/kg	440	85 U	ug/kg	85
Aroclor-1232		340 UJ	ug/kg	340	450 UJ	ug/kg	450	440 UJ	ug/kg	440	85 U	ug/kg	85
Aroclor-1242		160 UJ	ug/kg	160	220 UJ	ug/kg	220	220 UJ	ug/kg	220	42 U	ug/kg	42
Aroclor-1248		160 UJ	ug/kg	160	220 UJ	ug/kg	220	220 UJ	ug/kg	220	42 U	ug/kg	42
Aroclor-1254		42 U	ug/kg	42	110 UJ	ug/kg	110	110 UJ	ug/kg	110	22 U	ug/kg	22
Aroclor-1260		42 U	ug/kg	42	110 UJ	ug/kg	110	110 UJ	ug/kg	110	22 U	ug/kg	22

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number:		R9800009			R9800002			R9800003			R9800001		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		14D00801			18D00101			18D00101D			18D00201		
Collect Date:		20-APR-95			19-APR-95			19-APR-95			19-APR-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg												
alpha-BHC		8.5 U	ug/kg	8.5	.78 U	ug/kg	.78	.78 U	ug/kg	.78	.87 U	ug/kg	.87
beta-BHC		16 U	ug/kg	16	1.6 U	ug/kg	1.6	1.6 U	ug/kg	1.6	1.7 U	ug/kg	1.7
delta-BHC		8.5 U	ug/kg	8.5	.78 U	ug/kg	.78	.78 U	ug/kg	.78	.87 U	ug/kg	.87
gamma-BHC (Lindane)		8.5 U	ug/kg	8.5	.78 U	ug/kg	.78	.78 U	ug/kg	.78	.87 U	ug/kg	.87
Heptachlor		8.5 U	ug/kg	8.5	.78 U	ug/kg	.78	.78 U	ug/kg	.78	.87 U	ug/kg	.87
Aldrin		8.5 U	ug/kg	8.5	.78 U	ug/kg	.78	.78 U	ug/kg	.78	.87 U	ug/kg	.87
Heptachlor epoxide		8.5 U	ug/kg	8.5	.78 U	ug/kg	.78	.78 U	ug/kg	.78	.87 U	ug/kg	.87
Endosulfan I		8.5 U	ug/kg	8.5	.78 U	ug/kg	.78	.78 U	ug/kg	.78	.87 U	ug/kg	.87
Dieldrin		8.5 U	ug/kg	8.5	.78 U	ug/kg	.78	.78 U	ug/kg	.78	.87 U	ug/kg	.87
4,4-DDE		8.5 U	ug/kg	8.5	.78 U	ug/kg	.78	.78 U	ug/kg	.78	.87 U	ug/kg	.87
Endrin		16 U	ug/kg	16	1.6 U	ug/kg	1.6	1.6 U	ug/kg	1.6	1.7 U	ug/kg	1.7
Endosulfan II		16 U	ug/kg	16	1.6 U	ug/kg	1.6	1.6 U	ug/kg	1.6	1.7 U	ug/kg	1.7
4,4-DDD		16 U	ug/kg	16	1.6 U	ug/kg	1.6	1.6 U	ug/kg	1.6	1.7 U	ug/kg	1.7
Endosulfan sulfate		16 U	ug/kg	16	1.6 U	ug/kg	1.6	1.6 U	ug/kg	1.6	1.7 U	ug/kg	1.7
4,4-DDT		16 U	ug/kg	16	1.6 U	ug/kg	1.6	1.6 U	ug/kg	1.6	1.7 U	ug/kg	1.7
Methoxychlor		68 UJ	ug/kg	68	3.1 U	ug/kg	3.1	3.1 U	ug/kg	3.1	3.5 U	ug/kg	3.5
Endrin aldehyde		16 U	ug/kg	16	1.6 U	ug/kg	1.6	1.6 U	ug/kg	1.6	1.7 U	ug/kg	1.7
Endrin ketone		16 U	ug/kg	16	1.6 U	ug/kg	1.6	1.6 U	ug/kg	1.6	1.7 U	ug/kg	1.7
Chlordane		85 U	ug/kg	85	11	ug/kg	7.8	16	ug/kg	7.8	8.7 U	ug/kg	8.7
Chlorobenzilate		250 U	ug/kg	250	23 U	ug/kg	23	23 U	ug/kg	23	26 U	ug/kg	26
Diallate		510 U	ug/kg	510	47 U	ug/kg	47	47 U	ug/kg	47	52 U	ug/kg	52
Toxaphene		420 U	ug/kg	420	38 U	ug/kg	38	38 U	ug/kg	38	43 U	ug/kg	43
Isodrin		8.5 U	ug/kg	8.5	.78 U	ug/kg	.78	.78 U	ug/kg	.78	.87 U	ug/kg	.87
Kepone		510 U	ug/kg	510	46 U	ug/kg	46	46 U	ug/kg	46	52 U	ug/kg	52
Aroclor-1016		420 U	ug/kg	420	38 U	ug/kg	38	38 U	ug/kg	38	43 U	ug/kg	43
Aroclor-1221		850 U	ug/kg	850	78 U	ug/kg	78	78 U	ug/kg	78	87 U	ug/kg	87
Aroclor-1232		850 U	ug/kg	850	78 U	ug/kg	78	78 U	ug/kg	78	87 U	ug/kg	87
Aroclor-1242		420 U	ug/kg	420	38 U	ug/kg	38	38 U	ug/kg	38	43 U	ug/kg	43
Aroclor-1248		420 U	ug/kg	420	38 U	ug/kg	38	38 U	ug/kg	38	43 U	ug/kg	43
Aroclor-1254		220 U	ug/kg	220	20 U	ug/kg	20	20 U	ug/kg	20	22 U	ug/kg	22
Aroclor-1260		220 U	ug/kg	220	20 U	ug/kg	20	20 U	ug/kg	20	22 U	ug/kg	22

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number: R9800004
Site GROUP111
Locator 18000301
Collect Date: 19-APR-95

		VALUE	QUAL	UNITS	DL
PESTICIDES/PCBs	ug/kg				
alpha-BHC		4.2	U	ug/kg	4.2
beta-BHC		14	U	ug/kg	14
delta-BHC		7.2	U	ug/kg	7.2
gamma-BHC (Lindane)		7.2	U	ug/kg	7.2
Heptachlor		7.2	U	ug/kg	7.2
Aldrin		7.2	U	ug/kg	7.2
Heptachlor epoxide		7.2	U	ug/kg	7.2
Endosulfan I		7.2	U	ug/kg	7.2
Dieldrin		7.2	U	ug/kg	7.2
4,4-DDE		7.2	U	ug/kg	7.2
Endrin		14	U	ug/kg	14
Endosulfan II		14	U	ug/kg	14
4,4-DDD		14	U	ug/kg	14
Endosulfan sulfate		14	U	ug/kg	14
4,4-DDT		14	U	ug/kg	14
Methoxychlor		29	U	ug/kg	29
Endrin aldehyde		14	U	ug/kg	14
Endrin ketone		14	U	ug/kg	14
Chlordane		72	U	ug/kg	72
Chlorobenzilate		220	U	ug/kg	220
Diallate		430	U	ug/kg	430
Toxaphene		350	U	ug/kg	350
Isodrin		7.2	U	ug/kg	7.2
Kepone		430	U	ug/kg	430
Aroclor-1016		350	U	ug/kg	350
Aroclor-1221		720	U	ug/kg	720
Aroclor-1232		720	U	ug/kg	720
Aroclor-1242		350	U	ug/kg	350
Aroclor-1248		350	U	ug/kg	350
Aroclor-1254		180	U	ug/kg	180
Aroclor-1260		180	U	ug/kg	180

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number:	R9800005				R9800006				R9800007				R9800014			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14D00101				14D00201				14D00301				14D00401			
Collect Date:	19-APR-95				19-APR-95				19-APR-95				21-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL) mg/kg																
Antimony	1.2	U	mg/kg	1.2	1.4	UJ	mg/kg	1.4	1.4	UJ	mg/kg	1.4	1.3	UJ	mg/kg	1.3
Arsenic	.51	J	mg/kg	.6	.78	J	mg/kg	.6	1.2	J	mg/kg	.6	.76	J	mg/kg	.6
Barium	4.2	J	mg/kg	.27	23	J	mg/kg	.3	12	J	mg/kg	.3	11.5	J	mg/kg	.29
Beryllium	.07	U	mg/kg	.07	.14	J	mg/kg	.081	.27	J	mg/kg	.083	.16	J	mg/kg	.078
Cadmium	.29	U	mg/kg	.29	.42	J	mg/kg	.32	.62	J	mg/kg	.33	.31	U	mg/kg	.31
Chromium	2.4	J	mg/kg	.41	3.7		mg/kg	.46	10		mg/kg	.47	3.6		mg/kg	.44
Cobalt	.75	U	mg/kg	.75	.99	J	mg/kg	.84	1.4	J	mg/kg	.85	.89	J	mg/kg	.81
Copper	4.8	UJ	mg/kg	4.8	52		mg/kg	.27	29.6		mg/kg	.28	11.2		mg/kg	.26
Cyanide	.06	U	mg/kg	.06	.07	U	mg/kg	.07	.07	U	mg/kg	.07	.07	U	mg/kg	.07
Lead	2.6	J	mg/kg	.4	12.2	J	mg/kg	.4	7.6	J	mg/kg	.4	4.2		mg/kg	.4
Mercury	.03	U	mg/kg	.03	.04	U	mg/kg	.04	.05	J	mg/kg	.1	.04	U	mg/kg	.04
Nickel	1.4	U	mg/kg	1.4	6.14	UJ	mg/kg	6.14	6.14	UJ	mg/kg	6.14	6.14	UJ	mg/kg	6.14
Selenium	.12	U	mg/kg	.12	.14	U	mg/kg	.14	.14	U	mg/kg	.14	.13	U	mg/kg	.13
Silver	.34	U	mg/kg	.34	.38	U	mg/kg	.38	.39	U	mg/kg	.39	.36	U	mg/kg	.36
Thallium	.15	U	mg/kg	.15	.16	U	mg/kg	.16	.17	U	mg/kg	.17	.16	U	mg/kg	.16
Tin	3.3	U	mg/kg	3.3	3.7	U	mg/kg	3.7	3.8	J	mg/kg	3.7	3.5	U	mg/kg	3.5
Vanadium	2.7	J	mg/kg	.29	3.4	J	mg/kg	.32	9.6	J	mg/kg	.33	4.1	J	mg/kg	.31
Zinc	13.7	UJ	mg/kg	13.7	206	J	mg/kg	.57	88.2	J	mg/kg	.58	29.3	J	mg/kg	.55

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number:	R9800015				R9800016				R9800017				R9800008			
Site	GROUP111				GROUP111				GROUP111				GROUP111			
Locator	14D00501				14D00601				14D00601D				14D00701			
Collect Date:	21-APR-95				21-APR-95				21-APR-95				20-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg															
Antimony	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
Arsenic	.69	J	mg/kg	.6	.91	J	mg/kg	.6	1.2	J	mg/kg	.6	1.3	J	mg/kg	.6
Barium	3.2	J	mg/kg	.28	5.8	J	mg/kg	.29	5.6	J	mg/kg	.29	4.6	J	mg/kg	.28
Beryllium	.08	J	mg/kg	.077	.16	J	mg/kg	.08	.16	J	mg/kg	.079	.16	J	mg/kg	.078
Cadmium	.31	U	mg/kg	.31	.32	U	mg/kg	.32	.32	U	mg/kg	.32	.31	U	mg/kg	.31
Chromium	2.3	J	mg/kg	.44	3.7		mg/kg	.45	3.6		mg/kg	.45	4.5		mg/kg	.44
Cobalt	.8	U	mg/kg	.8	.83	U	mg/kg	.83	.81	U	mg/kg	.81	.8	U	mg/kg	.8
Copper	4.1	UJ	mg/kg	4.1	8.5		mg/kg	.27	7.7		mg/kg	.26	6	J	mg/kg	.26
Cyanide	.06	U	mg/kg	.06	.07	U	mg/kg	.07	.07	U	mg/kg	.07	.06	U	mg/kg	.06
Lead	7.5		mg/kg	.4	6		mg/kg	.4	6.3		mg/kg	.4	7.2	J	mg/kg	.4
Mercury	.04	U	mg/kg	.04	.04	U	mg/kg	.04	.05	J	mg/kg	.1	.04	U	mg/kg	.04
Nickel	1.5	U	mg/kg	1.5	6.14	UJ	mg/kg	6.14	6.14	UJ	mg/kg	6.14	6.14	UJ	mg/kg	6.14
Selenium	.13	U	mg/kg	.13	.13	U	mg/kg	.13	.16	J	mg/kg	.5	.13	U	mg/kg	.13
Silver	.36	U	mg/kg	.36	.37	U	mg/kg	.37	.37	U	mg/kg	.37	.36	U	mg/kg	.36
Thallium	.15	U	mg/kg	.15	.16	U	mg/kg	.16	.16	U	mg/kg	.16	.16	U	mg/kg	.16
Tin	3.5	U	mg/kg	3.5	3.6	U	mg/kg	3.6	3.6	J	mg/kg	3.6	3.5	U	mg/kg	3.5
Vanadium	2.2	J	mg/kg	.31	4.8	J	mg/kg	.32	4.3	J	mg/kg	.32	4.8	J	mg/kg	.31
Zinc	10.1	UJ	mg/kg	10.1	28	J	mg/kg	.56	22.8	J	mg/kg	.55	20	J	mg/kg	.54

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number:		R9800009			R9800002			R9800003			R9800001		
Site		GROUP111			GROUP111			GROUP111			GROUP111		
Locator		14D00801			18D00101			18D00101D			18D00201		
Collect Date:		20-APR-95			19-APR-95			19-APR-95			19-APR-95		
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	
INORGANICS (SOIL)	mg/kg												
Antimony	1.3	U	mg/kg	1.3	1.2	U	mg/kg	1.2	1.3	U	mg/kg	1.3	1.1
Arsenic	.82	J	mg/kg	.6	.44	J	mg/kg	.6	.59	J	mg/kg	.6	.54
Barium	1.9	UJ	mg/kg	1.9	8.9	J	mg/kg	.26	12.3	J	mg/kg	.28	5
Beryllium	.08	U	mg/kg	.08	.1	J	mg/kg	.07	.08	J	mg/kg	.077	.09
Cadmium	.31	U	mg/kg	.31	.65	J	mg/kg	.28	.56	J	mg/kg	.31	.27
Chromium	1.5	J	mg/kg	.44	4.6		mg/kg	.4	6.2		mg/kg	.44	3.2
Cobalt	.8	U	mg/kg	.8	.93	J	mg/kg	.72	.79	U	mg/kg	.79	.7
Copper	3.8	UJ	mg/kg	3.8	20.2		mg/kg	.23	19.4		mg/kg	.26	10.2
Cyanide	.06	U	mg/kg	.06	.08	J	mg/kg	1	.06	U	mg/kg	.06	.08
Lead	1.8	J	mg/kg	.4	15.6		mg/kg	.4	34.4	J	mg/kg	2	7.6
Mercury	.04	U	mg/kg	.04	.13		mg/kg	.1	.11		mg/kg	.1	.03
Nickel	1.5	U	mg/kg	1.5	1.3	U	mg/kg	1.3	6.14	UJ	mg/kg	6.14	6.14
Selenium	.13	U	mg/kg	.13	.13	J	mg/kg	.5	.13	U	mg/kg	.13	.11
Silver	.36	U	mg/kg	.36	.33	U	mg/kg	.33	.36	U	mg/kg	.36	.32
Thallium	.15	U	mg/kg	.15	.14	U	mg/kg	.14	.15	U	mg/kg	.15	.14
Tin	3.5	U	mg/kg	3.5	3.6	J	mg/kg	3.2	3.5	U	mg/kg	3.5	3.1
Vanadium	2.8	J	mg/kg	.31	1.9	J	mg/kg	.28	2.3	J	mg/kg	.31	2.2
Zinc	6.9	UJ	mg/kg	6.9	86.6	J	mg/kg	.49	131	J	mg/kg	.54	124

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.

US Naval Station, Mayport, RCRA Facility Investigation Group III Report
Fleet Training Center - Firefighting Training Area Sediment Data

Lab Sample Number:	R9800004
Site	GROUP111
Locator	18D00301
Collect Date:	19-APR-95

		VALUE	QUAL	UNITS	DL
INORGANICS (SOIL)	mg/kg				
Antimony		1.1	U	mg/kg	1.1
Arsenic		.81	J	mg/kg	.6
Barium		7.1	J	mg/kg	.24
Beryllium		.08	J	mg/kg	.064
Cadmium		.29	J	mg/kg	.26
Chromium		12.5		mg/kg	.36
Cobalt		1.1	J	mg/kg	.66
Copper		334		mg/kg	.21
Cyanide		.05	U	mg/kg	.05
Lead		14.9	J	mg/kg	.4
Mercury		.08		mg/kg	.1
Nickel		6.14	UJ	mg/kg	6.14
Selenium		.11	U	mg/kg	.11
Silver		.41	J	mg/kg	.3
Thallium		.13	U	mg/kg	.13
Tin		3.5	J	mg/kg	2.9
Vanadium		4.2	J	mg/kg	.26
Zinc		34.1	J	mg/kg	.45

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-13

FIELD SCREENING RESULTS, GROUNDWATER, SWMUs 14 AND 18

US Naval Station, Mayport, Group III Report
FTC (SWMUs 14 and 18) Terraprobe Groundwater Data

Lab Sample Number:		R9757006			R9757005			R9757003			R9757004		
Site		GROUPIII			GROUPIII			GROUPIII			GROUPIII		
Locator		140004			140009			140012			140012D		
Collect Date:		09-APR-95			09-APR-95			09-APR-95			09-APR-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
Halogenated Volatiles	ug/l												
1,1,1-Trichloroethane		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
1,1,2,2-Tetrachloroethane		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
1,1,2-Trichloroethane		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
1,1-Dichloroethane		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
1,1-Dichloroethene		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
1,2-Dichlorobenzene		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
1,2-Dichloroethane		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
1,2-Dichloropropane		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
1,3-Dichlorobenzene		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
1,4-Dichlorobenzene		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
2-Chloroethylvinyl ether		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Bromodichloromethane		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Bromoform		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Bromomethane		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Carbon tetrachloride		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Chlorobenzene		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Chloroethane		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Chloroform		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Chloromethane		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Dibromochloromethane		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Dichlorodifluoromethane		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	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
Tetrachloroethene		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Trichloroethene		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Trichlorofluoromethane		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Vinyl chloride		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
cis-1,2-Dichloroethene		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
cis-1,3-Dichloropropene		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
trans-1,2-Dichloroethene		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
trans-1,3-Dichloropropene		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Aromatics	ug/l												
Benzene		.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
Toluene		.5 U	ug/l	.5	.5 U	ug/l	.5	.52	ug/l		.5 U	ug/l	.5
Xylenes (total)		.57	ug/l		.5 U	ug/l	.5	.5 U	ug/l	.5	.5 U	ug/l	.5
tert-Butyl methyl ether		1.3	ug/l		.5 U	ug/l	.5	.54	ug/l		1.1	ug/l	
Fuels	ug/l												
Diesel		-	ug/l		-	ug/l		790	ug/l	500	870	ug/l	500
Gasoline		-	ug/l		-	ug/l		500 U	ug/l	500	500 U	ug/l	500
JP-4		-	ug/l		-	ug/l		500 U	ug/l	500	500 U	ug/l	500
JP-5		-	ug/l		-	ug/l		500 U	ug/l	500	500 U	ug/l	500
Jet A		-	ug/l		-	ug/l		500 U	ug/l	500	500 U	ug/l	500
Kerosene		-	ug/l		-	ug/l		500 U	ug/l	500	500 U	ug/l	500
Mineral Spirits		-	ug/l		-	ug/l		500 U	ug/l	500	500 U	ug/l	500
TFH Gasoline		640	ug/l	50	50 U	ug/l	50	50 U	ug/l	50	50 U	ug/l	50

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.

US Naval Station, Mayport, Group III Report
FTC (SWMUs 14 and 18) Terraprobe Groundwater Data

Lab Sample Number:		R9757007			R9757008			R9757009		
Site		GROUPIII			GROUPIII			GROUPIII		
Locator		14Q020			14Q023			18Q001		
Collect Date:		09-APR-95			09-APR-95			09-APR-95		
		VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
Halogenated Volatiles	ug/l									
1,1,1-Trichloroethane		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
1,1,2,2-Tetrachloroethane		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
1,1,2-Trichloroethane		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
1,1-Dichloroethane		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
1,1-Dichloroethene		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
1,2-Dichlorobenzene		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
1,2-Dichloroethane		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
1,2-Dichloropropane		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
1,3-Dichlorobenzene		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
1,4-Dichlorobenzene		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
2-Chloroethylvinyl ether		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Bromodichloromethane		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Bromoform		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Bromomethane		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Carbon tetrachloride		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Chlorobenzene		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Chloroethane		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Chloroform		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Chloromethane		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Dibromochloromethane		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Dichlorodifluoromethane		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Methylene Chloride		5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Tetrachloroethene		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Trichloroethene		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Trichlorofluoromethane		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Vinyl chloride		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
cis-1,2-Dichloroethene		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
cis-1,3-Dichloropropene		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
trans-1,2-Dichloroethene		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
trans-1,3-Dichloropropene		1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Aromatics	ug/l									
Benzene		.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
Toluene		.5 U	ug/l	.5	.5 U	ug/l	.5	.52	ug/l	
Xylenes (total)		.5 U	ug/l	.5	.5 U	ug/l	.5	.5 U	ug/l	.5
tert-Butyl methyl ether		.5 U	ug/l	.5	.5 U	ug/l	.5	.5 U	ug/l	.5
Fuels	ug/l									
Diesel		500 U	ug/l	500	-	ug/l		-	ug/l	

US Naval Station, Maypo.., Group III Report
FTC (SWMUs 14 and 18) Terraprobe Groundwater Data

Lab Sample Number:	R9757007				R9757008				R9757009			
Site	GROUPIII				GROUPIII				GROUPIII			
Locator	14Q020				14Q023				18Q001			
Collect Date:	09-APR-95				09-APR-95				09-APR-95			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Gasoline	500	U	ug/l	500	-		ug/l		-		ug/l	
JP-4	500	U	ug/l	500	-		ug/l		-		ug/l	
JP-5	500	U	ug/l	500	-		ug/l		-		ug/l	
Jet A	500	U	ug/l	500	-		ug/l		-		ug/l	
Kerosene	500	U	ug/l	500	-		ug/l		-		ug/l	
Mineral Spirits	500	U	ug/l	500	-		ug/l		-		ug/l	
TFH Gasoline	50	U	ug/l	50	50	U	ug/l	50	50	U	ug/l	50

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-14

GROUNDWATER SAMPLE ANALYSES, SWMUs 14 AND 18

APPENDIX A-15

FIELD GAS CHROMATOGRAPH SCREENING RESULTS TABLES, GROUNDWATER, GROUP III

GC Operator: J. Watts GC #: 000784 Date: 3-22-95

Sample ID	Sample Collect Date	Run No.	Benzene	EBZ	Toluene	Xylenes	DCE	TCE	PCE	Total Peaks	Remarks
Column Blank		1								0	Perfect baseline - leak free
Syringe Blank		2								1	
① Std. Cocktail		3	20	20	20	40	10	10	10	9	
Syringe Blank		4								1	
23QØØ1	3/22/95	5	<1	<1	<1	<1	1.0	<1	<1	15	
② Syringe Blank		6								1	
Std. Cocktail		7	23	27	26	55	12	12	12	9	
* % D ① + ②			15%	35%	30%	38%	20%	20%	20%		** All %D's < 40% ∴ re-calibration is not necessary nor are J qualifiers for previous results
Syringe Blank		8								1	
23QØØ2	3/22/95	9	<1		<1		<1			7	
Syringe Blank		10								0	
23QØØ3	3/22/95	11	<1		<1	<1	<1	<1	<1	19	
Syringe Blank		12								1	
23QØØ4	3/22/95	13	<1	<1	<1	<1	2.0	<1	<1	18	
Syringe Blank		14								0	
③ Std. Cocktail		15	22	24	23	50	11	12	11	10	
% D ③ + ①			10%	20%	15%	25%	10%	20%	10%		

Note: All Concentrations in ppb (in headspace)
E = Estimated Value, concentration outside calibration range
J = Estimated Value, continuing calibration standard exceeded %D criteria

$$* \% D = \left| \frac{\text{concen. ② or ③} - \text{concen ①}}{\text{concen ①}} \times 100 \right|$$

** %D Criteria : if 2 or more compounds have %D > 40%

GC Operator: J. Watts GC #: 000784 Date: 3-23-95

Sample ID	Sample Collect Date	Run No.	Benzene	EBZ	Toluene	Xylenes	DCE	TCE	PCE	Total Peaks	Remarks
Column Blank		1								0	Perfect Baseline - No Leaks!
Syringe Blank		2								0	
Std. Cocktail		3	20	20	20	40	10	10	10	12	
Syringe Blank		4								0	
23QØØ5	3/22/95	5	<1 J	<1 J	<1 J	<1 J	0.82 J	<1 J	<1 J	18	
Syringe Blank		6				<1 J				1	miniscule trace of mxyl (0.005 ppb)
23QØØ6	3/22/95	7					<1 J	<1 J		5	All volatile detects eluted before 1.5 min run time ∴ ran a syringe blank for only 2 min.. No peaks resulted.
23QØØ7	3/22/95	8	<1 J		<1 J		<1 J	<1 J	<1 J	8	All volatile detects eluted before 3.5 min run time ∴ ran syringe blank for only 4 min.. No peaks resulted.
23QØØ8	3/22/95	9	<1 J				<1 J	<1 J		7	
Syringe Blank		10								0	
23QØØ9	3/23/95	11	<1 J				<1 J	<1 J	<1 J	20	
Syringe Blank		12								0	
23QØ1Ø	3/23/95	13	<1 J		<1 J	<1 J	<1 J	<1 J	<1 J	21	
Syringe Blank		14								0	
23QØ11	3/23/95	15	<1 J		<1 J		<1 J	<1 J		20	All volatile detects eluted before 2.5 min. run time ∴ ran syringe blank for only 3 min. No peaks resulted.
23QØ12	3/23/95	16	<1 J				<1 J	<1 J		8	All volatile detects eluted before 1.5 min. run time ∴ ran syringe blank for only 2 min.. No peaks resulted.

Note: All Concentrations in ppb (in headspace)
E = Estimated Value, concentration outside calibration range
J = Estimated Value, continuing calibration standard exceeded %D criteria

GC Operator: J. Watts GC #: 000784 Date: 3-23-95

Sample ID	Sample Collect Date	Run No.	Benzene	EBZ	Toluene	Xylenes	DCE	TCE	PCE	Total Peaks	Remarks
23QØ13	3/23/95	17	<1 J				<1 J	<1 J		11	
Syringe Blank		18								0	
23QØ14	3/23/95	19	<1 J		<1 J		<1 J	<1 J		16	
Syringe Blank		20								0	
ØIQØØ1	3/23/95	21	<1 J		<1 J		<1 J	<1 J	<1 J	14	All volatile detects eluted before 3.5 min. run time, ∴ ran syringe blank for only 4 min. No peaks resulted
ØIQØØ2	3/23/95	22	<1 J		6.5 J	<1 J	1.8 J	3.1 J		20	
Syringe Blank		23								1	
ØIQØØ3	3/23/95	24	<1 J		5.0 J		1.5 J	3.2 J		14	All volatile detects eluted before 4.5 min. run time, ∴ ran syringe blank for only 5 min.. No peaks resulted
ØIQØØ4	3/23/95	25	<1 J	<1 J	<1 J		<1 J	<1 J	<1 J	1	
Syringe Blank		26								0	
② Std. Cocktail		27	6.8	5.3	5.4	11	3.3	3.5	2.9	14	
* %D ①a②			66%	74%	73%	73%	67%	65%	71%		Because calibration std. meets ** %D criteria, qualify all positive detects as estimated (J).

Note: All Concentrations in ppb (in headspace)
E = Estimated Value, concentration outside calibration range
J = Estimated Value, continuing calibration standard exceeded %D criteria

$$* \%D = \left| \frac{\text{concen ② or ③} - \text{concen ①}}{\text{concen ①}} \right| \times 100$$

** %D criteria: If 2 or more compounds have a %D > 40%

GC Operator: J. Watts GC #: 000784 Date: 3-24-95

Sample ID	Sample Collect Date	Run No.	Benzene	EBZ	Toluene	Xylenes	DCE	TCE	PCE	Total Peaks	Remarks
Column Blank		1								0	Perfect baseline - No leaks!
Syringe Blank		2								0	
Std. Cocktail		3	20	20	20	40	10	10	10	11	
① Syringe Blank		4								0	
Ø1QØØ5	3/23/95	5	<1				1.7	1.3		7	All volatile detects eluted before 2.5 min. run time; ∴ ran syringe blank for only 3 min.. No peaks resulted.
Ø1QØØ6	3/23/95	6	<1		1.5		2.8	1.3	<1	14	All volatile detects eluted before 3.75 min. run time. ∴ ran syringe blank for only 4 min.. No peaks resulted
Ø1QØØ7	3/23/95	7	<1		12.7		7.2	7.3		15	
Syringe Blank		8								1	
25QØØ2	3/24/95	9	<1							5	All volatile detects eluted before 1.5 min. ∴ ran syringe blank for only 2 min. No peaks resulted.
23QØ15	3/24/95	10			<1					3	" " " 2.5 min. " " " 3 min..
③ Std. Cocktail		11	20	20	19	40	10	10	9.3	12	
* %D ③④②			0%	0%	5%	0%	0%	0%	7%		Does not meet ** %D criteria ∴ recalibration nor qualifiers is necessary.
Syringe Blank		12								1	
25QØØ1	3/24/95	13	<1	<1			<1	<1		9	
Syringe Blank		14								1	
23QØ16	3/24/95	15			<1		1.1	1.2	<1	8	All volatile detects eluted before 3.5 min. run time; ∴ ran 4 min. syringe blank. No peaks resulted

Note: All Concentrations in ppb (in headspace)
E = Estimated Value, concentration outside calibration range
J = Estimated Value, continuing calibration standard exceeded %D criteria

$$* \%D = \left| \frac{\text{concen } ②^{\text{or } ③} - \text{concen } ①}{\text{concen } ①} \right| \times 100$$

** %D criteria: if 2 or more compounds have a %D > 40%

GC Operator: J. Watts GC #: 000784 Date: 3-24-95

Sample ID	Sample Collect Date	Run No.	Benzene	EBZ	Toluene	Xylenes	DCE	TCE	PCE	Total Peaks	Remarks
23Q017	3/24/95	16	<1				<1	0.5	<1	7	All volatile detects eluted before 3.45 min. run time. ∴ ran 4 min. syringe blank. No peaks resulted.
25Q004	3/24/95	17	<1		<1		<1	<1		10	All volatile detects eluted before 2.5 min run time. ∴ ran 3 min syringe blank. No peaks resulted.
25Q005	3/24/95	18	<1	<1	<1		<1	<1		17	
Syringe Blank		19								1	
24Q001	3/24/95	20	<1		<1		<1	<1	<1	10	All volatile detects eluted before 3.45 min. run time. ∴ ran 4 min syringe blank. No peaks resulted.
25Q005	3/24/95	21	<1	<1	<1		0.6	<1	<1	20	
Syringe Blank		22								1	
③ Std. Cocktail		23	23	22	22	45	11	11	11	16	
%D ⓪ ③			15%	10%	10%	12.5%	10%	10%	10%		Does not meet %D criteria ∴ all detects do not need to be qualified as estimated.

Note: All Concentrations in ppb (in headspace)
E = Estimated Value, concentration outside calibration range
J = Estimated Value, continuing calibration standard exceeded %D criteria

GC Operator: J. Watts GC #: 000784 Date: 3-25-95

Sample ID	Sample Collect Date	Run No.	Benzene	EBZ	Toluene	Xylenes	DCE	TCE	PCE	Total Peaks	Remarks
Column Blank		1								0	Good Baseline
Syringe Blank		2								0	" "
Std. Cocktail		3	20	20	20	40	10	10	10	9	" "
① Syringe Blank		4								0	" "
24QΦΦ2	3/24/95	5	<1J		<1J		0.46J	<1J		8	All volatile deteds eluted before 3 min. run time, ∴ ran 3.5 min. syringe blank. No peaks resulted.
24QΦΦ3	3/24/95	6	<1J		<1J		1.7J	<1J	0.65J	15	" " " " 4.5 " " " " 5 min " " "
24QΦΦ4	3/24/95	7	<1J				<1J			5	" " " " 1.5 " " " " 2 min. " " "
23QΦ18	3/25/95	8	<1J			<1J	<1J	<1J		12	
Syringe Blank		9								2	
② Std. Cocktail		10	39	45	42	94	16	19	20	9	
** %D ①or②			95%	125%	110%	135%	60%	90%	100%		Since 2 or more compounds have a %D > 40%, qualify all positive results as estimated #. ∴ calculate new response factors.
Syringe Blank		11								1	
23QΦ19	3/25/95	12	<1		<1		<1	<1		13	
Syringe Blank		13								0	
23QΦ2Φ	3/25/95	14	<1		<1		<1			12	All volatile deteds eluted before 3:45 min. run time, ∴ ran 3 min. syringe blank. No peaks resulted.
23QΦ21	3/25/95	15	<1		<1		<1	<1	<1	18	

Note: All Concentrations in ppb (in headspace)
E = Estimated Value, concentration outside calibration range
J = Estimated Value, continuing calibration standard exceeded %D criteria

$$* \%D = \left| \frac{\text{concen ③} - \text{concen ①}}{\text{concen ①}} \right| \times 100$$

** %D criteria: if 2 or more compounds have %D > 40%

GC Operator: J. Watts GC #: 000784 Date: 3-25-95

Sample ID	Sample Collect Date	Run No.	Benzene	EBZ	Toluene	Xylenes	DCE	TCE	PCE	Total Peaks	Remarks
Syringe Blank		16								3	
23QØ22	3/25/95	17	<1		<1		0.62	<1	<1	13	All volatile detects eluted before 5 min. run time, ∴ ran 5:15 syringe blank. No peaks resulted.
23QØ23	3/25/95	18	<1							7	" " " " " 2.5 min. " " " " " 3 min " " "
23QØ25	3/25/95	19	<1		<1		<1	<1		16	
Syringe Blank		20								0	
23QØ24	3/25/95	21	<1		<1		<1		<1	13	All volatile detects eluted before 4 min. run time, ∴ ran 4:15 syringe blank. No peaks resulted.
② Std. Cocktail		22	13	13	13	25	8	7	6.5	10	
%D ② & ③			35%	35%	35%	38%	20%	30%	35%		Does not meet %D criteria ∴ positive detects do not need to be qualified as estimated.

Note: All Concentrations in ppb (in headspace)
E = Estimated Value, concentration outside calibration range
J = Estimated Value, continuing calibration standard exceeded %D criteria

GC Operator: J. Watts GC #: 0007816 Date: 3/26/95

Sample ID	Sample Collect Date	Run No.	Benzene	EBZ	Toluene	Xylenes	DCE	TCE	PCE	Total Peaks	Remarks
Column Blank		1								0	Excellent baseline - no leaks
Syringe Blank		2								0	" "
① Std. Cocktail		3	20	20	20	40	10	10	10	10	
Syringe Blank		4								2	
23Q026	3/25/95	5	<1 J		<1 J		<1 J		<1 J	7	
Syringe Blank		6								2	
23Q026D	3/25/95	7	<1 J		<1 J		<1 J	<1 J		19	Duplicate sample - detected greater amt. of vocs than orig.. Will re-run orig..
Syringe Blank		8								4	
23Q026	3/25/95	9	1.1 J	<1 J	<1 J		4.2 J	0.7 J		16	
Syringe Blank		10								3	
23Q027	3/25/95	11	0.5 J				3.3 J	0.5 J		10	All volatile detects eluted before 2 min. run time, ∴ ran 2:15 min syringe blank. Two peaks resulted.
23Q027D	3/25/95	12	<1 J	0.5 J			0.8 J	<1 J		13	Duplicate Sample - minor variance from orig. Not too significant
Syringe Blank		13								1	
23Q028	3/25/95	14	<1 J		3.7 J		17.5 EJ	2.9 J		21	
Syringe Blank		15								2	
25Q006	3/26/95	16	1.2 J	1.6 J	0.7 J	0.7 J	1.3 J	<1 J		20	

Note: All Concentrations in ppb (in headspace)
E = Estimated Value, concentration outside calibration range
J = Estimated Value, continuing calibration standard exceeded %D criteria

GC Operator: J. Watts GC #: 000784 Date: 3/26/95

Sample ID	Sample Collect Date	Run No.	Benzene	EBZ	Toluene	Xylenes	DCE	TCE	PCE	Total Peaks	Remarks
Syringe Blank		17								7	
① Std. Cocktail		18	37	43	43	85	18	19	20	14	
* %D ①&②			85%	115%	115%	113%	80%	90%	100%		meets %D criteria ∴ qualify all detects as estimated w cals. new resp. factors.
Syringe Blank		19								2	
23Q029	3/26/95	20	0.5 J				0.9 J	<1 J		13	All volatile detects eluted before 4:15 min. run time, ∴ ran 4.5 min. syringe blank. No peaks resulted.
23Q034	3/26/95	21	<1 J		<1 J		3.6 J	<1 J	<1 J	14	" " " " 4 min " " 4:15 min " "
23Q032	3/26/95	22	<1 J	1.0 J	0.7 J	10.6 J	4.1 J	1.0 J	<1 J	17	
Syringe Blank		23								0	
23Q033	3/26/95	24	<1 J	<1 J	<1 J	<1 J	<1 J	<1 J		21	
Syringe Blank		25								2	
23Q031	3/26/95	26	<1 J		2.1 J		3.1 J	0.5 J		15	All volatile detects eluted before 3:40 min. run time, ∴ ran 4 min. syringe blank. 2 peaks resulted
23Q030	3/26/95	27	<1 J		<1 J		1.4 J	<1 J		13	" " " " 2:50 min. " " " " 3 min. " " "
44Q003	3/26/95	28	<1 J		<1 J	2.6 J	<1 J	<1 J		13	
Syringe Blank		29								4	
③ Std. Cocktail		30	11	9	10	19	6	5	5	13	
%D ①&③			45%	55%	50%	53%	40%	50%	50%		meets %D criteria ∴ qualify all results as estimated - J.

Note: All Concentrations in ppb (in headspace)
E = Estimated Value, concentration outside calibration range
J = Estimated Value, continuing calibration standard exceeded %D criteria

$$* \%D = \left| \frac{\text{concen ② or ③} - \text{concen ①}}{\text{concen ①}} \right| \times 100$$

** %D criteria : If 2 or more cmpds. have %D > 40%

GC Operator: J. Watts GC #: 000784 Date: 3-27-95

Sample ID	Sample Collect Date	Run No.	Benzene	EBZ	Toluene	Xylenes	DCE	TCE	PCE	Total Peaks	Remarks
Column Blank		1								0	Good Baseline
Syringe Blank		2								0	" "
① Std. Cocktail		3	20	20	20	40	10	10	10	11	
Syringe Blank		4								0	
45QΦΦ2	3/26/95	5	0.5 J		<1 J		2.6 J	0.5 J		19	
Syringe Blank		6								0	
45QΦΦ1	3/26/95	7	<1 J		<1 J		<1 J			9	
Syringe Blank		8								2	
44QΦΦ1	3/26/95	9	<1 J				<1 J	<1 J		9	All volatile detects eluted before 3:40 min. run time, ∴ can 2 min. syringe blank.
45QΦΦ3	3/26/95	10	<1 J	<1 J	0.5 J	<1 J	4.2 J	0.6 J		26	
Syringe Blank		11								1	
③ Std. Cocktail		12	26	30	28	63	12	13	14	17	
* %D ① & ②			30%	50%	40%	58%	20%	30%	40%		Meets ** %D criteria, ∴ qualify all results as estimated (J) & calc. new RF.
Syringe Blank		13								0	
14QΦΦ1	3/27/95	14	0.6	0.6	38.4 E	2.1	1.1	6.1	0.6	30	
Syringe Blank		15								0	

Note: All Concentrations in ppb (in headspace)
E = Estimated Value, concentration outside calibration range
J = Estimated Value, continuing calibration standard exceeded %D criteria

$$* \%D = \left| \frac{\text{concen ② or ③} - \text{concen ①}}{\text{concen ①}} \right| \times 100$$

** %D criteria: if 2 or more cmpds. have a %D > 40%

GC Operator: J. Watts GC #: 000784 Date: 3-27-95

Sample ID	Sample Collect Date	Run No.	Benzene	EBZ	Toluene	Xylenes	DCE	TCE	PCE	Total Peaks	Remarks
140ØØ2	3/27/95	16	<1	<1	1.0	<1	2.6	0.5	<1	19	
Syringe Blank		17								0	
23QØ36	3/27/95	18	0.5	<1	<1	<1	1.4	<1	<1	30	
Syringe Blank		19								0	
23QØ37	3/27/95	20	<1		<1	<1		<1		18	
Syringe Blank		21								2	
23QØ38	3/27/95	22	<1		<1		1.4	<1		14	All volatile deteds eluted before 2:40 min. run time, ∴ ran 3 min syringe blank. No 2 peaks resulted
23QØ35	3/27/95	23	<1		<1		<1	<1		13	" " " " " 2:45 min. " " " 3 min. " " " " "
① Std. Cocktail		24	15	16	15	34	8	8	7.5	14	
%D ② + ③			25%	20%	25%	15%	20%	20%	25%		Does not meet %D criteria ∴ all results do not need to be qualified as estimated (J).

Note: All Concentrations in ppb (in headspace)
E = Estimated Value, concentration outside calibration range
J = Estimated Value, continuing calibration standard exceeded %D criteria

GC Operator: J. Watts GC #: 000384 Date: 3-28-95

Sample ID	Sample Collect Date	Run No.	Benzene	EBZ	Toluene	Xylenes	DCE	TCE	PCE	Total Peaks	Remarks
Column Blank		1								0	Perfect baseline - No leaks!
Syringe Blank		2								0	" "
Std. Cocktail		3	20	20	20	40	10	10	10	15	
① Syringe Blank		4								0	
14QΦΦ3	3/27/95	5	0.7	8.5	3.3	18.1	1.5	10.3	2.1	30	
Syringe Blank		6								0	Good baseline
14QΦΦ4	3/27/95	7	7.3E	18.4E	202E	91.5E	5.2	102E	7.3E	30	
Syringe Blank		8								0	
14QΦΦ4DL	3/27/95	9	<1	0.9	9.8	7.2	<1	3.8	0.5	30	
Syringe Blank		10								0	
14QΦΦ5	3/27/95	11								1	
14QΦΦ6	3/27/95	12								3	All volatile detects eluted before 3 min run time, ∴ ran 3.5 min. Syringe blank. No peaks resulted.
14QΦΦ5RE	3/27/95	13						<1		2	Re-analysis of 14QΦΦ5
② Std. Cocktail		14	18	11	13	19.5	7.4	7.1	6.1	10	
%D ① + ②			10%	45%	35%	51%	26%	29%	39%		Barely meets %D criteria, ∴ will not qualify results as estimates or calc. new RFs
Syringe Blank		15								0	

Note: All Concentrations in ppb (in headspace)
E = Estimated Value, concentration outside calibration range
J = Estimated Value, continuing calibration standard exceeded %D criteria

$$\%D = \left| \frac{\text{concen ② or ③} - \text{concen ①}}{\text{concen ①}} \right| \times 100$$

%D criteria: if 2 or more compounds have a %D > 40%

GC Operator: I Watts GC #: 000784 Date: 3-28-95

Sample ID	Sample Collect Date	Run No.	Benzene	EBZ	Toluene	Xylenes	DCE	TCE	PCE	Total Peaks	Remarks
14QØØ7A	3/28/95	16	<1		0.9		<1	<1		7	All volatile detects eluted before 3 min run time, ∴ ran 3:15 min syringe blank. No peaks resulted.
14QØØ8	3/28/95	17	<1		<1		1.5			14	" " " " 5:40 min " " " " " 6 min " " " . 1 peak resulted
14QØØ9	3/28/95	18	<1		<1		1.3	<1		12	" " " 3 min. " " " " 3:15 min " " .
SAS 14QØ23 ~~14QØØ1~~	3/28/95	19	<1		<1		4.1	1.0		24	
Syringe Blank		20								2	
SAS 14QØ31 ~~14QØØ2~~	3/28/95	21	0.5		0.5		9.1	1.7	<1	17	All volatile detects eluted before 4 min. run time, ∴ ran 4:15 min. syringe blank. 1 peak resulted.
14QØØ7	3/28/95	22	0.9		<1		8.5	0.8		16	" " " " 3 min. " " " 3:15 min " " . No peaks resulted.
14QØ1Ø	3/28/95	23	<1				<1			3	" " " " 1.5 min " " " 2 min. " " " . 1 peak resulted.
14QØ14	3/28/95	24	<1				<1	<1		6	" " " " 2 min " " " 2:15 " " . No peaks resulted.
14QØ13	3/28/95	25	<1	10.2	204E		<1	25E	2.0	29	
Syringe Blank		26								1	
③ Std. Cocktail		27	20	16	17.4	32	10	9.1	7.1	10	
%D ① + ③			0%	20%	13%	20%	0%	9%	29%		Does not meet %D criteria, ∴ all detects do not need to be qualified as estimates.

Note: All Concentrations in ppb (in headspace)
E = Estimated Value, concentration outside calibration range
J = Estimated Value, continuing calibration standard exceeded %D criteria

GC Operator: J. Watts GC #: 000784 Date: 3-29-95

Sample ID	Sample Collect Date	Run No.	Benzene	EBZ	Toluene	Xylenes	DCE	TCE	PCE	Total Peaks	Remarks
Column Blank		1								0	Perfect baseline - No leaks!
Syringe Blank		2								0	
Std. Cocktail		3	20	20	20	40	10	10	10	13	
Syringe Blank		4								1	
14QΦ11	3/28/95	5	<1		<1		0.6	<1		15	All volatile detects eluted before 6.5 min. run time, ∴ ran 6.5 min syringe blank. 3 peaks resulted.
14QΦ12	3/28/95	6	1.0		<1	<1	19E	2.7		29	
Syringe Blank		7								3	
18QΦΦ4	3/28/95	8	0.8		1.1		9E	1.6		20	
Syringe Blank		9								3	
18QΦΦ3	3/28/95	10	<1		<1	1.4	5.9	1.2		25	
Syringe Blank		11								3	
18QΦΦ5	3/29/95	12	<1		0.5	<1	1.7	0.5	<1	17	
Syringe Blank		13								2	
44QΦΦ5	3/29/95	14	<1		<1		<1	<1	<1	21	
Syringe Blank		15								2	
44QΦΦ4	3/29/95.	16	<1				2.5	<1	<1	13	

Note: All Concentrations in ppb (in headspace)
E = Estimated Value, concentration outside calibration range
J = Estimated Value, continuing calibration standard exceeded %D criteria

GC Operator: J. Watts GC #: 000784 Date: 3-29-95

Sample ID	Sample Collect Date	Run No.	Benzene	EBZ	Toluene	Xylenes	DCE	TCE	PCE	Total Peaks	Remarks
Syringe Blank		17								0	
② Std. Cocktail		18	26	25	27	49	14	13	13	12	
%D ① + ②			30%	25%	35%	23%	40%	30%	30%		Does not meet %D criteria ∴ results do not need to be qualified as estimates, ~~nor do RFs need to be determined~~ calculated.
Syringe Blank		19								3	
14QØ16	3/29/95	20	<1	<1	0.6	<1	<1	<1		20	
Syringe Blank		21								2	
14QØ18	3/29/95	22	<1		<1					5	All volatile detects eluted before 5:40 min. run time; ∴ ran 6 min. syringe blank. 5 peaks resulted: .07 ppb DCE.
14QØ17	3/29/95	23	<1		<1					5	" " " " 3 min " " " 3:15 min " " 4 peaks resulted.
14QØ15	3/29/95	24			<1						" " " " " 3:15 min " " " 3:5 min " " " " " "
44QØØ2	3/26/95	25	<1J				1.9J	<1J		18	
Syringe Blank		26					0.06			6	
③ Std. Cocktail		27	24	24	24	47	12	12	12	10	
%D ① + ③			20%	20%	20%	18%	20%	20%	20%		Does not meet %D criteria ∴ results do not need to be qualified as estimated.

Note: All Concentrations in ppb (in headspace)
E = Estimated Value, concentration outside calibration range
J = Estimated Value, continuing calibration standard exceeded %D criteria

$$\%D = \left| \frac{\text{Concen ② or ③} - \text{Concen ①}}{\text{Concen ①}} \right| \times 100$$

%D criteria: if 2 or more compounds have a %D > 40%

GC Operator: B. Gardner GC #: 000784 Date: 4/4/95

Sample ID	Sample Collect Date	Run No.	Benzene	EBZ	Toluene	Xylenes	DCE	TCE	PCE	Total Peaks	Remarks
Column Blank		1								0	Perfect Baseline - leak free
Syringe Blank		2								0	
Working Std.		3								12	Weak results. Standard was from last shift. Opening new cocktail tomorrow.
Syringe Blank		4								0	

Note: All Concentrations in ppb (in headspace)
E = Estimated Value, concentration outside calibration range
J = Estimated Value, continuing calibration standard exceeded %D criteria

GC Operator: B. Gardner GC #: 000784 Date: 04/05/95

Sample ID	Sample Collect Date	Run No.	Benzene	EBZ	Toluene	Xylenes	DCE	TCE	PCE	Total Peaks	Remarks
Column Blank		1								0	Excellent baseline
Syringe Blank		2								0	
① (Cal.) Working Standard		3	20	20	20	40	10	10	10	9	
Syringe Blank		4								0	
14Q021	04/05/95	5	<1		2.6	<1	1.0	<1		23	Used RF's from 2nd working standard to calculate concentration
Syringe Blank		6								3	
② (New Cal.) Working Standard		7	20	20	20	40	10	10	10	9	
Syringe Blank		8								1	
14Q021	04/05/95	9	<1	<1	3.1		3.4	1.1	<1	24	
Syringe Blank		10								1	
14Q019	04/05/95	11			1.7		<1	<1		7	all volatile detects eluted before 3 min. run time ∴ Ran syringe blank for 5 min. No peaks resulted.
14Q020	04/05/95	12	<1		2.0	<1	<1	<1	<1	20	
Syringe Blank		13								0	
14Q022	04/05/95	14	<1		1.2		<1	<1		11	
Syringe Blank		15								6	
S.A.S. 18Q001 ~~14Q023~~	04/05/95	16	<1		2.1		<1	<1		13	all volatile detects eluted before 3 min. run time ∴ Ran syringe blank for 5 min. No peaks resulted.

Note: All Concentrations in ppb (in headspace)
E = Estimated Value, concentration outside calibration range
J = Estimated Value, continuing calibration standard exceeded %D criteria

GC Operator: B. Gardner GC #: 000784 Date: 04/05/95

Sample ID	Sample Collect Date	Run No.	Benzene	EBZ	Toluene	Xylenes	DCE	TCE	PCE	Total Peaks	Remarks
14Q024	04/05/95	17	<1		1.7		<1	<1		22	
Syringe Blank		18								0	
14Q025	04/05/95	19	<1		<1					3	All volatile detects eluted before 3 min. run time ∴ Ran syringe blank for 5 min. No peaks resulted.
14Q026	04/05/95	20	<1		<1		<1	<1		1L	All volatile detects eluted before 3 min. run time. ∴ Ran syringe blank for 5 min. No peaks resulted.
② Working Standard		21	20.2	19.2	19.2	38.4	9.7	9.1	9.4	9	
% D: ② & ①			1	4	4	4	3	9	6		

Note: All Concentrations in ppb (in headspace)
E = Estimated Value, concentration outside calibration range
J = Estimated Value, continuing calibration standard exceeded %D criteria

GC Operator: B. Gardner GC #: 000784 Date: 04/06/95

Sample ID	Sample Collect Date	Run No.	Benzene	EBZ	Toluene	Xylenes	DCE	TCE	PCE	Total Peaks	Remarks
Column Blank		1								1	Excellent baseline.
Syringe Blank		2								0	
① Working Standard		3	20	20	20	40	10	10	10	9	
Syringe Blank		4								0	
MPT-14-1	04/06/95	5			<1		<1	<1		6	
Syringe Blank		6								2	
MPT-14-1D	04/06/95	7			<1		<1	<1		8	
Syringe Blank		8								0	
MPT-14-2	04/06/95	9			<1		<1	<1		11	
Syringe Blank		10								0	
MPT-14-2D	04/06/95	11			<1		<1	<1		16	
Syringe Blank		12								0	
② Working Standard		13	18.4	18.4	~~35.2~~ 18.6	35.2	9.7	10.2	12.3	11	
%D: ① & ②			8	8	7	12	3	2	23		%D < 40% for all so recalibration is not necessary. Nor are 'J' qualifiers for prev. results.
Syringe Blank		14								1	
14Q027	04/06/95	15	<1		1.2		<1	<1			

Note: All Concentrations in ppb (in headspace)
E = Estimated Value, concentration outside calibration range
J = Estimated Value, continuing calibration standard exceeded %D criteria

GC Operator: B. Gardner GC #: 000784 Date: 04/06/95

Sample ID	Sample Collect Date	Run No.	Benzene	EBZ	Toluene	Xylenes	DCE	TCE	PCE	Total Peaks	Remarks
Syringe Blank		16			<1					6	Toluene showing up in trace amounts in syringe blank.
14Q028	04/06/95	17	<1		1.5		<1	<1		11	
Syringe Blank		18								1	
14Q029	04/06/95	19	<1		1.4		<1	<1	<1	21	
Syringe Blank		20								1	
14Q030	04/06/95	21			<1		<1	<1		9	all volatile detects eluted before 6 min. run time. ∴ Ran syringe blank for 7min. No peaks resulted
18Q002 ~~14Q031~~	04/06/95	22			<1		<1	<1		12	all volatile detects eluted before 8 min. run time. ∴ Ran syringe blank for 8min. No peaks resulted.
14Q032	04/06/95	23	<1	<1	1.2		<1	<1		15	
Syringe Blank		24	~~18.6~~							0	
① Working Standard		25	18.6	18.6	19.0	35.4	11.1	10.8	12.6		
%D : ① & ③			7	7	5	12	11	8	26	—	

Note: All Concentrations in ppb (in headspace)
E = Estimated Value, concentration outside calibration range
J = Estimated Value, continuing calibration standard exceeded %D criteria

GC Operator: B. Gardner GC #: 000784 Date: 04/07/95

Sample ID	Sample Collect Date	Run No.	Benzene	EBZ	Toluene	Xylenes	DCE	TCE	PCE	Total Peaks	Remarks
Column Blank		1								0	Excellent baseline
Syringe Blank		2								1	
① Working Standard		3	20	20	20	40	10	10	10	11	
Syringe Blank		4								0	
140027	04/06/95	5			1.0		<1	<1		11	No volatile detects after 3:00 run time. Ran syringe blank for 4 min. No peaks resulted.
140028	04/06/95	6	<1		1.3		<1	<1		10	No volatile detects after 6:00 run time. Ran syringe blank for 7 min. No peaks resulted.
140032	04/06/95	7	<1		<1		1.8	<1		16	
Syringe Blank		8								0	
② Working Standard		9	18.6	19.1	18.5	38.2	8.4	9.2	11.5	10	
%D: ① & ②			7	5	8	5	16	8	15		All %D are less than 40 so recalibration is not necessary nor are J qualifiers for morning run.
Syringe Blank		10								0	
TCQ006	04/07/95	11	<1 J		<1 J			<1 J		11	
Syringe Blank		12								0	
TCG001	04/07/95	13	<1 J		<1 J			<1 J	<1 J	9	
Syringe Blank		14								3	
TCG002	04/07/95	15					<1 J			6	

Note: All Concentrations in ppb (in headspace)
E = Estimated Value, concentration outside calibration range
J = Estimated Value, continuing calibration standard exceeded %D criteria

GC Operator: B. Gardner GC #: 000784 Date: 04/07/95

Sample ID	Sample Collect Date	Run No.	Benzene	EBZ	Toluene	Xylenes	DCE	TCE	PCE	Total Peaks	Remarks
Syringe Blank		16								1	
TCG004	04/07/95	17					<1 J	2.4 J	11.9 J	5	Times are really early. Seems to be warmer in trailer than in morning
Syringe Blank		18								0	
TCQ001	04/07/95	19	<1 J		1.6 J		<1 J	<1 J	<1 J	14	All volatile detects eluted before 5 min run time. ∴ Ran 6 min syringe blank, no peaks detected. Times are really early.
⑤ Working Standard		20	23.9	27.0	26.5	55.5	12.3	12.0	14.8	12	
%D: ① & ③			20	35	33	m 36 o 42 39	23	20	48		PCE and O-xyl were off by more than 40% so all previous values are estimates.. New RF's were calculated for remaining samples.
Syringe Blank		21								2	
TCQ005	04/07/95	22	<1		1.8			<1		9	All volatile detects eluted within 5:04 run time. ∴ Ran syringe blank for 6 min. No peaks detected.
TCQ004	04/07/95	23	<1	<1	2.2		<1	<1	<1	19	
Syringe Blank		24								1	
TCQ002	04/07/95	25	<1		1.0		<1	2.9	445 E	9	
Syringe Blank		26								0	
TCQ003	04/07/95	27	<1	<1	2.5		<1	2.3	44.1 E	18	
Syringe Blank		28								1	
TCG004 ~~TCQ004~~	04/07/95	29					<1	7.9	34.9 E	8	All volatile detects eluted before 5:03 run time. ∴ Ran 6 min. syringe blank. No peaks detected
TCQ002DL	04/07/95	30			<1		<1	<1	94.2 E	7	Injected only 50ml as a dilution method.

Note: All Concentrations in ppb (in headspace)
E = Estimated Value, concentration outside calibration range
J = Estimated Value, continuing calibration standard exceeded %D criteria

GC Operator: B. Gardner GC #: 000784 Date: 04/07/95

Sample ID	Sample Collect Date	Run No.	Benzene	EBZ	Toluene	Xylenes	DCE	TCE	PCE	Total Peaks	Remarks
Syringe Blank		31								1	
TCG003DL	04/07/95	32			<1		<1	<1	7.3	10	no detects after 5:05 so ran 6 min syringe blank. Injected 50 ul blank. No peaks.
TCG004DL ~~ICG~~	04/07/95	33					<1	1.6	7.1	6	no detects after 5:07 so ran 6 min syringe blank. Injected 50 ul blank. No peaks.
③ Working Std.		34	21.5	20.7	21.7	39.7	9.0	12.0	10.5	10	
% D: ③ i ④			8	4	9	1	10	20	5		all % D are below 40. No qualifiers needed for samples after working std. #3.

Note: All Concentrations in ppb (in headspace)
E = Estimated Value, concentration outside calibration range
J = Estimated Value, continuing calibration standard exceeded %D criteria

GC Operator: B. Gardner GC #: 000784 Date: 04/08/95

Sample ID	Sample Collect Date	Run No.	Benzene	EBZ	Toluene	Xylenes	DCE	TCE	PCE	Total Peaks	Remarks
Column Blank		1								0	Excellent baseline.
Syringe Blank		2								~~0~~ 1	
① Working Standard		3	20	20	20	40	10	10	10	9	
Syringe Blank		4								1	
TCG003	04/07/95	5			<1				<1	7	
Syringe Blank		6								3	
TCQ007	04/07/95	7	<1		1.1		<1	<1		18	
Syringe Blank		8								7	
TCQ008	04/07/95	9	<1		1.4		<1	<1		15	
Syringe Blank		10								9	
TCQ010	04/07/95	11	<1		1.0		<1	<1		10	
Syringe Blank		12								0	
② Working Standard		13	20.7	19.0	20.0	35.5	11.1	11.3	12.3	10	
%D ① & ②			4	5	0	11	11	13	23		%D are all less than 40. Recalibration and 'J' qualifiers are not necessary.
Syringe Blank		14								0	
TCQ013	04/08/95	15	<1 J		1.9 J		<1 J	<1 J	<1 J	12	

Note: All Concentrations in ppb (in headspace)
E = Estimated Value, concentration outside calibration range
J = Estimated Value, continuing calibration standard exceeded %D criteria

GC Operator: B. Gardner GC #: 000784 Date: 04/08/95

Sample ID	Sample Collect Date	Run No.	Benzene	EBZ	Toluene	Xylenes	DCE	TCE	PCE	Total Peaks	Remarks
Syringe Blank		16			<1 J					2	
TCQ014	04/08/95	17	<1 J		<1 J		<1 J	<1 J		15	
Syringe Blank		18								2	
TCQ012	04/08/95	19			<1 J		<1 J	<1 J		6	All elutes occured before 3min. run time. Ran syringe blank for 4min. No peaks detected.
TCQ015	04/08/95	20	<1 J		<1 J		<1 J	<1 J		11	
Syringe Blank		21								1	
TCQ011	04/08/95	22	<1 J		1.6 J		<1 J	<1 J		12	
Syringe Blank		23								3	
③ Working Standard		24	23.8	27.6	27.0	51.9	17.2	14.3	17.3	11	2 compounds exceede 40%D so J qualifiers required for afternoon samples
%D: ① & ②			19	38	35	30	32	43	73		

Note: All Concentrations in ppb (in headspace)
E = Estimated Value, concentration outside calibration range
J = Estimated Value, continuing calibration standard exceeded %D criteria

APPENDIX B

PRECISION, ACCURACY, REPRESENTATIVENESS, COMPLETENESS, AND COMPARABILITY

Environmental Data Services, Inc.

Specializing in Laboratory Data Validation

September 22, 1995

Mr. Frank Lesesne
ABB Environmental Services, Inc.
2590 Executive Center Circle East
Tallahassee, Florida 32301

Re: Transmittal of Draft PARCC Report for NAS Mayport

Dear Mr. Lesesne:

Environmental Data Services, Inc. (EDS) is pleased to submit three (3) copies of the draft PARCC report for NAS Mayport. If you have any questions, please call me at (303) 692-0160.

Sincerely,
Environmental Data Services, Inc.

Nancy Weaver

Nancy Weaver
President

3267 S. Oneida Way • Denver, Colorado 80224 • Ph 303 692-0160 • Fax 303 692-0170

Environmental Data Services, Inc.

Specializing in Laboratory Data Validation

PARCC CRITERIA EVALUATION REPORT

NAS Mayport, Mayport, Florida
Remedial Investigation/Feasibility Study

Draft Report
September 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

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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 borings, surface soil, sediment, and sludge samples. These samples were collected in the vicinity of Solid Waste Management Units (SWMUs) 01, 14, 17, 18, 23, 24, 25, 44, and 45, 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 and inorganic analyses. CH2M Hill Quality Analytical Laboratories (QAL) analyzed all of the samples in their Montgomery, Alabama and Redding, California laboratories.

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 27 SDGs, M3001 through M3027, were analyzed for this project, however, only 23 of the 27 SDGs are summarized in this report. Two of the SDGs: M3014 and M3019 were evaluated in a separate PARCC report. In addition, SDGs M3007 and M3025 were not analyzed for volatile organic compounds. 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. One MS/MSD sample was analyzed in all 23 SDGs. The functional guidelines establishes RPD QC criteria limits for MS/MSD samples as follows:

MS/MSD Criteria

	Water RPD	Soil/Sediment 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 M3022. For this SDG benzene exceeded the 11% RPD QC limit with a 14% RPD. Qualifications were not made to the data based on the MS/MSD results.

Duplicate Samples

Field duplicate results are presented in Appendix A. One duplicate sample pair was analyzed with all SDGs except SDGs M3001, M3005, M3009, M3010, and M3013. In the case of these SDGs two duplicate pairs were analyzed. If one concentration was undetected and one concentration was reported, then a NC (not calculated) was written in the RPD column. If one or both results was reported below the CRDL, the RPD was calculated, however, the RPDs were not listed below as exceeding the DQOs since the concentrations were considered estimated (J). The compounds which exceeded the RPD QC limit are summarized below for compounds which were detected above the CRDL only. There were no qualifications made to the data based on field duplicate results.

SDG No.	Duplicate Pair	Compound	Conc.	RPD	Limit
M3026	TCG00501/Dup	Trichloroethene	10/8	22	14

2.2 Accuracy

The percent recovery results of MS/MSDs and surrogate spikes are used to assess accuracy. 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 were acceptable.

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 M3016

Samples 14B02403R1 and 14B02403 exhibited high %Rs for toluene-d8. These samples were previously qualified due to internal standard deficiencies and no further action has been taken.

SDG M3017

Samples 17S00601 and 17B01505 exhibited high %Rs for toluene-d8. Positive results associated with these samples were qualified as estimated "J."

SDG M3018

Sample TCS00401MS exhibited a high % recovery for toluene-d8 at 118%. No action is taken since this is the matrix spike sample.

SDG M3027

Sample TRS00201 exhibited a high toluene-d8 % recovery and a low % recovery for BFB. The sample was reanalyzed (TRS00201RE) with similar results. Both samples were qualified as estimated (J/UJ). The original sample 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.

Holding Times

The following summarizes holding time exceedences:

SDG M3016

Sample 14B02403R2 was analyzed one day outside of holding times. The original sample, 14B02403, was reanalyzed two times due to an apparent matrix problem which affected surrogates and internal standards. All results for sample 14B02403R2 have been qualified as estimated "J/UJ."

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. Acetone, carbon disulfide, methylene chloride, chloroform, chlorobenzene, 2-butanone, and chloromethane 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 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." 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. Acetone, carbon disulfide, methylene chloride, and chloroform 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. Acetone, methylene chloride, and 2-butanone 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. Acetone, methylene chloride, and chloromethane 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. Acetone, chloroform, chlorobenzene, and 2-butanone 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, therefore, the comparibility was considered acceptable.

2.5 Completeness

There were rejections of the data in all of the 23 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 M3016, in addition to a low RRF value, the internal standard area counts were extremely low for samples 14B02403 and 14B02403R1, therefore, all volatile organic compounds were rejected for both of these samples.

The percent of valid data for the volatile analysis for this project is 96.4%. 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 773 rejected compounds and 21,240 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 27 SDGs, M3001 through M3027, were analyzed for this project, however, only 23 of the 27 SDGs are summarized in this report. Two of the SDGs; M3014 and M3019 were evaluated in a separate PARCC report. In addition, SDGs M3007 and M3025 were not 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 23 SDGs. 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. No qualifications to the data were made based on MS/MSD results.

SDG	Compound	RPD	QC limit
M3006	1.4-DCB	69	27
M3006	1.2.4-TCB	80	23
M3006	4-Chloro-3-methylphenol	45	33
M3006	Acenaphthene	43	19
M3006	Pentachlorophenol	67	47
M3006	Pyrene	149	36
M3023	Pentachlorophenol	200	50
M3023	Phenol	152	42
M3023	2-Chlorophenol	200	40
M3023	4-Chloro-3-methylphenol	117	42
M3023	2.4-Dinitrotoluene	86	38
M3024	1.2.4-TCB	38	28
M3024	1.4-DCB	40	28

Duplicate Samples

Field duplicate results are presented in Appendix A. One duplicate sample pair was analyzed with all SDGs except SDGs M3005, and M3010. In the case of these SDGs two duplicate pairs were analyzed. If one concentration was undetected and one concentration was reported, then a NC (not calculated) was written in the RPD column. If one or both results was reported below the CRDL, the RPD was calculated, however,

the RPDs were not listed below as exceeding the DQOs since the concentrations were considered estimated (J). 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
M3002	45S00101/Dup	Phenanthrene	730/1300	56	21
M3002	45S00101/Dup	Di-n-butylphthalate	2300/440	136	50
M3002	45S00101/Dup	Benzo(a)anthracene	600/420	35	32
M3002	45S00101/Dup	Bis(2-ethylhexyl) phthalate	350/700	67	40
M3003	44S00101/Dup	Phenanthrene	750/1100	34	21

3.2 Accuracy

The percent recovery results of MS/MSDs and surrogate spikes are used to assess accuracy. 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 %R	Soil/Sediment %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
M3003	2,4-Dinitrotoluene	94/ok	28-89
M3003	Pyrene	168/ok	35-142
M3006	2-Chlorophenol	22/ok	25-102
M3006	1,2,4-TCB	37/ok	38-107
M3006	4-Nitrophenol	0/0	11-114
M3006	Pentachlorophenol	16/ok	17-109
M3006	Pyrene	13/ok	35-142
M3010	4-Chloro-3-methylphenol	107/ok	26-103
M3010	4-Nitrophenol	115/ok	11-114
M3010	2,4-Dinitrotoluene	98/92	28-89
M3010	Pentachlorophenol	119/113	17-109
M3011	4-Chloro-3-methylphenol	100/100	23-97
M3011	4-Nitrophenol	102/98	10-80
M3011	2,4-Dinitrotoluene	100/101	24-96
M3011	Pentachlorophenol	104/ok	9-103
M3013	2,4-Dinitrotoluene	98/96	28-89
M3015	Phenol	94/103	26-90
M3015	2,4-Dinitrotoluene	ok/94	28-89
M3017	Phenol	93/92	26-90
M3020	Phenol	ok/90	12-89
M3020	4-Nitrophenol	84/ok	10-80
M3021	Phenol	ok/90	12-89
M3021	4-Nitrophenol	82/98	10-80
M3022	4-Nitrophenol	82/90	10-80
M3023	4-Nitrophenol	0/0	10-80
M3023	Pentachlorophenol	6/0	9-103
M3023	Phenol	ok/3	12-89
M3023	2-Chlorophenol	ok/0	27-123
M3023	4-Chloro-3-methylphenol	ok/11	23-97
M3024	1,2,4-TCB	38/26	39-98
M3024	Acenaphthene	ok/40	46-118
M3024	1,4-Dichlorobenzene	ok/24	36-97
M3026	4-Nitrophenol	ok/84	10-80
M3026	Pentachlorophenol	ok/114	9-103
M3027	Phenol	93/ok	26-90
M3027	2,4-Dinitrotoluene	94/95	28-89

No qualifications were made to the data based on MS/MSD results.

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 M3002

The acid surrogates for 45R002 were not recovered. The sample was reextracted with acceptable recoveries. The original analysis should not be used since all acid compounds would be rejected.

SDG M3003

Surrogate criteria have been met and no action has been taken. The MS/MSD sample had terphenyl(S3) recover high, however, no action is taken for the MS/MSD or for only one semivolatile surrogate compound.

SDG M3006

Sample 14S00501 was analyzed at a 10X dilution, therefore, the surrogates did not recover. No action was taken by the reviewer. Sample 14S01101 and 14S01101MS had (S5)-2-Fluorophenol recover below the 25-121% QC limit. The functional guidelines allow for up to two semivolatile surrogate compounds per fraction to exceed QC limits before qualifications are required, therefore, no action was taken.

SDG M3013

Samples 01B00708 and 01S00201 had 2,4,6-tribromophenol recover at 9 and 4%, respectively. The samples were re-extracted (outside of holding times) and reanalyzed. The reanalysis should be used for reporting purposes since the original results for the acid fraction would be rejected due to the low recoveries (<10%).

SDG M3016

Sample 14S01501 exhibited a low %R of 18% for 2-fluorophenol. The reanalysis sample 14S01501RE produced similar results with a %R or 16%. The functional guidelines allow for up to two surrogates per fraction to exceed QC limits before qualification. The original results should be used for reporting purposes.

SDG M3017

Sample 14R019 exhibited a high %R of 97% for phenol-d5. No qualifications are required unless two surrogates per fraction exceed QC limits.

SDG M3020

Sample 23G00101 exhibited a high percent recovery for phenol-d5 and 2-fluorophenol. There were no positive results reported for this sample, therefore, no qualifications were required. Samples 23G00101D, 23G00301, 23G00601, and 23R022 exhibited high %Rs for phenol-d5. No qualifications are required unless two surrogates per fraction exceed QC limits.

SDG M3021

Samples 01G00101, 01G00201, 23G00501, 23R023, 44G00101, and 45G00201 exhibited high percent recoveries for phenol-d5 and 2-fluorophenol. Positive results were qualified as estimated "J". This includes bis(2-ethylhexyl)phthalate for sample 45G00201 only. Samples 23G00401D and 44G00201 exhibited a high %R for phenol-d5. Samples 24G00101 and 45G00101 exhibited a high %R for 2-fluorophenol. No qualifications are required unless two surrogates per fraction exceed QC limits. Sample 45G00201D had high surrogate recoveries for all six of the surrogate compounds. There were no positive results reported for this sample, therefore, no qualifications were required.

SDG M3022

Sample 14G00401 exhibited a high surrogate % recovery for phenol-d5. No qualifications were made based on these results since two surrogates are allowed to exceed QC limits before qualifiers are required.

SDG M3023

Several of the acid compounds either did not recover (0%) or recovered very low. Samples 18G00101 and duplicate 18G00101D were reextracted and reanalyzed to confirm these low recoveries. The reanalysis should be used for reporting purposes since the original sample was qualified as estimated "J" for positive results and rejected "R" for non-detects. An additional MS/MSD analysis was performed using the reanalysis 18G00101RE. Three of the MS/MSD percent recoveries were slightly above QC limits. No action was taken by the reviewer.

SDG M3024

Sample 23G00502 exhibited low surrogate % recoveries for nitrobenzene-d5 and 2-fluorobiphenyl. The sample was reextracted and reanalyzed outside of holding times but with acceptable recoveries. The original analysis should be used for reporting purposes since it has less qualified (only the base/neutral) compounds. Sample 0BG00102D exhibited a low %R for 2-fluorobiphenyl, however, the guidelines allow for up to two compounds to exceed QC limits before qualifiers are required.

SDG M3027

Sample PCZ00101 exhibited a low surrogate % recovery of 7% for 2,4,6-tribromophenol. Since the recovery was below 10%, all associated acid compounds were rejected "R". The sample was reextracted and reanalyzed with acceptable results, however, outside of holding times. The reanalysis should be used for reporting purposes since there were no rejected compounds for this sample.

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.

Holding Times

The following summarizes holding time exceedences:

SDG M3002

The acid surrogates for sample 45R002 were not recovered, therefore, the sample was reextracted outside of holding times and acceptable recoveries were found. The reanalysis should be used for reporting purposes since all acid compounds are rejected for the original sample. The reanalysis was qualified as estimated "UJ" since all results were non-detects.

SDG M3013

Samples 01S00201RE and 01B00708RE were extracted outside of holding times to confirm low surrogate recoveries in the original analysis. The samples were qualified as estimated "J" for positive results and "UJ" for non-detects.

SDG M3023

Samples 18G00101RE and 18G00101DRE were re-extracted outside of holding times to confirm low recoveries for the acid MS/MSD compounds. The samples were qualified as estimated (J/UJ).

SDG M3024

Sample 23G00502RE was re-extracted outside of holding times to confirm low surrogate recoveries in the original analysis. All results were qualified as estimated (J/UJ).

SDG M3027

Sample PCZ00101RE was re-extracted outside of holding times to confirm low recoveries in the original sample PCZ00101. The reanalysis was qualified as estimated (J/UJ).

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 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." 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. Bis(2-ethylhexyl)phthalate and di-n-butylphthalate 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. Bis(2-ethylhexyl)phthalate and di-n-butylphthalate 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. There were no compounds detected 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, therefore, the comparibility was considered acceptable.

3.5 Completeness

There were rejections of the data in all of the 23 SDGs except for SDGs M3005, M3008, M3009, M3011, M3012, M3020, and M3024.

The semivolatile compounds were rejected in all cases due to a low RRF (<0.05). In addition, SDGs M3002, M3013, and M3023 had compounds rejected due to low surrogate recoveries. Of the 35,534 total analyses, 451 compounds were rejected. The percent of valid data for these semivolatile samples for this project is 98.7%. 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 27 SDGs, M3001 through M3027, were analyzed for this project, however, only 23 of the 27 SDGs are summarized in this report. Two of the SDGs; M3014 and M3019 were evaluated in a separate PARCC report. In addition, SDGs M3007 and M3025 were not 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 23 SDGs. 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. There were no qualifications made to the data based on MS/MSD results.

SDG	Compound	RPD	QC limit
M3003	Aldrin	53	43
M3003	Dieldrin	67	38
M3003	4.4'-DDT	121	50
M3026	Dieldrin	19	18

Duplicate Samples

Field duplicate results are presented in Appendix A. One duplicate sample pair was analyzed with all SDGs except SDGs M3006 and M3009. In the case of these SDGs two duplicate pairs were analyzed. If one concentration was undetected and one concentration was reported, then a NC (not calculated) was written in the RPD column. If one or both results was reported below the CRDL, the RPD was calculated, however, the RPDs were not listed below as exceeding the DQOs since the concentrations were considerd estimated (J). The compounds which exceeded the RPD QC limit are summarized below for compounds which were detected above the CRDL only. There were no qualifications made to the data based on field duplicate results.

SDG No.	Duplicate Pair	Compound	Conc.	RPD	Limit
M3003	44S00101/Dup	Heptachlor Epoxide	24/4.2	140	35
M3009	17S00101/Dup	4.4'-DDE	240/110	74	35
M3009	17S00101/Dup	4.4'-DDT	54/31	54	35
M3009	17S00901/Dup	4.4'-DDE	3.4/5.4	45	35
M3009	17S00901/Dup	Chlordane	9.2/13	34	35
M3009	17S00901/Dup	Aroclor-1260	31/18	53	35
M3010	18D00101/Dup	Chlordane	11/16	37	35
M3013	01S00101/Dup	Aroclor-1260	100/150	40	35
M3015	24S00701/Dup	Chlordane	480/270	56	35
M3016	18S00301/Dup	Dieldrin	29/110	117	35

4.2 Accuracy

The percent recovery results of MS/MSDs and surrogate spikes are used to assess accuracy. 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. There were no qualifications made to the data based on the MS/MSD results.

SDG No.	Compound	%R MS/MSD	QC Limits
M3003	Aldrin	329/192	34-132
M3003	Endrin	244/289	42-139
M3003	4,4'-DDT	339/ok	23-134
M3016	Dieldrin	169/177	31-134

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 M3001

For kepone analysis, all of the soil sample recoveries for TCX were slightly above the 60-108% QC limits. High surrogate recoveries require qualification of positive results, however, all of the kepone results were non-detect, therefore, no qualifications were required.

SDG M3003

The MS sample had a high surrogate recovery of 129%. No action is taken since this is a matrix spike and the original sample is acceptable.

SDG M3004

The surrogate TCX recovered high for the kepone analysis for samples 23S00201, 23S00401, and 23S00701. High surrogate recoveries require qualification of positive results, however, all kepone results were non-detects, therefore, no action is required.

SDG M3005

For pesticide analysis, sample 23R007 had a high surrogate of 93% for TCX while the advisory limits are 29-91%. High surrogate recovery values require qualification of positive results, however, all results were non-detect for 23R007, therefore, no qualifications were required.

For kepone analysis, sample 23R007 had a high surrogate recovery of 100% for TCX while QC limits are 29-91%. High surrogate recovery values require qualification of positive results, however, all results were non-detect for 23R007, therefore, no qualifications were required.

For kepone analysis, sample 24S00401D had a low surrogate recovery of 38% for TCX while QC limits are 43-122%. Results were qualified as estimated "UJ" since they are all non-detects.

SDG M3006

For pesticide/PCB and kepone analysis, sample 14S00501 was analyzed at a 10X dilution, therefore, the surrogate compounds were not recovered. No action was taken by the reviewer on this basis.

SDG M3008

Surrogate criteria have been met and no action has been taken. Sample 25S00701 was analyzed at a dilution, therefore, the surrogates did not recover. No action was taken by the reviewer.

SDG M3009

For the pesticide/PCB and kepone analyses, several samples required dilutions due to high concentrations of target compounds. The dilutions caused the surrogates to be diluted out and not recovered. No action was taken by the reviewer.

For the kepone analyses, samples 17S00201, 17S01101, 17S00801, 17S00701, and 17S00901 exceeded the 62-109% QC limits for the DCB surrogate. High surrogate recoveries require qualification of positive results, however, all kepone results were non-detects, therefore, no qualifications were required.

SDG M3010

For the pesticide/PCB analyses, samples 14D00201 and 14D00801 had DCB recover above the 48-134% QC limits at 140% and 160%, respectively. High surrogate recoveries require qualification of positive results, however, there were no positive results, therefore, no action was taken.

For the kepone analyses, samples 14D00501 and 14D00601 had DCB recover above the 48-134% QC limits at 138% and 136%, respectively. High surrogate recoveries require qualification of positive results, however, there were no positive results, therefore, no action was taken.

SDG M3013

For the kepone analysis, samples 01R015 and 01S00201 had high surrogate recoveries of 127 and 114%, respectively. High surrogate recoveries require qualification of positive results, however, there were no positive results reported for either sample, therefore, no qualifications were required.

SDG M3015

Surrogate criteria have been met and no action has been taken. Surrogate recoveries on samples 24S00701, 24S00701MS, and 24S00701MSD were diluted out. No action is taken on this basis.

SDG M3017

For the pesticide/PCB analysis, sample 45S01001 exhibited a high %R for TCX at 113%. All positive results associated with this sample have been qualified as estimated "J." For the kepone analysis, samples 14B00604, 17S00501, and 45S00101 exhibited high %Rs for TCX. High surrogate recoveries require qualification of positive results, however, the kepone results were all non-detects, therefore, no qualifications were required.

SDG M3026

For the Pest/PCB analyses. DCB recovered above the QC limits for samples TCG00401. TCG00201, and TCG00301. High surrogate recoveries require qualification of positive results, however, there were no positive results reported for these samples. therefore. no action has been taken.

SDG M3027

For the Pest/PCB analyses. sample QGZ00101 exhibited a low surrogate recovery for TCX. All associated results were qualified as estimated "UJ" since they were all non-detects. Sample TRS00201DL was analyzed at a dilution due to a high concentration of chlordane in the sample. Due to the dilution, the surrogates did not recover. No action was taken by the reviewer.

Initial and Continuing Calibration

The %RSD and %D QC exceedences and the compounds qualified based on those exceedences are summarized in Appendix D. There were several 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%), however, in most cases the %D was acceptable on one of the two columns, either the primary or secondary, therefore, no qualifications were required.

Holding Times

The following summarizes holding time exceedences:

SDG M3003

Sample 44S00101 was re-extracted outside of holding times due to a high concentration of 4,4'-DDT in the sample. The reanalysis was qualified as estimated "J" for positive results and "UJ" for non-detects. The original should be used for reporting purposes for all compounds except 4,4'-DDT. The reanalysis results should be used for 4,4'-DDT.

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 blanks were used to assess the sample data.

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. There were no contaminants detected in any of the SDGs that were analyzed for pesticide/PCBs.

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
M3003	44S00101RE
M3027	TRS00201DL

4.5 Completeness

There were no rejections of the data in any of the SDGs for pesticide/PCBs or kepone. 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 9,920 pesticide/PCB analyses.

5.0 Metals and Cyanide

A total of 27 SDGs, M3001 through M3027, were analyzed for this project, however, only 23 of the 27 SDGs are summarized in this report. Two of the SDGs: M3014 and M3019 were evaluated in a separate PARCC report. In addition, SDGs M3007 and M3025 were not 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.

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. Field duplicate results are presented in Appendix A.

SDG No.	Analyte	Matrix	RPD or Difference	RPD Limit
M3010	Lead	Soil	RPD=75.2	35
M3016	Lead	Soil	RPD=83.6	35

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
M3004	Chromium	Soil	18.6 ± 4.6
M3004	Copper	Soil	50.4 ± 35
M3004	Lead	Soil	46.6 ± 35
M3004	Zinc	Soil	71.0 ± 35
M3008	Chromium	Soil	21.1 ± 5.0
M3009	Chromium	Soil	14.1 ± 4.2
M3016	Zinc	Soil	65.9 ± 8.2

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.

The percent recovery (%R) values for the MS samples listed below exceeded QC acceptance criteria.

SDG No.	Compound	%R MS	QC Limits
M3001	Lead	732	75-125
M3002	Selenium	47	75-125
M3003	Silver	70	75-125
M3004	Arsenic	127	75-125
M3004	Cadmium	72	75-125
M3005	Antimony	183	75-125
M3006	Antimony	0	75-125
M3006	Copper	128	75-125
M3006	Lead	156	75-125
M3006	Zinc	130	75-125
M3009	Antimony	53	75-125
M3009	Barium	73	75-125
M3009	Beryllium	63	75-125
M3009	Cobalt	69	75-125
M3009	Manganese	72	75-125
M3009	Vanadium	66	75-125
M3009	Copper	59	75-125

M3010	Cobalt	72	75-125
M3011	Cobalt	72	75-125
M3012	Cyanide	50	75-125
M3015	Selenium	62	75-125
M3016	Arsenic	69	75-125
M3016	Selenium	54	75-125
M3020	Antimony	0	75-125
M3024	Selenium	73	75-125

Percent recoveries that exceed QC limits indicate a potential high bias in associated sample results. Likewise, percent recoveries that are below QC limits indicate a potential low bias in sample results. Depending on the percent recovery, associated samples were either qualified as estimated "J" for positive results, "UJ" for non-detects, or rejected "R" for non-detects.

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.

Holding Times

The following summarizes holding time exceedences:

SDG M3015

Sample 24S00701 was prepped for the analysis of mercury 32 days after collection. The reported mercury results for the above sample has been qualified as estimated "J" and could possibly be biased low due to the extended holding time.

SDG M3016

Mercury holding time was exceeded for samples 14S02101 and 14B02105 by two days and for samples 14S02201, 14B02203, 14S02301, 14B02303, 14S02401, and 14B02403 by one day. Reported mercury results for the above samples have been qualified as estimated "UJ" by the reviewer.

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 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 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 aluminum, antimony, arsenic, barium, beryllium, calcium, chromium, cobalt, copper, cyanide, iron, lead, manganese, nickel, silver, sodium, tin, mercury, and zinc. Preparation blanks were designated with the prefix "PBS", "PBW", "WTIC", "WTCN", "WTHG", "WTFN", "SOIC", "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 arsenic, barium, calcium, cobalt, copper, lead, magnesium, nickel, selenium, sodium, and zinc.

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 barium, calcium, copper, cyanide, iron, tin, and zinc.

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 for antimony in SDGs M3008 and M3020 due to a zero percent recovery value for the matrix spike. The percent of valid data for the inorganic compounds for this project is 99.8%. The data quality objective for completeness for this project is 95%; therefore, the completeness for this project was acceptable. There are a total of 6,356 inorganic analyses and 14 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 Tables

Matrix Spike/Matrix Spike Duplicate Summary Table SDG No. M3001										
Matrix Spike Summary Table	Units	MS 45L00101			Acceptable Range for %R	MSD 45L00101			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 Lead	mg/kg	9.84	40.52	732	75-125	Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table SDG No. M3002										
Matrix Spike Summary Table	Units	MS 45S00101			Acceptable Range for %R	MSD 45S00101			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 Selenium	mg/kg	0.13U	1.00	47	75-125	Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Tables

Matrix Spike/Matrix Spike Duplicate Summary Table SDG No. M3003										
Matrix Spike Summary Table	Units	MS 44S00101			Acceptable Range for %R	MSD 44S00101			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOC (All criteria were met)	--	--	--	--	--	--	--	--	--	--
SVOCs										
2,4-Dinitrotoluene	ug/kg	0	3450	94	28-89	--	--	--	--	--
Pyrene	ug/kg	1270	7400	168	35-142	--	--	--	--	--
Pest/PCBs										
Aldrin	ug/kg	<.74	24	329	34-132	<.74	14	192	53	43
Endrin	ug/kg	<1.4	44	244	42-139	<1.4	52	289	ok	ok
Dieldrin	ug/kg	ok	ok	ok	31-134	ok	ok	ok	67	38
4,4'-DDT	ug/kg	57	120	339	23-134	ok	ok	ok	121	50
Metals										
Silver	mg/kg	23.85	31.57	70	75-125	Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table SDG No. M3004										
Matrix Spike Summary Table	Units	MS 23S00801			Acceptable Range for %R	MSD 23S00801			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										
Arsenic	mg/kg	4.47	16.20	127	75-125	Not Applicable				
Cadmium	mg/kg	2.99	11.29	72	75-125					

Matrix Spike/Matrix Spike Duplicate Summary Tables

Matrix Spike/Matrix Spike Duplicate Summary Table SDG No. M3005										
Matrix Spike Summary Table	Units	MS 23S02701			Acceptable Range for %R	MSD 23S02701			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 Antimony	mg/kg	[illegible].76	8.61	183	75-125	Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table SDG No. M3006										
Matrix Spike Summary Table	Units	MS 14S01101			Acceptable Range for %R	MSD 14S01101			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)	--	--	--	--	--	--	--	--	--	--
SVOCs										
2-Chlorophenol	ug/kg	0	1510	22	25-102	ok	ok	ok	ok	ok
1,4-DCB	ug/kg	ok	ok	ok	ok	ok	ok	ok	69	27
1,2,4-TCB	ug/kg	0	1300	37	38-107	ok	ok	ok	80	23
4-Chloro-3-methylphenol	ug/kg	ok	ok	ok	ok	ok	ok	ok	45	33
Acenaphthene	ug/kg	ok	ok	ok	ok	ok	ok	ok	43	19
4-Nitrophenol	ug/kg	0	0	0	11-114	0	0	0	0	ok
Pentachlorophenol	ug/kg	0	1110	16	17-109	0	2190	ok	67	47
Pyrene	ug/kg	0	441	13	35-142	0	3090	ok	149	36

Matrix Spike/Matrix Spike Duplicate Summary Tables

Pest/PCBs (All criteria were met)	--	--	--	--	--	--	--	--	--	--
Metals (All criteria were met)	--	--	--	--	--	Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table
SDG No. M3008

Matrix Spike Summary Table	Units	MS 25S00401			Acceptable Range for %R	MSD 25S00401			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				
Antimony	mg/kg	0.53U	0.53U	0.0	75-125					
Copper	mg/kg	8.07	89.74	128	75-125					
Lead	mg/kg	9.57	17.53	156	75-125					
Zinc	mg/kg	21.83	186.7	130	75-125					

Matrix Spike/Matrix Spike Duplicate Summary Tables

Matrix Spike/Matrix Spike Duplicate Summary Table SDG No. M3009										
Matrix Spike Summary Table	Units	MS 17S00101			Acceptable Range for %R	MSD 17S00101			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				
Antimony	mg/kg	0.77	2.95	53	75-125					
Barium	mg/kg	25.02	328	73	75-125					
Beryllium	mg/kg	0.07	6.64	63	75-125					
Cobalt	mg/kg	0.97U	71.25	69	75-125					
Manganese	mg/kg	52.94	127	72	75-125					
Vanadium	mg/kg	7.22	75.25	66	75-125					
Copper	mg/kg	12.36	42.65	59	75-125					

Matrix Spike/Matrix Spike Duplicate Summary Table SDG No. M3010										
Matrix Spike Summary Table	Units	MS 18D00101			Acceptable Range for %R	MSD 18D00101			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)	--	--	--	--	--	--	--	--	--	--
SVOCs										
4-Chloro-3-methylphenol	ug/kg	0	8290	107	26-103	--	--	ok	ok	--
4-Nitrophenol	ug/kg	0	8910	115	11-114	--	--	ok	ok	--
2,4-Dinitrotoluene	ug/kg	0	3810	98	28-89	0	3570	92	ok	--
Pentachlorophenol	ug/kg	0	9220	119	17-109	0	8760	113	ok	--

Matrix Spike/Matrix Spike Duplicate Summary Tables

Pest/PCBs (All criteria were met)	--	--	--	--	--	--	--	--	--	--
Metals Cobalt	ug/l	3.10U	362	72	75-125	Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table
SDG No. M3011

Matrix Spike Summary Table	Units	MS 14W004			Acceptable Range for %R	MSD 14W004			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)	--	--	--	--	--	--	--	--	--	--
SVOCs										
4-Chloro-3-methylphenol	ug/l	0	200	100	23-97	0	200	100	ok	--
4-Nitrophenol	ug/l	0	204	102	10-80	0	197	98	ok	--
2,4-Dinitrotoluene	ug/l	0	100	100	24-96	0	101	101	ok	--
Pentachlorophenol	ug/l	0	208	104	9-103	ok	ok	ok	ok	--
Pest/PCBs (All criteria were met)	--	--	--	--	--	--	--	--	--	--
Metals Cobalt	ug/l	3.10U	362	72	75-125	Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Tables

Matrix Spike/Matrix Spike Duplicate Summary Table SDG No. M3012										
Matrix Spike Summary Table	Units	MS 14S02001			Acceptable Range for %R	MSD 14S02001			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 Cyanide	mg/kg	0.10U	4.89	50	75-125	Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table SDG No. M3013										
Matrix Spike Summary Table	Units	MS 01S00101			Acceptable Range for %R	MSD 01S00101			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)	--	--	--	--	--	--	--	--	--	--
SVOCs 2,4-Dinitrotoluene	ug/kg	0	3570	98	28-89	0	3510	96	ok	ok
Pest/PCBs (All criteria were met)	--	--	--	--	--	--	--	--	--	--
Metals (All criteria were met)	--	--	--	--	--	Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Tables

Matrix Spike/Matrix Spike Duplicate Summary Table SDG No. M3015										
Matrix Spike Summary Table	Units	MS 24S00701			Acceptable Range for %R	MSD 24S00701			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)	--	--	--	--	--	--	--	--	--	--
SVOCs										
Phenol	ug/kg	0	3400	94	26-90	0	3700	103	ok	ok
2,4-Dinitrotoluene	ug/kg	ok	ok	ok	28-89	0	1700	94	ok	ok
Pest/PCBs (All criteria were met)	--	--	--	--	--	--	--	--	--	--
Metals										
Selenium	mg/kg	0.54	1.88	62	75-125	Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table SDG No. M3016										
Matrix Spike Summary Table	Units	MS 18S00301			Acceptable Range for %R	MSD 18S00301			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)	--	--	--	--	--	--	--	--	--	--
SVOCs (All criteria were met)	--	--	--	--	--	--	--	--	--	--
Pest/PCBs										
Dieldrin	ug/kg	29.07	58.78	169	31-134	29.07	61.58	177	ok	ok
Metals										
Arsenic	mg/kg	0.24	5.96	69	75-125	Not Applicable				
Selenium	mg/kg	0.24	1.36	54	75-125					

Matrix Spike/Matrix Spike Duplicate Summary Tables

Matrix Spike/Matrix Spike Duplicate Summary Table SDG No. M3017										
Matrix Spike Summary Table	Units	MS 18S00401			Acceptable Range for %R	MSD 18S00401			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)	--	--	--	--	--	--	--	--	--	--
SVOCs Phenol	ug/kg	0	6440	93	26-90	0	6390	92	ok	ok
Pest/PCBs (All criteria were met)	--	--	--	--	--	--	--	--	--	--
Metals (All criteria were met)	--	--	--	--	--	Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table SDG No. M3018										
Matrix Spike Summary Table	Units	MS TCS00401			Acceptable Range for %R	MSD TCS00401			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 Tables

Matrix Spike/Matrix Spike Duplicate Summary Table SDG No. M3020										
Matrix Spike Summary Table	Units	MS 23G00101			Acceptable Range for %R	MSD 23G00101			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)	--	--	--	--	--	--	--	--	--	--
SVOCs										
Phenol	ug/l	ok	ok	ok	12-89	0	180	90	ok	ok
4-Nitrophenol	ug/l	0	169	84	10-80	0	180	90	ok	ok
Pest/PCBs (All criteria were met)	--	--	--	--	--	--	--	--	--	--
Metals										
Antimony	ug/l	5.0U	50.0U	0.0	75-125	Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table SDG No. M3021										
Matrix Spike Summary Table	Units	MS 23G00401			Acceptable Range for %R	MSD 23G00401			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)	--	--	--	--	--	--	--	--	--	--
SVOCs										
Phenol	ug/l	ok	ok	ok	12-89	0	181	9[illegible]	ok	ok
4-Nitrophenol	ug/l	0	165	82	10-80	0	195	98	ok	ok
Pest/PCBs (All criteria were met)	--	--	--	--	--	--	--	--	--	--
Metals (All criteria were met)	--	--	--	--	--	Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Tables

Matrix Spike/Matrix Spike Duplicate Summary Table SDG No. M3022										
Matrix Spike Summary Table	Units	MS 14G00401			Acceptable Range for %R	MSD 14G00401			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs Benzene	ug/l	ok	ok	ok	ok	ok	ok	ok	14	11
SVOCs 4-Nitrophenol	ug/l	0	163	82	10-80	0	179	90	ok	ok
Pest/PCBs (All criteria were met)	--	--	--	--	--	--	--	--	--	--
Metals (All criteria were met)	--	--	--	--	--	Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table SDG No. M3023										
Matrix Spike Summary Table	Units	MS 18G00101			Acceptable Range for %R	MSD 18G00101			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)	--	--	--	--	--	--	--	--	--	--
SVOCs										
4-Nitrophenol	ug/l	0	0	0	10-80	0	0	0	0	50
Pentachlorophenol	ug/l	0	12.8	6	9-103	0	0	0	200	50
Phenol	ug/l	ok	ok	ok	12-89	0	5.46	3	152	42
2-Chlorophenol	ug/l	ok	ok	ok	27-123	0	0	0	200	40
4-Chloro-3-methylphenol	ug/l	ok	ok	ok	23-97	0	22.6	11	117	42
2,4-Dinitrotoluene	ug/l	ok	ok	ok	ok	ok	ok	ok	86	38
Pest/PCBs (All criteria were met)	--	--	--	--	--	--	--	--	--	--

Matrix Spike/Matrix Spike Duplicate Summary Tables

Metals (All criteria were met)	--	--	--	--	--	Not Applicable

Matrix Spike/Matrix Spike Duplicate Summary Table
SDG No. M3024

Matrix Spike Summary Table	Units	MS 45G00102			Acceptable Range for %R	MSD 45G00102			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)	--	--	--	--	--	--	--	--	--	--
SVOCs										
1,2,4-TCB	ug/l	0	19	38	39-98	0	13	26	38	28
Acenaphthene	ug/l	ok	ok	ok	46-118	0	20	40	ok	ok
1,4-Dichlorobenzene	ug/l	ok	ok	ok	36-97	0	12	24	40	28
Pest/PCBs (All criteria were met)	--	--	--	--	--	--	--	--	--	--
Metals										
Selenium	ug/l	0.60	7.89	73	75-125	Not Applicable				

Matrix Spike/Matrix Spike Duplicate Summary Table
SDG No. M3026

Matrix Spike Summary Table	Units	MS TCG00501			Acceptable Range for %R	MSD TCG00501			RPD	Acceptable Limit for RPD
		Unspiked	Spiked	%R		Unspiked	Spiked	%R		
VOCs (All criteria were met)	--	--	--	--	--	--	--	--	--	--
SVOCs										
4-Nitrophenol	ug/l	ok	ok	ok	10-80	0	167	84	ok	ok
Pentachlorophenol	ug/l	ok	ok	ok	9-103	0	228	114	ok	ok
Pest/PCBs										
Dieldrin	ug/l	ok	ok	ok	ok	ok	ok	ok	19	18

Matrix Spike/Matrix Spike Duplicate Summary Tables

Metals (All criteria were met)	--	--	--	--	--	Not Applicable

Matrix Spike/Matrix Spike Duplicate Summary Table
SDG No. M3027

Matrix Spike Summary Table	Units	MS TRS00101			Accept-able Range for %R	MSD TRS00101			RPD	Accept-able Limit for RPD
		Un-spiked	Spiked	%R		Un-spiked	Spiked	%R		
VOCs (All criteria were met)	--	--	--	--	--	--	--	--	--	--
SVOCs										
Phenol	ug/kg	0	6470	93	26-90	ok	ok	ok	ok	ok
2,4-Dinitrotoluene	ug/kg	0	3260	94	28-89	0	3290	95	ok	ok
Pest/PCBs (All criteria were met)	--	--	--	--	--	--	--	--	--	--
Metals (All criteria were met)	--	--	--	--	--	Not Applicable				

Volatile Field Duplicate Summary Tables

Volatile Field Duplicate Summary Table SDG No. M3001			
Compound	45L00101 ug/kg	45L00101D ug/kg	RPD
Xylenes (total)	3J	1J	NC

Volatile Field Duplicate Summary Table SDG No. M3001			
Compound	45L00102 ug/kg	45L00102D ug/kg	RPD
Carbon Disulfide	1J	5U	NC

Volatile Field Duplicate Summary Table SDG No. M3003			
Compound	44S00101 ug/kg	44S00101D ug/kg	RPD
Trichlorofluoromethane	2J	2J	0
Isobutyl Alcohol	220U	91J	NC

Volatile Field Duplicate Summary Table SDG No. M3005			
Compound	23S02701 ug/kg	23S02701D ug/kg	RPD
Xylenes (total)	2J	5U	NC

Volatile Field Duplicate Summary Table SDG No. M3005			
Compound	24S00401 ug/kg	24S00401D ug/kg	RPD
Xylenes (total)	3J	6	NC
Carbon Disulfide	5U	1J	NC
Toluene	5U	1J	NC

Volatile Field Duplicate Summary Tables

Volatile Field Duplicate Summary Table SDG No. M3006			
Compound	14S01601 ug/kg	14S01601D ug/kg	RPD
Toluene	6U	2J	NC

Volatile Field Duplicate Summary Table SDG No. M3008			
Compound	25S00401 ug/kg	25S00401D ug/kg	RPD
Carbon Disulfide	2J	1J	67
2-Butanone	6J	7J	15
Toluene	14	2J	150
Ethylbenzene	6J	6U	NC
Xylenes (total)	43	4J	166

Volatile Field Duplicate Summary Table SDG No. M3009			
Compound	17S00101 ug/kg	17S00101D ug/kg	RPD
Carbon Disulfide	2J	5U	NC
Toluene	4J	3J	29
Xylenes (total)	10	8	22

Volatile Field Duplicate Summary Table SDG No. M3009			
Compound	17S00901 ug/kg	17S00901D ug/kg	RPD
Xylenes (total)	5U	2J	NC

Volatile Field Duplicate Summary Table SDG No. M3010			
Compound	18D00101 ug/kg	18D00101D ug/kg	RPD
Acetone	12U	10J	NC

Volatile Field Duplicate Summary Tables

Volatile Field Duplicate Summary Table SDG No. M3010			
Compound	14D00601 ug/kg	14D00601D ug/kg	RPD
Acetone	140	39U	NC
Carbon Disulfide	8J	32U	NC
2-Butanone	30J	64U	NC

Volatile Field Duplicate Summary Table SDG No. M3012			
Compound	14S02001 ug/kg	14S02001D ug/kg	RPD
Xylenes (total)	1J	1J	0

Volatile Field Duplicate Summary Table SDG No. M3013			
Compound	01S00101 ug/kg	01S00101D ug/kg	RPD
Carbon Disulfide	6U	1J	NC
Xylenes (total)	6U	3J	NC

Volatile Field Duplicate Summary Table SDG No. M3013			
Compound	01B00608 ug/kg	01B00608D ug/kg	RPD
Carbon Disulfide	2J	1J	67
Xylenes (total)	1J	6U	NC

Volatile Field Duplicate Summary Table SDG No. M3016			
Compound	18S00301 ug/kg	18S00301D ug/kg	RPD
Toluene	2J	5U	NC

Volatile Field Duplicate Summary Tables

Volatile Field Duplicate Summary Table SDG No. M3017			
Compound	17B01505 ug/kg	17B01505D ug/kg	RPD
Carbon Disulfide	3J	6U	NC
Xylenes	3J	2J	40
2-Butanone	12U	6J	NC

Volatile Field Duplicate Summary Table SDG No. M3020			
Compound	23G00101 ug/l	23G00101D ug/l	RPD
Trichlorofluoromethane	5U	1J	NC

Volatile Field Duplicate Summary Table SDG No. M3026			
Compound	TCG00501 ug/l	TCG00501D ug/l	RPD
1,2-Dichloroethene (total)	1J	1J	0
Trichloroethene	10	8	22
Tetrachloroethene	100	73	31

Semivolatile Field Duplicate Summary Tables

Semivolatile Field Duplicate Summary Table SDG No. M3001			
Compound	45L00101 ug/kg	45L00101 ug/kg	RPD
Phenanthrene	81J	89J	9
Di-n-butylphthalate	160J	91J	55
Fluoranthene	180J	150J	18
Pyrene	170J	150J	12
Benzo(a)anthracene	120J	98J	20
Chrysene	140J	130J	7
Benzo(b)fluoranthene	92J	120J	26
Benzo(k)fluoranthene	150J	130J	14
Benzo(a)pyrene	100J	99J	1
Indeno(1,2,3-cd)pyrene	79J	84J	6
Benzo(g,h,i)perylene	96J	110J	14

Semivolatile Field Duplicate Summary Table SDG No. M3002			
Compound	45S00101 ug/kg	45S00101D ug/kg	RPD
Acenaphthene	110J	140J	24
Phenanthrene	730	1300	56
Di-n-butylphthalate	2300	440	136
Fluoranthene	1100	1100	0
Pyrene	910	670	30
Anthracene	260J	190J	31
Benzo(a)anthracene	600	420	35
Chrysene	690	520	28
Bis(2-ethylhexyl)phthalate	350	700	67
Benzo(b)fluoranthene	470	330J	35
Benzo(k)fluoranthene	560	430	26

Benzo(a)pyrene	460	270J	52
Indeno(1,2,3-cd)pyrene	230J	140J	49
Dibenz(a,h)anthracene	130J	87J	40
Benzo(g,h,i)perylene	230J	150J	42
Naphthalene	350U	40J	NC
2-Methylnaphthalene	350U	36J	NC
Dibenzofuran	350U	140J	NC
Fluorene	350U	250J	NC
Butylbenzylphthalate	350U	88J	NC

Semivolatile Field Duplicate Summary Table SDG No. M3003			
Compound	44S00101 ug/kg	44S00101D ug/kg	RPD
2-Methylnaphthalene	340J	340J	34
Phenanthrene	750	1100	38
Anthracene	300J	270J	11
Fluoranthene	1400	1300	7
Pyrene	1300	1300	0
Benzo(a)anthracene	630J	520J	19
Naphthalene	730U	93J	NC
Chrysene	670J	590J	13
Bis(2-ethylhexyl)phthalate	130J	140J	7
Benzo(b)fluoranthene	700J	500J	33
Benzo(k)fluoranthene	680J	640J	6
Benzo(a)pyrene	440J	350J	23
Indeno(1,2,3-cd)pyrene	240J	170J	34
Dibenz(a,h)anthracene	100J	730U	NC
Benzo(g,h,i)perylene	320J	240J	29

Fluorene	730U	130J	NC

Semivolatile Field Duplicate Summary Table SDG No. M3005			
Compound	23S02701	23S02701D	RPD
Di-n-butylphthalate	38J	360U	NC
Bis(2-ethylhexyl)phthalate	35J	360U	NC
Benzo(k)fluoranthene	24J	360U	NC

Semivolatile Field Duplicate Summary Table SDG No. M3005			
Compound	24S00401	24S00401D	RPD
Benzoic Acid	62J	1800U	NC
Phenanthrene	45J	120J	91
Anthracene	360U	19J	NC
Di-n-butylphthalate	39J	66J	51
Fluoranthene	100J	190J	62
Pyrene	140J	200J	35
Benzo(a)anthracene	91J	110J	19
Chrysene	130J	170J	27
Bis(2-ethylhexyl)phthalate	240J	420	55
Benzo(b)fluoranthene	96J	140J	37
Benzo(k)fluoranthene	85J	150J	55
Benzo(a)pyrene	83J	130J	44
Indeno(1,2,3-cd)pyrene	66J	99J	40
Dibenz(a,h)anthracene	40J	48J	18
Benzo(g,h,i)perylene	82J	120J	38

Semivolatile Field Duplicate Summary Tables

Semivolatile Field Duplicate Summary Table SDG No. M3006			
Compound	14S01601	14S01601D	RPD
Di-n-butylphthalate	370J	210J	55

Semivolatile Field Duplicate Summary Table SDG No. M3009			
Compound	17S00901 ug/kg	17S00901D ug/kg	RPD
Phenanthrene	41J	41J	0
Di-n-butylphthalate	39J	720U	NC
Fluoranthene	47J	45J	4
Bis(2-ethylhexyl)phthalate	51J	39J	27

Semivolatile Field Duplicate Summary Table SDG No. M3010			
Compound	18D00101 ug/kg	18D00101D ug/kg	RPD
Bis(2-ethylhexyl)phthalate	270J	290J	7
Pyrene	85J	770U	NC
Butylbenzylphthalate	230J	770U	NC

Semivolatile Field Duplicate Summary Table SDG No. M3010			
Compound	14D00601 ug/kg	14D00601D ug/kg	RPD
Fluorene	160J	130J	21
Phenanthrene	740J	750J	1
Fluoranthene	750J	640J	16
Pyrene	940	840J	11
Benzo(a)anthracene	310J	260J	18
Chrysene	660J	550J	17

Bis(2-ethylhexyl)phthalate	240J	270J	12
Benzo(b)fluoranthene	590J	530J	11
Benzo(k)fluoranthene	470J	540J	14
Benzo(a)pyrene	360J	340J	6
Indeno(1,2,3-cd)pyrene	340J	230J	39
Dibenz(a,h)anthracene	170J	870U	NC
Benzo(g,h,i)perylene	410J	240J	52

Semivolatile Field Duplicate Summary Table
SDG No. M3011

Compound	14W004 ug/l	14W004D ug/l	RPD
Bis(2-ethylhexyl) phthalate	57	10U	NC

Semivolatile Field Duplicate Summary Table
SDG No. M3012

Compound	14S00201	14S00201D	RPD
Phenathrene	26J	350U	NC
Fluoranthene	120J	54J	76
Pyrene	100J	56J	56
Benzo(a)anthracene	46J	21J	75
Chrysene	83J	45J	59
Benzo(b)fluoranthene	110J	69J	46
Benzo(k)fluoranthene	92J	51J	57
Benzo(a)pyrene	87J	49J	56
Indeno(1,2,3-cd)pyrene	82J	51J	47
Dibenz(a,h)anthracene	18J	350U	NC
Benzo(g,h,i)perylene	99J	65J	41

Semivolatile Field Duplicate Summary Tables

Semivolatile Field Duplicate Summary Table SDG No. M3015			
Compound	24S00701 ug/kg	24S00701D ug/kg	RPD
Phenanthrene	760J	650J	16
Anthracene	180J	1800U	NC
Fluoranthene	1000J	1200J	18
Pyrene	870J	1000J	14
Benzo(a)anthracene	600J	580J	3
Chrysene	720J	640J	12
Bis(2-ethylhexyl)phthalate	640J	670J	5
Benzo(b)fluoranthene	570J	520J	9
Benzo(k)fluoranthene	560J	570J	2
Benzo(a)pyrene	500J	510J	2
Indeno(1,2,3-cd)pyrene	410J	350J	16
Dibenz(a,h)anthracene	270J	1800U	NC
Benzo(g,h,i)perylene	400J	330J	19

Semivolatile Field Duplicate Summary Table SDG No. M3016			
Compound	18S00301 ug/kg	18S00301D ug/kg	RPD
Fluoranthene	55J	41J	29
Pyrene	66J	50J	28
Benzo(a)anthracene	68J	55J	21
Chrysene	78J	67J	15
Benzo(b)fluoranthene	92J	79J	15
Benzo(k)fluoranthene	81J	73J	10
Benzo(a)pyrene	55J	50J	10
Indeno(1,2,3-cd)pyrene	40J	350U	NC
Benzo(g,h,i)perylene	35J	350U	NC

Semivolatile Field Duplicate Summary Tables

Semivolatile Field Duplicate Summary Table SDG No. M3017			
Compound	17B01505 ug/kg	17B01505D ug/kg	RPD
2-Methylnaphthalene	170J	130J	27

Semivolatile Field Duplicate Summary Table SDG No. M3018			
Compound	TCS00401 ug/kg	TCS00401D ug/kg	RPD
Phenanthrene	57J	370U	NC
Fluoranthene	110J	130J	17
Pyrene	67J	86J	25
Benzo(a)anthracene	51J	64J	23
Chrysene	63J	90J	35
Benzo(b)fluoranthene	380U	100J	NC
Benzo(k)fluoranthene	380U	110J	NC
Benzo(a)pyrene	380U	82J	NC

Semivolatile Field Duplciate Summary Table SDG No. M3021			
Compound	45G00201 ug/l	45G00201D ug/l	RPD
Bis(2-ethylhexyl)phthalate	3J	10U	NC

Semivolatile Field Duplicate Summary Table SDG No. M3024			
Compound	45G00102 ug/l	45G00102D ug/l	RPD
Di-n-butylphthalate	10U	1J	NC

Semivolatile Field Duplicate Summary Tables

Semivolatile Field Duplicate Summary Table SDG No. M3027			
Compound	TRS00101 ug/kg	TRS00101D ug/kg	RPD
Acenaphthene	690U	330J	NC
Dibenzofuran	690U	85J	NC
Fluorene	690U	240J	NC
Phenanthrene	690U	3800	NC
Anthracene	690U	740	NC
Fluoranthene	690U	10000	NC
Pyrene	690U	7600	NC
Benzo(a)anthracene	690U	4200	NC
Chrysene	690U	4600	NC
Benzo(b) fluoranthene	690U	4800	NC
Benzo(k) fluoranthene	690U	4300	NC
Benzo(a)pyrene	690U	4200	NC
Indeno (1,2,3-cd) pyrene	690U	1700	NC
Dibenz(a,h) anthracene	690U	920	NC
Benzo(g,h,i) perylene	690U	1800	NC

Pesticide/PCB Field Duplicate Summary Tables

Pesticide/PCB Field Duplicate Summary Table SDG No. M3001			
Compound	45L00101 ug/kg	45L00501D ug/kg	RPD
Dieldrin	0.70U	0.79	NC
4-4'-DDD	1.4U	1.4	NC

Pesticide/PCB Field Duplicate Summary Table SDG No. M3002			
Compound	45S00101 ug/kg	45S00101D ug/kg	RPD
Dieldrin	1.0	0.71U	NC
4-4'-DDE	11	9.3	17
4-4'-DDT	5.0	4.7	6.2
4-4'-DDD	1.4U	1.4	NC

Pesticide/PCB Field Duplicate Summary Table SDG No. M3003			
Compound	44S00101 ug/kg	44S00101D ug/kg	RPD
Heptachlor Epoxide	24	4.2	140
Endrin	40	1.4U	NC
Endrin Aldehyde	63	1.4U	NC
4-4'-DDT	59	65	10
Methoxychlor	3.0U	29	NC
Endrin Ketone	1.4U	14	NC

Pesticide/PCB Field Duplicate Summary Table SDG No. M3004			
Compound	23S00801 ug/kg	23S00801D ug/kg	RPD
4-4'-DDE	1.8	1.9	5.4
4-4'-DDT	2.2	2.6	17

Pesticide/PCB Field Duplicate Summary Tables

Pesticide/PCB Field Duplicate Summary Table SDG No. M3006			
Compound	14S01101 ug/kg	14S01101D ug/kg	RPD
Chlordane	12J	6.9U	NC

Pesticide/PCB Field Duplicate Summary Table SDG No. M3006			
Compound	25S00401 ug/kg	25S00401D ug/kg	RPD
Aldrin	0.83J	1.6	66
Chlordane	16U	15	NC

Pesticide/PCB Field Duplicate Summary Table SDG No. M3009			
Compound	17S00101 ug/kg	17S00101D ug/kg	RPD
4,4'-DDE	240	110	74
4,4'-DDT	54	31	54

Pesticide/PCB Field Duplicate Summary Table SDG No. M3009			
Compound	17S00901 ug/kg	17S00901D ug/kg	RPD
4,4'-DDE	3.4	5.4	45
4,4'-DDT	1.3 J	1.6	21
Chlordane	9.2	13	34
Aroclor 1260	31	18	53

Pesticide/PCB Field Duplicate Summary Table SDG No. M3010			
Compound	18D00101 ug/kg	18D00101D ug/kg	RPD
Chlordane	11	16	37

Pesticide/PCB Field Duplicate Summary Tables

Pesticide/PCB Field Duplicate Summary Table SDG No. M3013			
Compound	01S00101 ug/kg	01S00101D ug/kg	RPD
4,4'-DDE	1.9	1.9	0
Aroclor 1260	100	150	40

Pesticide/PCB Field Duplicate Summary Table SDG No. M3015			
Compound	24S00701 ug/kg	24S00701D ug/kg	RPD
Chlordane	480	270	56

Pesticide/PCB Field Duplicate Summary Table SDG No. M3016			
Compound	18S00301 ug/kg	18S00301D ug/kg	RPD
Dieldrin	29	110	117

Pesticide/PCB Field Duplicate Summary Table SDG No. M3017			
Compound	17B01505 ug/kg	17B01505D ug/kg	RPD
Endrin	200	180	11
4,4'-DDD	53	65	20

Pesticide/PCB Field Duplicate Summary Table SDG No. M3018			
Compound	TCS00401 ug/kg	TCS00401D ug/kg	RPD
Heptachlor Epoxide	8.7	8.9	2
Heptachlor	1.3J	1.2J	80
4,4'-DDE	2.3	2.0	14
Chlordane	93	91	2
Aroclor 1260	170	150	13

Inorganic Field Duplicate Summary Table

Inorganic Field Duplicate Summary Table SDG No. M3001			
Sample	Analyte	RPD	EDS Qualifier
45L00101/45L00101D	Copper	39.5	NA

Inorganic Field Duplicate Summary Table SDG No. M3004			
Sample	Analyte	RPD or Difference	EDS Qualifier
23S00801/23S00801D	Lead	103 (±35%)	NA
23S00801/23S00801D	Zinc	59.4 (±35%)	NA

Inorganic Field Duplicate Summary Table SDG No. M3005			
Sample	Analyte	RPD or Difference	EDS Qualifier
23S02701/23S20701D	Lead	44.1	NA
24S00401/24S00401D	Antimony	58.3	NA
24S00401/24S00401D	Calcium	70.7	NA
24S00401/24S00401D	Copper	55.3	NA
24S00401/24S00401D	Manganese	47.2	NA
24S00401/24S00401D	Zinc	77.2	NA

Inorganic Field Duplicate Summary Table SDG No. M3008			
Sample	Analyte	RPD	EDS Qualifier
25S00401/25S00401D	Aluminum	73.6	NA
25S00401/25S00401D	Iron	43.4	NA
25S00401/25S00401D	Zinc	41.2	NA

Inorganic Field Duplicate Summary Table

Inorganic Field Duplicate Summary Table SDG No. M3009			
Sample	Analyte	RPD	EDS Qualifier
17S00901/17S00901D	Calcium	118	NA

Inorganic Field Duplicate Summary Table SDG No. M3010			
Sample	Analyte	RPD	EDS Qualifier
18D00201	Lead	75.2	J
18D00101	Lead	75.2	J
18D00101D	Lead	75.2	J
18D00301	Lead	75.2	J
14D00101	Lead	75.2	J
14D00201	Lead	75.2	J
14D00301	Lead	75.2	J
14D00701	Lead	75.2	J
14D00801	Lead	75.2	J

Inorganic Field Duplicate Summary Table SDG No. M3016			
Sample	Analyte	RPD	EDS Qualifier
14S02101	Lead	83.6	J
14S02201	Lead	83.6	J
14S02301	Lead	83.6	J
14S02401	Lead	83.6	J
18S00301	Lead	83.6	J
18S00301D	Lead	83.6	J
14S01501	Lead	83.6	J

Inorganic Laboratory Duplicate Summary Tables

Inorganic Laboratory Duplicate Summary Table SDG No. M3004			
Sample	Analyte	RPD or Difference	EDS Qualifier
23S00101	Chromium	18.6 (±4.6)	J
23S00201	Chromium	18.6 (±4.6)	J
23S00301	Chromium	18.6 (±4.6)	J
23S00501	Chromium	18.6 (±4.6)	J
23S00401	Chromium	18.6 (±4.6)	J
23S00601	Chromium	18.6 (±4.6)	J
23S00701	Chromium	18.6 (±4.6)	J
23S00801	Chromium	18.6 (±4.6)	J
23S00801D	Chromium	18.6 (±4.6)	J
23S00901	Chromium	18.6 (±4.6)	J
23S01001	Chromium	18.6 (±4.6)	J
23S01201	Chromium	18.6 (±4.6)	J
23S01101	Chromium	18.6 (±4.6)	J
23S01301	Chromium	18.6 (±4.6)	J
23S01401	Chromium	18.6 (±4.6)	J
23S01501	Chromium	18.6 (±4.6)	J
23S01601	Chromium	18.6 (±4.6)	J
23S01701	Chromium	18.6 (±4.6)	J
23S01701D	Chromium	18.6 (±4.6)	J
23S01801	Chromium	18.6 (±4.6)	J
23S00301	Copper	50.4 (±35%)	J
23S00701	Copper	50.4 (±35%)	J
23S00801	Copper	50.4 (±35%)	J
23S00801D	Copper	50.4 (±35%)	J
23S00901	Copper	50.4 (±35%)	J
23S01001	Copper	50.4 (±35%)	J

23S01201	Copper	50.4 (±35%)	J
23S01101	Copper	50.4 (±35%)	J
23S01301	Copper	50.4 (±35%)	J
23S01401	Copper	50.4 (±35%)	J
23S01501	Copper	50.4 (±35%)	J
23S01601	Copper	50.4 (±35%)	J
23S01701	Copper	50.4 (±35%)	J
23S01701D	Copper	50.4 (±35%)	J
23S01801	Copper	50.4 (±35%)	J
23S00101	Lead	46.6 (±35%)	J
23S00201	Lead	46.6 (±35%)	J
23S00301	Lead	46.6 (±35%)	J
23S00501	Lead	46.6 (±35%)	J
23S00401	Lead	46.6 (±35%)	J
23S00601	Lead	46.6 (±35%)	J
23S00701	Lead	46.6 (±35%)	J
23S00801	Lead	46.6 (±35%)	J
23S00801D	Lead	46.6 (±35%)	J
23S00901	Lead	46.6 (±35%)	J
23S01001	Lead	46.6 (±35%)	J
23S01201	Lead	46.6 (±35%)	J
23S01101	Lead	46.6 (±35%)	J
23S01301	Lead	46.6 (±35%)	J
23S01401	Lead	46.6 (±35%)	J
23S01501	Lead	46.6 (±35%)	J
23S01601	Lead	46.6 (±35%)	J
23S01701	Lead	46.6 (±35%)	J
23S01701D	Lead	46.6 (±35%)	J

23S01801	Lead	46.6 (±35%)	J
23S00101	Zinc	71.0 (±35%)	J
23S00201	Zinc	71.0 (±35%)	J
23S00301	Zinc	71.0 (±35%)	J
23S00501	Zinc	71.0 (±35%)	J
23S00401	Zinc	71.0 (±35%)	J
23S00601	Zinc	71.0 (±35%)	J
23S00701	Zinc	71.0 (±35%)	J
23S00801	Zinc	71.0 (±35%)	J
23S00801D	Zinc	71.0 (±35%)	J
23S00901	Zinc	71.0 (±35%)	J
23S01001	Zinc	71.0 (±35%)	J
23S01201	Zinc	71.0 (±35%)	J
23S01101	Zinc	71.0 (±35%)	J
23S01301	Zinc	71.0 (±35%)	J
23S01401	Zinc	71.0 (±35%)	J
23S01501	Zinc	71.0 (±35%)	J
23S01601	Zinc	71.0 (±35%)	J
23S01701	Zinc	71.0 (±35%)	J
23S01701D	Zinc	71.0 (±35%)	J
23S01801	Zinc	71.0 (±35%)	J

Inorganic Laboratory Duplicate Summary Table
SDG No. M3008

Sample	Analyte	RPD or Difference	EDS Qualifier
25S00101	Chromium	21.1 (±5.0)	J
25S00601	Chromium	21.1 (±5.0)	J
25S00701	Chromium	21.1 (±5.0)	J
25S00801	Chromium	21.1 (±5.0)	J

25S00901	Chromium	21.1 (±5.0)	J
25S00201	Chromium	21.1 (±5.0)	J
25S00301	Chromium	21.1 (±5.0)	J
25S00501	Chromium	21.1 (±5.0)	J
25S00401	Chromium	21.1 (±5.0)	J
25S00401D	Chromium	21.1 (±5.0)	J

Inorganic Laboratory Duplicate Summary Table
SDG No. M3009

Sample	Analyte	Difference	EDS Qualifier
17S00301	Chromium	14.1 (±4.2)	J
17S00201	Chromium	14.1 (±4.2)	J
17S00101	Chromium	14.1 (±4.2)	J
17S00101D	Chromium	14.1 (±4.2)	J
17S00401	Chromium	14.1 (±4.2)	J
17S01001	Chromium	14.1 (±4.2)	J
17S01101	Chromium	14.1 (±4.2)	J
17S01201	Chromium	14.1 (±4.2)	J
17S00801	Chromium	14.1 (±4.2)	J
17S00701	Chromium	14.1 (±4.2)	J
17S00901	Chromium	14.1 (±4.2)	J
17S00901D	Chromium	14.1 (±4.2)	J

Inorganic Laboratory Duplicate Summary Table
SDG No. M3016

Sample	Analyte	Difference	EDS Qualifier
14B00704	Zinc	65.9 (±8.2)	J

APPENDIX B
Representativeness Tables

Volatile Field Blank Summary Tables

Volatile Field Blank Summary Table SDG No. M3001								
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
45Y001 4/4/95	Acetone	16	160	45L00101 45R001 45L00602 45L00701 45L00702 45L00802	7 7 11 2 4 4	J J J J J J	10 10 12 11 11 10	U U U U U U
45R001 4/4/95	Acetone	7J	70	None - all previously qualified due to method blanks or field blanks	--	--	--	--
45T001 4/4/95	None Found	--	--	--	--	--	--	--
45T002 4/6/95	None Found	--	--	--	--	--	--	--

Volatile Field Blank Summary Table SDG No. M3002								
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
45Y001 w/M3001 4/4/95	Acetone	16	160	45R002	4	J	10	U
45T001 w/M3001 4/4/95	None Found	--	--	--	--	--	--	--
45R002 4/11/95	None Found	--	--	--	--	--	--	--
45T003 4/11/95	None Found	--	--	--	--	--	--	--

Volatile Field Blank Summary Tables

Volatile Field Blank Summary Table SDG No. M3003								
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
44T004 4/11/95	None Found	--	--	--	--	--	--	--
44R003 4/11/95	Acetone	11	110	44S00101D 44S00301	10 8	J J	11 11	U U

Volatile Field Blank Summary Table SDG No. M3004								
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
23T005 4/11/95	Acetone	4J	40	23R004 23S00101 23S00201 23S00801 23S00801D	3 4 7 6 4	J J J J J	10 10 11 12 12	U U U U U
23T006 4/11/95	Acetone	2J	20	23S01801 23S01701D 23R005 23S01101 23S01501	3 8 6 2 3	J J J J J	11 11 10 11 11	U U U U U

Volatile Field Blank Summary Table SDG No. M3005								
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
23R006 4/18/95	Acetone	7J	70	23S02701D	7	J	11	U
23T007 4/18/95	Methylene Chloride	1J	10	23R006	1	J	5	U
23R007 4/18/95	Methylene Chloride	1J	10	None - all previously qualified due to lab blank contamination				

23R007 4/18/95	Acetone	5J	50	23S02101 23S02201	7 11	J J	11 11	U U
23T008 4/18/95	None Found	--	--	--	--	--	--	--

Volatile Field Blank Summary Table
SDG No. M3006

Blank ID/Date Analyzed	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
14T009 4/23/95	None Found	--	--	--	--	--	--	--
14R008 4/213/95	Acetone	7J	70	14S00501 14S01101	40 8	-- J	40 10	U U

Volatile Field Blank Summary Table
SDG No. M3008

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
25T011 4/18/95	None Found	--	--	--	--	--	--	--
25R010 4/18/95	Acetone	6J	60	None-All previously qualified due to lab blank contamination	--	--	--	--

Volatile Field Blank Summary Table
SDG No. M3009

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
17T012 4/21/95	Acetone	8J	80	17R011	7	J	10	U

Volatile Field Blank Summary Tables

Volatile Field Blank Summary Table SDG No. M3010								
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
18Y002 5/1/95	None Found	--	--	--	--	--	--	--
18R012 5/1/95	None Found	--	--	--	--	--	--	--
18T013 5/1/95	None Found	--	--	--	--	--	--	--
14T014 4/21/95	Acetone	8	80	14D00501 14D00601D	24 39	J J	24 39	U U

Volatile Field Blank Summary Table SDG No. M3011								
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
14T015 5/5/95	None Found	--	--	--	--	--	--	--
14R013 5/5/95	None Found	--	--	--	--	--	--	--

Volatile Field Blank Summary Table SDG No. M3012								
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
14T016 4/27/95	None Found	--	--	--	--	--	--	--
14R014 4/27/95	Acetone	12	120	None-All non-detects	--	--	--	--

Volatile Field Blank Summary Tables

Volatile Field Blank Summary Table SDG No. M3013								
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
01T017 5/12/95	Methylene Chloride	1J	10	None-All samples previously qualified due to laboratory blank contamination	--	--	--	--
01Y003 5/12/95	None Found	--	--	--	--	--	--	--
01R015 5/12/95	None Found	--	--	--	--	--	--	--

Volatile Field Blank Summary Table SDG No. M3015								
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
23T020 5/25/95	Methylene Chloride	1J	10	23R017	1	J	5	U
23Y004 5/26/95	Chloroform	1J	5	23R017	1	J	5	U
23Y004 5/26/95	Chlorobenzene	1J	5	None-All non-detects	--	--	--	--
23T021 5/26/95	Methylene Chloride	2J	20	None-All associated samples previously qualified due to laboratory blank contamination				

Volatile Field Blank Summary Tables

Volatile Field Blank Summary Table SDG No. M3016								
Blank ID/Date Analyzed	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
14T022 5/26/95	Methylene Chloride	2J	20	14R018	1	J	5	U
14R018 5/26/95	2-Butanone	10	100	14B02203 14B02303 14B02403R2	4 3 8	J J J	13 12 12	U U U
14T023 6/2/95	Methylene Chloride	2J	20	None-All samples previously qualified due to laboratory blank contamination				

Volatile Field Blank Summary Table SDG No. M3017								
Blank ID/Date Analyzed	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
14T024 6/2/95	Methylene Chloride	2J	20	14R019	2	J	5	U
14R019 6/2/95	None Found	--	--	--	--	--	--	--

Volatile Field Blank Summary Table SDG No. M3018								
Blank ID/Date Analyzed	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
TCT025 6/12/95	None Found	--	--	--	--	--	--	--
TCR020 6/12/95	2-Butanone	10	100	None-All non-detects	--	--	--	--

Volatile Field Blank Summary Tables

Volatile Field Blank Summary Table SDG No. M3020								
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
20T029 6/13/95	None Found	--	--	--	--	--	--	--
23R022 6/13/95	2-Butanone	12J	120	None-All associated samples non-detect	--	--	--	--
23R022 6/13/95	Acetone	10	100	23G00101 23G00201	4 3	J J	10 10	U U
23T030 6/13/95	Chloromethane	1J	5	23R022	1	J	10	U
23T030 6/13/95	Methylene Chloride	1J	10	None-All associated samples non-detect	--	--	--	--

Volatile Field Blank Summary Table SDG No. M3021								
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
20T031 6/13/95	Methylene Chloride	1J	10	None Found	--	--	--	--
23R023 6/13/95	Acetone	10	100	23G00401D 44G00201 01G00301 23G00501 01G00101 24G00101 45G00201 45G00201D 45G00101	3 3 5 3 3 2 3 4 2	J J J J J J J J J	10 10 10 10 10 10 10 10 10	U U U U U U U U U

23R023 6/13/95	2-Butanone	66	660	None-All associated samples non-detect	--	--	--	--
23T032 6/14/95	Methylene Chloride	2J	20	None-All associated samples non-detect	--	--	--	--
45T033 6/14/95	Methylene Chloride	1J	10	None-All associated samples non-detect	--	--	--	--

Volatile Field Blank Summary Table
SDG No. M3022

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
14T034 6/15/95	None Found	--	--	--	--	--	--	--
14Y006 6/23/95	Acetone	23	230	14R024 14G00401D 14G00301	5 7 18	J J -	10 10 18	U U U
14Y006 6/23/95	2-Butanone	47	470	14R024	19	-	19	U
14R024 6/15/95	None Found	--	--	--	--	--	--	--
14T035 6/22/95	Methylene Chloride	1J	10	14G00101	1	J	5	U
14T036 6/22/95	Methylene Chloride	1J	10	14G00601	1	J	5	U

Volatile Field Blank Summary Tables

Volatile Field Blank Summary Table SDG No. M3023								
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
18T037 6/25/95	None Found	--	--	--	--	--	--	--
18R025 6/25/95	Acetone	22	220	14G01301 18G00101D 14G01401 14G00901 14G00701	6 12 15 83 78	J - - - -	10 12 15 83 78	U U U U U
14T038 6/25/95	None Found	--	--	--	--	--	--	--
17R026 6/29/95	Acetone	19	190	17G00101D	18	-	18	U

Volatile Field Blank Summary Table SDG No. M3024								
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
45T039 6/27/95	None Found	--	--	--	--	--	--	--
45R027 6/27/95	None Found	--	--	--	--	--	--	--
23T040 6/27/95	None Found	--	--	--	--	--	--	--
44T041 6/27/95	None Found	--	--	--	--	--	--	--
0BT042 6/28/95	None Found	--	--	--	--	--	--	--

Volatile Field Blank Summary Tables

Volatile Field Blank Summary Table SDG No. M3026								
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
TCY007 7/6/95	2-Butanone	110	1100	TCR028	9	J	10	U
TCT043 7/6/95	Methylene Chloride	1J	10	None Found	--	--	--	--
TCR028 7/6/95	Acetone	13	130	None Found	--	--	--	--
TCT044 7/6/95	None Found	--	--	--	--	--	--	--

Volatile Field Blank Summary Table SDG No. M3027								
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
TRT045 7/10/95	Acetone	6J	60	None-all non-detects	--	--	--	--
TRR029 7/6/95	2-Butanone	14	140	None-all non-detects	--	--	--	--

Volatile Laboratory Blank Summary Tables

Volatile Laboratory Blank Summary Table SDG No. M3001								
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
V0404W01-BLK 4/4/95	None Found	--	--	--	--	--	--	--
V0406W01-BLK 4/6/95	None Found	--	--	--	--	--	--	--
V0404S01-BLK 4/4/95	Carbon Disulfide	2J	10	None - all non-detects	--	--	--	--
V0405S01-BLK 4/5/95	Acetone	3J	30	45L00101D 45L00201 45L00301 45L00102 45L00102D 45L00202 45L00302 45L00401	4 5 13 3 5 4 6 6	BJ BJ B BJ BJ BJ BJ BJ	10 10 13 10 10 10 10 10	U U U U U U U U
V0406S01-BLK 4/6/95	None Found	--	--	--	--	--	--	--

Volatile Laboratory Blank Summary Table SDG No. M3002								
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
V0411W01-BLK 4/11/95	None Found	--	--	--	--	--	--	--
V0406S01-BLK 4/6/95	None Found	--	--	--	--	--	--	--

V0407S01-BLK 4/7/95	None Found	--	--	--	--	--	--	--

Volatile Laboratory Blank Summary Table
SDG No. M3003

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
V0411W01-BLK 4/11/95	None Found	--	--	--	--	--	--	--
V0410S01-BLK 4/10/95	None Found	--	--	--	--	--	--	--
V0411S01-BLK 4/11/95	None Found	--	--	--	--	--	--	--
V0414S01-BLK 4/14/95	None Found	--	--	--	--	--	--	--

Volatile Laboratory Blank Summary Table
SDG No. M3004

Blank ID/Date Analyzed	Affected Analyte	Conc. ug/kg or ug/l	Action Level ** ug/kg or ug/l	Affected Sample	Lab Conc ug/kg or ug/l	Lab Qual	EDS Conc ug/kg or ug/l	EDS Qual
V0411W01-BLK 4/11/95	None Found	--	--	--	--	--	--	--
V0414S01-BLK 4/14/95	None Found	--	--	--	--	--	--	--
V0417S01-BLK 4/17/95	None Found	--	--	--	--	--	--	--

V0418S01-BLK 4/18/95	None Found	--	--	--	--	--	--	--

Volatile Laboratory Blank Summary Table
SDG No. M3005

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
VBLKF9 4/18/95	None Found	--	--	--	--	--	--	--
VBLKF7 4/17/95	Methylene Chloride	12	120	23S02501	13	B	13	U
				24S00101	14	B	14	U
				24S00201	15	B	15	U
				24S00301	15	B	15	U
				24S00401	14	B	14	U
				24S00401D	14	B	14	U
				24S00501	15	B	15	U
VBLKF5 4/14/95	Methylene Chloride	6	60	23S01901	11	B	11	U
				23S02001	10	B	10	U
				23S02401	8	B	8	U
				23S02601	13	B	13	U
				23S02701	10	B	10	U
				23S02701D	10	B	10	U
				23S02801	11	B	11	U
				23S02101	10	B	10	U
				23S02301	11	B	11	U
				23S02201	8	B	8	U

Volatile Laboratory Blank Summary Table
SDG No. M3006

Blank ID/Date Analyzed	Affected Analyte	Conc. ug/l or ug/kg	Action Level ** ug/l or ug/kg	Affected Sample	Lab Conc ug/l or ug/kg	Lab Qual	EDS Conc ug/l or ug/kg	EDS Qual
V0423W01-BLK 4/23/95	None Found	--	--	--	--	--	--	--
V0418S01-BLK 4/18/95	None Found	--	--	--	--	--	--	--

Volatile Laboratory Blank Summary Tables

J0421S01-BLK 4/21/95	Acetone	4J	40	14S00701	4	BJ	11	U
				14S00801	5	BJ	11	U
				14S00901	9	BJ	11	U
				14S01001	26	B	26	U
				14S01701	16	B	16	U
V0423S01-BLK 4/23/95	Acetone	2J	20	14S01101D	3	BJ	10	U
				14S01201	2	BJ	11	U
				14S01401	3	BJ	11	U

Volatile Laboratory Blank Summary Table
SDG No. M3008

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
VBLKF9 4/18/95	None Found	--	--	--	--	--	--	--
VBLKFA 4/17/95	Methylene Chloride	6	60	25S00101	10	B	10	U
				25S00601	13	B	13	U
				25S00701	10	B	10	U
				25S00801	15	B	15	U
				25S00901	12	B	12	U
				25S00201	10	B	10	U
				25S00301	13	B	13	U
				25S00401	18	B	18	U
				25S00401D	14	B	14	U
VBLKFA 4/17/95	Acetone	5J	50	25S00101	6	JB	10	U
				25S00601	6	JB	13	U
				25S00701	5	JB	11	U
				25S00801	5	JB	11	U
				25S00901	6	JB	11	U
				25S00201	6	JB	11	U
				25S00301	24	B	24	U
				25S00401	48	B	48	U
				25S00401D	25	B	25	U
VBLKFB 4/20/95	Methylene Chloride	11	110	25S00501	16	B	16	U
VBLKFB 4/20/95	Acetone	8J	80	25S00501	42	B	42	U

Volatile Laboratory Blank Summary Tables

Volatile Laboratory Blank Summary Table SDG No. M3009								
Blank ID/Date Analyzed	Affected Analyte	Conc. ug/kg or ug/l	Action Level ** ug/kg or ug/l	Affected Sample	Lab Conc ug/kg or ug/l	Lab Qual	EDS Conc ug/kg or ug/l	EDS Qual
VBLKFE 4/21/95	Methylene Chloride	2J	20	17R011	2	JB	5	U
				17T012	2	JB	5	U
VBLKFB 4/20/95	Methylene Chloride	11	110	17S00301	11	B	11	U
				17S00201	12	B	12	U
				17S00101	16	B	16	U
				17S00101D	14	B	14	U
				17S00401	13	B	13	U
				17S01001	13	B	13	U
				17S01101	10	B	10	U
				17S01201	13	B	13	U
				17S00801	9	B	9	U
				17S00701	9	B	9	U
				17S00901	8	B	8	U
				17S00901D	9	B	9	U
VBLKFB 4/20/95	Acetone	8J	80	17S00301	17	B	17	U
				17S00201	5	JB	11	U
				17S00101	10	JB	10	U

Volatile Laboratory Blank Summary Table SDG No. M3010								
Blank ID/Date Analyzed	Affected Analyte	Conc. ug/kg or ug/l	Action Level ** ug/kg or ug/l	Affected Sample	Lab Conc ug/kg or ug/l	Lab Qual	EDS Conc ug/kg or ug/l	EDS Qual
VBLKFQ 5/1/95	None Found	--	--	--	--	--	--	--

VBLKFP 4/30/95	Methylene Chloride	3J	30	18D00201	4	JB	5	U
				18D00101	5	JB	6	U
				18D00301	4	JB	5	U
				14D00101	4	JB	6	U
				14D00201	26	JB	26	U
				14D00701	4	JB	6	U
				14D00801	5	JB	6	U
				14D00401	23	JB	23	U
				14D00501	23	JB	23	U
				14D00601	24	JB	24	U
				14D00601D	22	JB	22	U
VBLKFS 5/2/95	Methylene Chloride	5	50	14D00301	7	B	7	U
VBLKFV 5/3/95	Methylene Chloride	6	60	18D00101D	13	B	13	U

Volatile Laboratory Blank Summary Table
SDG No. M3011

Blank ID/Date Analyzed	Affected Analyte	Conc. ug/kg or ug/l	Action Level ** ug/kg or ug/l	Affected Sample	Lab Conc ug/kg or ug/l	Lab Qual	EDS Conc ug/kg or ug/l	EDS Qual
J0505W01 -BLK 5/5/95	None Found	--	--	--	--	--	--	--

Volatile Laboratory Blank Summary Table
SDG No. M3012

Blank ID/Date Analyzed	Affected Analyte	Conc. ug/kg or ug/l	Action Level ** ug/kg or ug/l	Affected Sample	Lab Conc ug/kg or ug/l	Lab Qual	EDS Conc ug/kg or ug/l	EDS Qual
VBLKFN 4/27/95	Methylene Chloride	3J	30	14T016	4	JB	5	U
				14R014	4	JB	5	U
VBLKF5 5/2/95	Methylene Chloride	5	50	24S00601	6	B	6	U
				14S02001	4	JB	5	U
				14S02001D	6	B	6	U
				14S01901	6	B	6	U
				18S00201	8	B	8	U
				18S00101	12	B	12	U

Volatile Laboratory Blank Summary Tables

Volatile Laboratory Blank Summary Table SDG No. M3013								
Blank ID/Date Analyzed	Affected Analyte	Conc. ug/kg or ug/l	Action Level ** ug/kg or ug/l	Affected Sample	Lab Conc ug/kg or ug/l	Lab Qual	EDS Conc ug/kg or ug/l	EDS Qual
VBLKGC 5/12/95	None Found	--	--	--	--	--	--	--
VBLKG9 5/11/95	Methylene Chloride	8	80	01S00101	9	B	9	U
				01B00109	12	B	12	U
				01S00201	9	B	9	U
				01B00208	9	B	9	U
				01S00301	7	B	7	U
				01S00401	11	B	11	U
				01B00308	8	B	8	U
				01B00409	8	B	8	U
				01S00501	7	B	7	U
VBLKG9 5/11/95	Acetone	16	160	01S00101	8	JB	11	U
				01B00109	10	JB	12	U
				01S00201	10	JB	11	U
				01B00208	13	B	13	U
				01S00301	8	JB	10	U
				01S00401	17	B	17	U
				01B00308	11	B	11	U
				01B00409	20	B	20	U
				01S00501	7	JB	10	U
VBLKGA 5/12/95	Methylene Chloride	5	50	01S00101D	11	B	11	U
				01B00608	14	B	14	U
				01B00608D	16	B	16	U
				01S00701	12	B	12	U
				01B00708	8	B	8	U
VBLKGA 5/12/95	Acetone	6	60	01S00101D	7	JB	11	U
				01B00608	24	B	24	U
				01B00608D	25	B	25	U
				01S00701	13	B	13	U
				01B00708	6	JB	11	U
VBLKGD 5/12/95	Methylene Chloride	7	70	01B00508	10	B	10	U
				01S00601	7	B	7	U
VBLKGD 5/12/95	Acetone	12	120	01B00508	15	B	15	U
				01S00601	8	JB	10	U

Volatile Laboratory Blank Summary Tables

Volatile Laboratory Blank Summary Table
SDG No. M3015

Blank ID/Date Analyzed	Affected Analyte	Conc. ug/kg or ug/l	Action Level ** ug/kg or ug/l	Affected Sample	Lab Conc ug/kg or ug/l	Lab Qual	EDS Conc ug/kg or ug/l	EDS Qual
VBLKHZ 5/25/95	Acetone	6J	60	23R017	8	JB	10	U
				23Y004	8	JB	10	U
VBLKH1 5/25/95	Methylene Chloride	8	80	24S00701D	16	B	16	U
				24B00707	17	B	17	U
				23B00105	16	B	16	U
				44B00107	16	B	16	U
				23B00406	14	B	14	U
				23B01606	14	B	14	U
VBLKH1 5/25/95	Acetone	8J	80	24S00701D	4	JB	11	U
				24B00707	6	JB	11	U
				23B00105	7	JB	12	U
				44B00107	6	JB	11	U
				23B00406	6	JB	11	U
				23B01606	6	JB	11	U
VBLKH4 5/26/95	Methylene Chloride	6	60	23B02407	9	B	9	U
				23B02807	6	B	6	U
				23S02901	8	B	8	U
				23S02901D	6	B	6	U
				23B02908	6	B	6	U
				23B02108	10	B	10	U
				44B00908	7	B	7	U
				45S00801	8	B	8	U
				45B00805	8	B	8	U
				01B008[illegible]	8	B	8	U
VBLKH4 5/26/95	Acetone	8J	80	23B02407	6	JB	11	U
				23B02807	7	JB	11	U
				23S02901	7	JB	11	U
				23S02901D	7	JB	11	U
				23B02908	7	JB	10	U
				23B02108	9	JB	11	U
				44B00908	4	JB	11	U
				45S00801	6	JB	11	U
				45B00805	6	JB	11	U
				01B00807	7	JB	10	U
VBLK6H 5/30/95	Methylene Chloride	7	70	24S00701	9	B	9	U
				01S00801	8	B	8	U

VBLK6H 5/30/95	Acetone	6J	60	24S00701 01S00801	5 4	JB JB	11 10	U U

Volatile Laboratory Blank Summary Table SDG No. M3016								
Blank ID/Date Analyzed	Affected Analyte	Conc. ug/kg or ug/l	Action Level ** ug/kg or ug/l	Affected Sample	Lab Conc ug/kg or ug/l	Lab Qual	EDS Conc ug/kg or ug/l	EDS Qual
VBLKH2 5/25/95	Acetone	6J	60	14R018	12	B	12	U
VBLKH4 5/26/95	Methylene Chloride	6	60	14S02101 14B02105 14S02201	6 8 6	B B B	6 8 6	U U U
VBLKH4 5/26/95	Acetone	8J	80	14S02101 14B02105 14S02201	8 8 8	JB JB JB	11 11 11	U U U
VBLK6H 5/30/95	Methylene Chloride	7	70	14B02203 14S02301 14B02303 14S02401 14B02403 14B02504 18S00301 18S00301D 18B00304 14B01404	9 9 9 8 23 9 7 6 7 10	B B B B B B B B B B	9 9 9 8 23 9 7 6 7 10	U U U U U U U U U U
VBLK6H 5/30/95	Acetone	6J	60	14B02203 14S02301 14B02303 14S02401 14B02504 18S00301 18S00301D 18B00304 14B01404	10 9 13 5 6 4 5 4 8	JB JB B JB JB JB JB JB JB	13 11 13 11 11 10 10 11 12	U U U U U U U U U

VBLKHB 6/1/95	Methylene Chloride	9	90	14B00204	12	B	12	U
				18B00204	11	B	11	U
				18B00204D	9	B	9	U
				14B01004	7	B	7	U
				14B01904	8	B	8	U
				14S01501	6	B	6	U
				14B00704	8	B	8	U
				14B02403R1	23	B	23	U
VBLKHB 6/1/95	Acetone	4J	40	14B00204	4	JB	12	U
				18B00204	4	JB	12	U
				18B00204D	7	JB	12	U
				14B01004	6	JB	13	U
				14B01904	8	JB	12	U
				14S01501	11	B	11	U
				14B00704	7	JB	12	U
VBLKHD 6/2/95	None Found	--	--	--	--	--	--	--
VBLKHK 6/5/95	Methylene Chloride	4J	40	14B02403R2	6	B	6	U
VBLKHK 6/5/95	Acetone	6J	60	14B02403R2	33	B	33	U

Volatile Laboratory Blank Summary Table
SDG No. M3017

Blank ID/Date Analyzed	Affected Analyte	Conc. ug/kg or ug/l	Action Level ** ug/kg or ug/l	Affected Sample	Lab Conc ug/kg or ug/l	Lab Qual	EDS Conc ug/kg or ug/l	EDS Qual
VBLKHD 6/2/95	None Found	--	--	--	--	--	--	--
VBLKHF 6/3/95	Methylene Chloride	4J	40	14B00604	5	JB	6	U
				14B00804	5	JB	6	U
				18S00401	4	JB	5	U
				18S00401D	4	JB	5	U
				18B00404	6	JB	6	U
				17S01301	4	JB	5	U
				17B01305	5	JB	6	U
				17S01401	4	JB	5	U
				17B01405	8	B	8	U
				17S01501	4	JB	5	U
				17B01505D	5	JB	6	U
				17S00601	5	JB	5	U

Volatile Laboratory Blank Summary Tables

VBLKHF 6/3/95	Acetone	14	140	14B00604 18B00404 17B01405 17S01501 17B01505D	5 4 13 32 27	JB JB B B B	12 12 13 32 27	U U U U U
VBLKHH 6/4/95	Methylene Chloride	3J	30	17B01505 17S00501 45S01001 44B01006 45B01005	5 4 4 4 4	JB JB JB JB JB	6 5 5 6 6	U U U U U
VBLKHH 6/4/95	Acetone	5J	50	17B01505 17S00501	12 49	JB B	12 49	U U
VBLKHK 6/5/95	Methylene Chloride	4J	40	44S01001	7	B	7	U
VBLKHK 6/5/95	Acetone	6J	60	None-All non-detects	--	--	--	--

Volatile Laboratory Blank Summary Table
SDG No. M3018

Blank ID/Date Analyzed	Affected Analyte	Conc. ug/kg or ug/l	Action Level ** ug/kg or ug/l	Affected Sample	Lab Conc ug/kg or ug/l	Lab Qual	EDS Conc ug/kg or ug/l	EDS Qual
V0612W01-BLK 6/12/95	Acetone	2J	20	TCR020	4	BJ	10	U
V0609S01-BLK 6/9/95	None Found	--	--	--	--	--	--	--
V0612S01-BLK 6/12/95	None Found	--	--	--	--	--	--	--

Volatile Laboratory Blank Summary Table
SDG No. M3020

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
V0612W02-BLK 6/13/95	None Found	--	--	--	--	--	--	--

Volatile Laboratory Blank Summary Tables

V0613W01-BLK 6/13/95	Chloroform	1J	5	None-All associated samples are non-detect	--	--	--	--

Volatile Laboratory Blank Summary Table SDG No. M3021								
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
V0613W01-BLK 6/13/95	Chloroform	1J	10	None Found	--	--	--	--
V0614W01-BLK 6/14/95	None Found	--	--	--	--	--	--	--

Volatile Laboratory Blank Summary Table SDG No. M3022								
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
V0615W01-BLK 6/15/95	None Found	--	--	--	--	--	--	--
V0622W01-BLK 6/22/95	None Found	--	--	--	--	--	--	--
V0623W01-BLK 6/23/95	None Found	--	--	--	--	--	--	--
V0625W01-BLK 6/25/95	Methylene Chloride	1J	10	14G00801	1	BJ	5	U

Volatile Laboratory Blank Summary Table SDG No. M3023								
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
V0625W01-BLK 6/25/95	Methylene Chloride	1J	10	18T037 14T038	2 1	BJ BJ	5 5	U U

V0628W01-BLK 6/28/95	None Found	--	--	--	--	--	--	--
V0629W01-BLK 6/29/95	None Found	--	--	--	--	--	--	--

Volatile Laboratory Blank Summary Table
SDG No. M3024

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
VBLKJJ 6/27/95	Methylene Chloride	2J	20	45T039	3	JB	5	U
				45R027	2	JB	5	U
				45G00102	2	JB	5	U
				45G00102D	1	JB	5	U
				23G00502	1	JB	5	U
				45G00103	1	JB	5	U
				23T040	2	JB	5	U
				23G00503	3	JB	5	U
				44G00103	3	JB	5	U
				44T041	4	JB	5	U
				44G00102	4	JB	5	U
				01G00103	4	JB	5	U
VBLKJK 6/28/95	Methylene Chloride	2J	20	01G00102	2	JB	5	U
				0BT042	2	JB	5	U
				0BG00102	2	JB	5	U
				0BG00102D	2	JB	5	U
				0BG00103	2	JB	5	U
				0BG00101	2	JB	5	U

Volatile Laboratory Blank Summary Table
SDG No. M3026

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
V0629W01-BLK 6/29/95	None Found	--	--	--	--	--	--	--
V0706W01-BLK 7/6/95	None Found	--	--	--	--	--	--	--

Volatile Laboratory Blank Summary Tables

Volatile Laboratory Blank Summary Table SDG No. M3027								
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
V0706W01-BLK 7/6/95	None Found	--	--	--	--	--	--	--
V0710W01-BLK 7/10/95	None Found	--	--	--	--	--	--	--
V0707S01-BLK 7/7/95	None Found	--	--	--	--	--	--	--
V0710S01-BLK 7/10/95	None Found	--	--	--	--	--	--	--

Semivolatile Field Blank Summary Tables

Semivolatile Field Blank Summary Table SDG No. M3001								
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
45Y001 4/11/95	None Found	--	--	--	--	--	--	--
45R001 4/11/95	None Found	--	--	--	--	--	--	--

Semivolatile Field Blank Summary Table SDG No. M3002								
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
45Y001 w/M3001 4/11/95	None Found	--	--	--	--	--	--	--
45R002RE 4/17/95	None Found	--	--	--	--	--	--	--

Semivolatile Field Blank Summary Table SDG No. M3003								
Blank ID Date Analyzed	Affected Analyte	Conc. ug/L	Action Level** ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
44R003 4/15/95	Bis(2-ethylhexyl) phthalate	3J	999	44S00101	130	J	730	U
				44S00101D	140	J	730	U
				44S00301	130	J	690	U
				44S00401	84	J	730	U
				44S00801	73	J	720	U

Semivolatile Field Blank Summary Tables

Semivolatile Field Blank Summary Table SDG No. M3004								
Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/L	Action Level** ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
23R004 4/17/95	Bis(2-ethylhexyl) phthalate	2J	666	23S00901	390	J	690	U
23R005 4/17/95	Bis(2-ethylhexyl) phthalate	3J	999	23S01301 23S01401	270 240	J J	850 800	U U

Semivolatile Field Blank Summary Table SDG No. M3005								
Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/L	Action Level** ug/kg	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
23R006 4/19/95	None Found	--	--	--	--	--	--	--
23R007 4/19/95	Bis(2-ethylhexyl) phthalate	3J	999	23S02101 23S02301 23S02201 24S00101 24S00201 24S00301 24S00401 24S00401D 24S00501	84 67 51 170 41 41 240 420 24	J J J J J J J - J	380 720 380 370 410 370 360 420 370	U U U U U U U U U

Semivolatile Field Blank Summary Table SDG No. M3006								
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
14R008 4/17/95	None Found	--	--	--	--	--	--	--

Semivolatile Field Blank Summary Tables

Semivolatile Field Blank Summary Table SDG No. M3008								
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
25R010 4/21/95	None Found	--	--	--	--	--	--	--

Semivolatile Field Blank Summary Table SDG No. M3009								
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
17R011 4/25/95	None Found	--	--	--	--	--	--	--

Semivolatile Field Blank Summary Table SDG No. M3010								
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
18Y002 5/5/95	None Found	--	--	--	--	--	--	--
18R012 5/5/95	None Found	--	--	--	--	--	--	--

Semivolatile Field Blank Summary Table SDG No. M3011								
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
14R013 5/5/95	Bis(2-ethylhexyl) phthalate	9J	90	14W004	57	--	57	U

Semivolatile Field Blank Summary Tables

Semivolatile Field Blank Summary Table SDG No. M3012								
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
14R014 5/12/95	None Found	--	--	--	--	--	--	--

Semivolatile Field Blank Summary Table SDG No. M3013								
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
01Y003 6/5/95	None Found	--	--	--	--	--	--	--
01R015 6/6/95	None Found	--	--	--	--	--	--	--

Semivolatile Field Blank Summary Table SDG No. M3015								
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
23Y004 5/31/95	None Found	--	--	--	--	--	--	--
23R017 5/31/95	None Found	--	--	--	--	--	--	--

Semivolatile Field Blank Summary Tables

Semivolatile Field Blank Summary Table SDG No. M3016								
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
14R018 6/2/95	Di-n-butylphthalate	2J	20	14S02301 14B01404 14B00204 14B00704	71 49 52 110	J J J J	360 410 410 820	U U U U
14R018 6/2/95	Bis(2-ethylhexyl) phthalate	2J	20	14S02201 14B02403 18S00301	80 57 88	J J J	360 400 350	U U U

Semivolatile Field Blank Summary Table SDG No. M3017								
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
14R019 6/9/95	Bis(2-ethylhexyl) phthalate	8J	80	None-All samples previously qualified due to laboratory method blank contamination				

Semivolatile Field Blank Summary Table SDG No. M3018								
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
TCR020 6/21/95	None Found	--	--	--	--	--	--	--

Semivolatile Field Blank Summary Table SDG No. M3020								
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
23R022 6/21/95	None Found	--	--	--	--	--	--	--

Semivolatile Field Blank Summary Tables

Semivolatile Field Blank Summary Table SDG No. M3021								
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
23R023 6/23/95	None Found	--	--	--	--	--	--	--

Semivolatile Field Blank Summary Table SDG No. M3022								
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
14Y006 6/26/95	None Found	--	--	--	--	--	--	--
14R024 6/26/95	None Found	--	--	--	--	--	--	--

Semivolatile Field Blank Summary Table SDG No. M3023								
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
18R025 7/13/95	None Found	--	--	--	--	--	--	--
17R026 7/14/95	None Found	--	--	--	--	--	--	--

Semivolatile Field Blank Summary Table SDG No. M3024								
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
45R027 6/29/95	None Found	--	--	--	--	--	--	--

Semivolatile Field Blank Summary Tables

Semivolatile Field Blank Summary Table SDG No. M3026								
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
TCY007 7/14/95	None Found	--	--	--	--	--	--	--
TCR028 7/14/95	None Found	--	--	--	--	--	--	--

Semivolatile Field Blank Summary Table SDG No. M3027								
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
TRR029 7/17/95	None Found	--	--	--	--	--	--	--

Semivolatile Laboratory Blank Summary Tables

Semivolatile Laboratory Blank Summary Table SDG No. M3001								
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
R0403WA 2-BLK 4/11/95	None Found	--	--	--	--	--	--	--
R0404SA 1-BLK 4/12/95	Bis(2-ethylhexyl) phthalate	170J	1700	45L00101	200	BJ	690	U
				45L00101D	180	BJ	690	U
				45L00201	100	BJ	670	U
				45L00301	120	BJ	690	U
				45L00102	420	BJ	680	U
				45L00102D	470	BJ	680	U
				45L00401	89	BJ	680	U
				45L00601	1000	B	1000	U
				45L00602	990	B	990	U
				45L00502	950	B	950	U
				45L00701	520	BJ	700	U
				45L00702	580	BJ	700	U
				45L00801	610	BJ	710	U
				45L00802	200	BJ	680	U

Semivolatile Laboratory Blank Summary Table SDG No. M3002								
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
R0403WA 2-BLK 4/11/95	None Found	--	--	--	--	--	--	--
R0413WA 1-BLK 4/17/95	Bis(2-ethylhexyl) phthalate	3J	30	45R002RE	4	BJ	10	U
R0413SA 1-BLK 4/13/95	None Found	--	--	--	--	--	--	--

Semivolatile Laboratory Blank Summary Tables

Semivolatile Laboratory Blank Summary Table SDG No. M3003								
Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/kg or ug/l	Action Level** ug/kg or ug/l	Affected Sample	Lab Conc ug/kg or ug/l	Lab Qual	EDS Conc ug/kg or ug/l	EDS Qual
R0411WA1-BLK 4/14/95	None Found	--	--	--	--	--	--	--
R0411SA2-BLK 4/21/95	None Found	--	--	--	--	--	--	--

Semivolatile Laboratory Blank Summary Table SDG No. M3004								
Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/L or ug/kg	Action Level** ug/L or ug/kg	Affected Sample	Lab Conc ug/L or ug/kg	Lab Qual	EDS Conc ug/L or ug/kg	EDS Qual
R0411WA1-BLK 4/14/95	None Found	--	--	--	--	--	--	--
R0415SA2-BLK 4/26/95	None Found	--	--	--	--	--	--	--
R0415SA1-BLK 4/27/95	None Found	--	--	--	--	--	--	--

Semivolatile Laboratory Blank Summary Table SDG No. M3005								
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
SBLKLW 4/19/95	None Found	--	--	--	--	--	--	--

SBLKLV 4/19/95	None Found	--	--	--	--	--	--	--

Semivolatile Laboratory Blank Summary Table SDG No. M3006								
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
R0413WA1-BLK 4/17/95	Bis(2-ethylhexyl) phthalate	3J	30	14R008	3	BJ	10	U
R0418SA1-BLK 4/29/95	None Found	--	--	--	--	--	--	--
R0418SA2-BLK 5/3/95	None Found	--	--	--	--	--	--	--
R0418SB1-BLK 5/4/95	None Found	--	--	--	--	--	--	--

Semivolatile Laboratory Blank Summary Table SDG No. M3008								
Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/L or ug/kg	Action Level** ug/L or ug/kg	Affected Sample	Lab Conc ug/L or ug/kg	Lab Qual	EDS Conc ug/L or ug/kg	EDS Qual
SBLKM2 4/21/95	None Found	--	--	--	--	--	--	--
SBLKM1 4/21/95	None Found	--	--	--	--	--	--	--

Semivolatile Laboratory Blank Summary Tables

Semivolatile Laboratory Blank Summary Table
SDG No. M3009

Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/L or ug/kg	Action Level** ug/L or ug/kg	Affected Sample	Lab Conc ug/L or ug/kg	Lab Qual	EDS Conc ug/L or ug/kg	EDS Qual
SBLKM6 4/25/95	None Found	--	--	--	--	--	--	--
SBLKM5 4/25/95	None Found	--	--	--	--	--	--	--

Semivolatile Laboratory Blank Summary Table
SDG No. M3010

Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/L or ug/kg	Action Level** ug/L or ug/kg	Affected Sample	Lab Conc ug/L or ug/kg	Lab Qual	EDS Conc ug/L or ug/kg	EDS Qual
R0424WA1-BLK 5/5/95	None Found	--	--	--	--	--	--	--
R0502SA1-BLK 5/16/95	None Found	--	--	--	--	--	--	--

Semivolatile Laboratory Blank Summary Table
SDG No. M3011

Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/L or ug/kg	Action Level** ug/L or ug/kg	Affected Sample	Lab Conc ug/L or ug/kg	Lab Qual	EDS Conc ug/L or ug/kg	EDS Qual
R0424WA1-BLK 5/5/95	None Found	--	--	--	--	--	--	--

Semivolatile Laboratory Blank Summary Tables

Semivolatile Laboratory Blank Summary Table SDG No. M3012								
Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/L or ug/kg	Action Level** ug/L or ug/kg	Affected Sample	Lab Conc ug/L or ug/kg	Lab Qual	EDS Conc ug/L or ug/kg	EDS Qual
SBLKMW 5/12/95	None Found	--	--	--	--	--	--	--
SBLKMX 5/12/95	Di-n-butylphthalate	20J	200	18S00201	27	JB	360	U

Semivolatile Laboratory Blank Summary Table SDG No. M3013								
Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/l or ug/kg	Action Level** ug/l or ug/kg	Affected Sample	Lab Conc ug/l or ug/kg	Lab Qual	EDS Conc ug/l or ug/kg	EDS Qual
R0509WB1-BLK 6/5/95	None Found	--	--	--	--	--	--	--
R0510SA1-BLK 5/19/95	None Found	--	--	--	--	--	--	--
R0523SA2-BLK 5/30/95	Bis(2-ethylhexyl) phthalate	110J	1100	01B00708RE	380	BJ	700	U

Semivolatile Laboratory Blank Summary Table SDG No. M3015								
Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/l or ug/kg	Action Level** ug/l or ug/kg	Affected Sample	Lab Conc ug/l or ug/kg	Lab Qual	EDS Conc ug/l or ug/kg	EDS Qual
SBLKP2 5/31/95	None Found	--	--	--	--	--	--	--

SBLKP3 5/31/95	Di-n-butyl phthalate	70J	700	24B00707 23B00105 44B00107 23B00406 23B01606	97 46 54 67 44	JB JB JB JB JB	370 410 370 360 350	U U U U U
SBLKP5 6/1/95	None Found	--	--	--	--	--	--	--

Semivolatile Laboratory Blank Summary Table
SDG No. M3016

Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/l or ug/kg	Action Level** ug/l or ug/kg	Affected Sample	Lab Conc ug/l or ug/kg	Lab Qual	EDS Conc ug/l or ug/kg	EDS Qual
SBLKP6 6/2/95	None Found	--	--	--	--	--	--	--
SBLKP7 6/2/95	None Found	--	--	--	--	--	--	--
SBLKP8 6/5/95	None Found	--	--	--	--	--	--	--
SBLKP15 6/7/95	Di-n-butylphthalate	17J	170	None-All non-detects	--	--	--	--

Semivolatile Laboratory Blank Summary Table
SDG No. M3017

Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/l or ug/kg	Action Level** ug/l or ug/kg	Affected Sample	Lab Conc ug/l or ug/kg	Lab Qual	EDS Conc ug/l or ug/kg	EDS Qual
R0529WA1-BLK 6/9/95	None Found	--	--	--	--	--	--	--

R0526SA1-BLK 6/9/95	Bis(2-ethylhexyl) phthalate	120J	1200	14B00604	98	BJ	800	U
				14B00804	160	BJ	780	U
				18S00401	100	BJ	690	U
				18B00404	160	BJ	800	U
				17B01305	84	BJ	730	U
				17S01401	150	BJ	720	U
				17B01405	99	BJ	850	U
				17S01501	290	BJ	730	U
				17B01505	190	BJ	810	U
				17B01505D	250	BJ	790	U
				17S00601	110	BJ	730	U
				45S01001	280	BJ	730	U
				45B01005	590	BJ	770	U
				44S01001	480	BJ	710	U
				44B01006	240	BJ	710	U

Semivolatile Laboratory Blank Summary Table
SDG No. M3018

Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/l or ug/kg	Action Level** ug/l or ug/kg	Affected Sample	Lab Conc ug/l or ug/kg	Lab Qual	EDS Conc ug/l or ug/kg	EDS Qual
R0606WA1-BLK 6/21/95	None Found	--	--	--	--	--	--	--
R0602SA1-BLK 6/20/95	Bis(2-ethylhexyl) phthalate	68J	680	TCS00101	90	BJ	360	U
				TCB00103	41	BJ	380	U
				TCS00201	46	BJ	380	U
				TCS00301	51	BJ	340	U
				TCS00401D	46	BJ	370	U
				TCB00403	41	BJ	370	U

Semivolatile Laboratory Blank Summary Table
SDG No. M3020

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
R0608WA1-BLK 6/22/95	None Found	--	--	--	--	--	--	--

Semivolatile Laboratory Blank Summary Tables

Semivolatile Laboratory Blank Summary Table
SDG No. M3021

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
R0609WB1-BLK 6/23/95	None Found	--	--	--	--	--	--	--

Semivolatile Laboratory Blank Summary Table
SDG No. M3022

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
R0619WA1-BLK 6/26/95	Bis(2-ethylhexyl) phthalate	4J	40	14Y006	6	BJ	10	U
				14R024	7	BJ	10	U
				14G00401	5	BJ	10	U
				14G00401D	14	B	14	U
				14G00101	8	BJ	10	U
				14G00201	3	BJ	10	U
				14G00601	4	BJ	10	U
				14G01201	2	BJ	10	U
				14G00501	2	BJ	10	U
				14G00801	5	BJ	10	U

Semivolatile Laboratory Blank Summary Table
SDG No. M3023

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
R0623WA1-BLK 7/13/95	None Found	--	--	--	--	--	--	--
R0718WA1-BLK 7/21/95	None Found	--	--	--	--	--	--	--

Semivolatile Laboratory Blank Summary Tables

Semivolatile Laboratory Blank Summary Table SDG No. M3024								
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
SBLKQE 6/29/95	None Found	--	--	--	--	--	--	--
SBLKQF 6/29/95	None Found	--	--	--	--	--	--	--

Semivolatile Laboratory Blank Summary Table SDG No. M3026								
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
R0629WA1-BLK 7/14/95	Bis(2-ethylhexyl) phthalate	3J	30	TCG00501D TCG00601	6 3	BJ BJ	10 10	U U
R0629WC1-BLK 7/17/95	Bis(2-ethylhexyl) phthalate	3J	30	None Found	--	--	--	--

Semivolatile Laboratory Blank Summary Table SDG No. M3027								
Blank ID/ Date Analyzed	Affected Analyte	Conc. ug/l or ug/kg	Action Level** ug/l or ug/kg	Affected Sample	Lab Conc ug/l or ug/kg	Lab Qual	EDS Conc ug/l or ug/kg	EDS Qual
R0629WC1-BLK 7/17/95	Bis (2-ethylhexyl) phthalate	3J	30	None-all non-detects	--	--	--	--
R0706SA1-BLK 7/17/95	None Found	--	--	--	--	--	--	--
R0719SA1-BLK 7/21/95	Di-n-butylphthalate	45J	450	PCZ00101RE	120	BJ	330	U

Inorganic Field Blank Summary Tables

Inorganic Field Blank Summary Table SDG No. M3001								
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
45Y001	Tin	2.34	11.7	45L00101	6.1	B	6.1	UJ
45Y001	Tin	2.34	11.7	45L00101D	10.3	B	10.3	UJ
45Y001	Tin	2.34	11.7	45L00201	4.8	B	4.8	UJ
45Y001	Tin	2.34	11.7	45L00301	4.9	B	4.9	UJ
45Y001	Tin	2.34	11.7	45L00102	4.1	B	4.1	UJ
45Y001	Tin	2.34	11.7	45L00102D	2.5	B	2.5	UJ
45Y001	Tin	2.34	11.7	45L00202	3.1	B	3.1	UJ
45Y001	Tin	2.34	11.7	45L00302	4.2	B	4.2	UJ
45Y001	Tin	2.34	11.7	45L00401	4.5	B	4.5	UJ
45Y001	Tin	2.34	11.7	45L00701	6.9	B	6.9	UJ
45Y001	Tin	2.34	11.7	45L00702	5.0	B	5.0	UJ
45Y001	Tin	2.34	11.7	45L00801	4.2	B	4.2	UJ
45Y001	Tin	2.34	11.7	45L00802	3.1	B	3.1	UJ

Inorganic Field Blank Summary Table SDG No. M3003								
Blank ID/ Date	Affected Analyte	Absolute Conc. ug/l	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
44R003	Selenium	0.126	0.63	44S00301	0.13	B	0.13	UJ
44R003	Selenium	0.126	0.63	44S00801	0.15	B	0.15	UJ

Inorganic Field Blank Summary Tables

Inorganic Field Blank Summary Table SDG No. M3004								
Blank ID/ Date	Affected Analyte	Absolute Conc. ug/l	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
23R004 4/5/95	Copper	2.24	11.2	23S00101	7.3	--	7.3	UJ
23R004 4/5/95	Copper	2.24	11.2	23S00201	6.3	--	6.3	UJ
23R004 4/5/95	Copper	2.24	11.2	23S00501	5.0	B	5.0	UJ
23R004 4/5/95	Copper	2.24	11.2	23S00401	10.2	--	10.2	UJ
23R004 4/5/95	Copper	2.24	11.2	23S00601	3.3	B	3.3	UJ
23R005 4/7/95	Cobalt	0.68	3.4	23S01301	3.9	B	3.9	UJ
23R005 4/7/95	Cobalt	0.68	3.4	23S01401	2.5	B	2.5	UJ
23R005 4/7/95	Cobalt	0.68	3.4	23S01501	1.6	B	1.6	UJ
23R005 4/7/95	Cobalt	0.68	3.4	23S01601	1.4	B	1.4	UJ
23R005 4/7/95	Cobalt	0.68	3.4	23S01801	0.77	B	0.77	UJ

Inorganic Field Blank Summary Table SDG No. M3005								
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
23R007 4/8/95	Arsenic	0.16	0.82	24S00101	0.76	B	0.76	UJ
23R007 4/8/95	Arsenic	0.16	0.82	24S00301	0.76	B	0.76	UJ

23R007 4/8/95	Arsenic	0.16	0.82	24S00501	0.55	B	0.55	UJ

Inorganic Field Blank Summary Table
SDG No. M3009

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
17R011	Nickel	1.3	6.5	17S00301	4.0	B	4.0	UJ
				17S00101	2.3	B	2.3	UJ
				17S00401	3.4	B	3.4	UJ
				17S01001	2.3	B	2.3	UJ
				17S01201	2.0	B	2.0	UJ
				17S00801	3.0	B	3.0	UJ
				17S00701	2.2	B	2.2	UJ
				17S00901D	1.3	B	1.3	UJ

Inorganic Field Blank Summary Table
SDG No. M3010

Blank ID/ Date	Affected Analyte	Absolute Conc. ug/l or mg/kg	Action Level ug/l or mg/kg	Affected Sample	Lab Conc ug/l or mg/kg	Lab Qual	EDS Conc ug/l or mg/kg	EDS Qual
18R012	Copper	1.04	5.2	14D00101	4.8	B	4.8	UJ
18R012	Copper	1.04	5.2	14D00801	3.8	B	3.8	UJ
18R012	Copper	1.04	5.2	14D00501	4.1	B	4.1	UJ
18R012	Copper	5.2	26.0	18Y002	3.8	B	5.2	UJ
18R012	Lead	0.7	3.5	18Y002	0.6	B	0.7	UJ
18R012	Nickel	6.14	30.7	18D00201	1.8	B	6.14	UJ
18R012	Nickel	6.14	30.7	18D00101D	3.0	B	6.14	UJ
18R012	Nickel	6.14	30.7	18D00301	1.8	B	6.14	UJ
18R012	Nickel	6.14	30.7	14D00201	3.0	B	6.14	UJ
18R012	Nickel	6.14	30.7	14D00301	3.1	B	6.14	UJ
18R012	Nickel	6.14	30.7	14D00701	2.0	B	6.14	UJ

18R012	Nickel	6.14	30.7	14D00401	2.2	B	6.14	UJ
18R012	Nickel	6.14	30.7	14D00601	1.6	B	6.14	UJ
18R012	Nickel	6.14	30.7	14D00601D	1.7	B	6.14	UJ
18R012	Nickel	30.7	154	18Y002	17.9	B	30.7	UJ
18R012	Zinc	3.96	19.8	14D00101	13.7	B	13.7	UJ
18R012	Zinc	3.96	19.8	14D00801	6.9	-	6.9	UJ
18R012	Zinc	3.96	19.8	14D00501	10.1	-	10.1	UJ

Inorganic Field Blank Summary Table
SDG No. M3011

Blank ID/ Date	Affected Analyte	Absolute Conc. ug/l or mg/kg	Action Level ug/l or mg/kg	Affected Sample	Lab Conc ug/l or mg/kg	Lab Qual	EDS Conc ug/l or mg/kg	EDS Qual
14R013	Copper	3.2	16.0	14W004D	5.4	B	5.4	UJ

Inorganic Field Blank Summary Table
SDG No. M3013

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
01Y003	Copper	1.48	7.4	01B00109	2.2	B	2.2	UJ
01Y003	Copper	1.48	7.4	01S00201	4.2	B	4.2	UJ
01Y003	Copper	1.48	7.4	01B00208	1.8	B	1.8	UJ
01Y003	Copper	1.48	7.4	01B00308	1.3	B	1.48	UJ
01Y003	Copper	1.48	7.4	01B00409	2.0	B	2.0	UJ
01Y003	Copper	1.48	7.4	01B00508	6.1	-	6.1	UJ
01Y003	Copper	1.48	7.4	01S00601	6.5	-	6.5	UJ
01Y003	Copper	1.48	7.4	01B00608	1.1	B	1.48	UJ
01Y003	Copper	1.48	7.4	01B00608D	0.98	B	1.48	UJ

01Y003	Copper	1.48	7.4	01S00701	3.5	B	3.5	UJ
01Y003	Copper	1.48	7.4	01B00708	0.84	B	1.48	UJ
01Y003	Copper	7.4	39.0	01R015	4.4	B	7.4	UJ

Inorganic Field Blank Summary Table
SDG No. M3015

Blank ID/ Date	Affected Analyte	Absolute Conc. ug/l	Action Level ug/l	Affected Sample	Lab Conc ug/l or mg/kg	Lab Qual	EDS Conc ug/l or mg/kg	EDS Qual
23Y004	Barium	0.52	2.6	23R017	0.41	B	0.52	UJ
23Y004	Cyanide	0.22	1.1	24S00701	0.18	B	0.22	UJ
23Y004	Cyanide	1.1	5.5	23R017	2.6	B	2.6	UJ

Inorganic Field Blank Summary Table
SDG No. M3016

Blank ID/ Date	Affected Analyte	Absolute Conc. ug/l	Action Level ug/l	Affected Sample	Lab Conc ug/l or mg/kg	Lab Qual	EDS Conc ug/l or mg/kg	EDS Qual
14R018	Arsenic	0.15	0.77	14B02105	0.64	B	0.64	UJ
				14B02203	0.65	B	0.65	UJ
				14S02401	0.49	B	0.49	UJ
				14B02504	0.76	B	0.76	UJ
				18S00301	0.23	B	0.23	UJ
				18S00301D	0.43	B	0.43	UJ
				18B00304	0.40	B	0.40	UJ
				14B01404	0.73	B	0.73	UJ
				14B01904	0.57	B	0.57	UJ
				14S01501	0.63	B	0.63	UJ
				14B00704	0.27	B	0.27	UJ

14R018	Zinc	2.78	13.9	14S02101	3.9	B	3.9	UJ
				14B02105	1.9	B	2.8	UJ
				14S02201	5.6	-	5.6	UJ
				14B02203	2.9	B	2.9	UJ
				14S02301	4.3	-	4.3	UJ
				14B02303	3.6	B	3.6	UJ
				14S02401	8.9	-	8.9	UJ
				14B02408	3.2	B	3.2	UJ
				14B02504	3.2	B	3.2	UJ
				18S00301	6.8	-	6.8	UJ
				18S00301D	3.4	B	3.4	UJ
				18B00304	3.1	B	3.1	UJ
				14B01404	2.5	B	2.8	UJ
				14B00204	2.9	B	2.9	UJ
				18B00204	3.1	B	3.1	UJ
				18B00204D	2.8	B	2.8	UJ
				14B01004	3.0	B	3.0	UJ
				14B01904	3.6	B	3.6	UJ
				14S01501	4.2	-	4.2	UJ

Inorganic Field Blank Summary Table
SDG No. M3017

Blank ID	Affected Analyte	Absolute Conc. ug/l	Action Level ug/l	Affected Sample	Lab Conc ug/l or mg/kg	Lab Qual	EDS Conc ug/l or mg/kg	EDS Qual
14R019	Nickel	1.34	6.7	17S01301	1.6	B	1.6	UJ
				17S01401	3.0	B	3.0	UJ
				17S01501	2.9	B	2.9	UJ
				17S00601	2.6	B	2.6	UJ
				17S00501	1.7	B	1.7	UJ
				44B01006	1.7	B	1.7	UJ

Inorganic Field Blank Summary Tables

Inorganic Field Blank Summary Table SDG No. M3018								
Blank ID	Affected Analyte	Absolute Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
TCR020	Arsenic	0.24	1.2	TCB00103	0.42	B	0.42	UJ
				TCS00201	0.58	B	0.58	UJ
				TCB00203	0.39	B	0.39	UJ
				TCS00301	1.0	B	1.0	UJ
				TCB00303	0.88	B	0.88	UJ
				TCS00401	0.58	B	0.58	UJ
				TCS00401D	0.34	B	0.34	UJ
				TCB00403	0.20	B	0.24	UJ

Inorganic Field Blank Summary Table SDG No. M3020								
Blank ID	Affected Analyte	Absolute Conc. ug/l	Action Level ug/l	Affected Sample	Lab Conc ug/l	Lab Qual	EDS Conc ug/l	EDS Qual
23R022	Arsenic	1.0	5.0	23G00101	3.2	B	3.2	UJ
				23G00101D	3.7	B	3.7	UJ
				23G00201	2.4	B	2.4	UJ
				23G00301	5.0	B	5.0	UJ
				23G00601	2.4	B	2.4	UJ

Inorganic Field Blank Summary Table SDG No. M3021								
Blank ID	Affected Analyte	Absolute Conc. ug/l	Action Level ug/l	Affected Sample	Lab Conc ug/l	Lab Qual	EDS Conc ug/l	EDS Qual
23R023	Iron	7.6	38.0	23G00401	16.5	B	16.5	UJ
				23G00401D	22.2	B	22.2	UJ
				01G00301	13.9	B	13.9	UJ
				01G00201	12.8	B	12.8	UJ
				23G00501	23.3	B	23.3	UJ
				44G00301	18.7	B	18.7	UJ
				45G00201	20.8	B	20.8	UJ
				45G00201D	13.4	B	13.4	UJ
				45G00101	20.4	B	20.4	UJ

23R023	Zinc	5.0	25.0	23G00401	3.7	B	5.0	UJ
				23G00401D	4.8	B	5.0	UJ
				44G00201	5.9	B	5.9	UJ
				01G00201	5.2	B	5.2	UJ
				23G00501	4.6	B	5.0	UJ
				01G00101	5.2	B	5.2	UJ
				44G00101	4.2	B	5.0	UJ
				44G00301	5.0	B	5.0	UJ
				24G00101	5.9	B	5.9	UJ
				45G00201	8.4	B	8.4	UJ
				45G00201D	4.6	B	5.0	UJ
				45G00101	4.6	B	5.0	UJ

Inorganic Field Blank Summary Table
SDG No. M3022

Blank ID	Affected Analyte	Absolute Conc. ug/l	Action Level ug/l	Affected Sample	Lab Conc ug/l	Lab Qual	EDS Conc ug/l	EDS Qual
14Y006	Iron	6.7	33.5	14R024	4.1	B	6.7	UJ
				14G00601	21.8	B	21.8	UJ
14Y006	Zinc	7.1	35.5	14R024	5.6	B	7.1	UJ
				14G00401	5.7	B	7.1	UJ
				14G00401D	5.0	B	7.1	UJ
				14G00101	5.1	B	7.1	UJ
				14G00201	3.4	B	7.1	UJ
				14G00601	4.5	B	7.1	UJ
				14G00301	4.4	B	7.1	UJ
				14G01201	4.7	B	7.1	UJ
				14G00501	4.5	B	7.1	UJ
				14G00801	3.4	B	7.1	UJ
14R024	Sodium	69.1	346	14Y006	54.0	B	69.1	UJ

Inorganic Field Blank Summary Tables

Inorganic Field Blank Summary Table SDG No. M3023								
Blank ID	Affected Analyte	Absolute Conc. ug/l	Action Level ug/l	Affected Sample	Lab Conc ug/l	Lab Qual	EDS Conc ug/l	EDS Qual
18R025	Barium	1.9	9.5	18G00201	8.9	B	8.9	UJ
				14G01101	5.6	B	5.6	UJ
				14G01401	3.9	B	3.9	UJ
				14G00901	7.9	B	7.9	UJ
				14G00701	5.0	B	5.0	UJ
				14G01301	4.2	B	4.2	UJ
18R025	Calcium	280	1400	17R026	79.4	B	280	UJ
18R025	Lead	0.7	3.5	18G00101	0.4	B	0.7	UJ
				18G00301	3.5	B	3.5	UJ
18R025	Lead	0.7	3.5	14G01101	0.4	B	0.7	UJ
				14G01401	0.4	B	0.7	UJ
				14G00901	0.4	B	0.7	UJ
				14G00701	0.5	B	0.7	UJ
				17G00101D	0.8	B	0.8	UJ
18R025	Magnesium	54.3	272	17R026	20.0	B	54.3	UJ
17R026	Sodium	52.0	260	18R025	43.0	B	52.0	UJ

Inorganic Field Blank Summary Table SDG No. M3024								
Blank ID	Affected Analyte	Absolute Conc. ug/l	Action Level ug/l	Affected Sample	Lab Conc ug/l	Lab Qual	EDS Conc ug/l	EDS Qual
45R027	Lead	1.0	5.0	45G00102	0.9	B	1.0	UJ
				45G00102D	0.6	B	1.0	UJ
				23G00502	0.9	B	1.0	UJ
				44G00102	0.8	B	1.0	UJ
				01G00102	0.5	B	1.0	UJ
				0BG00102	0.5	B	1.0	UJ
				0BG00103	4.0	B	4.0	UJ
				0BG00101	1.6	B	1.6	UJ

45R027	Zinc	3.3	16.5	45G00102	3.3	B	3.3	UJ
				45G00102D	4.9	B	4.9	UJ
				23G00502	3.8	B	3.8	UJ
				45G00103	4.2	B	4.2	UJ
				23G00503	4.6	B	4.6	UJ
				44G00103	4.7	B	4.7	UJ
				44G00102	3.6	B	3.6	UJ
				01G00103	3.2	B	3.3	UJ
				01G00102	4.3	B	4.3	UJ
				0BG00102	4.1	B	4.1	UJ
				0BG00102D	5.1	B	5.1	UJ
				0BG00103	8.4	B	8.4	UJ
				0BG00101	5.1	B	5.1	UJ

Inorganic Field Blank Summary Table
SDG No. M3026

Blank ID	Affected Analyte	Absolute Conc. ug/l	Action Level ug/l	Affected Sample	Lab Conc ug/l	Lab Qual	EDS Conc ug/l	EDS Qual
TCY007	Calcium	56.3	282	TCR028	50.5	B	56.3	UJ
TCY007	Iron	8.8	44.0	TCR028	5.5	B	8.8	UJ
				TCG00201	14.8	B	14.8	UJ
				TCG00301	27.2	B	27.2	UJ
TCR028	Zinc	4.9	24.5	TCY007	4.7	B	4.9	UJ
				TCG00501	3.4	B	4.9	UJ
				TCG00501D	4.6	B	4.9	UJ
				TCG00601	3.7	B	4.9	UJ
				TCG00101	4.8	B	4.9	UJ
				TCG00401	4.3	B	4.9	UJ
				TCG00201	3.8	B	4.9	UJ
				TCG00301	4.9	B	4.9	UJ

Inorganic Field Blank Summary Table
SDG No. M3027

Blank ID	Affected Analyte	Absolute Conc. mg/kg	Action Level mg/kg	Affected Sample	Lab Conc mg/kg	Lab Qual	EDS Conc mg/kg	EDS Qual
TRR029	Copper	0.24	1.2	TRS00101	1.0	B	1.0	UJ

Inorganic Laboratory Blank Summary Tables

Inorganic Laboratory Blank Summary Table SDG No. M3001								
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
WTIC 4/6/95	Barium	1.31	6.55	45Y001	2.0	B	2.0	UJ
WTIC 4/6/95	Barium	1.31	6.55	45R001	2.2	B	2.2	UJ
WTIC 4/6/95	Zinc	3.74	18.7	45Y001	3.8	B	3.8	UJ
WTIC 4/6/95	Zinc	3.74	18.7	45R001	4.4	B	4.4	UJ

Inorganic Laboratory Blank Summary Table SDG No. M3002								
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
WTIC 0406-1	Zinc	3.74	18.7	45R002	5.3	B	5.3	UJ

Inorganic Laboratory Blank Summary Table SDG No. M3003								
Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg or ug/l	Action Level mg/kg or ug/l	Affected Sample	Lab Conc mg/kg or ug/l	Lab Qual	EDS Conc mg/kg or ug/l	EDS Qual
WTIC 0417-1	Zinc	7.1	35.5	44R003	3.9	B	7.1	UJ
WTFN 0417-1	Arsenic	0.70	3.5	44R003	0.70	U	0.70	UJ
SOIC 0412-1	Cobalt	0.583	2.92	44S00201	1.2	B	1.2	UJ
SOIC 0412-1	Cobalt	0.583	2.92	44S00101	1.7	B	1.7	UJ
SOIC 0412-1	Cobalt	0.583	2.92	44S00101D	1.7	B	1.7	UJ
SOIC 0412-1	Cobalt	0.583	2.92	44S00301	0.78	B	0.78	UJ
SOIC 0412-1	Cobalt	0.583	2.92	44S00401	0.98	B	0.98	UJ

SOIC 0412-1	Cobalt	0.583	2.92	44S00501	0.89	B	0.89	UJ
SOIC 0412-1	Cobalt	0.583	2.92	44S00601	0.73	B	0.73	UJ
SOIC 0412-1	Cobalt	0.583	2.92	44S00701	1.1	B	1.1	UJ
SOIC 0412-1	Cobalt	0.583	2.92	44S00801	1.1	B	1.1	UJ
SOIC 0412-1	Cobalt	0.583	2.92	44S00901	0.87	B	0.87	UJ
SOIC 0412-1	Tin	2.09	10.45	44S00201	5.8	B	5.8	UJ
SOIC 0412-1	Tin	2.09	10.45	44S00301	2.7	B	2.7	UJ
SOIC 0412-1	Tin	2.09	10.45	44S00401	2.3	B	2.3	UJ
SOIC 0412-1	Tin	2.09	10.45	44S00701	3.7	B	3.7	UJ
SOIC 0412-1	Tin	2.09	10.45	44S00801	5.9	B	5.9	UJ
SOHG 0419-1	Mercury	0.028	0.14	44S00501	0.30	U	0.30	UJ
SOHG 0419-1	Mercury	0.028	0.14	44S00901	0.30	U	0.30	UJ

Inorganic Laboratory Blank Summary Table
SDG No. M3004

Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg or ug/l	Action Level mg/kg or ug/l	Affected Sample	Lab Conc mg/kg or ug/l	Lab Qual	EDS Conc mg/kg or ug/l	EDS Qual
WTFN 0417-1	Arsenic	0.7	NA	23R004	0.7	U	0.7	UJ
WTFN 0417-1	Arsenic	0.7	NA	23R005	0.7	U	0.7	UJ
WTIC 0417-1	Barium	0.97	4.85	23R004	2.4	B	2.4	UJ
WTIC 0417-1	Barium	0.97	4.85	23R005	1.1	B	1.1	UJ
WTIC 0417-1	Zinc	7.1	35.5	23R004	3.9	B	7.1	UJ
WTIC 0417-1	Zinc	7.1	35.5	23R005	2.9	B	7.1	UJ
WTCN 0414-1	Cyanide	1.75	8.77	23R004	1.1	B	1.75	UJ
WTCN 0414-1	Cyanide	1.75	8.77	23R005	2.4	B	2.4	UJ

Inorganic Laboratory Blank Summary Tables

Inorganic Laboratory Blank Summary Table SDG No. M3005								
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
PBW 4/12/95	Aluminum	21.16	105.8	23R006	39.1	B	39.1	UJ
PBW 4/12/95	Aluminum	21.16	105.8	23R007	71.7	B	71.7	UJ
PBW 4/12/95	Calcium	26.08	130.4	23R006	34.1	B	34.1	UJ
PBW 4/12/95	Calcium	26.08	130.4	23R007	61.7	B	61.7	UJ
PBW 4/12/95	Iron	3.99	19.95	23R006	15.5	B	15.5	UJ
PBW 4/12/95	Iron	3.99	19.95	23R007	7.4	B	7.4	UJ
PBW 4/12/95	Sodium	64.46	337	23R006	102	B	102	UJ
PBW 4/12/95	Sodium	64.46	337	23R007	134	B	134	UJ
PBW 4/12/95	Zinc	2.79	13.95	23R006	3.6	B	3.6	UJ
PBW 4/12/95	Zinc	2.79	13.95	23R007	5.1	B	5.1	UJ

Inorganic Laboratory Blank Summary Table SDG No. M3006								
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
WTIC 0417-1	Barium	0.97	4.85	14R008	1.1	B	1.1	UJ
WTIC 0417-1	Zinc	7.1	35.5	14R008	6.2	B	7.1	UJ
WTIC 0417-1	Cyanide	1.75	8.75	14R008	1.1	B	1.75	UJ

Inorganic Laboratory Blank Summary Tables

Inorganic Laboratory Blank Summary Table SDG No. M3008								
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
PBW 4/17/95	Aluminum	26.7	134	25R010	22.0	B	26.7	UJ
PBW 4/17/95	Barium	2.17	10.8	25R010	4.0	B	4.0	UJ
PBW 4/17/95	Calcium	43.7	218	25R010	71.7	B	71.7	UJ
PBW 4/17/95	Iron	6.03	30.2	25R010	6.2	B	6.2	UJ
PBW 4/17/95	Sodium	130	650	25R010	116	B	130	UJ

Inorganic Laboratory Blank Summary Table SDG No. M3009								
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
PBW 4/17/95	Aluminum	26.7	134	17R011	33.6	B	33.6	UJ
PBW 4/17/95	Barium	2.17	10.8	17R011	6.4	B	6.4	UJ
PBW 4/17/95	Calcium	43.68	218	17R011	64.6	B	64.6	UJ
PBW 4/17/95	Iron	6.03	30.2	17R011	7.8	B	7.8	UJ
PBW 4/17/95	Sodium	130	650	17R011	163	B	163	UJ

Inorganic Laboratory Blank Summary Table SDG No. M3010								
Blank ID Date	Affected Analyte	Absolute Conc. ug/l or mg/kg	Action Level ug/l or mg/kg	Affected Sample	Lab Conc ug/l or mg/kg	Lab Qual	EDS Conc ug/l or mg/kg	EDS Qual
WTIC 0505-1	Zinc	2.87	14.4	18Y002	11.8	B	11.8	UJ
WTCN 0428-1	Cyanide	2.43	12.2	18Y002	1.8	B	2.43	UJ
WTCN 0428-1	Cyanide	2.43	12.2	18R012	2.4	B	2.43	UJ
SOIC 0428-1	Barium	0.62	3.12	14D00801	1.9	B	1.9	UJ

Inorganic Laboratory Blank Summary Tables

Inorganic Laboratory Blank Summary Table SDG No. M3011								
Blank ID/ Date	Affected Analyte	Absolute Conc. ug/l or mg/kg	Action Level ug/l or mg/kg	Affected Sample	Lab Conc ug/l or mg/kg	Lab Qual	EDS Conc ug/l or mg/kg	EDS Qual
WTIC 0505-1	Iron	2.19	10.95	14R013	5.2	B	5.2	UJ
WTIC 0505-1	Zinc	2.87	14.4	14R013	3.9	B	3.9	UJ
WTIC 0505-1	Zinc	2.87	14.4	14W004	4.6	B	4.6	UJ
WTIC 0505-1	Zinc	2.87	14.4	14W005	4.8	B	4.8	UJ
WTCN 0428-1	Cyanide	2.43	12.2	14R013	1.8	B	2.43	UJ
WTCN 0428-1	Cyanide	2.43	12.2	14W004	3.0	B	3.0	UJ
WTCN 0428-1	Cyanide	2.43	12.2	14W004D	3.0	B	3.0	UJ
WTCN 0428-1	Cyanide	2.43	12.2	14W005	3.0	B	3.0	UJ

Inorganic Laboratory Blank Summary Table SDG No. M3012								
Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg or ug/l	Action Level mg/kg or ug/l	Affected Sample	Lab Conc mg/kg or ug/l	Lab Qual	EDS Conc mg/kg of ug/l	EDS Qual
PBS 5/1/95	Antimony	0.458	2.29	24S00601	0.62	B	0.62	UJ
PBS 5/1/95	Antimony	0.458	2.29	14S02001	0.80	B	0.80	UJ
PBS 5/1/95	Antimony	0.458	2.29	14S01901	0.59	B	0.59	UJ
PBS 5/1/95	Antimony	0.458	2.29	18S00201	0.85	B	0.85	UJ
PBW 5/11/95	Calcium	29.68	148.0	14R014	61.7	B	61.7	UJ
PBW 5/11/95	Sodium	250.0	1250	14R014	173	B	250.0	UJ
PBW 5/11/95	Zinc	4.14	20.7	14R014	17.2	B	17.2	UJ

Inorganic Laboratory Blank Summary Table
SDG No. M3013

Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg or ug/l	Action Level mg/kg or ug/l	Affected Sample	Lab Conc mg/kg or ug/l	Lab Qual	EDS Conc mg/kg of ug/l	EDS Qual
WTIC 0518-1	Silver	2.48	--	01Y003	1.4	U	2.48	UJ
WTIC 0518-1	Silver	2.48	--	01R015	1.4	U	2.48	UJ
WTIC 0518-1	Zinc	4.39	21.95	01Y003	5.6	B	5.6	UJ
WTIC 0518-1	Zinc	4.39	21.95	01R015	15.0	B	15.0	UJ
WTFN 0518-1	Lead	0.4	2.0	01Y003	0.9	B	0.9	UJ
WTFN 0518-1	Lead	0.4	2.0	01R015	1.0	B	1.0	UJ
WTCN 0509-1	Cyanide	1.31	6.55	01Y003	1.3	B	1.3	UJ
SOIC 0515-1	Silver	0.37	--	01S00101	0.31	U	0.37	UJ
SOIC 0515-1	Silver	0.37	--	01S00101D	0.31	U	0.37	UJ
SOIC 0515-1	Silver	0.37	--	01B00109	0.34	U	0.37	UJ
SOIC 0515-1	Silver	0.37	--	01S00201	0.30	U	0.37	UJ
SOIC 0515-1	Silver	0.37	--	01B00208	0.30	U	0.37	UJ
SOIC 0515-1	Silver	0.37	--	01S00301	0.29	U	0.37	UJ
SOIC 0515-1	Silver	0.37	--	01S00401	0.30	U	0.37	UJ
SOIC 0515-1	Silver	0.37	--	01B00308	0.30	U	0.37	UJ
SOIC 0515-1	Silver	0.37	--	01B00409	0.33	U	0.37	UJ
SOIC 0515-1	Silver	0.37	--	01S00501	0.29	U	0.37	UJ
SOIC 0515-1	Silver	0.37	--	01B00508	0.30	U	0.37	UJ
SOIC 0515-1	Silver	0.37	--	01S00601	0.29	U	0.37	UJ
SOIC 0515-1	Silver	0.37	--	01B00608	0.31	U	0.37	UJ
SOIC 0515-1	Silver	0.37	--	01B00608D	0.32	U	0.37	UJ
SOIC 0515-1	Silver	0.37	--	01S00701	0.31	U	0.37	UJ
SOIC 0515-1	Silver	0.37	--	01B00708	0.30	U	0.37	UJ

SOIC 0515-1	Zinc	0.67	3.35	01B00208	2.5	B	2.5	UJ
SOIC 0515-1	Zinc	0.67	3.35	01B00308	2.8	B	2.8	UJ
SOIC 0515-1	Zinc	0.67	3.35	01B00608	2.6	B	2.6	UJ
SOIC 0515-1	Zinc	0.67	3.35	01B00608D	2.4	B	2.4	UJ
SOIC 0515-1	Zinc	0.67	3.35	01B00708	2.6	B	2.6	UJ
SOIC 0515-1	Tin	4.36	21.8	01S00101	3.6	B	4.36	UJ
SOIC 0515-1	Tin	4.36	21.8	01S00101D	3.3	B	4.36	UJ
SOIC 0515-1	Tin	4.36	21.8	01B00109	5.1	B	5.1	UJ
SOIC 0515-1	Tin	4.36	21.8	01S00301	5.7	B	5.7	UJ
SOIC 0515-1	Tin	4.36	21.8	01S00401	13.9	B	13.9	UJ
SOIC 0515-1	Tin	4.36	21.8	01B00308	3.9	B	4.36	UJ
SOIC 0515-1	Tin	4.36	21.8	01B00409	5.6	B	5.6	UJ
SOIC 0515-1	Tin	4.36	21.8	01S00501	9.1	B	9.1	UJ
SOIC 0515-1	Tin	4.36	21.8	01B00508	5.6	B	5.6	UJ
SOIC 0515-1	Tin	4.36	21.8	01S00601	6.2	B	6.2	UJ
SOIC 0515-1	Tin	4.36	21.8	01B00608	3.5	B	4.36	UJ
SOIC 0515-1	Tin	4.36	21.8	01B00608D	5.3	B	5.3	UJ
SOIC 0515-1	Tin	4.36	21.8	01B00708	3.8	B	4.36	UJ

Inorganic Laboratory Blank Summary Table
SDG No. M3015

Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg or ug/l	Action Level mg/kg or ug/l	Affected Sample	Lab Conc mg/kg or ug/l	Lab Qual	EDS Conc mg/kg of ug/l	EDS Qual
PBS 6/7/95	Beryllium	0.042	NA	23B00105	0.03	U	0.04	UJ
				44B00107	0.03	U	0.04	UJ
				23B01606	0.03	U	0.04	UJ
				23B02908	0.03	U	0.04	UJ
				44B00908	0.04	U	0.04	UJ
				01B00807	0.03	U	0.04	UJ
PBW 5/31/95	Arsenic	0.81	4.05	23R017	1.6	B	1.6	UJ

PBW 5/31/95	Copper	3.09	15.45	23Y004 23R017	5.6 5.4	B B	5.6 5.4	UJ UJ
PBW 5/31/95	Zinc	2.03	10.15	23Y004 23R017	6.6 3.9	B B	6.6 3.9	UJ UJ

Inorganic Laboratory Blank Summary Table
SDG No. M3016

Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg or ug/l	Action Level mg/kg or ug/l	Affected Sample	Lab Conc mg/kg or ug/l	Lab Qual	EDS Conc mg/kg of ug/l	EDS Qual
PBW 5/31/95	Copper	3.09	15.4	14R018	5.0	B	5.0	UJ
PBS 6/12/95	Antimony	0.54	2.68	14S02101	0.68	B	0.68	UJ
				14S02301	0.52	B	0.54	UJ
				14S02401	0.47	B	0.54	UJ
				14B02504	0.54	B	0.54	UJ
				18S00301	0.46	B	0.54	UJ
				14B01404	0.52	B	0.54	UJ
				14B00204	0.71	B	0.71	UJ
				18B00204D	1.6	-	1.6	UJ
				14B01004	0.66	B	0.66	UJ
				14B01904	0.90	B	0.90	UJ
				14S01501	0.60	B	0.60	UJ

Inorganic Laboratory Blank Summary Table
SDG No. M3017

Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg or ug/l	Action Level mg/kg or ug/l	Affected Sample	Lab Conc mg/kg or ug/l	Lab Qual	EDS Conc mg/kg of ug/l	EDS Qual
WTIC 0612-1	Zinc	5.37	26.8	14R019	5.4	B	5.4	UJ
WTFN 0612-1	Lead	0.90	4.5	14R019	0.4	B	0.9	UJ
WTCN 0601-2	Cyanide	1.985	9.92	14R019	3.8	B	3.8	UJ

SOIC 0607-1	Chromium	0.375	1.88	18S00401	0.8	B	0.8	UJ
				18S00401D	1.3	B	1.3	UJ
				17B01305	1.4	B	1.4	UJ
				17B01405	0.63	B	0.63	UJ
				44B01006	1.0	B	1.0	UJ
SOIC 0607-1	Copper	0.741	3.7	18B00404	2.8	B	2.8	UJ
				17S01301	2.0	B	2.0	UJ
				17B01305	1.2	B	1.2	UJ
				17B01405	0.79	B	0.79	UJ
				17S01501	1.7	B	1.7	UJ
				17B01505	1.4	B	1.4	UJ
				17B01505D	1.6	B	1.6	UJ
				17S00601	3.5	B	3.5	UJ
				44B01006	2.4	B	2.4	UJ
SOIC 0607-1	Zinc	0.903	4.52	14B00804	3.6	B	3.6	UJ
				44B01006	2.6	B	2.6	UJ

Inorganic Laboratory Blank Summary Table
SDG No. M3018

Blank ID/ Date	Affected Analyte	Absolute Conc. mg/kg or ug/l	Action Level mg/kg or ug/l	Affected Sample	Lab Conc mg/kg or ug/l	Lab Qual	EDS Conc mg/kg of ug/l	EDS Qual
WTIC 0612-1	Zinc	5.37	26.8	TCR020	6.7	B	6.7	UJ
WTFN 0612-1	Lead	0.90	4.5	TCR020	1.2	B	1.2	UJ
SOIC 0609-1	Silver	0.29	NA	TCS00101	0.31	U	0.31	UJ
				TCB00103	0.33	U	0.33	UJ
				TCS00201	0.32	U	0.32	UJ
				TCB00203	0.36	U	0.36	UJ
				TCS00301	0.29	U	0.29	UJ
				TCB00303	0.34	U	0.34	UJ
				TCS00401	0.32	U	0.32	UJ
				TCS00401D	0.32	U	0.32	UJ
				TCB00403	0.32	U	0.32	UJ
SOIC 0609-1	Zinc	0.527	2.6	TCB00103	2.4	B	2.4	UJ

Inorganic Laboratory Blank Summary Tables

Inorganic Laboratory Blank Summary Table
SDG No. M3020

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
WTIC 0612-1	Copper	1.17	5.85	23G00101D	1.5	B	1.5	UJ
WTIC 0612-1	Iron	10.9	54.5	23R022	7.6	B	10.9	UJ
				23G00101	18.7	B	18.7	UJ
				23G00101D	14.0	B	14.0	UJ
				23G00601	7.2	B	10.9	UJ
WTIC 0612-1	Manganese	0.52	2.6	23R022	0.52	B	0.52	UJ
WTIC 0612-1	Zinc	5.37	26.8	23R022	3.9	B	5.37	UJ
				23G00701	4.5	B	5.37	UJ
				23G00101	5.2	B	5.37	UJ
				23G00101D	3.8	B	5.37	UJ
				23G00201	5.7	B	5.7	UJ
				23G00301	3.0	B	5.37	UJ
				23G00601	4.7	B	5.37	UJ

Inorganic Laboratory Blank Summary Table
SDG No. M3021

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
WTIC 0614-1	Silver	1.72	8.60	23G00401	1.7	B	1.7	UJ
				23G00401D	1.7	B	1.7	UJ
WTIC 0614-1	Sodium	44.5	222	23R023	36.8	B	44.5	UJ

Inorganic Laboratory Blank Summary Table
SDG No. M3022

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
WTIC 0622-1	Calcium	56.2	281	14Y006	56.2	B	56.2	UJ
				14R024	46.6	B	56.2	UJ

WTIC 0623-1	Cyanide	1.55	7.75	14G00401D	1.5	B	1.6	UJ
				14G00101	2.2	B	2.2	UJ
				14G00601	2.2	B	2.2	UJ

Inorganic Laboratory Blank Summary Table
SDG No. M3023

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
WTIC 0623-1	Cyanide	1.55	7.75	18G00101D	1.5	B	1.6	UJ
				18G00301	1.5	B	1.6	UJ
				14G01001	1.5	B	1.6	UJ
				17G00101D	1.5	B	1.6	UJ
WTIC 0627-1	Iron	16.7	83.5	18R025	4.5	B	16.7	UJ
				18G00101	31.6	B	31.6	UJ
				18G00201	25.4	B	25.4	UJ
				14G01001	75.9	B	75.9	UJ
				17R026	2.2	B	16.7	UJ
WTIC 0627-1	Nickel	6.14	30.7	18R025	5.7	U	6.14	UJ
				18G00101	5.7	U	6.14	UJ
				18G00101D	5.7	U	6.14	UJ
				18G00201	5.7	U	6.14	UJ
				18G00301	5.7	U	6.14	UJ
				14G01101	5.7	U	6.14	UJ
				14G01001	5.7	U	6.14	UJ
				14G01401	5.7	U	6.14	UJ
				14G00901	5.7	U	6.14	UJ
				14G00701	5.7	U	6.14	UJ
				14G01301	5.7	U	6.14	UJ
				17R026	5.7	U	6.14	UJ
				17G00101	5.7	U	6.14	UJ
				17G00101D	5.7	U	6.14	UJ
				17G00201	5.7	U	6.14	UJ
				17G00301	5.7	U	6.14	UJ

WTIC 0627-1	Zinc	4.23	21.2	18R025	4.2	B	4.2	UJ
				18G00101	3.4	B	4.2	UJ
				18G00101D	5.8	B	5.8	UJ
				18G00201	4.2	B	4.2	UJ
				18G00301	4.0	B	4.2	UJ
				14G01101	5.3	B	5.3	UJ
				14G01001	5.5	B	5.5	UJ
				14G01401	5.0	B	5.0	UJ
				14G00901	5.8	B	5.8	UJ
				14G00701	4.6	B	4.6	UJ
				14G01301	4.2	B	4.2	UJ
				17R026	4.0	B	4.2	UJ
				17G00101	5.2	B	5.2	UJ
				17G00101D	5.6	B	5.6	UJ
				17G00201	5.7	B	5.7	UJ
				17G00301	7.2	B	7.2	UJ

Inorganic Laboratory Blank Summary Table
SDG No. M3026

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
WTIC 0630-1	Sodium	49.7	248	TCY007	46.5	B	49.7	UJ
				TCR028	38.8	B	49.7	UJ
WTIC 0630-1	Tin	14.4	72.0	TCY007	13.6	U	14.4	UJ
				TCR028				
				TCG00501				
				TCG00501D				
				TCG00601				
				TCG00101				
				TCG00401				
				TCG00201				
				TCG00301				
WTHG 0713-1	Mercury	0.11	0.55	TCY007	0.10	U	0.11	UJ
				TCR028				
				TCG00501				
				TCG00501D				
				TCG00601				
				TCG00101				
				TCG00401				
				TCG00201				
				TCG00301				

Inorganic Laboratory Blank Summary Tables

Inorganic Laboratory Blank Summary Table SDG No. M3027								
Blank ID/ Date	Affected Analyte	Absolute Conc. ug/l or mg/kg	Action Level ug/l or mg/kg	Affected Sample	Lab Conc ug/l or mg/kg	Lab Qual	EDS Conc ug/l or mg/kg	EDS Qual
WTIC 0630-1	Zinc	5.31	26.6	TRR029	4.1	B	5.3	UJ
WTIC 0630-1	Tin	14.4	72.0	TRR029	13.6	U	14.4	UJ
WTHG 0713-1	Mercury	0.11	0.55	TRR029	0.10	U	0.11	UJ
SOHG 0713-1	Mercury	0.03	0.15	FPZ00101 FSZ00101 QGZ00101 PCZ00101 BCZ00101 TRS00101 TRS00101D TRS00201	0.03	U	0.03	UJ

APPENDIX C
Completeness Tables

Summary of Rejected Compounds Tables

Summary of Rejected Compounds SDG No. M3001				
Analyses	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane	22 22	RRF < 0.05 RRF < 0.05	1298
Semivolatiles	Hexachlorophene	10	RRF < 0.05	2180
Pest/PCBs	None	--	--	620
Inorganic	None	--	--	342

Summary of Rejected Compounds SDG No. M3002				
Analyses	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane	10 10	RRF < 0.05 RRF < 0.05	590
Semivolatiles	Hexachlorophene All Acid Cmpds for 45R002	9 17	RRF < 0.05 %R = 0.0 for acid surrogate	1090
Pest/PCBs	None	--	--	279
Inorganic	None	--	--	162

Summary of Rejected Compounds SDG No. M3003				
Analyses	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane	11 12	RRF < 0.05 RRF < 0.05	708
Semivolatiles	Hexachlorophene 4-Nitroquinoline-1-oxide	11 11	RRF < 0.05 RRF < 0.05	1199
Pest/PCBs	None	--	--	372

Inorganic	None	--	--	198

Summary of Rejected Compounds SDG No. M3004				
Analyses	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1.4-Dioxane	24 24	RRF <0.05 RRF <0.05	1416
Semivolatiles	Hexachlorophene 1,4-Naphthoquinone 4-Nitroquinoline-1-oxide Aramite	15 20 20 7	RRF <0.05 RRF <0.05 RRF <0.05 RRF <0.05	2398
Pest/PCBs	None	--	--	682
Inorganic	None	--	--	396

Summary of Rejected Compounds SDG No. M3005				
Analyses	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	1.4-Dioxane	21	RRF <0.05	1239
Semivolatiles	None	--	--	2071
Pest/PCBs	None	--	--	589
Inorganic	None	--	--	456

Summary of Rejected Compounds SDG No. M3006				
Analyses	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1.4-Dioxane	20 20	RRF <0.05 RRF <0.05	1180

Semivolatiles	Hexachlorophene Aramite 4-Nitroquinoline-1-oxide 1,4-Naphthoquinone	9 15 10 17	RRF<0.05 RRF<0.05 RRF<0.05 RRF<0.05	2071
Pest/PCBs	None	--	--	589
Inorganic	None	--	--	342

Summary of Rejected Compounds SDG No. M3008				
Analyses	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	1,4-Dioxane	12	RRF<0.05	708
Semivolatiles	None	--	--	1199
Pest/PCBs	None	--	--	341
Inorganic	Antimony	7	MS %R=0.0	264

Summary of Rejected Compounds SDG No. M3009				
Analyses	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	1,4-Dioxane	14	RRF<0.05	826
Semivolatiles	None	--	--	1417
Pest/PCBs	None	--	--	403
Inorganic	None	--	--	312

Summary of Rejected Compounds SDG No. M3010				
Analyses	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	1,4-Dioxane	17	RRF<0.05	1003

Semivolatiles	4-Nitroquinoline-1-oxide Hexachlorophene Aramite	13 4 12	RRF < 0.05 RRF < 0.05 RRF < 0.05	1635
Pest/PCBs	None	--	--	465
Inorganic	None	--	--	270

Summary of Rejected Compounds
SDG No. M3011

Analyses	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane	5 5	RRF < 0.05 RRF < 0.05	295
Semivolatiles	None	--	--	436
Pest/PCBs	None	--	--	124
Inorganic	None	--	--	92

Summary of Rejected Compounds
SDG No. M3012

Analyses	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane	2 8	RRF < 0.05 RRF < 0.05	472
Semivolatiles	None	--	--	763
Pest/PCBs	None	--	--	217
Inorganic	None	--	--	161

Summary of Rejected Compounds
SDG No. M3013

Analyses	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	1,4-Dioxane	19	RRF < 0.05	1121

Summary of Rejected Compounds Tables

Semivolatiles	4-Nitroquinoline-1-oxide Aramite All acid cmpds for 01B00708 and 01S00201	14 7 34	RRF < 0.05 RRF < 0.05 %Rs 9% and 4% for 2,4,6-TBP	2180
Pest/PCBs	None	--	--	558
Inorganic	None	--	--	324

Summary of Rejected Compounds SDG No. M3015				
Analyses	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	1,4-Dioxane	22	RRF < 0.05	1298
Semivolatiles	4-Nitroquinoline-1-oxide	20	RRF < 0.05	2180
Pest/PCBs	None	--	--	620
Inorganic	None	--	--	360

Summary of Rejected Compounds SDG No. M3016				
Analyses	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	1,4-Dioxane All cmpds for 14B02403 and 14B02403R1	25 118	RRF < 0.05 IS area counts low	1475
Semivolatiles	4-Nitroquinoline-1-oxide Hexachlorophene	22 1	RRF < 0.05 RRF < 0.05	2398
Pest/PCBs	None	--	--	651
Inorganic	None	--	--	378

Summary of Rejected Compounds Tables

Summary of Rejected Compounds SDG No. M3017				
Analyses	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	1,4-Dioxane	20	RRF < 0.05	1180
Semivolatiles	Hexachlorophene 1,4-Naphthoquinone	13 15	RRF < 0.05 RRF < 0.05	2071
Pest/PCBs	None	--	--	589
Inorganic	None	--	--	342

Summary of Rejected Compounds SDG No. M3018				
Analyses	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane 2-Butanone	11 11 10	RRF < 0.05 RRF < 0.05 RRF < 0.05	649
Semivolatiles	4-Nitroquinoline-1-oxide Hexachlorophene 1,4-Naphthoquinone	2 2 8	RRF < 0.05 RRF < 0.05 RRF < 0.05	1090
Pest/PCBs	None	--	--	310
Inorganic	None	--	--	180

Summary of Rejected Compounds SDG No. M3020				
Analyses	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane 2-Butanone	9 9 8	RRF < 0.05 RRF < 0.05 RRF < 0.05	531
Semivolatiles	None	--	--	763
Pest/PCBs	None	--	--	217

Inorganic	Antimony	7	MS %R=0.0	161

Summary of Rejected Compounds SDG No. M3021				
Analyses	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane 2-Butanone Acrolein	17 17 16 11	RRF<0.05 RRF<0.05 RRF<0.05 RRF<0.05	1003
Semivolatiles	1,4-Naphthoquinone	8	RRF<0.05	1526
Pest/PCBs	None	--	--	434
Inorganic	None	--	--	322

Summary of Rejected Compounds SDG No. M3022				
Analyses	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane 2-Butanone Acrolein	14 14 13 3	RRF<0.05 RRF<0.05 RRF<0.05 RRF<0.05	826
Semivolatiles	1,4-Naphthoquinone	11	RRF<0.05	1199
Pest/PCBs	None	--	--	341
Inorganic	None	--	--	253

Summary of Rejected Compounds SDG No. M3023				
Analyses	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane 2-Butanone	18 18 18	RRF<0.05 RRF<0.05 RRF<0.05	1062

Semivolatiles	1,4-Naphthoquinone Hexachlorophene All acid cmpds for 18G00101 and 18G00101D	18 1 34	RRF < 0.05 RRF < 0.05 Low %R for surrogates	1962
Pest/PCBs	None	--	--	496
Inorganic	None	--	--	368

Summary of Rejected Compounds
SDG No. M3024

Analyses	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	1,4-Dioxane	18	RRF < 0.05	1062
Semivolatiles	None	--	--	1635
Pest/PCBs	None	--	--	434
Inorganic	None	--	--	322

Summary of Rejected Compounds
SDG No. M3026

Analyses	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane 2-Butanone 1,2-Dibromo-3-chloropropane	11 11 10 10	RRF < 0.05 RRF < 0.05 RRF < 0.05 RRF < 0.05	649
Semivolatiles	Hexachlorophene 1,4-Naphthoquinone	9 9	RRF < 0.05 RRF < 0.05	981
Pest/PCBs	None	--	--	279
Inorganic	None	--	--	207

Summary of Rejected Compounds Tables

Summary of Rejected Compounds SDG No. M3027				
Analyses	Rejected Compounds	No. of Compounds Rejected	Rejection Explanation	Total No. of Analyses
Volatiles	Isobutyl Alcohol 1,4-Dioxane 2-Butanone 1,2-Dibromo-3-chloropropane	11 11 10 1	RRF < 0.05 RRF < 0.05 RRF < 0.05 RRF < 0.05	649
Semivolatiles	1,4-Naphthoquinone Hexachlorophene 4-Nitroquinoline-1-oxide	10 9 4	RRF < 0.05 RRF < 0.05 RRF < 0.05	1090
Pest/PCBs	None	--	--	310
Inorganic	None	--	--	162

APPENDIX D
Calibration Tables

Volatile Initial and Continuing Calibration Summary Tables

Volatile Initial Calibration Summary Table SDG No. M3001								
ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/L or ug/kg	Lab Qual	EDS Conc ug/L or ug/kg	EDS Qual
95M2V02099-95M2V02103 3/31/95	Isobutyl Alcohol	9.1	0.036	45L00101	210	U	210	R
				45L00101D	210	U	210	R
				45L00201	200	U	200	R
				45L00301	210	U	210	R
				45L00102	210	U	210	R
				45L00102D	210	U	210	R
				45L00202	210	U	210	R
				45L00302	210	U	210	R
				45L00401	210	U	210	R
				45L00402	200	U	200	R
				45Y001	200	U	200	R
				45R001	200	U	200	R
				45T001	200	U	200	R
				45L00601	250	U	250	R
				45L00602	230	U	230	R
				45L00501	290	U	290	R
				45L00502	240	U	240	R
				45L00701	210	U	210	R
				45L00702	210	U	210	R
				45L00801	220	U	220	R
				45L00802	210	U	210	R
				45T002	200	U	200	R

95M2V02099- 95M2V02103 3/31/95	1,4-Dioxane	12.0	0.007	45L00101	210	U	210	R
				45L00101D	210	U	210	R
				45L00201	200	U	200	R
				45L00301	210	U	210	R
				45L00102	210	U	210	R
				45L00102D	210	U	210	R
				45L00202	210	U	210	R
				45L00302	210	U	210	R
				45L00401	210	U	210	R
				45L00402	200	U	200	R
				45Y001	200	U	200	R
				45R001	200	U	200	R
				45T001	200	U	200	R
				45L00601	250	U	250	R
				45L00602	230	U	230	R
				45L00501	290	U	290	R
				45L00502	240	U	240	R
				45L00701	210	U	210	R
				45L00702	210	U	210	R
				45L00801	220	U	220	R
				45L00802	210	U	210	R
				45T002	200	U	200	R

Volatile Continuing Calibration Summary Table
SDG No. M3001

CCAL Date and File Batch Numbers of Stds.	Affected Analyte	% D	RRF	Affected Samples	Lab Value ug/L or ug/kg	Lab Qual	EDS Value ug/L or ug/kg	EDS Qual
95M2V02123 4/4/95	Isobutyl Alcohol	2.8	0.037	All samples previously qualified due to initial calibration results	--	--	--	--
95M2V02123 4/4/95	1,4-Dioxane	0.0	0.007	All samples previously qualified due to initial calibration results	--	--	--	--

95M2V02141 4/5/95	Isobutyl Alcohol	13.9	0.041	All samples previously qualified due to initial calibration results	--	--	--	--
95M2V02141 4/5/95	1,4-Dioxane	14.3	0.008	All samples previously qualified due to initial calibration results	--	--	--	--
95M2V02162 4/6/95	Isobutyl Alcohol	8.3	0.033	All samples previously qualified due to initial calibration results	--	--	--	--
95M2V02162 4/6/95	1,4-Dioxane	14.3	0.006	All samples previously qualified due to initial calibration results	--	--	--	--
95M2V02163 4/6/95	Acrolein	58.8	0.416	45L00501 45L00602 45L00701 45L00702 45L00801 45L00802 45L00601 45T002	150 120 110 110 110 100 120 100	U U U U U U U U	150 120 110 110 110 100 120 100	UJ UJ UJ UJ UJ UJ UJ UJ
95M2V02163 4/6/95	Acrylonitrile	29.6	0.967	45L00501 45L00602 45L00701 45L00702 45L00801 45L00802 45L00601 45T002	150 120 110 110 110 100 120 100	U U U U U U U U	150 120 110 110 110 100 120 100	UJ UJ UJ UJ UJ UJ UJ UJ

95M2V02163 4/6/95	Ethyl methacrylate	35.0	0.814	45L00501	7	U	7	UJ
				45L00602	6	U	6	UJ
				45L00701	5	U	5	UJ
				45L00702	5	U	5	UJ
				45L00801	5	U	5	UJ
				45L00802	5	U	5	UJ
				45L00601	6	U	6	UJ
				45T002	5	U	5	UJ
95M2V02163 4/6/95	1,2,3-Trichloro propane	36.0	0.291	45L00501	7	U	7	UJ
				45L00602	6	U	6	UJ
				45L00701	5	U	5	UJ
				45L00702	5	U	5	UJ
				45L00801	5	U	5	UJ
				45L00802	5	U	5	UJ
				45L00601	6	U	6	UJ
				45T002	5	U	5	UJ
95M2V02163 4/6/95	Trans-1,4-dichloro-2-butene	41.9	0.342	45L00501	7	U	7	UJ
				45L00602	6	U	6	UJ
				45L00701	5	U	5	UJ
				45L00702	5	U	5	UJ
				45L00801	5	U	5	UJ
				45L00802	5	U	5	UJ
				45L00601	6	U	6	UJ
				45T002	5	U	5	UJ

Volatile Initial Calibration Summary Table
SDG No. M3002

ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/L or ug/kg	Lab Qual	EDS Conc ug/L or ug/kg	EDS Qual
95M2V02099-95M2V02103 3/31/95	Isobutyl Alcohol	9.1	0.036	45S00101	210	U	210	R
				45S00101D	210	U	210	R
				45S00201	210	U	210	R
				45S00301	200	U	200	R
				45S00401	210	U	210	R
				45S00501	220	U	220	R
				45S00601	230	U	230	R
				45S00701	210	U	210	R
				45R002	200	U	200	R
				45T003	200	U	200	R

95M2V02099-95M2V02103 3/31/95	1,4-Dioxane	12.0	0.007	45S00101	210	U	210	R
				45S00101D	210	U	210	R
				45S00201	210	U	210	R
				45S00301	200	U	200	R
				45S00401	210	U	210	R
				45S00501	220	U	220	R
				45S00601	230	U	230	R
				45S00701	210	U	210	R
				45R002	200	U	200	R
				45T003	200	U	200	R

Volatile Continuing Calibration Summary Table
SDG No. M3002

CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	% D	RRF	Affected Samples	Lab Value ug/L or ug/kg	Lab Qual	EDS Value ug/L or ug/kg	EDS Qual
95M2V02162 4/6/95	Isobutyl Alcohol	8.3	0.033	45S00101	210	U	210	R
95M2V02162 4/6/95	1,4-Dioxane	14.3	0.006	45S00101	210	U	210	R
95M2V02163 4/6/95	Acrolein	58.8	0.416	45S00101	110	U	110	UJ
95M2V02163 4/6/95	Acrylonitrile	29.6	0.967	45S00101	110	U	110	UJ
95M2V02163 4/6/95	Ethyl Methacrylate	35.0	0.814	45S00101	5	U	5	UJ
95M2V02163 4/6/95	1,2,3-Trichloropropane	36.0	0.291	45S00101	5	U	5	UJ
95M2V02163 4/6/95	Trans-1,4-dichloro-2-butene	41.9	0.342	45S00101	5	U	5	UJ
95M2V02183 4/7/95	Isobutyl Alcohol	47.2	0.019	All previously qualified due to initial calibration	--	--	--	--

95M2V02183 4/7/95	1,4-Dioxane	57.1	0.003	All previously qualified due to initial calibration	--	--	--	--
95M2V02183 4/7/95	Acetonitrile	45.2	0.147	45S00101D	110	U	110	UJ
				45S00201	100	U	100	UJ
				45S00301	100	U	100	UJ
				45S00401	110	U	110	UJ
				45S00501	110	U	110	UJ
				45S00601	120	U	120	UJ
				45S00701	100	U	100	UJ
95M2V02183 4/7/95	Propionitrile	42.0	0.177	45S00101D	110	U	110	UJ
				45S00201	100	U	100	UJ
				45S00301	100	U	100	UJ
				45S00401	110	U	110	UJ
				45S00501	110	U	110	UJ
				45S00601	120	U	120	UJ
				45S00701	100	U	100	UJ
95M2V02183 4/7/95	Methacrylonitrile	31.9	0.477	45S00101D	5	U	5	UJ
				45S00201	5	U	5	UJ
				45S00301	5	U	5	UJ
				45S00401	5	U	5	UJ
				45S00501	5	U	5	UJ
				45S00601	6	U	6	UJ
				45S00701	5	U	5	UJ
95M2V02183 4/7/95	1,2-Dibromo-3-chloropropane	39.9	0.199	45S00101D	11	U	11	UJ
				45S00201	10	U	10	UJ
				45S00301	10	U	10	UJ
				45S00401	11	U	11	UJ
				45S00501	11	U	11	UJ
				45S00601	12	U	12	UJ
				45S00701	10	U	10	UJ
95M2V02184 4/7/95	Acetone	47.1	1.505	45S00101D	11	U	11	UJ
				45S00201	10	U	10	UJ
				45S00301	10	U	10	UJ
				45S00401	11	U	11	UJ
				45S00501	11	U	11	UJ
				45S00601	12	U	12	UJ
				45S00701	10	U	10	UJ

95M2V02184 4/7/95	2-butanone	27.0	0.080	45S00101D 45S00201 45S00301 45S00401 45S00501 45S00601 45S00701	11 10 10 11 11 12 10	U U U U U U U	11 10 10 11 11 12 10	UJ UJ UJ UJ UJ UJ UJ
95M2V02222 4/11/95	Acetone	27.4	1.303	45T003 45R002	10 10	U U	10 10	UJ UJ
95M2V02222 4/11/95	2-Butanone	25.4	0.079	45T003 45R002	10 10	U U	10 10	UJ UJ
95M2V02222 4/11/95	2-Chloroethyl vinylether	36.9	0.330	45T003 45R002	10 10	U U	10 10	UJ UJ
95M2V02222 4/11/95	Acrolein	48.5	0.389	45T003 45R002	100 100	U U	100 100	UJ UJ
95M2V02225 4/11/95	Isobutyl Alcohol	11.1	0.032	All previously qualified due to initial calibration	--	--	--	--
95M2V02225 4/11/95	1,4-Dioxane	0.0	0.007	All previously qualified due to initial calibration	--	--	--	--

Volatile Initial Calibration Summary Table
SDG No. M3003

ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/L or ug/kg	Lab Qual	EDS Conc ug/L or ug/kg	EDS Qual
95M2V02099-95M2V02103 3/31/95	Isobutyl Alcohol	9.1	0.036	44S00201	210	U	210	R
				44S00101	220	U	220	R
				44S00101D	91	J	91	J
				44S00301	210	U	210	R
				44S00401	220	U	220	R
				44S00501	210	U	210	R
				44S00601	210	U	210	R
				44S00701	210	U	210	R
				44S00801	220	U	220	R
				44S00901	210	U	210	R
				44R003	200	U	200	R
				44T004	200	U	200	R
95M2V02099-95M2V02103 3/31/95	1,4-Dioxane	12.0	0.007	44S00201	210	U	210	R
				44S00101	220	U	220	R
				44S00101D	220	U	220	R
				44S00301	210	U	210	R
				44S00401	220	U	220	R
				44S00501	210	U	210	R
				44S00601	210	U	210	R
				44S00701	210	U	210	R
				44S00801	220	U	220	R
				44S00901	210	U	210	R
				44R003	200	U	200	R
				44T004	200	U	200	R

Volatile Continuing Calibration Summary Table SDG No. M3003								
CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	% D	RRF	Affected Samples	Lab Value ug/L or ug/kg	Lab Qual	EDS Value ug/L or ug/kg	EDS Qual
95M2V02202 4/10/95	Isobutyl Alcohol	13.9	0.041	None-All samples previously qualified due to initial calbration	--	--	--	--
95M2V02202 4/10/95	1,4-Dioxane	0.0	0.007	None-All samples previously qualified due to initial calbration	--	--	--	--
95M2V02202 4/10/95	Acetonitrile	30.6	0.350	44S00201 44S00101D 44S00301 44SS0401 44S00501 44S00601	100 110 110 110 100 110	U U U U U U	100 110 110 110 100 110	UJ UJ UJ UJ UJ UJ
95M2V02203 4/10/95	Acetone	52.0	1.555	44S00201 44S00101D 44S00301 44SS0401 44S00501 44S00601	10 11 11 11 10 11	U U U U U U	10 11 11 11 10 11	UJ UJ UJ UJ UJ UJ
95M2V02203 4/10/95	2-Chloroethyl vinylether	27.4	0.175	44S00201 44S00101D 44S00301 44SS0401 44S00501 44S00601	10 11 11 11 10 11	U U U U U U	10 11 11 11 10 11	UJ UJ UJ UJ UJ UJ
95M2V02222 4/11/95	Acetone	27.4	1.303	44S00101 44T004 44R003	11 10 11	U U -	11 10 11	UJ UJ J

95M2V02222 4/11/95	2-Butanone	25.4	0.079	44S00101 44T004 44R003	11 10 10	U U U	11 10 10	UJ UJ UJ
95M2V02222 4/11/95	2-Chloroethyl vinylether	36.9	0.330	44S00101 44T004 44R003	11 10 10	U U U	11 10 10	UJ UJ UJ
95M2V02222 4/11/95	Acrolein	48.5	0.389	44S00101 44T004 44R003	110 100 100	U U U	110 100 100	UJ UJ UJ
95M2V02225 4/11/95	Isobutyl Alcohol	11.1	0.032	None-All samples previously qualified due to initial calibration	--	--	--	--
95M2V02225 4/11/95	1,4-Dioxane	0.0	0.007	None-All samples previously qualified due to initial calibration	--	--	--	--
95M2V02242 4/14/95	Isobutyl Alcohol	11.1	0.040	None-All samples previously qualified due to initial calibration	--	--	--	--
95M2V02242 4/14/95	1,4-Dioxane	14.3	0.006	None-All samples previously qualified due to initial calibration	--	--	--	--

Volatile Initial Calibration Summary Table
SDG No. M3004

ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/L or ug/kg	Lab Qual	EDS Conc ug/L or ug/kg	EDS Qual
95M2V02099-95M2V02103 3/31/95	Isobutyl Alcohol	9.1	0.036	23S00101	210	U	210	R
				23S00201	220	U	220	R
				23S00301	210	U	210	R
				23S00501	200	U	200	R
				23S00401	200	U	200	R
				23S00601	200	U	200	R
				23S00701	230	U	230	R
				23S00801	230	U	230	R
				23S00801D	230	U	230	R
				23S00901	210	U	210	R
				23S01001	210	U	210	R
				23R004	200	U	200	R
				23T005	200	U	200	R
				23S01201	220	U	220	R
				23S01101	220	U	220	R
				23S01301	260	U	260	R
				23S01401	240	U	240	R
				23S01501	230	U	230	R
				23S01601	230	U	230	R
				23S01701	220	U	220	R
				23S01701D	220	U	220	R
				23S01801	220	U	220	R
				23R005	200	U	200	R
				23T006	200	U	200	R

95M2V02099- 95M2V02103 3/31/95	1,4-Dioxane	12.0	0.007	23S00101	210	U	210	R
				23S00201	220	U	220	R
				23S00301	210	U	210	R
				23S00501	200	U	200	R
				23S00401	200	U	200	R
				23S00601	200	U	200	R
				23S00701	230	U	230	R
				23S00801	230	U	230	R
				23S00801D	230	U	230	R
				23S00901	210	U	210	R
				23S01001	210	U	210	R
				23R004	200	U	200	R
				23T005	200	U	200	R
				23S01201	220	U	220	R
				23S01101	220	U	220	R
				23S01301	260	U	260	R
				23S01401	240	U	240	R
				23S01501	230	U	230	R
				23S01601	230	U	230	R
				23S01701	220	U	220	R
				23S01701D	220	U	220	R
				23S01801	220	U	220	R
				23R005	200	U	200	R
				23T006	200	U	200	R

Volatile Continuing Calibration Summary Table
SDG No. M3004

CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	% D	RRF	Affected Samples	Lab Value ug/L or ug/kg	Lab Qual	EDS Value ug/L or ug/kg	EDS Qual
95M2V02222 4/11/95	Acetone	27.4	1.303	23T005	4	J	4	J
				23T006	2	J	2	J
				23R004	10	U	10	UJ
				23R005	10	U	10	UJ
95M2V02222 4/11/95	2-Butanone	25.4	0.079	23T005	10	U	10	UJ
				23T006	10	U	10	UJ
				23R004	10	U	10	UJ
				23R005	10	U	10	UJ
95M2V02222 4/11/95	2-Chloroethyl vinylether	36.9	0.330	23T005	10	U	10	UJ
				23T006	10	U	10	UJ
				23R004	10	U	10	UJ
				23R005	10	U	10	UJ

95M2V02222 4/11/95	Acrolein	48.5	0.389	23T005 23T006 23R004 23R005	100 100 100 100	U U U U	100 100 100 100	UJ UJ UJ UJ
95M2V02225 4/11/95	Isobutyl Alcohol	11.1	0.032	All samples previously qualified due to initial calibration				
95M2V02225 4/11/95	1,4-Dioxane	0.0	0.007	All samples previously qualified due to initial calibration				
95M2V02242 4/14/95	Isobutyl Alcohol	11.1	0.040	All samples previously qualified due to initial calibration				
95M2V02242 4/14/95	1,4-Dioxane	14.3	0.006	All samples previously qualified due to initial calibration				
95M2V02263 4/17/95	Isobutyl Alcohol	8.3	0.039	All samples previously qualified due to initial calibration				
95M2V02263 4/17/95	1,4-Dioxane	14.3	0.006	All samples previously qualified due to initial calibration				
95M2V02264 4/17/95	Acetone	40.8	1.440	23S00901 23S01001 23S01201 23S01501 23S01601 23S01701 23S01701D 23S01801	11 11 11 11 11 11 11 11	U U U U U U U U	11 11 11 11 11 11 11 11	UJ UJ UJ UJ UJ UJ UJ UJ
95M2V02280 4/18/95	Chloromethane	27.6	2.648	23S01101 23S01301 23S01401	11 13 12	U U U	11 13 12	UJ UJ UJ
95M2V02280 4/18/95	Acetone	73.3	1.773	23S01101 23S01301 23S01401	11 13 12	U U U	11 13 12	UJ UJ UJ
95M2V02280 4/18/95	2-Butanone	38.1	0.087	23S01101 23S01301 23S01401	11 13 12	U U U	11 13 12	UJ UJ UJ
95M2V02281 4/18/95	Isobutyl Alcohol	22.2	0.044	All samples previously qualified due to initial calibration				
95M2V02281 4/18/95	1,4-Dioxane	0.0	0.007	All samples previously qualified due to initial calibration				

95M2V02281 4/18/95	Propionitrile	27.2	0.388	23S01101 23S01301 23S01401	110 130 120	U U U	110 130 120	UJ UJ UJ
95M2V02281 4/18/95	Pentachloroethane	56.2	0.171	23S01101 23S01301 23S01401	11 13 12	U U U	11 13 12	UJ UJ UJ

Volatile Initial Calibration Summary Table
SDG No. M3005

ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/L or ug/kg	Lab Qual	EDS Conc ug/L or ug/kg	EDS Qual
EV01201012.D- EV01601016.D 4/12/95	1.4-Dioxane	13.9	0.003	23R006 23T007 23R007 23T008	200 200 200 200	U U U U	200 200 200 200	R R R R
CSVH034705.D- CSVH034708.D 4/12/95	1.4-Dioxane	9.1	0.004	23S01901 23S02001 23S02401 23S02501 23S02601 23S02701 23S02701D 23S02801 23S02101 23S02301 23S02201 24S00101 24S00201 24S00301 24S00401 24S00401D 24S00501	220 230 220 220 210 220 220 220 230 220 230 220 220 220 220 220 220	U U U U U U U U U U U U U U U U U	220 230 220 220 210 220 220 220 230 220 230 220 220 220 220 220 220	R R R R R R R R R R R R R R R R R

Volatile Continuing Calibration Summary Table
SDG No. M3005

CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/L or ug/kg	Lab Qual	EDS Conc ug/L or ug/kg	EDS Qual
EV09501095.D 4/18/95	2-Chloroethylvinyl ether	33.1	0.155	23R006	10	U	10	UJ
				23T007	10	U	10	UJ
				23R007	10	U	10	UJ
				23T008	10	U	10	UJ
EV09601096.D 4/18/95	1,4-Dioxane	1.1	0.003	23R006	200	U	200	R
				23T007	200	U	200	R
				23R007	200	U	200	R
				23T008	200	U	200	R
CS9H034744.D 4/14/95	1,4-Dioxane	1.0	0.004	23S01901	220	U	220	R
				23S02001	230	U	230	R
				23S02401	220	U	220	R
				23S02601	210	U	210	R
				23S02701	220	U	220	R
				23S02701D	220	U	220	R
				23S02801	220	U	220	R
				23S02101	230	U	230	R
				23S02301	220	U	220	R
				23S02201	230	U	230	R
CS9H034766.D 4/17/95	1,4-Dioxane	7.8	0.005	23S02501	220	U	220	R
				24S00101	220	U	220	R
				24S00201	220	U	220	R
				24S00301	220	U	220	R
				24S00401	220	U	220	R
				24S00401D	220	U	220	R
				24S00501	220	U	220	R

Volatile Initial Calibration Summary Table
SDG No. M3006

ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/L or ug/kg	Lab Qual	EDS Conc ug/L or ug/kg	EDS Qual
95M2V02099-95M2V02103 3/31/95	Isobutyl Alcohol	9.1	0.036	14S00301	220	U	220	R
				14S00501	220	U	220	R
				14S01401	210	U	210	R
				14S01101	210	U	210	R
				14S01101D	200	U	200	R
				14S01201	210	U	210	R
				14S00101	220	U	220	R
				14S00201	210	U	210	R
				14S00401	210	U	210	R
				14S00601	210	U	210	R
				14S01301	210	U	210	R
				14S01601	260	U	260	R
				14S01601D	260	U	260	R
				14R008	200	U	200	R
				14T009	200	U	200	R
95M2V02099-95M2V02103 3/31/95	1,4-Dioxane	12.0	0.007	14S00301	220	U	220	R
				14S00501	220	U	220	R
				14S01401	210	U	210	R
				14S01101	210	U	210	R
				14S01101D	200	U	200	R
				14S01201	210	U	210	R
				14S00101	220	U	220	R
				14S00201	210	U	210	R
				14S00401	210	U	210	R
				14S00601	210	U	210	R
				14S01301	210	U	210	R
				14S01601	260	U	260	R
				14S01601D	260	U	260	R
				14R008	200	U	200	R
				14T009	200	U	200	R
95M3V01410-95M2V01414 4/21/95	Isobutyl Alcohol	41.1	0.031	14S00701	210	U	210	R
				14S00801	230	U	230	R
				14S00901	210	U	210	R
				14S01001	220	U	220	R
				14S01701	240	U	240	R

95M3V01410- 95M2V01414 4/21/95	1,4- Dioxane	13.7	0.008	14S00701 14S00801 14S00901 14S01001 14S01701	210 230 210 220 240	U U U U U	210 230 210 220 240	R R R R R
95M3V01410- 95M2V01414 4/21/95	Aceto nitrile	36.4	0.141	None-All non-detects	--	--	--	--

Volatile Continuing Calibration Summary Table
SDG No. M3006

CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/L or ug/kg	Lab Qual	EDS Conc ug/L or ug/kg	EDS Qual
95M2V02280 4/18/95	Chloro methane	27.6	2.648	14S00301 14S00501 14S01101	11 11 10	U U U	11 11 10	UJ UJ UJ
95M2V02280 4/18/95	Acetone	73.3	1.773	14S00301 14S00501 14S01101	11 40 10	U U U	11 40 10	UJ UJ UJ
95M2V02280 4/18/95	2- Butanone	38.1	0.087	14S00301 14S00501 14S01101	11 16 10	U - U	11 16 10	UJ J UJ
95M2V02281 4/18/95	Isobutyl Alcohol	22.2	0.044	None-All samples previously qualified due to initial calibration	--	--	--	--
95M2V02281 4/18/95	1,4- Dioxane	0.0	0.007	None-All samples previously qualified due to initial calibration	--	--	--	--

95M2V02281 4/18/95	Proprio nitrile	27.2	0.388	14S00301 14S00501 14S01101	110 110 100	U U U	110 110 100	UJ UJ UJ
95M2V02281 4/18/95	Penta chloro ethane	56.2	0.171	14S00301 14S00501 14S01101	11 11 10	U U U	11 11 10	UJ UJ UJ
95M2V02328 4/23/95	Isobutyl Alcohol	22.2	0.044	None-All samples previously qualified due to initial calibration	--	--	--	--
95M2V02328 4/23/95	1,4-Dioxane	14.3	0.008	None-All samples previously qualified due to initial calibration	--	--	--	--
95M2V02328 4/23/95	3-Chloro propene	62.4	0.786	14S01401 14S01101D 14S01201 14S00101 14S00201 14S00401 14S00601 14S01301 14S01601 14S01601D 14R008 14T009	5 5 5 5 5 5 5 5 6 7 5 5	U U U U U U U U U U U U	5 5 5 5 5 5 5 5 6 7 5 5	UJ UJ UJ UJ UJ UJ UJ UJ UJ UJ UJ UJ

95M2V02328 4/23/95	Methacryl onitrile	37.0	0.959	14S01401	5	U	5	UJ
				14S01101D	5	U	5	UJ
				14S01201	5	U	5	UJ
				14S00101	5	U	5	UJ
				14S00201	5	U	5	UJ
				14S00401	5	U	5	UJ
				14S00601	5	U	5	UJ
				14S01301	5	U	5	UJ
				14S01601	6	U	6	UJ
				14S01601D	7	U	7	UJ
				14R008	5	U	5	UJ
				14T009	5	U	5	UJ
95M2V02328 4/23/95	Penta chloro ethane	55.1	0.175	14S01401	11	U	11	UJ
				14S01101D	10	U	10	UJ
				14S01201	11	U	11	UJ
				14S00101	11	U	11	UJ
				14S00201	10	U	10	UJ
				14S00401	11	U	11	UJ
				14S00601	11	U	11	UJ
				14S01301	10	U	10	UJ
				14S01601	13	U	13	UJ
				14S01601D	13	U	13	UJ
				14R008	10	U	10	UJ
				14T009	10	U	10	UJ
95M3V01428 4/21/95	Acetone	31.9	0.583	14S00701	11	U	11	UJ
				14S00801	11	U	11	UJ
				14S00901	11	U	11	UJ
				14S01001	26	U	26	UJ
				14S01701	16	U	16	UJ
95M3V01428 4/21/95	Carbon Disulfide	45.4	1.349	14S00701	5	U	5	UJ
				14S00801	6	U	6	UJ
				14S00901	5	U	5	UJ
				14S01001	5	U	5	UJ
				14S01701	6	U	6	UJ
95M3V01429 4/21/95	Isobutyl Alcohol	12.9	0.035	None-All samples previously qualified due to initial calibration	--	--	--	--

95M3V01429 4/21/95	1,4-Dioxane	0.0	0.008	None-All samples previously qualified due to initial calibration	--	--	--	--

Volatile Initial Calibration Summary Table
SDG No. M3008

ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/L or ug/kg	Lab Qual	EDS Conc ug/L or ug/kg	EDS Qual
EV01201012.D-EV01601016.D 4/12/95	1,4-Dioxane	13.9	0.003	25R010 25T011	200 200	U U	200 200	R R
CSVH034705.D-CSVH034708.D 4/12/95	1,4-Dioxane	9.1	0.004	25S00101 25S00601 25S00701 25S00801 25S00901 25S00201 25S00301 25S00401 25S00401D 25S00501	210 270 220 220 220 220 220 240 220 230	U U U U U U U U U U	210 270 220 220 220 220 220 240 220 230	R R R R R R R R R R

Volatile Continuing Calibration Summary Table
SDG No. M3008

CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%	RRF	Affected Sample	Lab Conc ug/L or ug/kg	Lab Qual	EDS Conc ug/L or ug/kg	EDS Qual
EV09501095.D 4/18/95	2-Chloroethylvinyl ether	33.1	0.155	25R010 25T011	10 10	U U	10 10	UJ UJ

EV09601096.D 4/18/95	1,4-Dioxane	1.1	0.003	Previously qualified due to initial calibration	--	--	--	--
CS9H034787.D 4/19/95	Isobutyl Alcohol	32.3	0.084	25S00101 25S00601 25S00701 25S00801 25S00901 25S00201 25S00301 25S00401 25S00401D	210 270 220 220 220 220 220 240 220	U U U U U U U U U	210 270 220 220 220 220 220 240 220	UJ UJ UJ UJ UJ UJ UJ UJ UJ
CS9H034787.D 4/19/95	1,4-Dioxane	22.2	0.005	Previously qualified due to initial calibration	--	--	--	--
CSVH034805.D 4/20/95	Acrolein	35.9	0.159	25S00501	110	U	110	UJ
CSVH034805.D 4/20/95	Acrylonitrile	29.8	0.264	25S00501	110	U	110	UJ
CSVH034806.D 4/20/95	1,4-Dioxane	14.5	0.005	Previously qualified due to inital calibration	--	--	--	--

Volatile Initial Calibration Summary Table
SDG No. M3009

ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/L or ug/kg	Lab Qual	EDS Conc ug/L or ug/kg	EDS Qual
EV01201012.D-EV01601016.D 4/12/95	1,4-Dioxane	13.9	0.003	17R011 17T012	200 200	U U	200 200	R R

CSVH034705.D- CSVH034708.D 4/12/95	1,4-Dioxane	9.1	0.004	17S00301	220	U	220	R
				17S00201	220	U	220	R
				17S00101	210	U	210	R
				17S00101D	210	U	210	R
				17S00401	220	U	220	R
				17S01001	220	U	220	R
				17S01101	210	U	210	R
				17S01201	210	U	210	R
				17S00801	220	U	220	R
				17S00701	220	U	220	R
				17S00901	220	U	220	R
				17S00901D	220	U	220	R

Volatile Continuing Calibration Summary Table
SDG No. M3009

CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/L or ug/kg	Lab Qual	EDS Conc ug/L or ug/kg	EDS Qual
EV03001030.D 4/21/95	Acrolein	28.6	0.187	17R011	100	U	100	UJ
				17T012	100	U	100	UJ
EV03101031.D 4/21/95	1,4-Dioxane	1.8	0.003	None-All samples previously qualified due to initial calibration	--	--	--	--
CS9H034805.D 4/20/95	Acrolein	35.9	0.159	17S00301	110	U	110	UJ
				17S00201	110	U	110	UJ
				17S00201	100	U	100	UJ
				17S00101D	100	U	100	UJ
				17S00401	110	U	110	UJ
				17S01001	110	U	110	UJ
				17S01101	100	U	100	UJ
				17S01201	110	U	110	UJ
				17S00801	110	U	110	UJ
				17S00701	110	U	110	UJ
				17S00901	110	U	110	UJ
				17S00901D	110	U	110	UJ

CSVH034805.D 4/20/95	Acrylonitrile	29.8	0.264	17S00301	110	U	110	UJ
				17S00201	110	U	110	UJ
				17S00201	100	U	100	UJ
				17S00101D	100	U	100	UJ
				17S00401	110	U	110	UJ
				17S01001	110	U	110	UJ
				17S01101	100	U	100	UJ
				17S01201	110	U	110	UJ
				17S00801	110	U	110	UJ
				17S00701	110	U	110	UJ
				17S00901	110	U	110	UJ
				17S00901D	110	U	110	UJ
CS9H034806.D 4/20/95	1,4-Dioxane	14.5	0.005	None-All samples were previoulsy qualified due to initial calibration	--	--	--	--

Volatile Initial Calibration Summary Table
SDG No. M3010

ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/L or ug/kg	Lab Qual	EDS Conc ug/L or ug/kg	EDS Qual
EV01201012.D-EV01601016.D 4/12/95	1,4-Dioxane	13.9	0.003	18Y002	200	U	200	R
				18R012	200	U	200	R
				18T013	200	U	200	R
				14T014	200	U	200	R
CSVH034705.D-CSVH034708.D 4/12/95	1,4-Dioxane	9.1	0.004	18D00201	210	U	210	R
				18D00101	230	U	230	R
				18D00101D	230	U	230	R
				18D00301	220	U	220	R
				14D00101	240	U	240	R
				14D00201	1200	U	1200	R
				14D00301	260	U	260	R
				14D00701	250	U	250	R
				14D00801	250	U	250	R
				14D00401	1300	U	1300	R
				14D00501	1200	U	1200	R
				14D00601	1300	U	1300	R
				14D00601D	1300	U	1300	R

Volatile Continuing Calibration Summary Table
SDG No. M3010

CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/L or ug/kg	Lab Qual	EDS Conc ug/L or ug/kg	EDS Qual
EV00601006.D 5/1/95	Acrolein	25.5	0.195	18Y002	100	U	100	UJ
				18R012	100	U	100	UJ
				18T013	100	U	100	UJ
				14T014	100	U	100	UJ
EV00601006.D 5/1/95	1,4-Dioxane	3.8	0.003	None-All samples previously qualified due to initial calibration	--	--	--	--
CSVH034906.D 4/30/95	Acrolein	40.2	0.149	18D00201	100	U	100	UJ
				18D00101	120	U	120	UJ
				18D00301	110	U	110	UJ
				14D00101	120	U	120	UJ
				14D00201	620	U	620	UJ
				14D00701	120	U	120	UJ
				14D00801	130	U	130	UJ
				14D00401	640	U	640	UJ
				14D00501	620	U	620	UJ
				14D00601	660	U	660	UJ
				14D00601D	640	U	640	UJ
CSVH034906.D 4/30/95	Acrylonitrile	25.3	0.281	18D00201	100	U	100	UJ
				18D00101	120	U	120	UJ
				18D00301	110	U	110	UJ
				14D00101	120	U	120	UJ
				14D00201	620	U	620	UJ
				14D00701	120	U	120	UJ
				14D00801	130	U	130	UJ
				14D00401	640	U	640	UJ
				14D00501	620	U	620	UJ
				14D00601	660	U	660	UJ
				14D00601D	640	U	640	UJ

CS9H034907.D 4/30/95	1,4-Dioxane	6.5	0.004	None-All samples previously qualified due to initial calibration	--	--	--	--
CSVH034923.D 5/2/95	Acrolein	32.2	0.169	14D00301	130	U	130	UJ
CS9H034924.D 5/2/95	1,4-Dioxane	6.3	0.004	None-All samples previously qualified due to initial calibration	--	--	--	--
CSVH034941.D 5/3/95	Acrolein	27.7	0.180	18D00101D	120	U	120	UJ
CS9H034944.D 5/3/95	1,4-Dioxane	6.5	0.004	None-All samples previously qualified due to initial calibration	--	--	--	--

Volatile Initial Calibration Summary Table
SDG No. M3011

ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/L or ug/kg	Lab Qual	EDS Conc ug/L or ug/kg	EDS Qual
95M3V01410-95M3V01414 4/21/95	Isobutyl Alcohol	41.1	0.031	14T015 14R013 14W004 14W004D 14W005	200	U	200	R
95M3V01410-95M3V01414 4/21/95	Acetonitrile	36.4	0.141	None-All were non-detects	--	--	--	--

95M3V01410-95M3V01414 4/21/95	1,4-Dioxane	13.7	0.008	14T015 14R013 14W004 14W004D 14W005	200	U	200	R
95M3V01489-95M3V01493 4/28/95	Iodomethane	38.8	2.614	None-All were non-detects	--	--	--	--

Volatile Continuing Calibration Summary Table
SDG No. M3011

CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/L or ug/kg	Lab Qual	EDS Conc ug/l or ug/kg	EDS Qual
95M3V01583 5/5/95	Isobutyl Alcohol	38.7	0.019	None-All sample previously qualified due to initial calibration	--	--	--	--
95M3V01583 5/5/95	1,4-Dioxane	75.0	0.002	None-All sample previously qualified due to initial calibration	--	--	--	--
95M3V01583 5/5/95	Dichlorodifluoro methane	30.1	0.536	14T015 14R013 14W004 14W004D 14W005	10	U	10	UJ
95M3V01583 5/5/95	Acetonitrile	28.4	0.181	14T015 14R013 14W004 14W004D 14W005	100	U	100	UJ

95M3V01586 5/5/95	Trichlorofluoro methane	57.1	2.586	14T015 14R013 14W004 14W004D 14W005	5	U	5	UJ
95M3V01586 5/5/95	1,2-Dichloroethane	34.1	2.608	14T015 14R013 14W004 14W004D 14W005	5	U	5	UJ
95M3V01586 5/5/95	Carbon Tetrachloride	34.1	0.857	14T015 14R013 14W004 14W004D 14W005	5	U	5	UJ
95M3V01586 5/5/95	2-Chloroethyl vinylether	41.4	0.297	14T015 14R013 14W004 14W004D 14W005	10	U	10	UJ
95M3V01586 5/5/95	Acrolein	27.0	0.138	14T015 14R013 14W004 14W004D 14W005	100	U	100	UJ
95M3V01586 5/5/95	Iodomethane	28.5	3.360	14T015 14R013 14W004 14W004D 14W005	10	U	10	UJ

Volatile Initial and Continuing Calibration Summary Tables

Volatile Initial Calib ..on Summary Table SDG No. M3012								
ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/L or ug/kg	Lab Qual	EDS Conc ug/L or ug/kg	EDS Qual
CSVH034705.D-CSVH034708.D 4/12/95	1,4-Dioxane	7.6	0.004	24S00601	210	U	210	R
				14S02001	210	U	210	R
				14S02001D	210	U	210	R
				14S01901	200	U	200	R
				18S00201	220	U	220	R
				18S00101	220	U	220	R
CSVO034864.D-CSVO034867.D 4/26/95	Isobutyl Alcohol	5.0	0.037	14T016	200	U	200	R
				14R014	200	U	200	R
CSVO034864.D-CSVO034867.D 4/26/95	1,4-Dioxane	8.8	0.003	14T016	200	U	200	R
				14R014	200	U	200	R

Volatile Continuing Calibration Summary Table SDG No. M3012								
CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/L or ug/kg	Lab Qual	EDS Conc ug/L or ug/kg	EDS Qual
CSVH034923.D 5/2/95	Acrolein	32.2	0.169	24S00601	100	U	100	UJ
				14S02001	100	U	100	UJ
				14S02001D	110	U	110	UJ
				14S01901	100	U	100	UJ
				18S00201	110	U	110	UJ
				18S00101	110	U	110	UJ
CSVH034924.D 5/2/95	1,4-Dioxane	6.3	0.004	Samples were previously qualified due to initial calibration	--	--	--	--

CSIX034892.D 4/27/95	Isobutyl Alcohol	1.2	0.038	Samples were previously qualified due to initial calibration	--	--	--	--
CSIX034892.D 4/27/95	1,4-Dioxane	1.6	0.003	Samples were previously qualified due to initial calibration	--	--	--	--

Volatile Initial Calibration Summary Table
SDG No. M3013

ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/l or ug/kg	Lab Qual	EDS Conc ug/l or ug/kg	EDS Qual
EV01201012.D-EV01601016.D 4/12/95	1,4-Dioxane	13.9	0.003	01T017	200	U	200	R
				01Y003	200	U	200	R
				01R015	200	U	200	R
CSVH034705.D-CSVH034708.D 4/12/95	1,4-Dioxane	9.1	0.004	01S00101	220	U	220	R
				01S00101D	220		220	
				01B00109	240		240	
				01S00201	220		220	
				01B00208	220		220	
				01S00301	210		210	
				01S00401	210		210	
				01B00308	220		220	
				01B00409	220		220	
				01S00501	210		210	
				01B00508	210		210	
				01S00601	210		210	
				01B00608	230		230	
				01B00608D	240		240	
				01S00701	230		230	
				01B00708	210		210	

Volatile Continuing Calibration Summary Table SDG No. M3013								
CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/l or ug/kg	Lab Qual	EDS Conc ug/l or ug/kg	EDS Qual
EV02501025.D 5/12/95	Acrolein	32.0	0.178	01T017 01Y003 01R015	100 100 100	U U U	100 100 100	UJ UJ UJ
EV02601026.D 5/12/95	1,4-Dioxane	4.8	0.003	None-All samples previously qualified due to initial calibration	--	--	--	--
CSVH035088.D 5/11/95	Acrolein	34.2	0.163	01S00101 01B00109 01S00201 01B00208 01S00301 01S00401 01B00308 01B00409 01S00501	110 120 110 110 100 110 110 110 100	U U U U U U U U U	110 120 110 110 100 110 110 110 100	UJ UJ UJ UJ UJ UJ UJ UJ UJ
CS9H035089.D 5/11/95	1,4-Dioxane	4.4	0.004	None-All samples previously qualified due to initial calibration	--	--	--	--
CSVH035104.D 5/12/95	Acrolein	34.1	0.164	01S00101D 01B00608 01B00608D 01S00701 01B00708	110 110 120 110 110	U U U U U	110 110 120 110 110	UJ UJ UJ UJ UJ
CS9H035105.D 5/12/95	1,4-Dioxane	16.6	0.005	None-All samples previously qualified due to initial calibration	--	--	--	--

CSVH035117.D 5/12/95	Bromomethane	25.3	1.870	01B00508 01S00601	11 10	U U	11 10	UJ UJ
CSVH035117.D 5/12/95	Acrolein	29.6	0.175	01B00508 01S00601	110 100	U U	110 100	UJ UJ
CS9H037118.D 5/12/95	Isobutyl Alcohol	26.2	0.080	01B00508 01S00601	210 210	U U	210 210	UJ UJ
CS9H037118.D 5/12/95	1,4-Dioxane	15.1	0.005	None-All samples previously qualified due to initial calibration	--	--	--	--

Volatile Initial Calibration Summary Table
SDG No. M3015

ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/l or ug/kg	Lab Qual	EDS Conc ug/l or ug/kg	EDS Qual
EV01201012.D- EV01601016.D 4/12/95	1,4-Dioxane	13.9	0.003	23T020 23R017 23T017 23Y004	200 200 200 200	U U U U	200 200 200 200	R R R R
CSVH034705.D- CSVH034708.D 4/12/95	1,4-Dioxane	9.1	0.004	24S00701 24S00701D 24B00707 23B00105 44B00107 23B00406 23B01606 23B02407 23B02807 23S02901 23S02901D 23B02908 23B02108 44B00908 45S00801 45B00805 01S00801 01B00807	220 220 220 240 220 220 210 220 220 220 210 210 230 220 210 220 210 210	U	220 220 220 240 220 220 210 220 220 220 210 210 230 220 210 220 210 210	R

Volatile Continuing Calibration Summary Table SDG No. M3015								
CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/l or ug/kg	Lab Qual	EDS Conc ug/l or ug/kg	EDS Qual
EV07201072.D 5/25/95	1,4-Dioxane	5.8	0.003	None-All samples previously qualified due to initial calibration results				
CSVH035290.D 5/25/95	Bromomethane	32.5	1.977	24S00701D 24B00707 23B00105 44B00107 23B00406 23B01606	11 11 12 11 11 11	U U U U U U	11 11 12 11 11 11	UJ UJ UJ UJ UJ UJ
CS9H035291.D 5/25/95	1,4-Dioxane	10.4	0.005	None-All samples previously qualified due to initial calibration results				
CS9H035311.D 5/26/95	1,4-Dioxane	9.8	0.005	None-All samples previously qualified due to initial calibration results				
CSVH035331.D 5/30/95	Bromomethane	34.4	2.005	24S00701 01S00801	11 10	U U	11 10	UJ UJ
CSVH035331.D 5/30/95	Dichlorodifluoro methane	35.3	1.184	24S00701 01S00801	11 10	U U	11 10	UJ UJ
CS9H035332.D 5/30/95	1,4-Dioxane	7.9	0.004	None-All samples previously qualified due to initial calibration results				

Volatile Initial Calibration Summary Table SDG No. M3016								
ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/l or ug/kg	Lab Qual	EDS Conc ug/l or ug/kg	EDS Qual
EV01201012.D- EV01601016.D 4/12/95	1,4-Dioxane	13.9	0.003	14T022 14R018 14T023	200 200 200	U U U	200 200 200	R R R

CSVH034705.D-CSVH034708.D 4/12/95	1,4-Dioxane	9.1	0.004	14S02101	220	U	220	R
				14B02105	220		220	
				14S02201	220		220	
				14B02203	260		260	
				14S02301	220		220	
				14B02303	240		240	
				14S02401	220		220	
				14B02403	240		240	
				14B02504	230		230	
				18S00301	210		210	
				18S00301D	210		210	
				18B00304	230		230	
				14B01404	250		250	
				14B00204	240		240	
				18B00204	240		240	
				18B00204D	240		240	
				14B01004	250		250	
				14B01904	240		240	
				14S01501	210		210	
				14B00704	250		250	
				14B02403R1	240		240	
				14B02403R2	240		240	

Volatile Continuing Calibration Summary Table
SDG No. M3016

CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/l or ug/kg	Lab Qual	EDS Conc ug/l or ug/kg	EDS Qual
FV07201072.D 5/25/95	1,4-Dioxane	5.8	0.003	None-All samples previously qualified due to initial calibration results				
FV06501065.D 6/2/95	1,4-Dioxane	11.2	0.004	None-All samples previously qualified due to initial calibration results				
FV06501065.D 6/2/95	1,2-Dibromo-3-chloropropane	25.6	0.145	14T023	10	U	10	UJ
CS9H035311.D 5/26/95	1,4-Dioxane	9.8	0.005	None-All samples previously qualified due to initial calibration results				

CSVH035331.D 5/30/95	Bromomethane	34.4	2.005	14B02203	13	U	13	UJ
				14S02301	11	U	11	UJ
				14B02303	12	U	12	UJ
				14S02401	11	U	11	UJ
				14B02403	12	U	12	UJ
				14B02504	11	U	11	UJ
				18S00301	10	U	10	UJ
				18S00301D	10	U	10	UJ
				18B00304	11	U	11	UJ
				14B01404	12	U	12	UJ
CSVH035331.D 5/30/95	Dichlorodifluoro methane	35.3	1.184	14B02203	13	U	13	UJ
				14S02301	11	U	11	UJ
				14B02303	12	U	12	UJ
				14S02401	11	U	11	UJ
				14B02403	12	U	12	UJ
				14B02504	11	U	11	UJ
				18S00301	10	U	10	UJ
				18S00301D	10	U	10	UJ
				18B00304	11	U	11	UJ
				14B01404	12	U	12	UJ
CS9H035332.D 5/30/95	1,4-Dioxane	7.9	0.004	None-All samples previously qualified due to initial calibration results				
CS9H035373.D 6/1/95	1,4-Dioxane	6.6	0.005	None-All samples previously qualified due to initial calibration results				
CS9H035451.D 6/5/95	1,4-Dioxane	0.6	0.004	None-All samples previously qualified due to initial calibration results				

Volatile Initial Calibration Summary Table
SDG No. M3017

ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/l or ug/kg	Lab Qual	EDS Conc ug/l or ug/kg	EDS Qual
FV01201012.D-FV01601016.D 4/12/95	1,4-Dioxane	13.9	0.003	14T024	200	U	200	R
				14R019	200	U	200	R

CSVH034705.D-CSVH034708.D 4/12/95	1,4-Dioxane	9.1	0.004	14B00604	240	U	240	R
				14B00804	240		240	
				18S00401	210		210	
				18S00401D	210		210	
				18B00404	250		250	
				17S01301	210		210	
				17B01305	230		230	
				17S01401	210		210	
				17B01405	260		260	
				17S01501	220		220	
				17B01505	240		240	
				17B01505D	240		240	
				17S00601	220		220	
				17S00501	220		220	
				45S01001	210		210	
				45B01005	240		240	
				44S01001	220		220	
				44B01006	240		240	

Volatile Continuing Calibration Summary Table
SDG No. M3017

CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/l or ug/kg	Lab Qual	EDS Conc ug/l or ug/kg	EDS Qual
EV06501065.D 6/2/95	1,4-Dioxane	11.2	0.004	None-All samples previously qualified due to initial calibration results				
EV06501065.D 6/2/95	1,2-Dibromo-3-chloropropane	25.6	0.145	14T024	10	U	10	UJ
				14R019	10	U	10	UJ
CSVH035415.D 6/3/95	Iodomethane	25.8	2.155	14B00604	12	U	12	UJ
				14B00804	12	U	12	UJ
				18S00401	10	U	10	UJ
				18S00401D	10	U	10	UJ
				18B00404	12	U	12	UJ
				17S01301	10	U	10	UJ
				17B01305	11	U	11	UJ
				17S01401	11	U	11	UJ
				17B01405	13	U	13	UJ
				17S01501	11	U	11	UJ
				17B01505D	12	U	12	UJ
				17S00601	11	U	11	UJ

CS9H035416.D 6/3/95	1,4-Dioxane	8.1	0.004	None-All samples previously qualified due to initial calibration results				
CS9H035416.D 6/3/95	Pentachloroethane	26.2	0.484	14B00604	12	U	12	UJ
				14B00804	12	U	12	UJ
				18S00401	10	U	10	UJ
				18S00401D	10	U	10	UJ
				18B00404	12	U	12	UJ
				17S01301	10	U	10	UJ
				17B01305	11	U	11	UJ
				17S01401	11	U	11	UJ
				17B01405	13	U	13	UJ
				17S01501	11	U	11	UJ
				17B01505D	12	U	12	UJ
				17S00601	11	U	11	UJ
CSVH035433.D 6/4/95	Bromomethane	30.9	1.953	17B01505	12	U	12	UJ
				17S00501	11	U	11	UJ
				45S01001	11	U	11	UJ
				44B01006	12	U	12	UJ
				45B01005	12	U	12	UJ
CSVH035433.D 6/4/95	Iodomethane	25.5	2.164	17B01505	12	U	12	UJ
				17S00501	11	U	11	UJ
				45S01001	11	U	11	UJ
				44B01006	12	U	12	UJ
				45B01005	12	U	12	UJ
CS9H035434.D 6/4/95	1,4-Dioxane	6.0	0.004	None-All samples previously qualified due to initial calibration results				
CS9H035451.D 6/5/95	1,4-Dioxane	0.6	0.004	None-All samples previously qualified due to initial calibration results				

Volatile Initial Calibration Summary Table
SDG No. M3018

ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/l or ug/kg	Lab Qual	EDS Conc ug/l or ug/kg	EDS Qual
95M2V02938-95M2V02942 6/8/95	Isobutyl Alcohol	23.4	0.019	TCT025	200	U	200	R
				TCR020	200	U	200	R
				TCS00101	220	U	220	R
				TCB00103	230	U	230	R
				TCS00201	230	U	230	R
				TCB00203	260	U	260	R
				TCS00301	210	U	210	R
				TCB00303	250	U	250	R
				TCS00401	230	U	230	R
				TCS00401D	220	U	220	R
				TCB00403	230	U	230	R
95M2V02938-95M2V02942 6/8/95	1,4-Dioxane	14.9	0.003	TCT025	200	U	200	R
				TCR020	200	U	200	R
				TCS00101	220	U	220	R
				TCB00103	230	U	230	R
				TCS00201	230	U	230	R
				TCB00203	260	U	260	R
				TCS00301	210	U	210	R
				TCB00303	250	U	250	R
				TCS00401	230	U	230	R
				TCS00401D	220	U	220	R
				TCB00403	230	U	230	R
95M2V02938-95M2V02942 6/8/95	2-Butanone	10.4	0.042	TCT025	10	U	10	R
				TCR020	10	U	10	J
				TCS00101	11	U	11	R
				TCB00103	12	U	12	R
				TCS00201	11	U	11	R
				TCB00203	13	U	13	R
				TCS00301	10	U	10	R
				TCB00303	12	U	12	R
				TCS00401	11	U	11	R
				TCS00401D	11	U	11	R
				TCB00403	11	U	11	R

Volatile Continuing Calibration Summary Table
SDG No. M3018

CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/l or ug/kg	Lab Qual	EDS Conc ug/l or ug/kg	EDS Qual
95M2V02958 6/9/95	Isobutyl Alcohol	0.0	0.019	None-All samples previously qualified due to initial calibration results				
95M2V02958 6/9/95	1,4-Dioxane	0.0	0.003	None-All samples previously qualified due to initial calibration results				
95M2V02959 6/9/95	2-Butanone	2.4	0.041	None-All samples previously qualified due to initial calibration results				
95M2V02959 6/9/95	Acrolein	37.2	0.107	TCS00401	110	U	110	UJ
				TCB00103	120	U	120	UJ
				TCS00201	110	U	110	UJ
				TCB00203	130	U	130	UJ
				TCS00301	100	U	100	UJ
				TCB00303	120	U	120	UJ
95M2V02977 6/12/95	Isobutyl Alcohol	5.3	0.018	None-All samples previously qualified due to initial calibration results				
95M2V02977 6/12/95	1,4-Dioxane	33.3	0.002	None-All samples previously qualified due to initial calibration results				
95M2V02978 6/12/95	Acetone	47.0	1.120	TCT025	10	U	10	UJ
				TCR020	10	U	10	UJ
95M2V02978 6/12/95	2-Butanone	16.7	0.049	None-All samples previously qualified due to initial calibration results				
95M2V02997 6/12/95	Isobutyl Alcohol	21.0	0.023	None-All samples previously qualified due to initial calibration results				
95M2V02997 6/12/95	1,4-Dioxane	33.3	0.004	None-All samples previously qualified due to initial calibration results				
95M2V02998 6/12/95	2-Butanone	16.7	0.035	None-All samples previously qualified due to initial calibration results				
95M2V02998 6/12/95	Acrolein	25.6	0.058	TCS00401D	110	U	110	UJ
				TCB00403	110	U	110	UJ
				TCS00101	110	U	110	UJ

Volatile Initial Calibration Summary Table
SDG No. M3020

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
95M2V02936-95M2V02942 6/8/95	Isobutyl Alcohol	23.4	0.019	23T029	200	U	200	R
				23R022	200	U	200	R
				23G00701	200	U	200	R
				23T030	200	U	200	R
				23G00101	200	U	200	R
				23G00101D	200	U	200	R
				23G00201	200	U	200	R
				23G00301	200	U	200	R
				23G00601	200	U	200	R
95M2V02936-95M2V02942 6/8/95	1,4-Dioxane	14.9	0.003	23T029	200	U	200	R
				23R022	200	U	200	R
				23G00701	200	U	200	R
				23T030	200	U	200	R
				23G00101	200	U	200	R
				23G00101D	200	U	200	R
				23G00201	200	U	200	R
				23G00301	200	U	200	R
				23G00601	200	U	200	R
95M2V02950-95M2V02956 6/9/95	2-Butanone	10.4	0.042	23T029	10	U	10	R
				23R022	12	-	12	J
				23G00701	10	U	10	R
				23T030	10	U	10	R
				23G00101	10	U	10	R
				23G00101D	10	U	10	R
				23G00201	10	U	10	R
				23G00301	10	U	10	R
				23G00601	10	U	10	R

Volatile Continuing Calibration Summary Table SDG No. M3020								
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
95M2V02997 6/12/95	Isobutyl Alcohol	21.0	0.023	None-All samples previously qualified due to initial calibration results				
95M2V02997 6/12/95	1,4-Dioxane	33.3	0.004	None-All samples previously qualified due to initial calibration results				
95M2V02998 6/12/95	2-Butanone	16.7	0.035	None-All samples previously qualified due to initial calibration results				
95M2V02998 6/12/95	Acrolein	25.6	0.058	23T029 23R022 23G00101 23G00701	100 100 100 100	U U U U	100 100 100 100	UJ UJ UJ UJ
95M2V03021 6/13/95	2-Butanone	0.0	0.042	None-All samples previously qualified due to initial calibration results				
95M2V03021 6/13/95	Acrolein	25.6	0.058	23T030 23G00101D 23G00201 23G00301 23G00601	100 100 100 100 100	U U U U U	100 100 100 100 100	UJ UJ UJ UJ UJ

Volatile Initial Calibration Summary Table
SDG No. M3021

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
95M2V02936-95M2V02942 6/8/95	Isobutyl Alcohol	23.4	0.019	23T031	200	U	200	R
				23R023	200	U	200	R
				23G00401	200	U	200	R
				23G00401D	200	U	200	R
				44G00201	200	U	200	R
				01G00301	200	U	200	R
				01G00201	200	U	200	R
				23T032	200	U	200	R
				23G00501	200	U	200	R
				01G00101	200	U	200	R
				44G00101	200	U	200	R
				44G00301	200	U	200	R
				24G00101	200	U	200	R
				45T033	200	U	200	R
				45G00201	200	U	200	R
				45G00201D	200	U	200	R
				45G00101	200	U	200	R
95M2V02936-95M2V02942 6/8/95	1,4-Dioxane	14.9	0.003	23T031	200	U	200	R
				23R023	200	U	200	R
				23G00401	200	U	200	R
				23G00401D	200	U	200	R
				44G00201	200	U	200	R
				01G00301	200	U	200	R
				01G00201	200	U	200	R
				23T032	200	U	200	R
				23G00501	200	U	200	R
				01G00101	200	U	200	R
				44G00101	200	U	200	R
				44G00301	200	U	200	R
				24G00101	200	U	200	R
				45T033	200	U	200	R
				45G00201	200	U	200	R
				45G00201D	200	U	200	R
				45G00101	200	U	200	R

95M2V02950- 95M2V02956 6/9/95	2-Butanone	10.4	0.042	23T031	10	U	10	R
				23R023	66	-	66	J
				23G00401	10	U	10	R
				23G00401D	10	U	10	R
				44G00201	10	U	10	R
				01G00301	10	U	10	R
				01G00201	10	U	10	R
				23T032	10	U	10	R
				23G00501	10	U	10	R
				01G00101	10	U	10	R
				44G00101	10	U	10	R
				44G00301	10	U	10	R
				24G00101	10	U	10	R
				45T033	10	U	10	R
				45G00201	10	U	10	R
				45G00201D	10	U	10	R
				45G00101	10	U	10	R

Volatile Continuing Calibration Summary Table
SDG No. M3021

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
95M2V03020 6/13/95	Isobutyl Alcohol	10.5	0.017	None-All samples previously qualified due to initial calibration results				
95M2V03020 6/13/95	1,4-Dioxane	33.3	0.002	None-All samples previously qualified due to initial calibration results				
95M2V03021 6/13/95	2-Butanone	0.0	0.042	None-All samples previously qualified due to initial calibration results				
95M2V03021 6/13/95	Acrolein	25.6	0.058	23G00401	100	U	100	UJ
				23T031	100	U	100	UJ
				23R023	100	U	100	UJ
				23G00401D	100	U	100	UJ
				44G00201	100	U	100	UJ
				01G00301	100	U	100	UJ

95M2V03041 6/14/95	Acetone	28.2	0.977	23T032	10	U	10	UJ
				01G00201	10	U	10	UJ
				23G00501	10	U	10	UJ
				01G00101	10	U	10	UJ
				45T033	10	U	10	UJ
				44G00101	10	U	10	UJ
				44G00301	10	U	10	UJ
				24G00101	10	U	10	UJ
				45G00201	10	U	10	UJ
				45G00201D	10	U	10	UJ
				45G00101	10	U	10	UJ
95M2V03041 6/14/95	2-Butanone	7.1	0.045	None-All samples previously qualified due to initial calibration results				
95M2V03041 6/14/95	Acrolein	46.2	0.042	23T032	100	U	100	R
				01G00201	100	U	100	R
				23G00501	100	U	100	R
				01G00101	100	U	100	R
				45T033	100	U	100	R
				44G00101	100	U	100	R
				44G00301	100	U	100	R
				24G00101	100	U	100	R
				45G00201	100	U	100	R
				45G00201D	100	U	100	R
				45G00101	100	U	100	R

Volatile Initial Calibration Summary Table
SDG No. M3022

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
95M2V02936-95M2V02942 6/8/95	Isobutyl Alcohol	23.4	0.019	14T034	200	U	200	R
				14Y006	200	U	200	R
				14R024	200	U	200	R
				14G00401	200	U	200	R
				14G00401D	200	U	200	R
				14T035	200	U	200	R
				14G00101	200	U	200	R
				14G00201	200	U	200	R
				14T036	200	U	200	R
				14G00601	200	U	200	R
				14G00301	200	U	200	R
				14G01201	200	U	200	R
				14G00501	200	U	200	R
				14G00801	200	U	200	R
95M2V02936-95M2V02942 6/8/95	1,4-Dioxane	14.9	0.003	14T034	200	U	200	R
				14Y006	200	U	200	R
				14R024	200	U	200	R
				14G00401	200	U	200	R
				14G00401D	200	U	200	R
				14T035	200	U	200	R
				14G00101	200	U	200	R
				14G00201	200	U	200	R
				14T036	200	U	200	R
				14G00601	200	U	200	R
				14G00301	200	U	200	R
				14G01201	200	U	200	R
				14G00501	200	U	200	R
				14G00801	200	U	200	R
95M2V02950-95M2V02956 6/9/95	2-Butanone	10.4	0.042	14T034	10	U	10	R
				14R024	19	U	19	R
				14G00401D	10	U	10	R

95M2V03094- 95M2V03099 6/22/95	2-Butanone	17.2	0.028	14Y006	47	J	47	J
				14G00401	10	U	10	R
				14T035	10	U	10	R
				14G00101	10	U	10	R
				14G00201	10	U	10	R
				14T036	10	U	10	R
				14G00601	10	U	10	R
				14G00301	10	U	10	R
				14G01201	10	U	10	R
				14G00501	10	U	10	R
				14G00801	10	U	10	R

Volatile Continuing Calibration Summary Table
SDG No. M3022

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
95M2V03061 6/15/95	Isobutyl Alcohol	5.3	0.018	None-All samples previously qualified due to initial calibration results				
95M2V03061 6/15/95	1,4-Dioxane	33.3	0.002	None-All samples previously qualified due to initial calibration results				
95M2V03061 6/15/95	Dichlorodifluoro methane	28.0	1.326	14T034	10	U	10	UJ
				14R024	10	U	10	UJ
				14G00401D	10	U	10	UJ
95M2V03062 6/15/95	2-Butanone	16.7	0.035	None-All samples previously qualified due to initial calibration results				
95M2V03062 6/15/95	Trichlorofluoro methane	28.4	3.171	14T034	5	U	5	UJ
				14R024	5	U	5	UJ
				14G00401D	5	U	5	UJ
95M2V03062 6/15/95	Acrolein	55.1	0.035	14T034	100	U	100	R
				14R024	100	U	100	R
				14G00401D	100	U	100	R
95M2V03094 6/22/95	2-Butanone	21.4	0.022	None-All samples previously qualified due to initial calibration results				

95M2V03101 6/22/95	Acetonitrile	41.2	0.104	14Y006 14G00401 14T035 14G00101 14G00201 14T036 14G00601	100 100 100 100 100 100 100	U U U U U U U	100 100 100 100 100 100 100	UJ UJ UJ UJ UJ UJ UJ
95M2V03101 6/22/95	Isobutyl Alcohol	5.3	0.020	None-All samples previously qualified due to initial calibration results				
95M2V03101 6/22/95	1,4-Dioxane	33.3	0.004	None-All samples previously qualified due to initial calibration results				
95M2V03101 6/22/95	1,2-Dibromo-3-chloropropane	28.0	0.154	14Y006 14G00401 14T035 14G00101 14G00201 14T036 14G00601	10 10 10 10 10 10 10	U U U U U U U	10 10 10 10 10 10 10	UJ UJ UJ UJ UJ UJ UJ
95M2V03115 6/23/95	Isobutyl Alcohol	36.8	0.012	None-All samples previously qualified due to initial calibration results				
95M2V03115 6/23/95	1,4-Dioxane	33.3	0.002	None-All samples previously qualified due to initial calibration results				
95M2V03115 6/23/95	Acetonitrile	64.4	0.063	14G00301 14G00501 14G01201	100 100 100	U U U	100 100 100	UJ UJ UJ
95M2V03115 6/23/95	3-Chloropropene	30.3	0.281	14G00301 14G00501 14G01201	5 5 5	U U U	5 5 5	UJ UJ UJ
95M2V03115 6/23/95	Propionitrile	52.2	0.119	14G00301 14G00501 14G01201	100 100 100	U U U	100 100 100	UJ UJ UJ
95M2V03115 6/23/95	1,2-Dibromo-3-chloropropane	45.8	0.116	14G00301 14G00501 14G01201	10 10 10	U U U	10 10 10	UJ UJ UJ
95M2V03116 6/23/95	Vinyl Acetate	32.8	0.552	14G00301 14G00501 14G01201	10 10 10	U U U	10 10 10	UJ UJ UJ
95M2V03116 6/23/95	2-Butanone	0.0	0.028	None-All samples previously qualified due to initial calibration results				

95M2V03137 6/25/95	Isobutyl Alcohol	42.1	0.011	None-All samples previously qualified due to initial calibration results				
95M2V03137 6/25/95	1,4-Dioxane	33.3	0.002	None-All samples previously qualified due to initial calibration results				
95M2V03137 6/25/95	Acetonitrile	64.4	0.063	14G00801	100	U	100	UJ
95M2V03137 6/25/95	Propionitrile	57.8	0.105	14G00801	100	U	100	UJ
95M2V03137 6/25/95	1,2-Dibromo-3-chloropropane	36.4	0.136	14G00801	10	U	10	UJ
95M2V03138 6/25/95	Chloromethane	33.8	1.692	14G00801	10	U	10	UJ
95M2V03138 6/25/95	Trichlorofluoro methane	33.6	3.464	14G00801	5	U	5	UJ
95M2V03138 6/25/95	1,1,1-Trichloroethane	44.9	0.758	14G00801	5	U	5	UJ
95M2V03138 6/25/95	Carbon Tetrachloride	50.4	0.618	14G00801	5	U	5	UJ
95M2V03138 6/25/95	Vinyl Acetate	39.8	0.494	14G00801	10	U	10	UJ
95M2V03138 6/25/95	Dibromochloro methane	32.5	0.710	14G00801	5	U	5	UJ
95M2V03138 6/25/95	Bromoform	44.2	0.643	14G00801	5	U	5	UJ
95M2V03138 6/25/95	2-Butanone	0.0	0.028	None-All samples previously qualified due to initial calibration results				
95M2V03138 6/25/95	Acrylonitrile	26.1	0.421	14G00801	100	U	100	UJ

Volatile Initial Calibration Summary Table
SDG No. M3023

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
95M2V02936-95M2V02942 6/8/95	Isobutyl Alcohol	23.4	0.019	18T037	200	U	200	R
				18R025	200	U	200	R
				18G00101	200	U	200	R
				18G00101D	200	U	200	R
				18G00201	200	U	200	R
				18G00301	200	U	200	R
				14T038	200	U	200	R
				14G01101	200	U	200	R
				14G01001	200	U	200	R
				14G01401	200	U	200	R
				14G00901	200	U	200	R
				14G00701	200	U	200	R
				14G01301	200	U	200	R
				17R026	200	U	200	R
				17G00101	200	U	200	R
				17G00101D	200	U	200	R
				17G00201	200	U	200	R
				17G00301	200	U	200	R
95M2V02936-95M2V02942 6/8/95	1,4-Dioxane	14.9	0.003	18T037	200	U	200	R
				18R025	200	U	200	R
				18G00101	200	U	200	R
				18G00101D	200	U	200	R
				18G00201	200	U	200	R
				18G00301	200	U	200	R
				14T038	200	U	200	R
				14G01101	200	U	200	R
				14G01001	200	U	200	R
				14G01401	200	U	200	R
				14G00901	200	U	200	R
				14G00701	200	U	200	R
				14G01301	200	U	200	R
				17R026	200	U	200	R
				17G00101	200	U	200	R
				17G00101D	200	U	200	R
				17G00201	200	U	200	R
				17G00301	200	U	200	R

95M2V03094-95M2V03099 6/22/95	2-Butanone	17.2	0.028	18T037	10	U	10	R
				18R025	10	U	10	R
				18G00101	10	U	10	R
				18G00101D	10	U	10	R
				18G00201	10	U	10	R
				18G00301	10	U	10	R
				14T038	10	U	10	R
				14G01101	10	U	10	R
				14G01001	10	U	10	R
				14G01401	10	U	10	R
				14G00901	10	U	10	R
				14G00701	10	U	10	R
				14G01301	10	U	10	R
				17R026	10	U	10	R
				17G00101	10	U	10	R
				17G00101D	10	U	10	R
				17G00201	10	U	10	R
				17G00301	10	U	10	R

Volatile Continuing Calibration Summary Table
SDG No. M3023

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
95M2V03137 6/25/95	Isobutyl Alcohol	42.1	0.011	None-All samples previously qualified due to initial calibration results				
95M2V03137 6/25/95	1,4-Dioxane	33.3	0.002	None-All samples previously qualified due to initial calibration results				
95M2V03137 6/25/95	Acetonitrile	64.4	0.063	18T037	100	U	100	UJ
				14T038	100	U	100	UJ
				18G00101	100	U	100	UJ
				18R025	100	U	100	UJ
				18G00101D	100	U	100	UJ
				18G00201	100	U	100	UJ
				18G00301	100	U	100	UJ
				14G01101	100	U	100	UJ

95M2V03137 6/25/95	Propionitrile	57.8	0.105	18T037	100	U	100	UJ
				14T038	100	U	100	UJ
				18G00101	100	U	100	UJ
				18R025	100	U	100	UJ
				18G00101D	100	U	100	UJ
				18G00201	100	U	100	UJ
				18G00301	100	U	100	UJ
				14G01101	100	U	100	UJ
95M2V03137 6/25/95	1,2-Dibromo-3-chloropropane	36.4	0.136	18T037	10	U	10	UJ
				14T038	10	U	10	UJ
				18G00101	10	U	10	UJ
				18R025	10	U	10	UJ
				18G00101D	10	U	10	UJ
				18G00201	10	U	10	UJ
				18G00301	10	U	10	UJ
				14G01101	10	U	10	UJ
95M2V03138 6/25/95	Chloromethane	33.8	1.692	18T037	10	U	10	UJ
				14T038	10	U	10	UJ
				18G00101	10	U	10	UJ
				18R025	10	U	10	UJ
				18G00101D	10	U	10	UJ
				18G00201	10	U	10	UJ
				18G00301	10	U	10	UJ
				14G01101	10	U	10	UJ
95M2V03138 6/25/95	Trichlorofluoro methane	33.6	3.464	18T037	5	U	5	UJ
				14T038	5	U	5	UJ
				18G00101	5	U	5	UJ
				18R025	5	U	5	UJ
				18G00101D	5	U	5	UJ
				18G00201	5	U	5	UJ
				18G00301	5	U	5	UJ
				14G01101	5	U	5	UJ
95M2V03138 6/25/95	1,1,1-Trichloroethane	44.9	0.758	18T037	5	U	5	UJ
				14T038	5	U	5	UJ
				18G00101	5	U	5	UJ
				18R025	5	U	5	UJ
				18G00101D	5	U	5	UJ
				18G00201	5	U	5	UJ
				18G00301	5	U	5	UJ
				14G01101	5	U	5	UJ
95M2V03138 6/25/95	2-Butanone	0.0	0.028	None-All samples previously qualified due to initial calibration results				

95M2V03138 6/25/95	Carbon Tetrachloride	50.4	0.618	18T037	5	U	5	UJ
				14T038	5	U	5	UJ
				18G00101	5	U	5	UJ
				18R025	5	U	5	UJ
				18G00101D	5	U	5	UJ
				18G00201	5	U	5	UJ
				18G00301	5	U	5	UJ
				14G01101	5	U	5	UJ
95M2V03138 6/25/95	Vinyl Acetate	39.8	0.494	18T037	10	U	10	UJ
				14T038	10	U	10	UJ
				18G00101	10	U	10	UJ
				18R025	10	U	10	UJ
				18G00101D	10	U	10	UJ
				18G00201	10	U	10	UJ
				18G00301	10	U	10	UJ
				14G01101	10	U	10	UJ
95M2V03138 6/25/95	Dibromochloro methane	32.5	0.710	18T037	5	U	5	UJ
				14T038	5	U	5	UJ
				18G00101	5	U	5	UJ
				18R025	5	U	5	UJ
				18G00101D	5	U	5	UJ
				18G00201	5	U	5	UJ
				18G00301	5	U	5	UJ
				14G01101	5	U	5	UJ
95M2V03138 6/25/95	Bromoform	44.2	0.643	18T037	5	U	5	UJ
				14T038	5	U	5	UJ
				18G00101	5	U	5	UJ
				18R025	5	U	5	UJ
				18G00101D	5	U	5	UJ
				18G00201	5	U	5	UJ
				18G00301	5	U	5	UJ
				14G01101	5	U	5	UJ
95M2V03138 6/25/95	Acrylonitrile	26.1	0.421	18T037	100	U	100	UJ
				14T038	100	U	100	UJ
				18G00101	100	U	100	UJ
				18R025	100	U	100	UJ
				18G00101D	100	U	100	UJ
				18G00201	100	U	100	UJ
				18G00301	100	U	100	UJ
				14G01101	100	U	100	UJ
95M2V03177 6/28/95	Isobutyl Alcohol	31.6	0.013	None-All samples previously qualified due to initial calibration results				

95M2V03177 6/28/95	1,4-Dioxane	0.0	0.003	None-All samples previously qualified due to initial calibration results				
95M2V03177 6/28/95	Acetonitrile	64.4	0.063	14G01001	100	U	100	UJ
95M2V03177 6/28/95	3-Chloropropene	30.3	0.281	14G01001	5	U	5	UJ
95M2V03177 6/28/95	Propionitrile	51.0	0.122	14G01001	100	U	100	UJ
95M2V03177 6/28/95	1,2-Dibromo-3-chloropropane	32.7	0.144	14G01001	10	U	10	UJ
95M2V03178 6/28/95	Bromomethane	33.5	2.167	14G01001	10	U	10	UJ
95M2V03178 6/28/95	2-Butanone	17.9	0.033	None-All samples previously qualified due to initial calibration results				
95M2V03178 6/28/95	1,1,1-Trichloroethane	34.4	0.703	14G01001	5	U	5	UJ
95M2V03178 6/28/95	Carbon Tetrachloride	39.2	0.572	14G01001	5	U	5	UJ
95M2V03178 6/28/95	Vinyl Acetate	25.2	0.614	14G01001	10	U	10	UJ
95M2V03178 6/28/95	Dibromochloro methane	27.6	0.684	14G01001	5	U	5	UJ
95M2V03178 6/28/95	Benzene	25.8	1.288	14G01001	5	U	5	UJ
95M2V03178 6/28/95	Bromoform	34.3	0.599	14G01001	5	U	5	UJ
95M2V03192 6/29/95	Isobutyl Alcohol	31.6	0.013	None-All samples previously qualified due to initial calibration results				
95M2V03192 6/29/95	1,4-Dioxane	0.0	0.003	None-All samples previously qualified due to initial calibration results				

95M2V03192 6/29/95	Acetonitrile	52.5	0.084	14G01401	100	U	100	UJ
				14G00901	100	U	100	UJ
				14G00701	100	U	100	UJ
				14G01301	100	U	100	UJ
				17R026	100	U	100	UJ
				17G00101	100	U	100	UJ
				17G00101D	100	U	100	UJ
				17G00201	100	U	100	UJ
				17G00301	100	U	100	UJ
95M2V03192 6/29/95	Propionitrile	49.0	0.127	14G01401	100	U	100	UJ
				14G00901	100	U	100	UJ
				14G00701	100	U	100	UJ
				14G01301	100	U	100	UJ
				17R026	100	U	100	UJ
				17G00101	100	U	100	UJ
				17G00101D	100	U	100	UJ
				17G00201	100	U	100	UJ
				17G00301	100	U	100	UJ
95M2V03192 6/29/95	1,2-Dibromo-3-chloropropane	34.6	0.140	14G01401	10	U	10	UJ
				14G00901	10	U	10	UJ
				14G00701	10	U	10	UJ
				14G01301	10	U	10	UJ
				17R026	10	U	10	UJ
				17G00101	10	U	10	UJ
				17G00101D	10	U	10	UJ
				17G00201	10	U	10	UJ
				17G00301	10	U	10	UJ
95M2V03193 6/29/95	2-Butanone	7.7	0.036	None-All samples previously qualified due to initial calibration results				
95M2V03193 6/29/95	2-Chloroethyl vinylether	26.8	0.251	14G01401	10	U	10	UJ
				14G00901	10	U	10	UJ
				14G00701	10	U	10	UJ
				14G01301	10	U	10	UJ
				17R026	10	U	10	UJ
				17G00101	10	U	10	UJ
				17G00101D	10	U	10	UJ
				17G00201	10	U	10	UJ
				17G00301	10	U	10	UJ

Volatile Initial Calibration Summary Table
SDG No. M3024

Volatile Initial and Continuing Calibration Summary Tables

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
CSV0035667.D CSV0035671.D 6/23/95	1,4-Dioxane	6.1	0.003	45T039	200	U	200	R
				45R027	200	U	200	R
				45G00102	200	U	200	R
				45G00102D	200	U	200	R
				23G00502	200	U	200	R
				45G00103	200	U	200	R
				23T040	200	U	200	R
				23G00503	200	U	200	R
				44G00103	200	U	200	R
				44T041	200	U	200	R
				44G00102	200	U	200	R
				01G00103	200	U	200	R
				01G00102	200	U	200	R
				0BT042	200	U	200	R
				0BG00102	200	U	200	R
				0BG00102D	200	U	200	R
				0BG00103	200	U	200	R
				0BG00101	200	U	200	R

Volatile Continuing Calibration Summary Table
SDG No. M3024

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
CSIX035712.D 6/27/95	1,4-Dioxane	4.8	0.003	None-All samples previously qualified due to initial calibration results				
CSIX035731.D 6/28/95	1,4-Dioxane	3.7	0.003	None-All samples previously qualified due to initial calibration results				

Volatile Initial Calibration Summary Table
SDG No. M3026

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
95M2V02936-95M2V02942 6/8/95	Isobutyl Alcohol	23.4	0.019	TCG00501	200	U	200	R
95M2V02936-95M2V02942 6/8/95	1,4-Dioxane	14.9	0.003	TCG00501	200	U	200	R
95M2V03094-95M2V03099 6/22/95	2-Butanone	17.2	0.028	TCG00501	10	U	10	R
95M2V03220-95M2V03224 6/30/95	Isobutyl Alcohol	58.4	0.029	TCT043	200	U	200	R
				TCY007	200	U	200	R
				TCR028	200	U	200	R
				TCG00501D	200	U	200	R
				TCG00601	200	U	200	R
				TCG00101	200	U	200	R
				TCT044	200	U	200	R
				TCG00401	200	U	200	R
				TCG00201	200	U	200	R
				TCG00301	200	U	200	R
95M2V03220-95M2V03224 6/30/95	1,4-Dioxane	61.9	0.006	TCT043	200	U	200	R
				TCY007	200	U	200	R
				TCR028	200	U	200	R
				TCG00501D	200	U	200	R
				TCG00601	200	U	200	R
				TCG00101	200	U	200	R
				TCT044	200	U	200	R
				TCG00401	200	U	200	R
				TCG00201	200	U	200	R
				TCG00301	200	U	200	R

95M2V03212-95M2V03217 6/30/95	2-Bu[illegible]none	22.8	0.039	TCT043	10	U	10	R
				TCY007	110	-	110	J
				TCR028	10	U	10	R
				TCG00501D	10	U	10	R
				TCG00601	10	U	10	R
				TCG0[illegible]01	10	U	10	R
				TC[illegible]	10	U	10	R
				[illegible]CG[illegible]01	10	U	10	R
				TCG00201	10	U	10	R
				TCG0[illegible]301	10	U	10	R

Volatile Continuing Calibration Summary Table
SDG No. M3026

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
95M2V03192 6/29/95	Isobutyl Alcohol	31.6	0.013	None-All samples previously qualified due to initial calibration results				
95M2V03192 6/29/95	1,4-Dioxane	0.0	0.003	None-All samples previously qualified due to initial calibration results				
95M2V03192 6/29/95	Acetonitrile	52.5	0.084	TCG00501	100	U	100	UJ
95M2V03192 6/29/95	Propionitrile	49.0	0.127	TCG00501	100	U	100	UJ
95M2V03192 6/29/95	1,2-Dibromo-3-chloropropane	34.6	0.332	TCG00501	10	U	10	UJ
95M2V03193 6/29/95	Bromomethane	36.5	2.216	TCG00501	10	U	10	UJ
95M2V03193 6/29/95	Acetone	26.3	0.706	TCG00501	10	U	10	UJ
95M2V03193 6/29/95	Trichlorofluoro methane	25.3	3.248	TCG00501	5	U	5	UJ
95M2V03193 6/29/95	2-Butanone	28.6	0.0[illegible]	None-All samples previously qualified due to initial calibration results				
95M2V03193 6/29/95	[illegible],1,1-Trichloroethane	34.0	0.701	TCG00501	5	U	5	UJ

95M2V03193 6/29/95	Carbon Tetrachloride	32.8	0.546	TCG00501	5	U	5	UJ
95M2V03193 6/29/95	Bromoform	29.6	0.578	TCG00501	5	U	5	UJ
95M2V03193 6/29/95	1,2,3-Trichloropropane	25.2	0.184	TCG00501	5	U	5	UJ
95M2V03273 7/6/95	Isobutyl Alcohol	58.6	0.012	None-All samples previously qualified due to initial calibration results				
95M2V03273 7/6/95	1,4-Dioxane	50.0	0.003	None-All samples previously qualified due to initial calibration results				
95M2V03273 7/6/95	Propionitrile	39.7	0.082	TCT043	100	U	100	UJ
				TCY007	100	U	100	UJ
				TCR028	100	U	100	UJ
				TCG00501D	100	U	100	UJ
				TCG00601	100	U	100	UJ
				TCG00101	100	U	100	UJ
				TCT044	100	U	100	UJ
				TCG00401	100	U	100	UJ
				TCG00201	100	U	100	UJ
				TCG00301	100	U	100	UJ
95M2V03273 7/6/95	Methacrylonitrile	30.4	0.433	TCT043	5	U	5	UJ
				TCY007	5	U	5	UJ
				TCR028	5	U	5	UJ
				TCG00501D	5	U	5	UJ
				TCG00601	5	U	5	UJ
				TCG00101	5	U	5	UJ
				TCT044	5	U	5	UJ
				TCG00401	5	U	5	UJ
				TCG00201	5	U	5	UJ
				TCG00301	5	U	5	UJ
95M2V03273 7/6/95	Methyl methacrylate	26.4	0.237	TCT043	10	U	10	UJ
				TCY007	10	U	10	UJ
				TCR028	10	U	10	UJ
				TCG00501D	10	U	10	UJ
				TCG00601	10	U	10	UJ
				TCG00101	10	U	10	UJ
				TCT044	10	U	10	UJ
				TCG00401	10	U	10	UJ
				TCG00201	10	U	10	UJ
				TCG00301	10	U	10	UJ

95M2V03273 7/6/95	1.2-Dibromo-3-chloropropane	66.9	0.048	TCT043	10	U	10	R
				TCY007	10	U	10	R
				TCR028	10	U	10	R
				TCG00501D	10	U	10	R
				TCG00601	10	U	10	R
				TCG00101	10	U	10	R
				TCT044	10	U	10	R
				TCG00401	10	U	10	R
				TCG00201	10	U	10	R
				TCG00301	10	U	10	R
95M2V03273 7/6/95	Chloroprene	25.8	2.753	TCT043	200	U	200	UJ
				TCY007	200	U	200	UJ
				TCR028	200	U	200	UJ
				TCG00501D	200	U	200	UJ
				TCG00601	200	U	200	UJ
				TCG00101	200	U	200	UJ
				TCT044	200	U	200	UJ
				TCG00401	200	U	200	UJ
				TCG00201	200	U	200	UJ
				TCG00301	200	U	200	UJ
95M2V03274 7/6/95	2-Butanone	18.0	0.032	None-All samples previously qualified due to initial calibration results				
95M2V03274 7/6/95	Acrolein	28.7	0.184	TCT043	100	U	100	UJ
				TCY007	100	U	100	UJ
				TCR028	100	U	100	UJ
				TCG00501D	100	U	100	UJ
				TCG00601	100	U	100	UJ
				TCG00101	100	U	100	UJ
				TCT044	100	U	100	UJ
				TCG00401	100	U	100	UJ
				TCG00201	100	U	100	UJ
				TCG00301	100	U	100	UJ
95M2V03274 7/6/95	Iodomethane	34.5	2.781	TCT043	10	U	10	UJ
				TCY007	10	U	10	UJ
				TCR028	10	U	10	UJ
				TCG00501D	10	U	10	UJ
				TCG00601	10	U	10	UJ
				TCG00101	10	U	10	UJ
				TCT044	10	U	10	UJ
				TCG00401	10	U	10	UJ
				TCG00201	10	U	10	UJ
				TCG00301	10	U	10	UJ

95M2V03274 7/6/95	Acrylonitrile	27.8	0.465	TCT043	100	U	100	UJ
				TCY007	100	U	100	UJ
				TCR028	100	U	100	UJ
				TCG00501D	100	U	100	UJ
				TCG00601	100	U	100	UJ
				TCG00101	100	U	100	UJ
				TCT044	100	U	100	UJ
				TCG00401	100	U	100	UJ
				TCG00201	100	U	100	UJ
				TCG00301	100	U	100	UJ

Volatile Initial Calibration Summary Table
SDG No. M3027

ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Sample	Lab Conc ug/l or ug/kg	Lab Qual	EDS Conc ug/l or ug/kg	EDS Qual
95M2V03220-95M2V03224 6/30/95	Isobutyl Alcohol	58.4	0.029	TRT045	200	U	200	R
				TRR029	200	U	200	R
				FPZ00101	200	U	200	R
				FSZ00101	200	U	200	R
				QGZ00101	1100	U	1100	R
				PCZ00101	200	U	200	R
				BCZ00101	1100	U	1100	R
				TRS00101	210	U	210	R
				TRS00101D	210	U	210	R
				TRS00201	220	U	220	R
				TRS00201RE	220	U	220	R
95M2V03220-95M2V03224 6/30/95	1,4-Dioxane	61.9	0.006	TRT045	200	U	200	R
				TRR029	200	U	200	R
				FPZ00101	200	U	200	R
				FSZ00101	200	U	200	R
				QGZ00101	1100	U	1100	R
				PCZ00101	200	U	200	R
				BCZ00101	1100	U	1100	R
				TRS00101	210	U	210	R
				TRS00101D	210	U	210	R
				TRS00201	220	U	220	R
				TRS00201RE	220	U	220	R

95M2V03212-95M2V03217 6/30/95	2-Butanone	22.8	0.039	TRT045	10	U	10	R
				TRR029	14	-	14	J
				FPZ00101	10	U	10	R
				FSZ00101	10	U	10	R
				QGZ00101	54	U	54	R
				PCZ00101	10	U	10	R
				BCZ00101	56	U	56	R
				TRS00101	10	U	10	R
				TRS00101D	10	U	10	R
				TRS00201	11	U	11	R
				TRS00201RE	11	U	11	R

Volatile Continuing Calibration Summary Table
SDG No. M3027

CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Sample	Lab Conc ug/l or ug/kg	Lab Qual	EDS Conc ug/l or ug/kg	EDS Qual
95M2V03273 7/6/95	Isobutyl Alcohol	58.6	0.012	None-All samples previously qualified due to initial calibration results				
95M2V03273 7/6/95	1,4-Dioxane	50.0	0.003	None-All samples previously qualified due to initial calibration results				
95M2V03273 7/6/95	Propionitrile	39.7	0.082	TRR029	100	U	100	UJ
95M2V03273 7/6/95	Methacrylonitrile	30.4	0.433	TRR029	5	U	5	UJ
95M2V03273 7/6/95	Methyl methacrylate	26.4	0.237	TRR029	10	U	10	UJ
95M2V03273 7/6/95	1,2-Dibromo-3-chloropropane	66.9	0.048	TRR029	10	U	10	R
95M2V03273 7/6/95	Chloroprene	25.8	2.753	TRR029	200	U	200	UJ
95M2V03274 7/6/95	2-Butanone	18.0	0.032	None-All samples previously qualified due to initial calibration results				
95M2V03274 7/6/95	Acrolein	28.7	0.184	TRR029	100	U	100	UJ

95M2V03274 7/6/95	Iodomethane	34.5	2.781	TRR029	10	U	10	UJ
95M2V03274 7/6/95	Acrylonitrile	27.8	0.465	TRR029	100	U	100	UJ
95M2V03293 7/7/95	Isobutyl Alcohol	44.8	0.016	None-All samples previously qualified due to initial calibration results				
95M2V03293 7/7/95	1,4-Dioxane	33.3	0.004	None-All samples previously qualified due to initial calibration results				
95M2V03293 7/7/95	Acetonitrile	126	0.265	FPZ00101 FSZ00101 PCZ00101 TRS00101 QGZ00101 BCZ00101 TRS00101D	100 100 100 100 540 560 100	U U U U U U U	100 100 100 100 540 560 100	UJ UJ UJ UJ UJ UJ UJ
95M2V03293 7/7/95	1,2-Dibromo-3-chloropropane	31.7	0.099	FPZ00101 FSZ00101 PCZ00101 TRS00101 QGZ00101 BCZ00101 TRS00101D	10 10 10 10 54 56 10	U U U U U U U	10 10 10 10 54 56 10	UJ UJ UJ UJ UJ UJ UJ
95M2V03295 7/7/95	2-Chloroethyl vinylether	26.3	0.250	FPZ00101 FSZ00101 PCZ00101 TRS00101 QGZ00101 BCZ00101 TRS00101D	10 10 10 10 54 56 10	U U U U U U U	10 10 10 10 54 56 10	UJ UJ UJ UJ UJ UJ UJ
95M2V03295 7/7/95	2-Butanone	0.0	0.039	None-All samples previously qualified due to initial calibration results				
95M2V03310 7/10/95	Chloroprene	26.0	2.742	TRT045 TRS00201 TRS00201RE	200 220 220	U U U	200 220 220	UJ UJ UJ
95M2V03310 7/10/95	Isobutyl Alcohol	41.4	0.017	None-All samples previously qualified due to initial calibration results				
95M2V03310 7/10/95	1,4-Dioxane	33.3	0.004	None-All samples previously qualified due to initial calibration results				
95M2V03311 7/10/95	2-Butanone	12.8	0.034	None-All samples previously qualified due to initial calibration results				

Semivolatile Continuing Calibration Summary Table
SDG No. M3001

CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	% D	RRF	Affected Samples	Lab Value ug/L or ug/kg	Lab Qual	EDS Value ug/L or ug/kg	EDS Qual
95M4BN1987 4/11/95	4-Nitrophenol	29.8	0.099	45Y001	50	U	50	UJ
				45R001	50	U	50	UJ
				45L00101	3300	U	3300	UJ
				45L00101D	3300	U	3300	UJ
				45L00201	3300	U	3300	UJ
				45L00301	3400	U	3400	UJ
				45L00102	3300	U	3300	UJ
95M4BN1988 4/11/95	1,4-Naphthoquinone	30.4	0.073	45Y001	1000	U	1000	UJ
				45R001	1000	U	1000	UJ
				45L00101	69000	U	69000	UJ
				45L00101D	69000	U	69000	UJ
				45L00201	67000	U	67000	UJ
				45L00301	69000	U	69000	UJ
				45L00102	68000	U	68000	UJ
95M4BN1988 4/11/95	1-Naphthylamine	37.7	0.752	45Y001	50	U	50	UJ
				45R001	50	U	50	UJ
				45L00101	3300	U	3300	UJ
				45L00101D	3300	U	3300	UJ
				45L00201	3300	U	3300	UJ
				45L00301	3400	U	3400	UJ
				45L00102	3300	U	3300	UJ
95M4BN1988 4/11/95	2-Naphthylamine	62.4	0.825	45Y001	50	U	50	UJ
				45R001	50	U	50	UJ
				45L00101	3300	U	3300	UJ
				45L00101D	3300	U	3300	UJ
				45L00201	3300	U	3300	UJ
				45L00301	3400	U	3400	UJ
				45L00102	3300	U	3300	UJ
95M4BN1988 4/11/95	5-Nitro-o-toluidine	55.4	0.331	45Y001	10	U	10	UJ
				45R001	10	U	10	UJ
				45L00101	690	U	690	UJ
				45L00101D	690	U	690	UJ
				45L00201	670	U	670	UJ
				45L00301	690	U	690	UJ
				45L00102	680	U	680	UJ

95M4BN1988 4/11/95	4-Aminobiphenyl	38.4	0.591	45Y001	50	U	50	UJ
				45R001	50	U	50	UJ
				45L00101	3300	U	3300	UJ
				45L00101D	3300	U	3300	UJ
				45L00201	3300	U	3300	UJ
				45L00301	3400	U	3400	UJ
				45L00102	3300	U	3300	UJ
95M4BN1988 4/11/95	Aramite	41.5	0.075	45Y001	50	U	50	UJ
				45R001	50	U	50	UJ
				45L00101	3300	U	3300	UJ
				45L00101D	3300	U	3300	UJ
				45L00201	3300	U	3300	UJ
				45L00301	3400	U	3400	UJ
				45L00102	3300	U	3300	UJ
95M4BN1988 4/11/95	Hexachlorophene	91.1	0.010	45Y001	500	U	500	R
				45R001	500	U	500	R
				45L00101	33000	U	33000	R
				45L00101D	33000	U	33000	R
				45L00201	33000	U	33000	R
				45L00301	34000	U	34000	R
				45L00102	33000	U	33000	R
95M4BN2003 4/12/95	2-Nitroaniline	27.2	0.345	45L00102D	3300	U	3300	UJ
				45L00202	3300	U	3300	UJ
				45L00302	3300	U	3300	UJ
				45L00401	3300	U	3300	UJ
				45L00402	3200	U	3200	UJ
				45L00601	4000	U	4000	UJ
				45L00602	3700	U	3700	UJ
				45L00501	4700	U	4700	UJ
				45L00502	3800	U	3800	UJ
				45L00701	3400	U	3400	UJ
95M4BN2003 4/12/95	4-Nitrophenol	33.3	0.094	45L00102D	3300	U	3300	UJ
				45L00202	3300	U	3300	UJ
				45L00302	3300	U	3300	UJ
				45L00401	3300	U	3300	UJ
				45L00402	3200	U	3200	UJ
				45L00601	4000	U	4000	UJ
				45L00602	3700	U	3700	UJ
				45L00501	4700	U	4700	UJ
				45L00502	3800	U	3800	UJ
				45L00701	3400	U	3400	UJ

95M4BN2003 4/12/95	1,2-Diphenyl-hydrazine	25.8	0.890	45L00102D	680	U	680	UJ
				45L00202	680	U	680	UJ
				45L00302	680	U	680	UJ
				45L00401	680	U	680	UJ
				45L00402	670	U	670	UJ
				45L00601	820	U	820	UJ
				45L00602	770	U	770	UJ
				45L00501	970	U	970	UJ
				45L00502	780	U	780	UJ
				45L00701	700	U	700	UJ
95M4BN2004 4/12/95	1,4-Naphthoquinone	28.6	0.072	45L00102D	68000	U	68000	UJ
				45L00202	68000	U	68000	UJ
				45L00302	68000	U	68000	UJ
				45L00401	68000	U	68000	UJ
				45L00402	67000	U	67000	UJ
				45L00601	82000	U	82000	UJ
				45L00602	77000	U	77000	UJ
				45L00501	97000	U	97000	UJ
				45L00502	78000	U	78000	UJ
				45L00701	70000	U	70000	UJ
95M4BN2004 4/12/95	1-Naphthylamine	35.9	0.742	45L00102D	3300	U	3300	UJ
				45L00202	3300	U	3300	UJ
				45L00302	3300	U	3300	UJ
				45L00401	3300	U	3300	UJ
				45L00402	3200	U	3200	UJ
				45L00601	4000	U	4000	UJ
				45L00602	3700	U	3700	UJ
				45L00501	4700	U	4700	UJ
				45L00502	3800	U	3800	UJ
				45L00701	3400	U	3400	UJ
95M4BN2004 4/12/95	2-Naphthylamine	65.6	0.841	45L00102D	3300	U	3300	UJ
				45L00202	3300	U	3300	UJ
				45L00302	3300	U	3300	UJ
				45L00401	3300	U	3300	UJ
				45L00402	3200	U	3200	UJ
				45L00601	4000	U	4000	UJ
				45L00602	3700	U	3700	UJ
				45L00501	4700	U	4700	UJ
				45L00502	3800	U	3800	UJ
				45L00701	3400	U	3400	UJ

95M4BN2004 4/12/95	5-Nitro-o-toluidine	60.1	0.341	45L00102D	680	U	680	UJ
				45L00202	680	U	680	UJ
				45L00302	680	U	680	UJ
				45L00401	680	U	680	UJ
				45L00402	670	U	670	UJ
				45L00601	820	U	820	UJ
				45L00602	770	U	770	UJ
				45L00501	970	U	970	UJ
				45L00502	780	U	780	UJ
				45L00701	700	U	700	UJ
95M4BN2004 4/12/95	4-Aminobiphenyl	41.4	0.604	45L00102D	3300	U	3300	UJ
				45L00202	3300	U	3300	UJ
				45L00302	3300	U	3300	UJ
				45L00401	3300	U	3300	UJ
				45L00402	3200	U	3200	UJ
				45L00601	4000	U	4000	UJ
				45L00602	3700	U	3700	UJ
				45L00501	4700	U	4700	UJ
				45L00502	3800	U	3800	UJ
				45L00701	3400	U	3400	UJ
95M4BN2004 4/12/95	Aramite	47.2	0.078	45L00102D	3300	U	3300	UJ
				45L00202	3300	U	3300	UJ
				45L00302	3300	U	3300	UJ
				45L00401	3300	U	3300	UJ
				45L00402	3200	U	3200	UJ
				45L00601	4000	U	4000	UJ
				45L00602	3700	U	3700	UJ
				45L00501	4700	U	4700	UJ
				45L00502	3800	U	3800	UJ
				45L00701	3400	U	3400	UJ
95M4BN2004 4/12/95	Hexachlorophene	54.5	0.051	45L00102D	33000	U	33000	UJ
				45L00202	33000	U	33000	UJ
				45L00302	33000	U	33000	UJ
				45L00401	33000	U	33000	UJ
				45L00402	32000	U	32000	UJ
				45L00601	40000	U	40000	UJ
				45L00602	37000	U	37000	UJ
				45L00501	47000	U	47000	UJ
				45L00502	38000	U	38000	UJ
				45L00701	34000	U	34000	UJ
95M4BN2019 4/13/95	2-Nitroaniline	28.1	0.341	45L00702	3400	U	3400	UJ
				45L00801	3400	U	3400	UJ
				45L00802	3300	U	3300	UJ

95M4BN2019 4/13/95	4-Nitrophenol	36.9	0.089	45L00702 45L00801 45L00802	3400 3400 3300	U U U	3400 3400 3300	UJ UJ UJ
95M4BN2019 4/13/95	1,2- Diphenylhydrazine	28.8	0.855	45L00702 45L00801 45L00802	700 710 680	U U U	700 710 680	UJ UJ UJ
95M4BN2019 4/13/95	Benzidine	27.0	0.395	45L00702 45L00801 45L00802	3400 3400 3300	U U U	3400 3400 3300	UJ UJ UJ
95M4BN2020 4/13/95	1,4- Naphthoquinone	30.4	0.073	45L00702 45L00801 45L00802	70000 71000 68000	U U U	70000 71000 68000	UJ UJ UJ
95M4BN2020 4/13/95	1-Naphthylamine	34.6	0.735	45L00702 45L00801 45L00802	3400 3400 3300	U U U	3400 3400 3300	UJ UJ UJ
95M4BN2020 4/13/95	2-Naphthylamine	63.4	0.830	45L00702 45L00801 45L00802	3400 3400 3300	U U U	3400 3400 3300	UJ UJ UJ
95M4BN2020 4/13/95	5-Nitro-o-toluidine	65.3	0.352	45L00702 45L00801 45L00802	700 710 680	U U U	700 710 680	UJ UJ UJ
95M4BN2020 4/13/95	4-Aminobiphenyl	38.4	0.591	45L00702 45L00801 45L00802	3400 3400 3300	U U U	3400 3400 3300	UJ UJ UJ
95M4BN2020 4/13/95	Aramite	43.4	0.076	45L00702 45L00801 45L00802	3400 3400 3300	U U U	3400 3400 3300	UJ UJ UJ
95M4BN2020 4/13/95	Methapyrilene	31.3	0.228	45L00702 45L00801 45L00802	3400 3400 3300	U U U	3400 3400 3300	UJ UJ UJ
95M4BN2020 4/13/95	Hexachlorophene	88.4	0.013	45L00702 45L00801 45L00802	34000 34000 33000	U U U	34000 34000 33000	R R R

Semivolatile Continuing Calibration Summary Table SDG No. M3002								
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
95M4BN2019 4/13/95	2-Nitroaniline	28.1	0.341	45S00301 45S00401	1600 1700	U U	1600 1700	UJ UJ
95M4BN2019 4/13/95	4-Nitrophenol	36.9	0.089	45S00301 45S00401	1600 1700	U U	1600 1700	UJ UJ
95M4BN2019 4/13/95	1,2-Diphenylhydrazine	28.8	0.855	45S00301 45S00401	340 350	U U	340 350	UJ UJ
95M4BN2019 4/13/95	Benzidine	27.0	0.395	45S00301 45S00401	1600 1700	U U	1600 1700	UJ UJ
95M4BN2020 4/13/95	1,4-Naphthoquinone	30.4	0.073	45S00301 45S00401	34000 35000	U U	34000 35000	UJ UJ
95M4BN2020 4/13/95	1-Naphthylamine	34.6	0.735	45S00301 45S00401	1600 1700	U U	1600 1700	UJ UJ
95M4BN2020 4/13/95	2-Naphthylamine	63.4	0.830	45S00301 45S00401	1600 1700	U U	1600 1700	UJ UJ
95M4BN2020 4/13/95	5-Nitro-o-toluidine	65.3	0.352	45S00301 45S00401	340 350	U U	340 350	UJ UJ
95M4BN2020 4/13/95	4-Aminobiphenyl	38.4	0.591	45S00301 45S00401	1600 1700	U U	1600 1700	UJ UJ
95M4BN2020 4/13/95	Methapyrilene	31.3	0.228	45S00301 45S00401	1600 1700	U U	1600 1700	UJ UJ

95M4BN2020 4/13/95	Aramite	43.4	0.076	45S00301 45S00401	1600 1700	U U	1600 1700	UJ UJ
95M4BN2020 4/13/95	Hexachlorophene	88.4	0.013	45S00301 45S00401	16000 17000	U U	16000 17000	R R
95M4BN2035 4/14/95	2-Nitroaniline	28.1	0.341	45S00101 45S00101D 45S00201 45S00501 45S00601 45S00701	1700 1700 1700 1700 1900 1600	U U U U U U	1700 1700 1700 1700 1900 1600	UJ UJ UJ UJ UJ UJ
95M4BN2035 4/14/95	4-Nitrophenol	29.8	0.099	45S00101 45S00101D 45S00201 45S00501 45S00601 45S00701	1700 1700 1700 1700 1900 1600	U U U U U U	1700 1700 1700 1700 1900 1600	UJ UJ UJ UJ UJ UJ
95M4BN2035 4/14/95	Benzidine	25.7	0.391	45S00101 45S00101D 45S00201 45S00501 45S00601 45S00701	1700 1700 1700 1700 1900 1600	U U U U U U	1700 1700 1700 1700 1900 1600	UJ UJ UJ UJ UJ UJ
95M4BN2036 4/14/95	1,4- Naphthoquinone	28.6	0.076	45S00101 45S00101D 45S00201 45S00501 45S00601 45S00701	35000 35000 34000 36000 38000 34000	U U U U U U	35000 35000 34000 36000 38000 34000	UJ UJ UJ UJ UJ UJ
95M4BN2036 4/14/95	1-Naphthylamine	38.3	0.755	45S00101 45S00101D 45S00201 45S00501 45S00601 45S00701	1700 1700 1700 1700 1900 1600	U U U U U U	1700 1700 1700 1700 1900 1600	UJ UJ UJ UJ UJ UJ
95M4BN2036 4/14/95	2-Naphthylamine	63.6	0.831	45S00101 45S00101D 45S00201 45S00501 45S00601 45S00701	1700 1700 1700 1700 1900 1600	U U U U U U	1700 1700 1700 1700 1900 1600	UJ UJ UJ UJ UJ UJ

95M4BN2036 4/14/95	5-Nitro-o-toluidine	66.7	0.355	45S00101 45S00101D 45S00201 45S00501 45S00601 45S00701	350 350 340 360 380 340	U U U U U U	350 350 340 360 380 340	UJ UJ UJ UJ UJ UJ
95M4BN2036 4/14/95	4-Aminobiphenyl	39.8	0.597	45S00101 45S00101D 45S00201 45S00501 45S00601 45S00701	1700 1700 1700 1700 1900 1600	U U U U U U	1700 1700 1700 1700 1900 1600	UJ UJ UJ UJ UJ UJ
95M4BN2036 4/14/95	Methapyrilene	38.0	0.206	45S00101 45S00101D 45S00201 45S00501 45S00601 45S00701	1700 1700 1700 1700 1900 1600	U U U U U U	1700 1700 1700 1700 1900 1600	UJ UJ UJ UJ UJ UJ
95M4BN2036 4/14/95	Aramite	34.0	0.071	45S00101 45S00101D 45S00201 45S00501 45S00601 45S00701	1700 1700 1700 1700 1900 1600	U U U U U U	1700 1700 1700 1700 1900 1600	UJ UJ UJ UJ UJ UJ
95M4BN2036 4/14/95	Hexachlorophene	63.4	0.041	45S00101 45S00101D 45S00201 45S00501 45S00601 45S00701	17000 17000 17000 17000 19000 16000	U U U U U U	17000 17000 17000 17000 19000 16000	R R R R R R
95M4BN2055 4/17/95	4-Nitrophenol	42.6	0.081	45R002RE	50	U	50	UJ
95M4BN2055 4/17/95	Benzo(k) fluoranthene	28.4	1.824	45R002RE	10	U	10	UJ
95M4BN2055 4/17/95	Indeno(1,2,3- cd)pyrene	31.9	2.026	45R002RE	10	U	10	UJ
95M4BN2055 4/17/95	Dibenz(a,h) anthracene	38.6	1.717	45R002RE	10	U	10	UJ
95M4BN2055 4/17/95	Benzo(g,h,i) perylene	31.6	1.717	45R002RE	10	U	10	UJ

95M4BN2059 4/17/95	Phenyl-tert-butylamine	35.0	1.123	45R002RE	50	U	50	UJ
95M4BN2059 4/17/95	Hexachlorophene	68.8	0.035	45R002RE	500	U	500	R
95M4BN2059 4/17/95	1-Naphthylamine	34.8	0.736	45R002RE	50	U	50	UJ
95M4BN2059 4/17/95	2-Naphthylamine	57.9	0.802	45R002RE	50	U	50	UJ
95M4BN2059 4/17/95	5-Nitro-o-toluidine	56.3	0.333	45R002RE	10	U	10	UJ
95M4BN2059 4/17/95	1,3,5-Trinitrobenzene	27.1	0.564	45R002RE	10	U	10	UJ
95M4BN2059 4/17/95	Methapyrilene	33.1	0.222	45R002RE	50	U	50	UJ
95M4BN2059 4/17/95	Aramite	39.6	0.074	45R002RE	50	U	50	UJ

Semivolatile Continuing Calibration Summary Table
SDG No. M3003

CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	% D	RRF	Affected Samples	Lab Value ug/kg or ug/l	Lab Qual	EDS Value ug/kg or ug/l	EDS Qual
95M4BN2035 4/14/95	2-Nitroaniline	28.1	0.341	44R003	50	U	50	UJ
95M4BN2035 4/14/95	4-Nitrophenol	29.8	0.099	44R003	50	U	50	UJ
95M4BN2035 4/14/95	Benzidine	25.7	0.391	44R003	50	U	50	UJ
95M4BN2036 4/14/95	1,4-Naphthoquinone	28.6	0.072	44R003	1000	U	1000	UJ
95M4BN2036 4/14/95	1-Naphthylamine	38.3	0.755	44R003	50	U	50	UJ
95M4BN2036 4/14/95	2-Naphthylamine	63.6	0.831	44R003	50	U	50	UJ

95M4BN2036 4/14/95	5-Nitro-o-toluidine	66.7	0.355	44R003	10	U	10	UJ
95M4BN2036 4/14/95	4-Aminobiphenyl	39.8	0.597	44R003	50	U	50	UJ
95M4BN2036 4/14/95	Methapyrilene	38.0	0.206	44R003	50	U	50	UJ
95M4BN2036 4/14/95	Aramite	34.0	0.071	44R003	50	U	50	UJ
95M4BN2036 4/14/95	Hexachlorophene	63.4	0.041	44R003	500	U	500	R
95M4BN2107 4/21/95	2-Nitroaniline	31.6	0.324	44S00201	3300	U	3300	UJ
				44S00101	3500	U	3500	UJ
				44S00101D	3500	U	3500	UJ
				44S00301	3400	U	3400	UJ
				44S00401	3600	U	3600	UJ
				44S00501	3300	U	3300	UJ
				44S00601	3400	U	3400	UJ
				44S00701	3300	U	3300	UJ
				44S00801	3500	U	3500	UJ
95M4BN2107 4/21/95	4-Nitrophenol	43.3	0.080	44S00201	3300	U	3300	UJ
				44S00101	3500	U	3500	UJ
				44S00101D	3500	U	3500	UJ
				44S00301	3400	U	3400	UJ
				44S00401	3600	U	3600	UJ
				44S00501	3300	U	3300	UJ
				44S00601	3400	U	3400	UJ
				44S00701	3300	U	3300	UJ
				44S00801	3500	U	3500	UJ
95M4BN2109 4/21/95	p-Phenylenediamine	35.2	0.180	44S00201	33000	U	33000	UJ
				44S00101	35000	U	35000	UJ
				44S00101D	35000	U	35000	UJ
				44S00301	34000	U	34000	UJ
				44S00401	36000	U	36000	UJ
				44S00501	33000	U	33000	UJ
				44S00601	34000	U	34000	UJ
				44S00701	33000	U	33000	UJ
				44S00801	35000	U	35000	UJ

95M4BN2110 4/21/95	N-Nitroso diethylamine	27.9	0.307	44S00201	690	U	690	UJ
				44S00101	730	U	730	UJ
				44S00101D	730	U	730	UJ
				44S00301	690	U	690	UJ
				44S00401	730	U	730	UJ
				44S00501	680	U	680	UJ
				44S00601	700	U	700	UJ
				44S00701	690	U	690	UJ
				44S00801	720	U	720	UJ
95M4BN2110 4/21/95	2-Naphthylamine	35.8	0.690	44S00201	3300	U	3300	UJ
				44S00101	3500	U	3500	UJ
				44S00101D	3500	U	3500	UJ
				44S00301	3400	U	3400	UJ
				44S00401	3600	U	3600	UJ
				44S00501	3300	U	3300	UJ
				44S00601	3400	U	3400	UJ
				44S00701	3300	U	3300	UJ
				44S00801	3500	U	3500	UJ
95M4BN2110 4/21/95	5-Nitro-o-toluidine	34.7	0.287	44S00201	690	U	690	UJ
				44S00101	730	U	730	UJ
				44S00101D	730	U	730	UJ
				44S00301	690	U	690	UJ
				44S00401	730	U	730	UJ
				44S00501	680	U	680	UJ
				44S00601	700	U	700	UJ
				44S00701	690	U	690	UJ
				44S00801	720	U	720	UJ
95M4BN2110 4/21/95	1,3,5-Trinitrobenzene	36.3	0.493	44S00201	690	U	690	UJ
				44S00101	730	U	730	UJ
				44S00101D	730	U	730	UJ
				44S00301	690	U	690	UJ
				44S00401	730	U	730	UJ
				44S00501	680	U	680	UJ
				44S00601	700	U	700	UJ
				44S00701	690	U	690	UJ
				44S00801	720	U	720	UJ
95M4BN2110 4/21/95	Phenacetin	31.4	0.335	44S00201	690	U	690	UJ
				44S00101	730	U	730	UJ
				44S00101D	730	U	730	UJ
				44S00301	690	U	690	UJ
				44S00401	730	U	730	UJ
				44S00501	680	U	680	UJ
				44S00601	700	U	700	UJ
				44S00701	690	U	690	UJ
				44S00801	720	U	720	UJ

95M4BN2110 4/21/95	4-Nitroquinoline-1-oxide	37.7	0.043	44S00201	33000	U	33000	R
				44S00101	35000	U	35000	R
				44S00101D	35000	U	35000	R
				44S00301	34000	U	34000	R
				44S00401	36000	U	36000	R
				44S00501	33000	U	33000	R
				44S00601	34000	U	34000	R
				44S00701	33000	U	33000	R
				44S00801	35000	U	35000	R
95M4BN2110 4/21/95	Methapyrilene	55.7	0.147	44S00201	3300	U	3300	UJ
				44S00101	3500	U	3500	UJ
				44S00101D	3500	U	3500	UJ
				44S00301	3400	U	3400	UJ
				44S00401	3600	U	3600	UJ
				44S00501	3300	U	3300	UJ
				44S00601	3400	U	3400	UJ
				44S00701	3300	U	3300	UJ
				44S00801	3500	U	3500	UJ
95M4BN2110 4/21/95	2-Acetylamino fluorene	31.8	0.208	44S00201	690	U	690	UJ
				44S00101	730	U	730	UJ
				44S00101D	730	U	730	UJ
				44S00301	690	U	690	UJ
				44S00401	730	U	730	UJ
				44S00501	680	U	680	UJ
				44S00601	700	U	700	UJ
				44S00701	690	U	690	UJ
				44S00801	720	U	720	UJ
95M4BN2110 4/21/95	Hexachlorophene	84.8	0.017	44S00201	33000	U	33000	R
				44S00101	35000	U	35000	R
				44S00101D	35000	U	35000	R
				44S00301	34000	U	34000	R
				44S00401	36000	U	36000	R
				44S00501	33000	U	33000	R
				44S00601	34000	U	34000	R
				44S00701	33000	U	33000	R
				44S00801	35000	U	35000	R
95M4BN2160 4/26/95	Bis(2-chloroisopropyl) ether	28.4	1.482	44S00901	700	U	700	UJ
95M4BN2160 4/26/95	2-Nitroaniline	36.5	0.301	44S00901	3400	U	3400	UJ
95M4BN2160 4/26/95	2,4-Dinitrophenol	25.8	0.138	44S00901	3400	U	3400	UJ

95M4BN2160 4/26/95	4-Nitrophenol	44.0	0.079	44S00901	3400	U	3400	UJ
95M4BN2160 4/26/95	4-Nitroaniline	41.7	0.154	44S00901	3400	U	3400	UJ
95M4BN2160 4/26/95	Anthracene	27.0	1.487	44S00901	700	U	700	UJ
95M4BN2160 4/26/95	Butylbenzyl phthalate	30.0	0.566	44S00901	700	U	700	UJ
95M4BN2160 4/26/95	Benzoic Acid	25.3	0.171	44S00901	3400	U	3400	UJ
95M4BN2161 4/26/95	1.3-Dinitrobenzene	29.6	0.088	44S00901	700	U	700	UJ
95M4BN2161 4/26/95	2-Naphthylamine	32.7	0.674	44S00901	3400	U	3400	UJ
95M4BN2161 4/26/95	1.3.5-Trinitrobenzene	28.7	0.552	44S00901	700	U	700	UJ
95M4BN2161 4/26/95	Phenacetin	34.8	0.318	44S00901	700	U	700	UJ
95M4BN2161 4/26/95	4-Nitroquinoline-1-oxide	31.9	0.047	44S00901	34000	U	34000	R
95M4BN2161 4/26/95	Methapyrilene	54.8	0.150	44S00901	3400	U	3400	UJ
95M4BN2161 4/26/95	2-Acetylamine fluorene	34.1	0.201	44S00901	700	U	700	UJ
95M4BN2161 4/26/95	Hexachlorophene	75.9	0.027	44S00901	34000	U	34000	R
95M4BN2161 4/26/95	1.4-Naphthoquinone	21.4	0.044	44S00901	70000	U	70000	R

Semivolatile Continuing Calibration Summary Table SDG No. M3004								
CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	% D	RRF	Affected Samples	Lab Value ug/l or ug/kg	Lab Qual	EDS Value ug/l or ug/kg	EDS Qual
95M4BN2055 4/17/95	4-Nitrophenol	42.6	0.081	23R004 23R005	50 50	U U	50 50	UJ UJ
95M4BN2055 4/17/95	Benzo(k) fluoranthene	28.4	1.824	23R004 23R005	10 10	U U	10 10	UJ UJ
95M4BN2055 4/17/95	Indeno(1,2,3-cd)pyrene	31.9	2.026	23R004 23R005	10 10	U U	10 10	UJ UJ
95M4BN2055 4/17/95	Dibenz(a,h) anthracene	38.6	1.717	23R004 23R005	10 10	U U	10 10	UJ UJ
95M4BN2055 4/17/95	Benzo (g,h,i) perylene	31.6	1.717	23R004 23R005	10 10	U U	10 10	UJ UJ
95M4BN2059 4/17/95	Phenyl-tert-butyl amine	35.0	1.123	23R004 23R005	50 50	U U	50 50	UJ UJ
95M4BN2059 4/17/95	1-Naphthylamine	34.8	0.736	23R004 23R005	50 50	U U	50 50	UJ UJ
95M4BN2059 4/17/95	2-Naphthylamine	57.9	0.802	23R004 23R005	50 50	U U	50 50	UJ UJ
95M4BN2059 4/17/95	5-Nitro-o-toluidine	56.3	0.333	23R004 23R005	10 10	U U	10 10	UJ UJ
95M4BN2059 4/17/95	1,3,5-Trinitrobenzene	27.1	0.564	23R004 23R005	10 10	U U	10 10	UJ UJ
95M4BN2059 4/17/95	Methapyrilene	33.1	0.222	23R004 23R005	50 50	U U	50 50	UJ UJ
95M4BN2059 4/17/95	Aramite	39.6	0.074	23R004 23R005	50 50	U U	50 50	UJ UJ
95M4BN2059 4/17/95	Hexachlorophene	68.8	0.035	23R004 23R005	500 500	U U	500 500	R R

95M4BN2160 4/26/95	Bis(2-chloroisopropyl) ether	28.4	1.482	23S00101	690	U	690	UJ
				23S00201	710	U	710	UJ
				23S00301	680	U	680	UJ
				23S00501	670	U	670	UJ
				23S00401	670	U	670	UJ
				23S00601	670	U	670	UJ
95M4BN2160 4/26/95	2-Nitroaniline	36.5	0.301	23S00101	3300	U	3300	UJ
				23S00201	3400	U	3400	UJ
				23S00301	3300	U	3300	UJ
				23S00501	3300	U	3300	UJ
				23S00401	3300	U	3300	UJ
				23S00601	3300	U	3300	UJ
95M4BN2160 4/26/95	2,4-Dinitrophenol	25.8	0.138	23S00101	3300	U	3300	UJ
				23S00201	3400	U	3400	UJ
				23S00301	3300	U	3300	UJ
				23S00501	3300	U	3300	UJ
				23S00401	3300	U	3300	UJ
				23S00601	3300	U	3300	UJ
95M4BN2160 4/26/95	4-Nitrophenol	44.0	0.079	23S00101	3300	U	3300	UJ
				23S00201	3400	U	3400	UJ
				23S00301	3300	U	3300	UJ
				23S00501	3300	U	3300	UJ
				23S00401	3300	U	3300	UJ
				23S00601	3300	U	3300	UJ
95M4BN2160 4/26/95	4-Nitroaniline	41.7	0.154	23S00101	3300	U	3300	UJ
				23S00201	3400	U	3400	UJ
				23S00301	3300	U	3300	UJ
				23S00501	3300	U	3300	UJ
				23S00401	3300	U	3300	UJ
				23S00601	3300	U	3300	UJ
95M4BN2160 4/26/95	Anthracene	27.0	1.487	23S00101	690	U	690	UJ
				23S00201	710	U	710	UJ
				23S00301	680	U	680	UJ
				23S00501	670	U	670	UJ
				23S00401	670	U	670	UJ
				23S00601	670	U	670	UJ
95M4BN2160 4/26/95	Butylbenzyl phthalate	30.0	0.566	23S00101	690	U	690	UJ
				23S00201	710	U	710	UJ
				23S00301	680	U	680	UJ
				23S00501	670	U	670	UJ
				23S00401	670	U	670	UJ
				23S00601	670	U	670	UJ

95M4BN2160 4/26/95	Benzoic Acid	25.3	0.171	23S00101	3300	U	3300	UJ
				23S00201	3400	U	3400	UJ
				23S00301	3300	U	3300	UJ
				23S00501	3300	U	3300	UJ
				23S00401	3300	U	3300	UJ
				23S00601	3300	U	3300	UJ
95M4BN2161 4/26/95	1,4-Naphthoquinone	21.4	0.044	23S00101	69000	U	69000	R
				23S00201	71000	U	71000	R
				23S00301	68000	U	68000	R
				23S00501	67000	U	67000	R
				23S00401	67000	U	67000	R
				23S00601	67000	U	67000	R
95M4BN2161 4/26/95	1,3-Dinitrobenzene	29.6	0.088	23S00101	690	U	690	UJ
				23S00201	710	U	710	UJ
				23S00301	680	U	680	UJ
				23S00501	670	U	670	UJ
				23S00401	670	U	670	UJ
				23S00601	670	U	670	UJ
95M4BN2161 4/26/95	2-Naphthylamine	32.7	0.674	23S00101	3300	U	3300	UJ
				23S00201	3400	U	3400	UJ
				23S00301	3300	U	3300	UJ
				23S00501	3300	U	3300	UJ
				23S00401	3300	U	3300	UJ
				23S00601	3300	U	3300	UJ
95M4BN2161 4/26/95	1,3,5-Trinitrobenzene	28.7	0.552	23S00101	690	U	690	UJ
				23S00201	710	U	710	UJ
				23S00301	680	U	680	UJ
				23S00501	670	U	670	UJ
				23S00401	670	U	670	UJ
				23S00601	670	U	670	UJ
95M4BN2161 4/26/95	Phenacetin	34.8	0.318	23S00101	690	U	690	UJ
				23S00201	710	U	710	UJ
				23S00301	680	U	680	UJ
				23S00501	670	U	670	UJ
				23S00401	670	U	670	UJ
				23S00601	670	U	670	UJ
95M4BN2161 4/26/95	4-Nitroquinoline-1-oxide	31.9	0.047	23S00101	33000	U	33000	R
				23S00201	34000	U	34000	R
				23S00301	33000	U	33000	R
				23S00501	33000	U	33000	R
				23S00401	33000	U	33000	R
				23S00601	33000	U	33000	R

95M4BN2161 4/26/95	Methapyrilene	54.8	0.150	23S00101	3300	U	3300	UJ
				23S00201	3400	U	3400	UJ
				23S00301	3300	U	3300	UJ
				23S00501	3300	U	3300	UJ
				23S00401	3300	U	3300	UJ
				23S00601	3300	U	3300	UJ
95M4BN2161 4/26/95	2-Acetylamino fluorene	34.1	0.201	23S00101	690	U	690	UJ
				23S00201	710	U	710	UJ
				23S00301	680	U	680	UJ
				23S00501	670	U	670	UJ
				23S00401	670	U	670	UJ
				23S00601	670	U	670	UJ
95M4BN2161 4/26/95	Hexachlorophene	75.9	0.027	23S00101	33000	U	33000	R
				23S00201	34000	U	34000	R
				23S00301	33000	U	33000	R
				23S00501	33000	U	33000	R
				23S00401	33000	U	33000	R
				23S00601	33000	U	33000	R
95M4BN2176 4/27/95	Bis(2-chloroisopropyl) ether	27.0	1.512	23S00701	750	U	750	UJ
				23S00801	770	U	770	UJ
				23S00801D	770	U	770	UJ
				23S00901	690	U	690	UJ
				23S01001	700	U	700	UJ
				23S01201	720	U	720	UJ
				23S01101	700	U	700	UJ
95M4BN2176 4/27/95	2-Nitroaniline	34.8	0.309	23S00701	3600	U	3600	UJ
				23S00801	3700	U	3700	UJ
				23S00801D	3700	U	3700	UJ
				23S00901	3400	U	3400	UJ
				23S01001	3400	U	3400	UJ
				23S01201	3500	U	3500	UJ
				23S01101	3400	U	3400	UJ
95M4BN2176 4/27/95	3-Nitroaniline	25.4	0.249	23S00701	3600	U	3600	UJ
				23S00801	3700	U	3700	UJ
				23S00801D	3700	U	3700	UJ
				23S00901	3400	U	3400	UJ
				23S01001	3400	U	3400	UJ
				23S01201	3500	U	3500	UJ
				23S01101	3400	U	3400	UJ

95M4BN2176 4/27/95	4-Nitrophenol	39.0	0.086	23S00701	3600	U	3600	UJ
				23S00801	3700	U	3700	UJ
				23S00801D	3700	U	3700	UJ
				23S00901	3400	U	3400	UJ
				23S01001	3400	U	3400	UJ
				23S01201	3500	U	3500	UJ
				23S01101	3400	U	3400	UJ
95M4BN2176 4/27/95	4-Nitroaniline	38.3	0.163	23S00701	3600	U	3600	UJ
				23S00801	3700	U	3700	UJ
				23S00801D	3700	U	3700	UJ
				23S00901	3400	U	3400	UJ
				23S01001	3400	U	3400	UJ
				23S01201	3500	U	3500	UJ
				23S01101	3400	U	3400	UJ
95M4BN2176 4/27/95	Anthracene	29.2	1.513	23S00701	750	U	750	UJ
				23S00801	770	U	770	UJ
				23S00801D	770	U	770	UJ
				23S00901	690	U	690	UJ
				23S01001	700	U	700	UJ
				23S01201	720	U	720	UJ
				23S01101	700	U	700	UJ
95M4BN2176 4/27/95	Butylbenzyl phthalate	36.5	0.514	23S00701	750	U	750	UJ
				23S00801	770	U	770	UJ
				23S00801D	770	U	770	UJ
				23S00901	690	U	690	UJ
				23S01001	700	U	700	UJ
				23S01201	720	U	720	UJ
				23S01101	700	U	700	UJ
95M4BN2176 4/27/95	Bis(2-ethylhexyl) phthalate	31.0	0.760	23S00701	750	U	750	UJ
				23S00801	770	U	770	UJ
				23S00801D	770	U	770	UJ
				23S00901	390	J	390	J
				23S01001	700	U	700	UJ
				23S01201	720	U	720	UJ
				23S01101	700	U	700	UJ
95M4BN2176 4/27/95	Benzo(b) fluoranthene	39.0	2.390	23S00701	110	J	110	J
				23S00801	770	U	770	UJ
				23S00801D	770	U	770	UJ
				23S00901	690	U	690	UJ
				23S01001	700	U	700	UJ
				23S01201	720	U	720	UJ
				23S01101	700	U	700	UJ

95M4BN2176 4/27/95	Indeno(1,2,3-cd)pyrene	26.9	1.123	23S00701	750	U	750	UJ
				23S00801	770	U	770	UJ
				23S00801D	770	U	770	UJ
				23S00901	690	U	690	UJ
				23S01001	700	U	700	UJ
				23S01201	720	U	720	UJ
				23S01101	700	U	700	UJ
95M4BN2176 4/27/95	Benzo (g,h,i) perylene	38.8	0.798	23S00701	750	U	750	UJ
				23S00801	770	U	770	UJ
				23S00801D	770	U	770	UJ
				23S00901	690	U	690	UJ
				23S01001	700	U	700	UJ
				23S01201	720	U	720	UJ
				23S01101	700	U	700	UJ
95M4BN2176 4/27/95	Benzoic Acid	29.7	0.161	23S00701	3600	U	3600	UJ
				23S00801	3700	U	3700	UJ
				23S00801D	3700	U	3700	UJ
				23S00901	3400	U	3400	UJ
				23S01001	3400	U	3400	UJ
				23S01201	3500	U	3500	UJ
				23S01101	3400	U	3400	UJ
95M4BN2177 4/27/95	Phenyl-tert-butyl amine	56.6	0.361	23S00701	3600	U	3600	UJ
				23S00801	3700	U	3700	UJ
				23S00801D	3700	U	3700	UJ
				23S00901	3400	U	3400	UJ
				23S01001	3400	U	3400	UJ
				23S01201	3500	U	3500	UJ
				23S01101	3400	U	3400	UJ
95M4BN2177 4/27/95	1,4-Naphthoquinone	28.6	0.040	23S00701	75000	U	75000	R
				23S00801	77000	U	77000	R
				23S00801D	77000	U	77000	R
				23S00901	69000	U	69000	R
				23S01001	70000	U	70000	R
				23S01201	72000	U	72000	R
				23S01101	70000	U	70000	R
95M4BN2177 4/27/95	1,3-Dinitrobenzene	31.2	0.086	23S00701	750	U	750	UJ
				23S00801	770	U	770	UJ
				23S00801D	770	U	770	UJ
				23S00901	690	U	690	UJ
				23S01001	700	U	700	UJ
				23S01201	720	U	720	UJ
				23S01101	700	U	700	UJ

95M4BN2177 4/27/95	2-Naphthylamine	25.6	0.638	23S00701	3600	U	3600	UJ
				23S00801	3700	U	3700	UJ
				23S00801D	3700	U	3700	UJ
				23S00901	3400	U	3400	UJ
				23S01001	3400	U	3400	UJ
				23S01201	3500	U	3500	UJ
				23S01101	3400	U	3400	UJ
95M4BN2177 4/27/95	1,3,5-Trinitrobenzene	28.7	0.552	23S00701	750	U	750	UJ
				23S00801	770	U	770	UJ
				23S00801D	770	U	770	UJ
				23S00901	690	U	690	UJ
				23S01001	700	U	700	UJ
				23S01201	720	U	720	UJ
				23S01101	700	U	700	UJ
95M4BN2177 4/27/95	Phenacetin	34.4	0.320	23S00701	750	U	750	UJ
				23S00801	770	U	770	UJ
				23S00801D	770	U	770	UJ
				23S00901	690	U	690	UJ
				23S01001	700	U	700	UJ
				23S01201	720	U	720	UJ
				23S01101	700	U	700	UJ
95M4BN2177 4/27/95	4-Nitroquinoline-1-oxide	31.9	0.047	23S00701	36000	U	36000	R
				23S00801	37000	U	37000	R
				23S00801D	37000	U	37000	R
				23S00901	34000	U	34000	R
				23S01001	34000	U	34000	R
				23S01201	35000	U	35000	R
				23S01101	34000	U	34000	R
95M4BN2177 4/27/95	Methapyrilene	40.7	0.197	23S00701	3600	U	3600	UJ
				23S00801	3700	U	3700	UJ
				23S00801D	3700	U	3700	UJ
				23S00901	3400	U	3400	UJ
				23S01001	3400	U	3400	UJ
				23S01201	3500	U	3500	UJ
				23S01101	3400	U	3400	UJ
95M4BN2177 4/27/95	Hexachlorophene	76.8	0.026	23S00701	36000	U	36000	R
				23S00801	37000	U	37000	R
				23S00801D	37000	U	37000	R
				23S00901	34000	U	34000	R
				23S01001	34000	U	34000	R
				23S01201	35000	U	35000	R
				23S01101	34000	U	34000	R

95M4BN2198 4/28/95	Methyl Methanesulfonate	26.6	0.130	23S01301	850	U	850	UJ
				23S01401	800	U	800	UJ
				23S01501	750	U	750	UJ
				23S01601	760	U	760	UJ
				23S01701	710	U	710	UJ
				23S01701D	710	U	710	UJ
				23S01801	730	U	730	UJ
95M4BN2198 4/28/95	N-Nitrosodiethyl amine	27.9	0.307	23S01301	850	U	850	UJ
				23S01401	800	U	800	UJ
				23S01501	750	U	750	UJ
				23S01601	760	U	760	UJ
				23S01701	710	U	710	UJ
				23S01701D	710	U	710	UJ
				23S01801	730	U	730	UJ
95M4BN2198 4/28/95	1,4-Naphthoquinone	17.9	0.046	23S01301	85000	U	85000	R
				23S01401	80000	U	80000	R
				23S01501	75000	U	75000	R
				23S01601	76000	U	76000	R
				23S01701	71000	U	71000	R
				23S01701D	71000	U	71000	R
				23S01801	73000	U	73000	R
95M4BN2198 4/28/95	1,3-Dinitrobenzene	32.0	0.085	23S01301	850	U	850	UJ
				23S01401	800	U	800	UJ
				23S01501	750	U	750	UJ
				23S01601	760	U	760	UJ
				23S01701	710	U	710	UJ
				23S01701D	710	U	710	UJ
				23S01801	730	U	730	UJ
95M4BN2198 4/28/95	2-Naphthylamine	35.2	0.687	23S01301	4100	U	4100	UJ
				23S01401	3900	U	3900	UJ
				23S01501	3600	U	3600	UJ
				23S01601	3700	U	3700	UJ
				23S01701	3400	U	3400	UJ
				23S01701D	3400	U	3400	UJ
				23S01801	3500	U	3500	UJ
95M4BN2198 4/28/95	5-Nitro-o-toluidine	36.2	0.290	23S01301	850	U	850	UJ
				23S01401	800	U	800	UJ
				23S01501	750	U	750	UJ
				23S01601	760	U	760	UJ
				23S01701	710	U	710	UJ
				23S01701D	710	U	710	UJ
				23S01801	730	U	730	UJ

95M4BN2198 4/28/95	1,3,5-Trinitrobenzene	31.8	0.528	23S01301	850	U	850	UJ
				23S01401	800	U	800	UJ
				23S01501	750	U	750	UJ
				23S01601	760	U	760	UJ
				23S01701	710	U	710	UJ
				23S01701D	710	U	710	UJ
				23S01801	730	U	730	UJ
95M4BN2198 4/28/95	Phenacetin	44.9	0.269	23S01301	850	U	850	UJ
				23S01401	800	U	800	UJ
				23S01501	750	U	750	UJ
				23S01601	760	U	760	UJ
				23S01701	710	U	710	UJ
				23S01701D	710	U	710	UJ
				23S01801	730	U	730	UJ
95M4BN2198 4/28/95	4-Nitroquinoline-1-oxide	39.1	0.042	23S01301	41000	U	41000	R
				23S01401	39000	U	39000	R
				23S01501	36000	U	36000	R
				23S01601	37000	U	37000	R
				23S01701	34000	U	34000	R
				23S01701D	34000	U	34000	R
				23S01801	35000	U	35000	R
95M4BN2198 4/28/95	Methapyrilene	70.8	0.097	23S01301	4100	U	4100	UJ
				23S01401	3900	U	3900	UJ
				23S01501	3600	U	3600	UJ
				23S01601	3700	U	3700	UJ
				23S01701	3400	U	3400	UJ
				23S01701D	3400	U	3400	UJ
				23S01801	3500	U	3500	UJ
95M4BN2198 4/28/95	p-Dimethylamino azobenzene	34.6	0.193	23S01301	850	U	850	UJ
				23S01401	800	U	800	UJ
				23S01501	750	U	750	UJ
				23S01601	760	U	760	UJ
				23S01701	710	U	710	UJ
				23S01701D	710	U	710	UJ
				23S01801	730	U	730	UJ
95M4BN2198 4/28/95	Aramite	7.5	0.049	23S01301	4100	U	4100	R
				23S01401	3900	U	3900	R
				23S01501	3600	U	3600	R
				23S01601	3700	U	3700	R
				23S01701	3400	U	3400	R
				23S01701D	3400	U	3400	R
				23S01801	3500	U	3500	R

95M4BN2198 4/28/95	3,3'-Dimethyl benzidine	37.0	0.211	23S01301	850	U	850	UJ
				23S01401	800	U	800	UJ
				23S01501	750	U	750	UJ
				23S01601	760	U	760	UJ
				23S01701	710	U	710	UJ
				23S01701D	710	U	710	UJ
				23S01801	730	U	730	UJ
95M4BN2198 4/28/95	2-Acetylamino fluorene	48.8	0.156	23S01301	850	U	850	UJ
				23S01401	800	U	800	UJ
				23S01501	750	U	750	UJ
				23S01601	760	U	760	UJ
				23S01701	710	U	710	UJ
				23S01701D	710	U	710	UJ
				23S01801	730	U	730	UJ

Semivolatile Continuing Calibration Summary Table
SDG No. M3005

CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	% D	RRF	Affected Samples	Lab Value ug/L or ug/kg	Lab Qual	EDS Value ug/L or ug/kg	EDS Qual
19APR0201002.D 4/19/95	Benzo(k) fluoranthene	25.9	0.782	23R006	10	U	10	UJ
				23R007	10	U	10	UJ
				23S01901	370	U	370	UJ
				23S02001	27	J	27	J
				23S02401	19	J	19	J
				23S02501	35	J	35	J
				23S02601	270	J	270	J
				23S02701	24	J	24	J
20APR0501005.D 4/20/95	2,4-Dinitrophenol	27.5	0.236	23S02701D	1800	U	1800	UJ
				23S02801	1800	U	1800	UJ
				24S00301	1800	U	1800	UJ
				24S00101	1800	U	1800	UJ
				24S00401	1800	U	1800	UJ
				24S00401D	1800	U	1800	UJ
				23S02201	1900	U	1900	UJ
				24S00201	2000	U	2000	UJ
				23S02101	1900	U	1900	UJ
				24S00501	1800	U	1800	UJ

20APR0501005.D 4/20/95	Benzoic Acid	67.4	0.158	23S02701D	1800	U	1800	UJ
				23S02801	1800	U	1800	UJ
				24S00301	1800	U	1800	UJ
				24S00101	1800	U	1800	UJ
				24S00401	62	J	62	J
				24S00401D	1800	U	1800	UJ
				23S02201	1900	U	1900	UJ
				24S00201	2000	U	2000	UJ
				23S02101	1900	U	1900	UJ
				24S00501	1800	U	1800	UJ

Semivolatile Continuing Calibration Summary Table
SDG No. M3006

CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	% D	RRF	Affected Samples	Lab Value ug/L or ug/kg	Lab Qual	EDS Value ug/L or ug/kg	EDS Qual
95M4BN2055 4/17/95	4-Nitrophenol	42.6	0.081	14R008	50	U	50	UJ
95M4BN2055 4/17/95	Benzo(k) fluoranthene	28.4	1.824	14R008	10	U	10	UJ
95M4BN2055 4/17/95	Indeno(1,2,3,cd) pyrene	31.9	2.026	14R008	10	U	10	UJ
95M4BN2055 4/17/95	Dibenz(a,h) anthracene	38.6	1.717	14R008	10	U	10	UJ
95M4BN2055 4/17/95	Benzo(g,h,i) perylene	31.6	1.717	14R008	10	U	10	UJ
95M4BN2059 4/17/95	Phenyl-tert-butylamine	35.0	1.123	14R008	50	U	50	UJ
95M4BN2059 4/17/95	1-Naphthylamine	34.8	0.736	14R008	50	U	50	UJ
95M4BN2059 4/17/95	2-Naphthylamine	57.9	0.802	14R008	50	U	50	UJ
95M4BN2059 4/17/95	5-nitro-o-toluidine	56.3	0.333	14R008	10	U	10	UJ
95M4BN2059 4/17/95	1,3,5-Trinitrobenzene	27.1	0.564	14R008	10	U	10	UJ

95M4BN2059 4/17/95	Methapyrilene	33.1	0.222	14R008	50	U	50	UJ
95M4BN2059 4/17/95	Aramite	39.6	0.074	14R008	50	U	50	UJ
95M4BN2059 4/17/95	Hexachlorophene	68.8	0.035	14R008	500	U	500	R
95M4BN2198 4/28/95	Methyl methanesulfonate	26.6	0.130	14S00301	710	U	710	UJ
95M4BN2198 4/28/95	N-Nitroso diethylamine	27.9	0.307	14S00301	710	U	710	UJ
95M4BN2198 4/28/95	1,3-Dinitrobenzene	32.0	0.085	14S00301	710	U	710	UJ
95M4BN2198 4/28/95	2-Naphthylamine	35.2	0.687	14S00301	3400	U	3400	UJ
95M4BN2198 4/28/95	5-Nitro-o-toluidine	36.2	0.290	14S00301	710	U	710	UJ
95M4BN2198 4/28/95	1,3,5-Trinitro benzene	31.8	0.528	14S00301	710	U	710	UJ
95M4BN2198 4/28/95	Phenacetin	44.9	0.269	14S00301	710	U	710	UJ
95M4BN2198 4/28/95	4-Nitro quinoline-1-oxide	39.1	0.042	14S00301	34000	U	34000	R
95M4BN2198 4/28/95	Methapyrilene	70.8	0.097	14S00301	3400	U	3400	UJ
95M4BN2198 4/28/95	p-Dimethyl aminoazobenzene	34.6	0.193	14S00301	710	U	710	UJ
95M4BN2198 4/28/95	2-Acetylamino fluorene	48.8	0.156	14S00301	710	U	710	UJ
95M4BN2198 4/28/95	3,3'-Dimethyl benzidine	37.0	0.211	14S00301	710	U	710	UJ
95M4BN2198 4/28/95	Aramite	7.5	0.049	14S00301	3400	U	3400	R
95M4BN2243 5/3/95	Benzidine	27.9	0.176	14S01401 14S01101D 14S01201 14S00101 14S00201	3400 3300 3400 3500 3300	U	3400 3300 3400 3500 3300	UJ

95M4BN2246 5/3/95	Pyridine	36.8	1.257	14S01401 14S01101D 14S01201 14S00101 14S00201	3400 3300 3400 3500 3300	U	3400 3300 3400 3500 3300	UJ
95M4BN2246 5/3/95	2-Picoline	28.2	1.153	14S01401 14S01101D 14S01201 14S00101 14S00201	3400 3300 3400 3500 3300	U	3400 3300 3400 3500 3300	UJ
95M4BN2246 5/3/95	N-nitroso methylethylamine	28.2	1.153	14S01401 14S01101D 14S01201 14S00101 14S00201	700 680 690 720 690	U	700 680 690 720 690	UJ
95M4BN2246 5/3/95	Phenacetin	27.7	0.353	14S01401 14S01101D 14S01201 14S00101 14S00201	700 680 690 720 690	U	700 680 690 720 690	UJ
95M4BN2246 5/3/95	4-Nitro quinoline-1-oxide	27.5	0.050	14S01401 14S01101D 14S01201 14S00101 14S00201	34000 33000 34000 35000 33000	U	34000 33000 34000 35000 33000	UJ
95M4BN2246 5/3/95	Methapyrilene	33.4	0.221	14S01401 14S01101D 14S01201 14S00101 14S00201	3400 3300 3400 3500 3300	U	3400 3300 3400 3500 3300	UJ
95M4BN2246 5/3/95	2-Acetylamino fluorene	31.5	0.209	14S01401 14S01101D 14S01201 14S00101 14S00201	700 680 690 720 690	U	700 680 690 720 690	UJ
95M4BN2246 5/3/95	Hexachlorophene	77.7	0.025	14S01401 14S01101D 14S01201 14S00101 14S00201	34000 33000 34000 35000 33000	U	34000 33000 34000 35000 33000	R

95M4BN2246 5/3/95	1,4- Naphthoquinone	23.2	0.043	14S01401 14S01101D 14S01201 14S00101 14S00201	70000 68000 69000 72000 69000	U	70000 68000 69000 72000 69000	R
95M4BN2246 5/3/95	Aramite	11.3	0.047	14S01401 14S01101D 14S01201 14S00101 14S00201	3400 3300 3400 3500 3300	U	3400 3300 3400 3500 3300	R
95M4BN2259 5/4/95	Benzo(g,h,i) perylene	25.6	0.819	14S00401 14S00601 14S00701 14S00801 14S00901 14S01001 14S01301 14S01601 14S01601D	690 690 690 750 700 720 690 860 870	U	690 690 690 750 700 720 690 860 870	UJ
95M4BN2259 5/4/95	Benzidine	48.8	0.125	14S00401 14S00601 14S00701 14S00801 14S00901 14S01001 14S01301 14S01601 14S01601D	3400 3400 3400 3600 3400 3500 3300 4200 4200	U	3400 3400 3400 3600 3400 3500 3300 4200 4200	UJ
95M4BN2260 5/4/95	Pyridine	35.8	1.248	14S00401 14S00601 14S00701 14S00801 14S00901 14S01001 14S01301 14S01601 14S01601D	3400 3400 3400 3600 3400 3500 3300 4200 4200	U	3400 3400 3400 3600 3400 3500 3300 4200 4200	UJ

95M4BN2260 5/4/95	2-Picoline	25.2	1.126	14S00401 14S00601 14S00701 14S00801 14S00901 14S01001 14S01301 14S01601 14S01601D	3400 3400 3400 3600 3400 3500 3300 4200 4200	U	3400 3400 3400 3600 3400 3500 3300 4200 4200	UJ
95M4BN2260 5/4/95	N-nitroso methylethylamine	25.6	0.511	14S00401 14S00601 14S00701 14S00801 14S00901 14S01001 14S01301 14S01601 14S01601D	690 690 690 750 700 720 690 860 870	U	690 690 690 750 700 720 690 860 870	UJ
95M4BN2260 5/4/95	1,4-Naphthoquinone	26.8	0.041	14S00401 14S00601 14S00701 14S00801 14S00901 14S01001 14S01301 14S01601 14S01601D	69000 69000 69000 75000 70000 72000 69000 86000 87000	U	69000 69000 69000 75000 70000 72000 69000 86000 87000	R
95M4BN2260 5/4/95	1,3,5-Trinitrobenzene	25.3	0.578	14S00401 14S00601 14S00701 14S00801 14S00901 14S01001 14S01301 14S01601 14S01601D	690 690 690 750 700 720 690 860 870	U	690 690 690 750 700 720 690 860 870	UJ
95M4BN2260 5/4/95	Phenacetin	35.4	0.315	14S00401 14S00601 14S00701 14S00801 14S00901 14S01001 14S01301 14S01601 14S01601D	690 690 690 750 700 720 690 860 870	U	690 690 690 750 700 720 690 860 870	UJ

95M4BN2260 5/4/95	4-Nitro quinoline-1-oxide	36.2	0.044	14S00401 14S00601 14S00701 14S00801 14S00901 14S01001 14S01301 14S01601 14S01601D	34000 34000 34000 36000 34000 35000 33000 42000 42000	U	34000 34000 34000 36000 34000 35000 33000 42000 42000	R
95M4BN2260 5/4/95	Methapyrilene	33.4	0.221	14S00401 14S00601 14S00701 14S00801 14S00901 14S01001 14S01301 14S01601 14S01601D	3400 3400 3400 3600 3400 3500 3300 4200 4200	U	3400 3400 3400 3600 3400 3500 3300 4200 4200	UJ
95M4BN2260 5/4/95	3,3'-Dimethyl benzidine	28.1	0.241	14S00401 14S00601 14S00701 14S00801 14S00901 14S01001 14S01301 14S01601 14S01601D	690 690 690 750 700 720 690 860 870	U	690 690 690 750 700 720 690 860 870	UJ
95M4BN2260 5/4/95	2-Acetylamino fluorene	29.8	0.214	14S00401 14S00601 14S00701 14S00801 14S00901 14S01001 14S01301 14S01601 14S01601D	690 690 690 750 700 720 690 860 870	U	690 690 690 750 700 720 690 860 870	UJ
95M4BN2260 5/4/95	Aramite	15.1	0.045	14S00401 14S00601 14S00701 14S00801 14S00901 14S01001 14S01301 14S01601 14S01601D	3400 3400 3400 3600 3400 3500 3300 4200 4200	U	3400 3400 3400 3600 3400 3500 3300 4200 4200	R

95M4BN2274 5/4/95	N-nitroso-di-n-propylamine	28.6	0.795	14S00501 14S01101 14S01701	7100 3400 800	U	7100 3400 800	UJ
95M4BN2274 5/4/95	Hexachloroethane	27.4	0.561	14S00501 14S01101 14S01701	7100 3400 800	U	7100 3400 800	UJ
95M4BN2274 5/4/95	Nitrobenzene	29.6	0.293	14S00501 14S01101 14S01701	7100 3400 800	U	7100 3400 800	UJ
95M4BN2274 5/4/95	Bis(2-chloro ethoxy)methane	26.9	0.354	14S00501 14S01101 14S01701	7100 3400 800	U	7100 3400 800	UJ
95M4BN2274 5/4/95	Bis(2-ethylhexyl) phthalate	27.7	0.990	14S00501 14S01101 14S01701	7100 3400 800	U	7100 3400 800	UJ
95M4BN2274 5/4/95	N-nitroso dimethylamine	37.2	0.733	14S00501 14S01101 14S01701	7100 3400 800	U	7100 3400 800	UJ
95M4BN2274 5/4/95	Pyridine	36.9	1.077	14S00501 14S01101 14S01701	34000 17000 3900	U	34000 17000 3900	UJ
95M4BN2274 5/4/95	Benzyl alcohol	26.6	0.842	14S00501 14S01101 14S01701	7100 3400 800	U	7100 3400 800	UJ
95M4BN2274 5/4/95	Benzidine	42.2	0.347	14S00501 14S01101 14S01701	34000 17000 3900	U	34000 17000 3900	UJ
95M4BN2275 5/4/95	Methyl methanesulfonate	40.1	0.106	14S00501 14S01101 14S01701	7100 3400 800	U	7100 3400 800	UJ
95M4BN2275 5/4/95	N-nitrosodiethylamine	30.5	0.296	14S00501 14S01101 14S01701	7100 3400 800	U	7100 3400 800	UJ
95M4BN2275 5/4/95	Hexachloropropene	30.5	0.132	14S00501 14S01101 14S01701	34000 17000 3900	U	34000 17000 3900	UJ
95M4BN2275 5/4/95	1,3-Dinitrobenzene	32.0	0.085	14S00501 14S01101 14S01701	7100 3400 800	U	7100 3400 800	UJ

95M4BN2275 5/4/95	2-Naphthylamine	54.1	0.783	14S00501 14S01101 14S01701	34000 17000 3900	U	34000 17000 3900	UJ
95M4BN2275 5/4/95	5-nitro-o-toluidine	34.7	0.287	14S00501 14S01101 14S01701	7100 3400 800	U	7100 3400 800	UJ
95M4BN2275 5/4/95	1.3.5- Trinitrobenzene	31.6	0.529	14S00501 14S01101 14S01701	7100 3400 800	U	7100 3400 800	UJ
95M4BN2275 5/4/95	4-Aminobiphenyl	36.3	0.582	14S00501 14S01101 14S01701	34000 17000 3900	U	34000 17000 3900	UJ
95M4BN2275 5/4/95	Methapyrilene	26.5	0.244	14S00501 14S01101 14S01701	34000 17000 3900	U	34000 17000 3900	UJ
95M4BN2275 5/4/95	Aramite	32.1	0.070	14S00501 14S01101 14S01701	34000 17000 3900	U	34000 17000 3900	UJ
95M4BN2275 5/4/95	Hexachlorophene	63.4	0.041	14S00501 14S01101 14S01701	34000 0 17000 39000	U	34000 0 17000 39000	R
95M4BN2275 5/4/95	1,4- Naphthoquinone	12.5	0.049	14S00501 14S01101 14S01701	71000 0 34000 80000	U	71000 0 34000 80000	R

Semivolatile Continuing Calibration Summary Table
SDG No. 3010

CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	% D	RRF	Affected Samples	Lab Value ug/l or ug/kg	Lab Qual	EDS Value ug/l or ug/kg	EDS Qual
95M4BN2290 5 5 95	4-Nitroaniline	34.6	0.214	18Y002 18R012	50 50	U U	50 50	UJ UJ
95M4BN2290 5/5/95	Bis(2-ethylhexyl) phthalate	25.9	0.976	18Y002 18R012	10 10	U U	10 10	UJ UJ

95M4BN2290 5/5/95	Benzo(k) fluoranthene	27.6	1.138	18Y002 18R012	10 10	U U	10 10	UJ UJ
95M4BN2291 5/5/95	1-Naphthylamine	29.5	0.707	18Y002 18R012	50 50	U U	50 50	UJ UJ
95M4BN2291 5/5/95	2-Naphthylamine	64.6	0.836	18Y002 18R012	50 50	U U	50 50	UJ UJ
95M4BN2291 5/5/95	5-Nitro-o- toluidine	57.8	0.336	18Y002 18R012	10 10	U U	10 10	UJ UJ
95M4BN2291 5/5/95	4-Aminobiphenyl	34.9	0.576	18Y002 18R012	50 50	U U	50 50	UJ UJ
95M4BN2291 5/5/95	Aramite	32.1	0.070	18Y002 18R012	50 50	U U	50 50	UJ UJ
95M4BN2291 5/5/95	p-Dimethylamino azobenzene	31.2	0.387	18Y002 18R012	10 10	U U	10 10	UJ UJ
95M4BN2291 5/5/95	Hexachlorophene	33.9	0.074	18Y002 18R012	500 500	U U	500 500	UJ UJ
95M4BN2240 5/16/95	Benzo(g,h,i) perylene	31.6	1.447	18D00201 18D00101 18D00101D 14D00201	750 770 850 1400	U U U J	750 770 850 1400	UJ UJ UJ J
95M4BN2240 5/16/95	N-Nitrosodi methylamine	45.4	1.698	18D00201 18D00101 18D00101D 14D00201	750 770 850 1800	U U U U	750 770 850 1800	UJ UJ UJ UJ
95M4BN2240 5/16/95	Pyridine	46.2	2.495	18D00201 18D00101 18D00101D 14D00201	3600 3700 4100 8600	U U U U	3600 3700 4100 8600	UJ UJ UJ UJ
95M4BN2240 5/16/95	Aniline	28.4	1.281	18D00201 18D00101 18D00101D 14D00201	750 770 850 1800	U U U U	750 770 850 1800	UJ UJ UJ UJ
95M4BN2240 5/16/95	Benzidine	34.8	0.159	18D00201 18D00101 18D00101D 14D00201	3600 3700 4100 8600	U U U U	3600 3700 4100 8600	UJ UJ UJ UJ

95M4BN2443 5/16/95	2-Picoline	99.9	1.932	18D00201 18D00101 18D00101D 14D00201	3600 3700 4100 8600	U U U U	3600 3700 4100 8600	UJ UJ UJ UJ
95M4BN2443 5/16/95	N-nitrosomethyl ethylamine	40.0	0.570	18D00201 18D00101 18D00101D 14D00201	750 770 850 1800	U U U U	750 770 850 1800	UJ UJ UJ UJ
95M4BN2443 5/16/95	N-nitrosodiethyl amine	38.3	0.589	18D00201 18D00101 18D00101D 14D00201	750 770 850 1800	U U U U	750 770 850 1800	UJ UJ UJ UJ
95M4BN2443 5/16/95	N-nitrosopyrrolidine	25.5	0.512	18D00201 18D00101 18D00101D 14D00201	750 770 850 1800	U U U U	750 770 850 1800	UJ UJ UJ UJ
95M4BN2443 5/16/95	2,6-Dichlorophenol	34.3	0.329	18D00201 18D00101 18D00101D 14D00201	750 770 850 1800	U U U U	750 770 850 1800	UJ UJ UJ UJ
95M4BN2443 5/16/95	Safrole	29.3	0.388	18D00201 18D00101 18D00101D 14D00201	3600 3700 4100 8600	U U U U	3600 3700 4100 8600	UJ UJ UJ UJ
95M4BN2443 5/16/95	5-Nitro-o-toluidine	32.9	0.283	18D00201 18D00101 18D00101D 14D00201	750 770 850 1800	U U U U	750 770 850 1800	UJ UJ UJ UJ
95M4BN2443 5/16/95	4-Nitroquinoline-1-oxide	42.0	0.040	18D00201 18D00101 18D00101D 14D00201	36000 37000 41000 86000	U U U U	36000 37000 41000 86000	R R R R
95M4BN2443 5/16/95	Methapyrilene	50.3	0.165	18D00201 18D00101 18D00101D 14D00201	3600 3700 4100 8600	U U U U	3600 3700 4100 8600	UJ UJ UJ UJ
95M4BN2443 5/16/95	3,3'-Dimethyl benzidine	27.8	0.242	18D00201 18D00101 18D00101D 14D00201	750 770 850 1800	U U U U	750 770 850 1800	UJ UJ UJ UJ

95M4BN2443 5/16/95	2-Acetylamino fluorene	27.5	0.221	18D00201	750	U	750	UJ
				18D00101	770	U	770	UJ
				18D00101D	850	U	850	UJ
				14D00201	1800	U	1800	UJ
95M4BN2443 5/16/95	Hexachlorophene	57.1	0.048	18D00201	36000	U	36000	R
				18D00101	37000	U	37000	R
				18D00101D	41000	U	41000	R
				14D00201	86000	U	86000	R
95M4BN2443 5/16/95	Aramite	9.4	0.048	18D00201	3600	U	3600	R
				18D00101	3700	U	3700	R
				18D00101D	4100	U	4100	R
				14D00201	8600	U	8600	R
95M4BN2456 5/17/95	N-nitroso-di-n-propylamine	29.4	1.442	18D00301	710	U	710	UJ
				14D00101	1600	U	1600	UJ
				14D00301	1800	U	1800	UJ
				14D00701	860	U	860	UJ
				14D00801	850	U	850	UJ
				14D00401	860	U	860	UJ
				14D00501	850	U	850	UJ
				14D00601D	870	U	870	UJ
95M4BN2456 5/17/95	Benzo(g,h,i) perylene	28.9	1.408	18D00301	770	J	770	J
				14D00101	1600	U	1600	UJ
				14D00301	110	J	110	J
				14D00701	860	U	860	UJ
				14D00801	850	U	850	UJ
				14D00401	510	J	510	J
				14D00501	200	J	200	J
				14D00601D	240	J	240	J
95M4BN2456 5/17/95	N-nitrosodimethyl amine	57.9	1.844	18D00301	710	U	710	UJ
				14D00101	1600	U	1600	UJ
				14D00301	1800	U	1800	UJ
				14D00701	860	U	860	UJ
				14D00801	850	U	850	UJ
				14D00401	860	U	860	UJ
				14D00501	850	U	850	UJ
				14D00601D	870	U	870	UJ

95M4BN2456 5/17/95	Pyridine	52.5	2.602	18D00301	3400	U	3400	UJ
				14D00101	7800	U	7800	UJ
				14D00301	8800	U	8800	UJ
				14D00701	4200	U	4200	UJ
				14D00801	4100	U	4100	UJ
				14D00401	4200	U	4200	UJ
				14D00501	4100	U	4100	UJ
				14D00601D	4200	U	4200	UJ
95M4BN2457 5/17/95	2-Picoline	81.1	1.623	18D00301	3400	U	3400	UJ
				14D00101	7800	U	7800	UJ
				14D00301	8800	U	8800	UJ
				14D00701	4200	U	4200	UJ
				14D00801	4100	U	4100	UJ
				14D00401	4200	U	4200	UJ
				14D00501	4100	U	4100	UJ
				14D00601D	4200	U	4200	UJ
95M4BN2457 5/17/95	N-nitrosomethyl ethylamine	81.3	0.738	18D00301	710	U	710	UJ
				14D00101	1600	U	1600	UJ
				14D00301	1800	U	1800	UJ
				14D00701	860	U	860	UJ
				14D00801	850	U	850	UJ
				14D00401	860	U	860	UJ
				14D00501	850	U	850	UJ
				14D00601D	870	U	870	UJ
95M4BN2457 5/17/95	Methylmethane sulfonate	30.5	0.231	18D00301	710	U	710	UJ
				14D00101	1600	U	1600	UJ
				14D00301	1800	U	1800	UJ
				14D00701	860	U	860	UJ
				14D00801	850	U	850	UJ
				14D00401	860	U	860	UJ
				14D00501	850	U	850	UJ
				14D00601D	870	U	870	UJ
95M4BN2457 5/17/95	N-nitrosodiethyl amine	25.6	0.535	18D00301	710	U	710	UJ
				14D00101	1600	U	1600	UJ
				14D00301	1800	U	1800	UJ
				14D00701	860	U	860	UJ
				14D00801	850	U	850	UJ
				14D00401	860	U	860	UJ
				14D00501	850	U	850	UJ
				14D00601D	870	U	870	UJ

95M4BN2457 5/17/95	N-nitrosopyrrolidine	42.9	0.583	18D00301	710	U	710	UJ
				14D00101	1600	U	1600	UJ
				14D00301	1800	U	1800	UJ
				14D00701	860	U	860	UJ
				14D00801	850	U	850	UJ
				14D00401	860	U	860	UJ
				14D00501	850	U	850	UJ
				14D00601D	870	U	870	UJ
95M4BN2457 5/17/95	N-nitrosopiperidine	37.7	1.071	18D00301	710	U	710	UJ
				14D00101	1600	U	1600	UJ
				14D00301	1800	U	1800	UJ
				14D00701	860	U	860	UJ
				14D00801	850	U	850	UJ
				14D00401	860	U	860	UJ
				14D00501	850	U	850	UJ
				14D00601D	870	U	870	UJ
95M4BN2457 5/17/95	Hexachloro propene	26.3	0.140	18D00301	3400	U	3400	UJ
				14D00101	7800	U	7800	UJ
				14D00301	8800	U	8800	UJ
				14D00701	4200	U	4200	UJ
				14D00801	4100	U	4100	UJ
				14D00401	4200	U	4200	UJ
				14D00501	4100	U	4100	UJ
				14D00601D	4200	U	4200	UJ
95M4BN2457 5/17/95	2-Naphthylamine	45.7	0.740	18D00301	3400	U	3400	UJ
				14D00101	7800	U	7800	UJ
				14D00301	8800	U	8800	UJ
				14D00701	4200	U	4200	UJ
				14D00801	4100	U	4100	UJ
				14D00401	4200	U	4200	UJ
				14D00501	4100	U	4100	UJ
				14D00601D	4200	U	4200	UJ
95M4BN2457 5/17/95	5-nitro-o-toluidine	36.2	0.290	18D00301	710	U	710	UJ
				14D00101	1600	U	1600	UJ
				14D00301	1800	U	1800	UJ
				14D00701	860	U	860	UJ
				14D00801	850	U	850	UJ
				14D00401	860	U	860	UJ
				14D00501	850	U	850	UJ
				14D00601D	870	U	870	UJ

95M4BN2457 5/17/95	4-Nitroquinoline-1-oxide	50.7	0.034	18D00301	34000	U	34000	R
				14D00101	78000	U	78000	R
				14D00301	88000	U	88000	R
				14D00701	42000	U	42000	R
				14D00801	41000	U	41000	R
				14D00401	42000	U	42000	R
				14D00501	41000	U	41000	R
				14D00601D	42000	U	42000	R
95M4BN2457 5/17/95	Methapyrilene	41.9	0.193	18D00301	3400	U	3400	UJ
				14D00101	7800	U	7800	UJ
				14D00301	8800	U	8800	UJ
				14D00701	4200	U	4200	UJ
				14D00801	4100	U	4100	UJ
				14D00401	4200	U	4200	UJ
				14D00501	4100	U	4100	UJ
				14D00601D	4200	U	4200	UJ
95M4BN2457 5/17/95	3.3'-Dimethyl benzidine	37.9	0.208	18D00301	710	U	710	UJ
				14D00101	1600	U	1600	UJ
				14D00301	1800	U	1800	UJ
				14D00701	860	U	860	UJ
				14D00801	850	U	850	UJ
				14D00401	860	U	860	UJ
				14D00501	850	U	850	UJ
				14D00601D	870	U	870	UJ
95M4BN2457 5/17/95	2-Acetylamino fluorene	32.5	0.206	18D00301	710	U	710	UJ
				14D00101	1600	U	1600	UJ
				14D00301	1800	U	1800	UJ
				14D00701	860	U	860	UJ
				14D00801	850	U	850	UJ
				14D00401	860	U	860	UJ
				14D00501	850	U	850	UJ
				14D00601D	870	U	870	UJ
95M4BN2457 5/17/95	Hexachlorophene	33.0	0.149	18D00301	34000	U	34000	UJ
				14D00101	78000	U	78000	UJ
				14D00301	88000	U	88000	UJ
				14D00701	42000	U	42000	UJ
				14D00801	41000	U	41000	UJ
				14D00401	42000	U	42000	UJ
				14D00501	41000	U	41000	UJ
				14D00601D	42000	U	42000	UJ

95M4BN2457 5/17/95	Aramite	20.8	0.042	18D00301 14D00101 14D00301 14D00701 14D00801 14D00401 14D00501 14D00601D	3400 7800 8800 4200 4100 4200 4100 4200	U U U U U U U U	3400 7800 8800 4200 4100 4200 4100 4200	R R R R R R R R
95M4BN2473 5/18/95	Hexachloroethane	25.6	0.595	14D00601	880	U	880	UJ
95M4BN2473 5/18/95	Nitrobenzene	29.8	0.292	14D00601	880	U	880	UJ
95M4BN2473 5/18/95	2,4- Dimethylphenol	26.5	0.263	14D00601	880	U	880	UJ
95M4BN2473 5/18/95	2-Nitroaniline	29.7	0.246	14D00601	4300	U	4300	UJ
95M4BN2473 5/18/95	4-Nitroaniline	27.7	0.203	14D00601	4300	U	4300	UJ
95M4BN2473 5/18/95	Indeno(1,2,3-cd) pyrene	27.6	1.789	14D00601	340	J	340	J
95M4BN2473 5/18/95	Benzo(g,h,i) perylene	32.6	1.459	14D00601	410	J	410	J
95M4BN2473 5/18/95	Benzoic Acid	25.8	0.135	14D00601	4300	U	4300	UJ
95M4BN2473 5/18/95	1,2-Diphenyl hydrazine	31.1	0.851	14D00601	880	U	880	UJ
95M4BN2474 5/18/95	Methyl methane sulfonate	42.4	0.102	14D00601	880	U	880	UJ
95M4BN2474 5/18/95	N-Nitrosodiethyl amine	35.7	0.274	14D00601	880	U	880	UJ
95M4BN2474 5/18/95	Hexachloro propene	40.0	0.114	14D00601	4300	U	4300	UJ
95M4BN2474 5/18/95	1,3- Dinitrobenzene	37.6	0.078	14D00601	880	U	880	UJ
95M4BN2474 5/18/95	2-Naphthylamine	27.6	0.648	14D00601	4300	U	4300	UJ

95M4BN2474 5/18/95	1,3,5-Trinitrobenzene	44.2	0.432	14D00601	880	U	880	UJ
95M4BN2474 5/18/95	Phenacitin	33.8	0.323	14D00601	880	U	880	UJ
95M4BN2474 5/18/95	4-Nitroquinoline-1-oxide	34.8	0.045	14D00601	43000	U	43000	R
95M4BN2474 5/18/95	Methapyrilene	40.7	0.197	14D00601	4300	U	4300	UJ
95M4BN2474 5/18/95	Hexachlorophene	59.8	0.179	14D00601	43000	U	43000	UJ

Semivolatile Continuing Calibration Summary Table
SDG No. 3011

CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	% D	RRF	Affected Samples	Lab Value ug/l or ug/kg	Lab Qual	EDS Value ug/l or ug/kg	EDS Qual
95M4BN2290 5/5/95	4-Nitroaniline	34.6	0.214	14R013 14W004 14W004D 14W005	50 50 50 50	U U U U	50 50 50 50	UJ UJ UJ UJ
95M4BN2290 5/5/95	Bis(2-ethylhexyl) phthalate	25.9	0.976	14R013 14W004 14W004D 14W005	9 57 10 10	J U U U	9 57 10 10	J UJ UJ UJ
95M4BN2290 5/5/95	Benzo(k) fluoranthene	27.6	1.136	14R013 14W004 14W004D 14W005	10 10 10 10	U U U U	10 10 10 10	UJ UJ UJ UJ
95M4BN2291 5/5/95	1-Naphthylamine	29.5	0.707	14R013 14W004 14W004D 14W005	50 50 50 50	U U U U	50 50 50 50	UJ UJ UJ UJ
95M4BN2291 5/5/95	2-Naphthylamine	64.6	0.836	14R013 14W004 14W004D 14W005	50 50 50 50	U U U U	50 50 50 50	UJ UJ UJ UJ

95M4BN2291 5/5/95	5-Nitro-o-toluidine	57.8	0.336	14R013 14W004 14W004D 14W005	10 10 10 10	U U U U	10 10 10 10	UJ UJ UJ UJ
95M4BN2291 5/5/95	4-Aminobiphenyl	34.9	0.576	14R013 14W004 14W004D 14W005	50 50 50 50	U U U U	50 50 50 50	UJ UJ UJ UJ
95M4BN2291 5/5/95	Aramite	32.1	0.070	14R013 14W004 14W004D 14W005	50 50 50 50	U U U U	50 50 50 50	UJ UJ UJ UJ
95M4BN2291 5/5/95	p-Dimethylamino azobenzene	31.2	0.387	14R013 14W004 14W004D 14W005	10 10 10 10	U U U U	10 10 10 10	UJ UJ UJ UJ
95M4BN2291 5/5/95	Hexachlorophene	33.9	0.074	14R013 14W004 14W004D 14W005	500 500 500 500	U U U U	500 500 500 500	UJ UJ UJ UJ

Semivolatile Continuing Calibration Summary Table
SDG No. 3012

CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	% D	RRF	Affected Samples	Lab Value ug/l or ug/kg	Lab Qual	EDS Value ug/l or ug/kg	EDS Qual
H0003825.D 5/12/95	Benzoic Acid	32.9	0.210	24S00601 14S02001 14S02001D 14S01901 18S00201 18S00101 14R014	8700 1700 1800 1700 1800 1800 50	U U U U U U U	8700 1700 1800 1700 1800 1800 50	UJ UJ UJ UJ UJ UJ UJ

H0003825.D 5/12/95	p-Phenylenediamine	33.1	0.140	24S00601	87000	U	87000	UJ
				14S02001	17000	U	17000	UJ
				14S02001D	18000	U	18000	UJ
				14S01901	17000	U	17000	UJ
				18S00201	18000	U	18000	UJ
				18S00101	18000	U	18000	UJ
				14R014	500	U	500	UJ

Semivolatile Continuing Calibration Summary Table
SDG No. 3013

CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	% D	RRF	Affected Samples	Lab Value ug/l or ug/kg	Lab Qual	EDS Value ug/l or ug/kg	EDS Qual
95M4BN2473 5/18/95	Hexachloroethane	25.6	0.575	01S00101	730	U	730	UJ
				01S00101D	730	U	730	UJ
				01B00109	800	U	800	UJ
				01B00208	720	U	720	UJ
				01S00301	690	U	690	UJ
				01S00401	690	U	690	UJ
				01B00308	690	U	690	UJ
95M4BN2473 5/18/95	Nitrobenzene	29.8	0.292	01S00101	730	U	730	UJ
				01S00101D	730	U	730	UJ
				01B00109	800	U	800	UJ
				01B00208	720	U	720	UJ
				01S00301	690	U	690	UJ
				01S00401	690	U	690	UJ
				01B00308	690	U	690	UJ
95M4BN2473 5/18/95	2,4-Dimethylphenol	26.5	0.263	01S00101	730	U	730	UJ
				01S00101D	730	U	730	UJ
				01B00109	800	U	800	UJ
				01B00208	720	U	720	UJ
				01S00301	690	U	690	UJ
				01S00401	690	U	690	UJ
				01B00308	690	U	690	UJ
95M4BN2473 5/18/95	2-Nitroaniline	29.7	0.246	01S00101	3500	U	3500	UJ
				01S00101D	3500	U	3500	UJ
				01B00109	3900	U	3900	UJ
				01B00208	3500	U	3500	UJ
				01S00301	3300	U	3300	UJ
				01S00401	3400	U	3400	UJ
				01B00308	3400	U	3400	UJ

95M4BN2473 5/18/95	4-Nitroaniline	27.7	0.203	01S00101	3500	U	3500	UJ
				01S00101D	3500	U	3500	UJ
				01B00109	3900	U	3900	UJ
				01B00208	3500	U	3500	UJ
				01S00301	3300	U	3300	UJ
				01S00401	3400	U	3400	UJ
				01B00308	3400	U	3400	UJ
95M4BN2473 5/18/95	Indeno(1,2,3-cd)pyrene	27.6	1.789	01S00101	730	U	730	UJ
				01S00101D	730	U	730	UJ
				01B00109	800	U	800	UJ
				01B00208	720	U	720	UJ
				01S00301	690	U	690	UJ
				01S00401	690	U	690	UJ
				01B00308	690	U	690	UJ
95M4BN2473 5/18/95	Benzo(g,h,i) perylene	32.6	1.459	01S00101	730	U	730	UJ
				01S00101D	730	U	730	UJ
				01B00109	800	U	800	UJ
				01B00208	720	U	720	UJ
				01S00301	690	U	690	UJ
				01S00401	690	U	690	UJ
				01B00308	690	U	690	UJ
95M4BN2473 5/18/95	Benzioc Acid	25.8	0.135	01S00101	3500	U	3500	UJ
				01S00101D	3500	U	3500	UJ
				01B00109	3900	U	3900	UJ
				01B00208	3500	U	3500	UJ
				01S00301	3300	U	3300	UJ
				01S00401	3400	U	3400	UJ
				01B00308	3400	U	3400	UJ
95M4BN2473 5/18/95	1,2-Diphenyl hydrazine	31.1	0.851	01S00101	730	U	730	UJ
				01S00101D	730	U	730	UJ
				01B00109	800	U	800	UJ
				01B00208	720	U	720	UJ
				01S00301	690	U	690	UJ
				01S00401	690	U	690	UJ
				01B00308	690	U	690	UJ
95M4BN2474 5/18/95	Methyl methanesulfonate	42.4	0.102	01S00101	730	U	730	UJ
				01S00101D	730	U	730	UJ
				01B00109	800	U	800	UJ
				01B00208	720	U	720	UJ
				01S00301	690	U	690	UJ
				01S00401	690	U	690	UJ
				01B00308	690	U	690	UJ

95M4BN2474 5/18/95	N-nitroso diethylamine	35.7	0.274	01S00101	730	U	730	UJ
				01S00101D	730	U	730	UJ
				01B00109	800	U	800	UJ
				01B00208	720	U	720	UJ
				01S00301	690	U	690	UJ
				01S00401	690	U	690	UJ
				01B00308	690	U	690	UJ
95M4BN2474 5/18/95	Hexachloro propene	40.0	0.114	01S00101	3500	U	3500	UJ
				01S00101D	3500	U	3500	UJ
				01B00109	3900	U	3900	UJ
				01B00208	3500	U	3500	UJ
				01S00301	3300	U	3300	UJ
				01S00401	3400	U	3400	UJ
				01B00308	3400	U	3400	UJ
95M4BN2474 5/18/95	1.3-Dinitrobenzene	37.6	0.076	01S00101	730	U	730	UJ
				01S00101D	730	U	730	UJ
				01B00109	800	U	800	UJ
				01B00208	720	U	720	UJ
				01S00301	690	U	690	UJ
				01S00401	690	U	690	UJ
				01B00308	690	U	690	UJ
95M4BN2474 5/18/95	2-Naphthylamine	27.6	0.648	01S00101	3500	U	3500	UJ
				01S00101D	3500	U	3500	UJ
				01B00109	3900	U	3900	UJ
				01B00208	3500	U	3500	UJ
				01S00301	3300	U	3300	UJ
				01S00401	3400	U	3400	UJ
				01B00308	3400	U	3400	UJ
95M4BN2474 5/18/95	1.3.5-Trinitrobenzene	44.2	0.432	01S00101	730	U	730	UJ
				01S00101D	730	U	730	UJ
				01B00109	800	U	800	UJ
				01B00208	720	U	720	UJ
				01S00301	690	U	690	UJ
				01S00401	690	U	690	UJ
				01B00308	690	U	690	UJ
95M4BN2474 5/18/95	Phenacetin	33.8	0.323	01S00101	730	U	730	UJ
				01S00101D	730	U	730	UJ
				01B00109	800	U	800	UJ
				01B00208	720	U	720	UJ
				01S00301	690	U	690	UJ
				01S00401	690	U	690	UJ
				01B00308	690	U	690	UJ

95M4BN2474 5/18/95	4-Nitroquinoline-1-oxide	34.8	0.045	01S00101	35000	U	35000	R
				01S00101D	35000	U	35000	R
				01B00109	39000	U	39000	R
				01B00208	35000	U	35000	R
				01S00301	33000	U	33000	R
				01S00401	34000	U	34000	R
				01B00308	34000	U	34000	R
95M4BN2474 5/18/95	Methapyrilene	40.7	0.197	01S00101	3500	U	3500	UJ
				01S00101D	3500	U	3500	UJ
				01B00109	3900	U	3900	UJ
				01B00208	3500	U	3500	UJ
				01S00301	3300	U	3300	UJ
				01S00401	3400	U	3400	UJ
				01B00308	3400	U	3400	UJ
95M4BN2474 5/18/95	Hexachlorophene	59.8	0.179	01S00101	35000	U	35000	UJ
				01S00101D	35000	U	35000	UJ
				01B00109	39000	U	39000	UJ
				01B00208	35000	U	35000	UJ
				01S00301	33000	U	33000	UJ
				01S00401	34000	U	34000	UJ
				01B00308	34000	U	34000	UJ
95M4BN2489 5/19/95	2,4-Dinitrophenol	30.1	0.147	01B00409	3800	U	3800	UJ
				01S00501	3300	U	3300	UJ
				01B00508	3400	U	3400	UJ
				01S00601	3300	U	3300	UJ
				01B00608	3600	U	3600	UJ
				01B00608D	3600	U	3600	UJ
				01S00701	3500	U	3500	UJ
95M4BN2489 5/19/95	4-Nitroaniline	44.0	0.229	01B00409	3800	U	3800	UJ
				01S00501	3300	U	3300	UJ
				01B00508	3400	U	3400	UJ
				01S00601	3300	U	3300	UJ
				01B00608	3600	U	3600	UJ
				01B00608D	3600	U	3600	UJ
				01S00701	3500	U	3500	UJ
95M4BN2489 5/19/95	Pyridine	26.0	1.262	01B00409	3800	U	3800	UJ
				01S00501	3300	U	3300	UJ
				01B00508	3400	U	3400	UJ
				01S00601	3300	U	3300	UJ
				01B00608	3600	U	3600	UJ
				01B00608D	3600	U	3600	UJ
				01S00701	3500	U	3500	UJ

95M4BN2490 5/19/95	Methyl methanesulfonate	42.4	0.102	01B00409	790	U	790	UJ
				01S00501	690	U	690	UJ
				01B00508	700	U	700	UJ
				01S00601	690	U	690	UJ
				01B00608	730	U	730	UJ
				01B00608D	750	U	750	UJ
				01S00701	730	U	730	UJ
95M4BN2490 5/19/95	N-nitroso diethylamine	25.4	0.318	01B00409	790	U	790	UJ
				01S00501	690	U	690	UJ
				01B00508	700	U	700	UJ
				01S00601	690	U	690	UJ
				01B00608	730	U	730	UJ
				01B00608D	750	U	750	UJ
				01S00701	730	U	730	UJ
95M4BN2490 5/19/95	Phenyl-tert-butylamine	29.3	0.588	01B00409	3800	U	3800	UJ
				01S00501	3300	U	3300	UJ
				01B00508	3400	U	3400	UJ
				01S00601	3300	U	3300	UJ
				01B00608	3600	U	3600	UJ
				01B00608D	3600	U	3600	UJ
				01S00701	3500	U	3500	UJ
95M4BN2490 5/19/95	Hexachloro propene	32.6	0.128	01B00409	3800	U	3800	UJ
				01S00501	3300	U	3300	UJ
				01B00508	3400	U	3400	UJ
				01S00601	3300	U	3300	UJ
				01B00608	3600	U	3600	UJ
				01B00608D	3600	U	3600	UJ
				01S00701	3500	U	3500	UJ
95M4BN2490 5/19/95	2-Naphthyamine	45.7	0.740	01B00409	3800	U	3800	UJ
				01S00501	3300	U	3300	UJ
				01B00508	3400	U	3400	UJ
				01S00601	3300	U	3300	UJ
				01B00608	3600	U	3600	UJ
				01B00608D	3600	U	3600	UJ
				01S00701	3500	U	3500	UJ
95M4BN2490 5/19/95	5-Nitro-o-toluidine	51.6	0.323	01B00409	790	U	790	UJ
				01S00501	690	U	690	UJ
				01B00508	700	U	700	UJ
				01S00601	690	U	690	UJ
				01B00608	730	U	730	UJ
				01B00608D	750	U	750	UJ
				01S00701	730	U	730	UJ

95M4BN2490 5/19/95	1.3.5-Trinitrobenzene	33.6	0.514	01B00409	790	U	790	UJ
				01S00501	690	U	690	UJ
				01B00508	700	U	700	UJ
				01S00601	690	U	690	UJ
				01B00608	730	U	730	UJ
				01B00608D	750	U	750	UJ
				01S00701	730	U	730	UJ
95M4BN2490 5/19/95	Phenacetin	29.5	0.344	01B00409	790	U	790	UJ
				01S00501	690	U	690	UJ
				01B00508	700	U	700	UJ
				01S00601	690	U	690	UJ
				01B00608	730	U	730	UJ
				01B00608D	750	U	750	UJ
				01S00701	730	U	730	UJ
95M4BN2490 5/19/95	4-Nitroquinoline-1-oxide	53.6	0.032	01B00409	38000	U	38000	R
				01S00501	33000	U	33000	R
				01B00508	34000	U	34000	R
				01S00601	33000	U	33000	R
				01B00608	36000	U	36000	R
				01B00608D	36000	U	36000	R
				01S00701	35000	U	35000	R
95M4BN2490 5/19/95	Methapyrilene	71.7	0.094	01B00409	3800	U	3800	UJ
				01S00501	3300	U	3300	UJ
				01B00508	3400	U	3400	UJ
				01S00601	3300	U	3300	UJ
				01B00608	3600	U	3600	UJ
				01B00608D	3600	U	3600	UJ
				01S00701	3500	U	3500	UJ
95M4BN2490 5/19/95	Aramite	17.0	0.044	01B00409	3800	U	3800	R
				01S00501	3300	U	3300	R
				01B00508	3400	U	3400	R
				01S00601	3300	U	3300	R
				01B00608	3600	U	3600	R
				01B00608D	3600	U	3600	R
				01S00701	3500	U	3500	R
95M4BN2490 5/19/95	3.3'-Dimethyl benzidine	47.5	0.176	01B00409	790	U	790	UJ
				01S00501	690	U	690	UJ
				01B00508	700	U	700	UJ
				01S00601	690	U	690	UJ
				01B00608	730	U	730	UJ
				01B00608D	750	U	750	UJ
				01S00701	730	U	730	UJ

95M4BN2490 5/19/95	2-Acetylamino fluorene	43.9	0.171	01B00409 01S00501 01B00508 01S00601 01B00608 01B00608D 01S00701	790 690 700 690 730 750 730	U U U U U U U	790 690 700 690 730 750 730	UJ UJ UJ UJ UJ UJ UJ
95M4BN2490 5/19/95	Hexachlorophene	44.6	0.062	01B00409 01S00501 01B00508 01S00601 01B00608 01B00608D 01S00701	38000 33000 34000 33000 36000 36000 35000	U U U U U U U	38000 33000 34000 33000 36000 36000 35000	UJ UJ UJ UJ UJ UJ UJ
95M4BN2637 5/30/95	4-Nitrophenol	42.8	0.197	01S00201RE 01B00708RE	3400 3400	U U	3400 3400	UJ UJ
95M4BN2638 5/30/95	Pyridine	41.3	1.058	01S00201RE 01B00708RE	3400 3400	U U	3400 3400	UJ UJ
95M4BN2638 5/30/95	N-nitroso diethylamine	25.2	0.696	01S00201RE 01B00708RE	700 700	U U	700 700	UJ UJ
95M4BN2638 5/30/95	1,3-Dinitrobenzene	26.3	0.149	01S00201RE 01B00708RE	700 700	U U	700 700	UJ UJ
95M4BN2638 5/30/95	2-Acetylamino fluorene	43.7	0.220	01S00201RE 01B00708RE	700 700	U U	700 700	UJ UJ
95M4BN2715 6/5/95	2,4-Dinitrophenol	32.3	0.113	01Y003	50	U	50	UJ
95M4BN2715 6/5/95	4,6-Dinitro-2-methylphenol	31.1	0.113	01Y003	50	U	50	UJ
95M4BN2715 6/5/95	Benzoic Acid	27.8	0.166	01Y003	50	U	50	UJ
95M4BN2715 6/5/95	Benzidine	33.3	0.372	01Y003	50	U	50	UJ
95M4BN2716 6/5/95	Phenyl-tert-butylamine	33.3	0.820	01Y003	50	U	50	UJ
95M4BN2716 6/5/95	Methapyrilene	26.4	0.257	01Y003	50	U	50	UJ
95M4BN2716 6/5/95	Hexachlorophene	34.1	0.224	01Y003	500	U	500	UJ

95M4BN2717 6/5/95	p-Phenylene diamine	32.4	0.598	01Y003	500	U	500	UJ
95M4BN2730 6/6/95	Bis(2-chloroisopropyl) ether	34.0	1.275	01Y003	10	U	10	UJ
95M4BN2730 6/6/95	N-Nitroso dimethylamine	31.8	0.580	01Y003	10	U	10	UJ
95M4BN2730 6/6/95	Benzoic Acid	27.4	0.167	01Y003	50	U	50	UJ
95M4BN2731 6/6/95	N-nitrosomethyl ethylamine	31.2	0.389	01R015	10	U	10	UJ
95M4BN2731 6/6/95	Methyl methanesulfonate	29.9	0.270	01R015	10	U	10	UJ
95M4BN2731 6/6/95	Ethyl methanesulfonate	26.5	0.492	01R015	10	U	10	UJ
95M4BN2731 6/6/95	N-nitroso morpholine	25.6	0.200	01R015	10	U	10	UJ
95M4BN2731 6/6/95	Phenyl-tert-butylamine	44.2	0.686	01R015	50	U	50	UJ
95M4BN2731 6/6/95	Methapyrilene	25.8	0.259	01R015	50	U	50	UJ
95M4BN2731 6/6/95	2-Acetylamino fluorene	27.9	0.282	01R015	10	U	10	UJ
95M4BN2732 6/6/95	p-Phenylene diamine	34.9	0.576	01R015	500	U	500	UJ

Semivolatile Initial Calibration Summary Table
SDG No. M3015

ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Samples	Lab Value ug/l or ug/kg	Lab Qual	EDS Value ug/l or ug/kg	EDS Qual
22MAY0601006.D-22MAY0501005.D 5/22/95	4-Nitroquinoline -1-oxide	47.5	0.036	24S00701	89000	U	89000	R
				24S00701D	89000	U	89000	R
				24B00707	18000	U	18000	R
				23B00105	20000	U	20000	R
				44B00107	18000	U	18000	R
				23B00406	18000	U	18000	R
				23B01606	18000	U	18000	R
				23Y004	500	U	500	R
				23R017	500	U	500	R
				23B02407	18000	U	18000	R
				23B02807	21000	U	21000	R
				23S02901	89000	U	89000	R
				23S02901D	88000	U	88000	R
				23B02908	17000	U	17000	R
				23B02108	19000	U	19000	R
				44B00908	18000	U	18000	R
				45S00801	18000	U	18000	R
				45B00805	18000	U	18000	R
				01S00801	17000	U	17000	R
				01B00807	17000	U	17000	R

Semivolatile Continuing Calibration Summary Table
SDG No. 3015

CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	% D	RRF	Affected Samples	Lab Value ug/l or ug/kg	Lab Qual	EDS Value ug/l or ug/kg	EDS Qual
31MAY0201002.D 5/31/95	Benzoic Acid	28.8	0.127	23Y004	50	U	50	UJ
				23R017	50	U	50	UJ
				24B00707	1800	U	1800	UJ
				23B00105	2000	U	2000	UJ
				44B00107	1800	U	1800	UJ
				23B00406	1800	U	1800	UJ
				23B01606	1800	U	1800	UJ
				24S00701D	8900	U	8900	UJ

31MAY0201002.D 5/31/95	4-Nitroquinoline-1-oxide	63.0	0.059	None-All samples previously qualified due to initial calibration problems				
01JUN0401004.D 6/1/95	Benzo(k) fluoranthene	29.2	0.740	23B02407	370	U	370	UJ
				23B02807	420	U	420	UJ
				23S02901	1800	U	1800	UJ
				23S02901D	1800	U	1800	UJ
				23B02908	350	U	350	UJ
				23B02108	380	U	380	UJ
				44B00908	360	U	360	UJ
				45S00801	350	U	350	UJ
				45B00805	370	U	370	UJ
				01S00801	350	U	350	UJ
01JUN0401004.D 6/1/95	4-Nitroquinoline-1-oxide	85.7	0.067	None-All samples previously qualified due to initial calibration problems				
02JUN0102002.D 6/2/95	4-Nitroquinoline-1-oxide	17.9	0.042	None-All samples previously qualified due to initial calibration problems				
05JUN0201002.D 6/5/95	1,3,5-Trinitro benzene	34.7	0.237	24S00701	1800	U	1800	UJ
05JUN0201002.D 6/5/95	4-Nitroquinoline-1-oxide	25.8	0.045	None-All samples previously qualified due to initial calibration problems				

Semivolatile Initial Calibration Summary Table
SDG No. M3016

ICAL Date and File/Batch Numbers of Stds.	Affected Analyte	% RSD	RRF	Affected Samples	Lab Value ug/l or ug/kg	Lab Qual	EDS Value ug/l or ug/kg	EDS Qual
22MAY0201002.D 22MAY0601006.D 5/22/95	4-Nitroquinoline-1-oxide	47.5	0.036	14S02101	180000	U	180000	R
				14B02105	18000	U	18000	R
				14S02201	18000	U	18000	R
				14B02203	21000	U	21000	R
				14S02301	18000	U	18000	R
				14B02303	20000	U	20000	R
				14S02401	18000	U	18000	R
				14B02403	20000	U	20000	R
				14B02504	19000	U	19000	R
				18S00301	17000	U	17000	R
				18S00301D	17000	U	17000	R
				18B00304	19000	U	19000	R
				14R018	500	U	500	R
				14B01404	20000	U	20000	R
				14B00204	20000	U	20000	R
				18B00204	19000	U	19000	R
				18B00204D	20000	U	20000	R
				14B01004	21000	U	21000	R
				14B01904	20000	U	20000	R
				14S01501	170000	U	170000	R
				14S01501RE	170000	U	170000	R
				14B00704	41000	U	41000	R

Semivolatile Continuing Calibration Summary Table
SDG No. 3016

CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	% D	RRF	Affected Samples	Lab Value ug/l or ug/kg	Lab Qual	EDS Value ug/l or ug/kg	EDS Qual
02JUN0102002.D 6/2/95	4-Nitroquinoline-1-oxide	17.9	0.042	None-All samples previously qualified due to initial calibration problems				

05JUN0201002.D 6/5/95	1,3,5-Trinitro benzene	34.7	0.237	14S01501 14B00704 14B01404 14B00204 18B00204 18B00204D 14B01004 14B01904	3500 820 410 410 390 400 420 400	U	3500 820 410 410 390 400 420 400	UJ
05JUN0201002.D 6/5/95	4-Nitroquinoline-1-oxide	25.8	0.045	None-All samples previously qualified due to initial calibration problems				
07JUN0201002.D 6/7/95	Benzoic Acid	58.5	0.074	14S01501RE	17000	U	17000	UJ
07JUN0201002.D 6/7/95	4-Nitroquinoline-1-oxide	13.9	0.031	14S01501RE	170000	U	170000	R
07JUN0201002.D 6/7/95	Methapyrilene	26.2	0.499	14S01501RE	17000	U	17000	UJ
07JUN0201002.D 6/7/95	Hexachloro phene	23.7	0.046	14S01501RE	170000	U	170000	R

Semivolatile Continuing Calibration Summary Table
SDG No. 3017

CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	% D	RRF	Affected Samples	Lab Value ug/l or ug/kg	Lab Qual	EDS Value ug/l or ug/kg	EDS Qual
95M4BN2801 6/9/95	Benzidine	26.3	0.230	14R019 18S00401 14B00804 14B00604	50 3300 3800 3900	U U U U	50 3300 3800 3900	UJ UJ UJ UJ
95M4BN2802 6/9/95	Phenyl-tert-butyl-amine	60.2	0.489	14R019 18S00401 14B00804 14B00604	50 3300 3800 3900	U U U U	50 3300 3800 3900	UJ UJ UJ UJ
95M4BN2802 6/9/95	2,6-Dichlorophenol	27.7	0.286	14R019 18S00401 14B00804 14B00604	10 690 780 800	U U U U	10 690 780 800	UJ UJ UJ UJ

95M4BN2802 6/9/95	Hexachloropropene	44.4	0.257	14R019 18S00401 14B00804 14B00604	50 3300 3800 3900	U U U U	50 3300 3800 3900	UJ UJ UJ UJ
95M4BN2802 6/9/95	Safrole	27.7	0.286	14R019 18S00401 14B00804 14B00604	50 3300 3800 3900	U U U U	50 3300 3800 3900	UJ UJ UJ UJ
95M4BN2802 6/9/95	1,2,4,5- Tetrachlorobenzene	45.4	0.455	14R019 18S00401 14B00804 14B00604	50 3300 3800 3900	U U U U	50 3300 3800 3900	UJ UJ UJ UJ
95M4BN2802 6/9/95	Pentachlorobenzene	29.8	0.654	14R019 18S00401 14B00804 14B00604	50 3300 3800 3900	U U U U	50 3300 3800 3900	UJ UJ UJ UJ
95M4BN2802 6/9/95	2,3,4,6- Tetrachlorophenol	50.7	0.416	14R019 18S00401 14B00804 14B00604	10 690 780 800	U U U U	10 690 780 800	UJ UJ UJ UJ
95M4BN2802 6/9/95	Pronamide	40.1	0.597	14R019 18S00401 14B00804 14B00604	10 690 780 800	U U U U	10 690 780 800	UJ UJ UJ UJ
95M4BN2802 6/9/95	Pentachloronitro benzene	58.8	0.216	14R019 18S00401 14B00804 14B00604	50 3300 3800 3900	U U U U	50 3300 3800 3900	UJ UJ UJ UJ
95M4BN2802 6/9/95	Methapyrilene	39.8	0.210	14R019 18S00401 14B00804 14B00604	50 3300 3800 3900	U U U U	50 3300 3800 3900	UJ UJ UJ UJ
95M4BN2802 6/9/95	p- Dimethylaminoazo benzene	25.4	0.258	14R019 18S00401 14B00804 14B00604	10 690 780 800	U U U U	10 690 780 800	UJ UJ UJ UJ
95M4BN2802 6/9/95	2-Acetylamino fluorene	39.9	0.235	14R019 18S00401 14B00804 14B00604	10 690 780 800	U U U U	10 690 780 800	UJ UJ UJ UJ

95M4BN2802 6/9/95	Hexachlorophene	88.6	0.019	14R019 18S00401 14B00804 14B00604	500 33000 38000 39000	U U U U	500 33000 38000 39000	R R R R
95M4BN2803 6/9/95	p- Phenylenediamine	39.2	0.538	14R019 18S00401 14B00804 14B00604	500 33000 38000 39000	U U U U	500 33000 38000 39000	UJ UJ UJ UJ
95M4BN2880 6/15/95	Benzidine	35.3	0.202	18S00401D 18B00404 17S01301 17B01305 17S01401 17B01405 17B01505 17B01505D 17S00601	3300 3900 3400 3600 3500 4100 4000 3800 3500	U U U U U U U U U	3300 3900 3400 3600 3500 4100 4000 3800 3500	UJ UJ UJ UJ UJ UJ UJ UJ UJ
95M4BN2881 6/15/95	Methyl Methanesulfonate	31.4	0.264	18S00401D 18B00404 17S01301 17B01305 17S01401 17B01405 17B01505 17B01505D 17S00601	690 800 710 730 720 850 810 790 730	U U U U U U U U U	690 800 710 730 720 850 810 790 730	UJ UJ UJ UJ UJ UJ UJ UJ UJ
95M4BN2881 6/15/95	Phenyl-tert- butylamine	45.9	0.665	18S00401D 18B00404 17S01301 17B01305 17S01401 17B01405 17B01505 17B01505D 17S00601	3300 3900 3400 3600 3500 4100 4000 3800 3500	U U U U U U U U U	3300 3900 3400 3600 3500 4100 4000 3800 3500	UJ UJ UJ UJ UJ UJ UJ UJ UJ
95M4BN2881 6/15/95	Hexachloropropene	32.0	0.235	18S00401D 18B00404 17S01301 17B01305 17S01401 17B01405 17B01505 17B01505D 17S00601	3300 3900 3400 3600 3500 4100 4000 3800 3500	U U U U U U U U U	3300 3900 3400 3600 3500 4100 4000 3800 3500	UJ UJ UJ UJ UJ UJ UJ UJ UJ

95M4BN2881 6/15/95	1,2,4,5-Tetrachlorobenzene	52.4	0.477	18S00401D	3300	U	3300	UJ
				18B00404	3900	U	3900	UJ
				17S01301	3400	U	3400	UJ
				17B01305	3600	U	3600	UJ
				17S01401	3500	U	3500	UJ
				17B01405	4100	U	4100	UJ
				17B01505	4000	U	4000	UJ
				17B01505D	3800	U	3800	UJ
				17S00601	3500	U	3500	UJ
95M4BN2881 6/15/95	1,4-Naphthoquinone	19.3	0.046	18S00401D	69000	U	69000	R
				18B00404	80000	U	80000	R
				17S01301	71000	U	71000	R
				17B01305	73000	U	73000	R
				17S01401	72000	U	72000	R
				17B01405	85000	U	85000	R
				17B01505	81000	U	81000	R
				17B01505D	79000	U	79000	R
				17S00601	73000	U	73000	R
95M4BN2881 6/15/95	Pentachlorobenzene	42.3	0.717	18S00401D	3300	U	3300	UJ
				18B00404	3900	U	3900	UJ
				17S01301	3400	U	3400	UJ
				17B01305	3600	U	3600	UJ
				17S01401	3500	U	3500	UJ
				17B01405	4100	U	4100	UJ
				17B01505	4000	U	4000	UJ
				17B01505D	3800	U	3800	UJ
				17S00601	3500	U	3500	UJ
95M4BN2881 6/15/95	2,3,4,6-Tetrachlorophenol	63.4	0.451	18S00401D	690	U	690	UJ
				18B00404	800	U	800	UJ
				17S01301	710	U	710	UJ
				17B01305	730	U	730	UJ
				17S01401	720	U	720	UJ
				17B01405	850	U	850	UJ
				17B01505	810	U	810	UJ
				17B01505D	790	U	790	UJ
				17S00601	730	U	730	UJ
95M4BN2881 6/15/95	Pronamide	47.4	0.628	18S00401D	690	U	690	UJ
				18B00404	800	U	800	UJ
				17S01301	710	U	710	UJ
				17B01305	730	U	730	UJ
				17S01401	720	U	720	UJ
				17B01405	850	U	850	UJ
				17B01505	810	U	810	UJ
				17B01505D	790	U	790	UJ
				17S00601	730	U	730	UJ

95M4BN2881 6/15/95	Pentachloronitro benzene	66.2	0.226	18S00401D	3300	U	3300	UJ
				18B00404	3900	U	3900	UJ
				17S01301	3400	U	3400	UJ
				17B01305	3600	U	3600	UJ
				17S01401	3500	U	3500	UJ
				17B01405	4100	U	4100	UJ
				17B01505	4000	U	4000	UJ
				17B01505D	3800	U	3800	UJ
				17S00601	3500	U	3500	UJ
95M4BN2881 6/15/95	4-Nitroquinoline-1-oxide	32.5	0.056	18S00401D	3300	U	3300	UJ
				18B00404	3900	U	3900	UJ
				17S01301	3400	U	3400	UJ
				17B01305	3600	U	3600	UJ
				17S01401	3500	U	3500	UJ
				17B01405	4100	U	4100	UJ
				17B01505	4000	U	4000	UJ
				17B01505D	3800	U	3800	UJ
				17S00601	3500	U	3500	UJ
95M4BN2881 6/15/95	Methapyrilene	51.9	0.168	18S00401D	3300	U	3300	UJ
				18B00404	3900	U	3900	UJ
				17S01301	3400	U	3400	UJ
				17B01305	3600	U	3600	UJ
				17S01401	3500	U	3500	UJ
				17B01405	4100	U	4100	UJ
				17B01505	4000	U	4000	UJ
				17B01505D	3800	U	3800	UJ
				17S00601	3500	U	3500	UJ
95M4BN2881 6/15/95	p-dimethylaminoazo benzene	37.0	0.218	18S00401D	690	U	690	UJ
				18B00404	800	U	800	UJ
				17S01301	710	U	710	UJ
				17B01305	730	U	730	UJ
				17S01401	720	U	720	UJ
				17B01405	850	U	850	UJ
				17B01505	810	U	810	UJ
				17B01505D	790	U	790	UJ
				17S00601	730	U	730	UJ
95M4BN2881 6/15/95	2-Acetylamino fluorene	47.8	0.204	18S00401D	690	U	690	UJ
				18B00404	800	U	800	UJ
				17S01301	710	U	710	UJ
				17B01305	730	U	730	UJ
				17S01401	720	U	720	UJ
				17B01405	850	U	850	UJ
				17B01505	810	U	810	UJ
				17B01505D	790	U	790	UJ
				17S00601	730	U	730	UJ

95M4BN2881 6/15/95	Hexachlorophene	87.4	0.021	18S00401D	33000	U	33000	R
				18B00404	39000	U	39000	R
				17S01301	34000	U	34000	R
				17B01305	36000	U	36000	R
				17S01401	35000	U	35000	R
				17B01405	41000	U	41000	R
				17B01505	40000	U	40000	R
				17B01505D	38000	U	38000	R
				17S00601	35000	U	35000	R
95M4BN2882 6/15/95	p-Phenylenediamine	38.3	0.546	18S00401D	33000	U	33000	UJ
				18B00404	39000	U	39000	UJ
				17S01301	34000	U	34000	UJ
				17B01305	36000	U	36000	UJ
				17S01401	35000	U	35000	UJ
				17B01405	41000	U	41000	UJ
				17B01505	40000	U	40000	UJ
				17B01505D	38000	U	38000	UJ
				17S00601	35000	U	35000	UJ
95M4BN2895 6/16/95	Benzidine	35.9	0.200	45S01001	3600	U	3600	UJ
				45B01005	3700	U	3700	UJ
				44S01001	3400	U	3400	UJ
				44B01006	3400	U	3400	UJ
95M4BN2896 6/16/95	Methyl Methanesulfonate	34.3	0.253	45S01001	730	U	730	UJ
				45B01005	770	U	770	UJ
				44S01001	710	U	710	UJ
				44B01006	710	U	710	UJ
95M4BN2896 6/16/95	Phenyl-tert-butylamine	43.6	0.693	45S01001	3600	U	3600	UJ
				45B01005	3700	U	3700	UJ
				44S01001	3400	U	3400	UJ
				44B01006	3400	U	3400	UJ
95M4BN2896 6/16/95	2,6-Dichlorophenol	26.8	0.284	45S01001	730	U	730	UJ
				45B01005	770	U	770	UJ
				44S01001	710	U	710	UJ
				44B01006	710	U	710	UJ
95M4BN2896 6/16/95	Safrole	26.8	0.284	45S01001	3600	U	3600	UJ
				45B01005	3700	U	3700	UJ
				44S01001	3400	U	3400	UJ
				44B01006	3400	U	3400	UJ
95M4BN2896 6/16/95	1,2,4,5-Tetrachlorobenzene	32.0	0.413	45S01001	3600	U	3600	UJ
				45B01005	3700	U	3700	UJ
				44S01001	3400	U	3400	UJ
				44B01006	3400	U	3400	UJ

95M4BN2896 6/16/95	Pentachlorobenzene	26.8	0.639	45S01001 45B01005 44S01001 44B01006	3600 3700 3400 3400	U U U U	3600 3700 3400 3400	UJ UJ UJ UJ
95M4BN2896 6/16/95	1,4- Naphthoquinone	14.0	0.049	45S01001 45B01005 44S01001 44B01006	73000 77000 71000 71000	U U U U	73000 77000 71000 71000	R R R R
95M4BN2896 6/16/95	2,3,4,6- Tetrachlorophenol	52.5	0.421	45S01001 45B01005 44S01001 44B01006	730 770 710 710	U U U U	730 770 710 710	UJ UJ UJ UJ
95M4BN2896 6/16/95	Pronamide	34.5	0.573	45S01001 45B01005 44S01001 44B01006	730 770 710 710	U U U U	730 770 710 710	UJ UJ UJ UJ
95M4BN2896 6/16/95	Pentachloronitro benzene	40.4	0.191	45S01001 45B01005 44S01001 44B01006	3600 3700 3400 3400	U U U U	3600 3700 3400 3400	UJ UJ UJ UJ
95M4BN2896 6/16/95	4-Nitroquinoline-1- oxide	26.5	0.061	45S01001 45B01005 44S01001 44B01006	36000 37000 34000 34000	U U U U	36000 37000 34000 34000	UJ UJ UJ UJ
95M4BN2896 6/16/95	Methapyrilene	68.8	0.109	45S01001 45B01005 44S01001 44B01006	3600 3700 3400 3400	U U U U	3600 3700 3400 3400	UJ UJ UJ UJ
95M4BN2896 6/16/95	p- Dimethylaminoazo benzene	36.4	0.220	45S01001 45B01005 44S01001 44B01006	730 770 710 710	U U U U	730 770 710 710	UJ UJ UJ UJ
95M4BN2896 6/16/95	3,3'- Dimethylbenzidine	32.8	0.238	45S01001 45B01005 44S01001 44B01006	730 770 710 710	U U U U	730 770 710 710	UJ UJ UJ UJ
95M4BN2896 6/16/95	2-Acetylamino fluorene	54.0	0.180	45S01001 45B01005 44S01001 44B01006	730 770 710 710	U U U U	730 770 710 710	UJ UJ UJ UJ

95M4BN2896 6/16/95	Hexachlorophene	49.7	0.084	45S01001 45B01005 44S01001 44B01006	36000 37000 34000 34000	U U U U	36000 37000 34000 34000	UJ UJ UJ UJ
95M4BN2897 6/16/95	p- Phenylenediamine	36.0	0.566	45S01001 45B01005 44S01001 44B01006	36000 37000 34000 34000	U U U U	36000 37000 34000 34000	UJ UJ UJ UJ
95M4BN2959 6/20/95	Indeno(1,2,3- cd)pyrene	28.6	1.559	17S00501 17S01501	730 730	U U	730 730	UJ UJ
95M4BN2959 6/20/95	Dibenz(a,h) anthracene	29.3	1.329	17S00501 17S01501	730 730	U U	730 730	UJ UJ
95M4BN2959 6/20/95	Benzo(g,h,i) perylene	35.9	1.260	17S00501 17S01501	730 730	U U	730 730	UJ UJ
95M4BN2960 6/20/95	Methyl Methanesulfonate	77.7	0.086	17S00501 17S01501	730 730	U U	730 730	UJ UJ
95M4BN2960 6/20/95	Phenyl-tert- butylamine	42.9	0.702	17S00501 17S01501	3500 3600	U U	3500 3600	UJ UJ
95M4BN2960 6/20/95	2,6-Dichlorophenol	35.7	0.304	17S00501 17S01501	730 730	U U	730 730	UJ UJ
95M4BN2960 6/20/95	Safrole	35.7	0.304	17S00501 17S01501	3500 3600	U U	3500 3600	UJ UJ
95M4BN2960 6/20/95	1,4- Naphthoquinone	22.8	0.044	17S00501 17S01501	73000 73000	U U	73000 73000	R R
95M4BN2960 6/20/95	1-Naphthylamine	35.0	0.494	17S00501 17S01501	3500 3600	U U	3500 3600	UJ UJ
95M4BN2960 6/20/95	2-Naphthylamine	32.0	0.572	17S00501 17S01501	3500 3600	U U	3500 3600	UJ UJ
95M4BN2960 6/20/95	4-Aminobiphenyl	28.1	0.494	17S00501 17S01501	3500 3600	U U	3500 3600	UJ UJ
95M4BN2960 6/20/95	Methapyrilene	60.7	0.137	17S00501 17S01501	3500 3600	U U	3500 3600	UJ UJ
95M4BN2960 6/20/95	3,3'- Dimethylbenzidine	38.4	0.218	17S00501 17S01501	730 730	U U	730 730	UJ UJ
95M4BN2960 6/20/95	2-Acetylamino fluorene	35.8	0.251	17S00501 17S01501	730 730	U U	730 730	UJ UJ

95M4BN2960 6/20/95	Hexachlorophene	73.0	0.289	17S00501 17S01501	35000 36000	U U	35000 36000	UJ UJ
95M4BN2961 6/20/95	p- Phenylenediamine	28.9	0.629	17S00501 17S01501	35000 36000	U U	35000 36000	UJ UJ

Semivolatile Continuing Calibration Summary Table
SDG No. 3018

CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	% D	RRF	Affected Samples	Lab Value ug/l or ug/kg	Lab Qual	EDS Value ug/l or ug/kg	EDS Qual
95M4BN2944 6/19/95	Indeno(1,2,3-cd)pyrene	27.2	0.882	TCB00103 TCS00201	380 380	U U	380 380	UJ UJ
95M4BN2944 6/19/95	Benzo(g,h,i) perylene	30.3	0.646	TCB00103 TCS00201	380 380	U U	380 380	UJ UJ
95M4BN2944 6/19/95	Benzidine	59.4	0.110	TCB00103 TCS00201	1900 1800	U U	1900 1800	UJ UJ
95M4BN2945 6/19/95	Methyl methanesulfonate	75.8	0.093	TCB00103 TCS00201	380 380	U U	380 380	UJ UJ
95M4BN2945 6/19/95	Phenyl-tert-butylamine	44.8	0.678	TCB00103 TCS00201	1900 1800	U U	1900 1800	UJ UJ
95M4BN2945 6/19/95	Hexachloropropene	25.8	0.132	TCB00103 TCS00201	1900 1800	U U	1900 1800	UJ UJ
95M4BN2945 6/19/95	2,6-Dichlorophenol	31.7	0.295	TCB00103 TCS00201	380 380	U U	380 380	UJ UJ
95M4BN2945 6/19/95	Safrole	31.7	0.295	TCB00103 TCS00201	1900 1800	U U	1900 1800	UJ UJ
95M4BN2945 6/19/95	1-Naphthylamine	32.2	0.515	TCB00103 TCS00201	1900 1800	U U	1900 1800	UJ UJ
95M4BN2945 6/19/95	2-Naphthylamine	31.3	0.578	TCB00103 TCS00201	1900 1800	U U	1900 1800	UJ UJ
95M4BN2945 6/19/95	4-Aminobiphenyl	29.6	0.484	TCB00103 TCS00201	1900 1800	U U	1900 1800	UJ UJ
95M4BN2945 6/19/95	4-Nitroquinoline-1-oxide	41.0	0.049	TCB00103 TCS00201	19000 18000	U U	19000 18000	R R

95M4BN2945 6/19/95	Methapyrilene	83.7	0.057	TCB00103 TCS00201	1900 1800	U U	1900 1800	UJ UJ
95M4BN2945 6/19/95	3,3'- Dimethylbenzidine	55.6	0.157	TCB00103 TCS00201	380 380	U U	380 380	UJ UJ
95M4BN2945 6/19/95	2-Acetylamino fluorene	59.1	0.160	TCB00103 TCS00201	380 380	U U	380 380	UJ UJ
95M4BN2945 6/19/95	Hexachlorophene	98.8	0.002	TCB00103 TCS00201	19000 18000	U U	19000 18000	R R
95M4BN2946 6/19/95	p- Phenylenediamine	30.8	0.612	TCB00103 TCS00201	19000 18000	U U	19000 18000	UJ UJ
95M4BN2959 6/20/95	Indeno(1,2,3- cd)pyrene	28.6	1.559	TCB00203 TCB00303 TCB00403 TCS00401 TCS00401D TCS00301	430 400 370 380 370 340	U U U U U U	430 400 370 380 370 340	UJ UJ UJ UJ UJ UJ
95M4BN2959 6/20/95	Dibenz(a,h) anthracene	29.3	1.329	TCB00203 TCB00303 TCB00403 TCS00401 TCS00401D TCS00301	430 400 370 380 370 340	U U U U U U	430 400 370 380 370 340	UJ UJ UJ UJ UJ UJ
95M4BN2959 6/20/95	Benzo(g,h,i) perylene	35.9	1.260	TCB00203 TCB00303 TCB00403 TCS00401 TCS00401D TCS00301	430 400 370 380 370 340	U U U U U U	430 400 370 380 370 340	UJ UJ UJ UJ UJ UJ
95M4BN2960 6/20/95	Methyl methanesulfonate	77.7	0.086	TCB00203 TCB00303 TCB00403 TCS00401 TCS00401D TCS00301	430 400 370 380 370 340	U U U U U U	430 400 370 380 370 340	UJ UJ UJ UJ UJ UJ
95M4BN2960 6/20/95	Phenyl-tert- butylamine	42.9	0.702	TCB00203 TCB00303 TCB00403 TCS00401 TCS00401D TCS00301	2100 2000 1800 1800 1800 1700	U U U U U U	2100 2000 1800 1800 1800 1700	UJ UJ UJ UJ UJ UJ

95M4BN2960 6/20/95	2,6-Dichlorophenol	35.7	0.304	TCB00203	430	U	430	UJ
				TCB00303	400	U	400	UJ
				TCB00403	370	U	370	UJ
				TCS00401	380	U	380	UJ
				TCS00401D	370	U	370	UJ
				TCS00301	340	U	340	UJ
95M4BN2960 6/20/95	Safrole	35.7	0.304	TCB00203	2100	U	2100	UJ
				TCB00303	2000	U	2000	UJ
				TCB00403	1800	U	1800	UJ
				TCS00401	1800	U	1800	UJ
				TCS00401D	1800	U	1800	UJ
				TCS00301	1700	U	1700	UJ
95M4BN2960 6/20/95	1,4-Naphthoquinone	22.8	0.044	TCB00203	43000	U	43000	R
				TCB00303	40000	U	40000	R
				TCB00403	37000	U	37000	R
				TCS00401	38000	U	38000	R
				TCS00401D	37000	U	37000	R
				TCS00301	34000	U	34000	R
95M4BN2960 6/20/95	1-Naphthylamine	35.0	0.494	TCB00203	2100	U	2100	UJ
				TCB00303	2000	U	2000	UJ
				TCB00403	1800	U	1800	UJ
				TCS00401	1800	U	1800	UJ
				TCS00401D	1800	U	1800	UJ
				TCS00301	1700	U	1700	UJ
95M4BN2960 6/20/95	2-Naphthylamine	32.0	0.572	TCB00203	2100	U	2100	UJ
				TCB00303	2000	U	2000	UJ
				TCB00403	1800	U	1800	UJ
				TCS00401	1800	U	1800	UJ
				TCS00401D	1800	U	1800	UJ
				TCS00301	1700	U	1700	UJ
95M4BN2960 6/20/95	4-Aminobiphenyl	28.1	0.494	TCB00203	2100	U	2100	UJ
				TCB00303	2000	U	2000	UJ
				TCB00403	1800	U	1800	UJ
				TCS00401	1800	U	1800	UJ
				TCS00401D	1800	U	1800	UJ
				TCS00301	1700	U	1700	UJ
95M4BN2960 6/20/95	Methapyrilene	60.7	0.137	TCB00203	2100	U	2100	UJ
				TCB00303	2000	U	2000	UJ
				TCB00403	1800	U	1800	UJ
				TCS00401	1800	U	1800	UJ
				TCS00401D	1800	U	1800	UJ
				TCS00301	1700	U	1700	UJ

95M4BN2960 6/20/95	3,3'- Dimethylbenzidine	38.4	0.218	TCB00203 TCB00303 TCB00403 TCS00401 TCS00401D TCS00301	430 400 370 380 370 340	U U U U U U	430 400 370 380 370 340	UJ UJ UJ UJ UJ UJ
95M4BN2960 6/20/95	2-Acetylamino fluorene	35.8	0.251	TCB00203 TCB00303 TCB00403 TCS00401 TCS00401D TCS00301	430 400 370 380 370 340	U U U U U U	430 400 370 380 370 340	UJ UJ UJ UJ UJ UJ
95M4BN2960 6/20/95	Hexachlorophene	73.0	0.289	TCB00203 TCB00303 TCB00403 TCS00401 TCS00401D TCS00301	21000 20000 18000 18000 18000 17000	U U U U U U	21000 20000 18000 18000 18000 17000	UJ UJ UJ UJ UJ UJ
95M4BN2961 6/20/95	p- Phenylenediamine	28.9	0.629	TCB00203 TCB00303 TCB00403 TCS00401 TCS00401D TCS00301	21000 20000 18000 18000 18000 17000	U U U U U U	21000 20000 18000 18000 18000 17000	UJ UJ UJ UJ UJ UJ
95M4BN2975 6/21/95	Indeno(1,2,3- cd)pyrene	40.4	1.702	TCR020 TCS00101	10 87	U J	10 87	UJ J
95M4BN2975 6/21/95	Dibenz(a,h) anthracene	41.2	1.452	TCR020 TCS00101	10 360	U U	10 360	UJ UJ
95M4BN2975 6/21/95	Benzo(g,h,i) perylene	40.4	1.301	TCR020 TCS00101	10 85	U J	10 85	UJ J
95M4BN2976 6/21/95	Methyl methanesulfonate	78.4	0.083	TCR020 TCS00101	10 360	U U	10 360	UJ UJ
95M4BN2976 6/21/95	Phenyl-tert- butylamine	36.6	0.779	TCR020 TCS00101	50 1700	U U	50 1700	UJ UJ
95M4BN2976 6/21/95	2,6-Dichlorophenol	38.8	0.311	TCR020 TCS00101	10 360	U U	10 360	UJ UJ
95M4BN2976 6/21/95	1,4- Naphthoquinone	21.0	0.045	TCR020 TCS00101	1000 36000	U U	1000 36000	R R
95M4BN2976 6/21/95	1-Naphthylamine	36.2	0.485	TCR020 TCS00101	50 1700	U U	50 1700	UJ UJ

95M4BN2976 6/21/95	2-Naphthylamine	33.9	0.556	TCR020 TCS00101	50 1700	U U	50 1700	UJ UJ
95M4BN2976 6/21/95	4-Aminobiphenyl	27.4	0.499	TCR020 TCS00101	50 1700	U U	50 1700	UJ UJ
95M4BN2976 6/21/95	Methapyrilene	50.1	0.174	TCR020 TCS00101	50 1700	U U	50 1700	UJ UJ
95M4BN2976 6/21/95	3,3'- Dimethylbenzidine	37.6	0.221	TCR020 TCS00101	10 360	U U	10 360	UJ UJ
95M4BN2976 6/21/95	2-Acetylamino fluorene	29.2	0.277	TCR020 TCS00101	10 360	U U	10 360	UJ UJ
95M4BN2976 6/21/95	Hexachlorophene	44.9	0.092	TCR020 TCS00101	500 17000	U U	500 17000	UJ UJ
95M4BN2977 6/21/95	p- Phenylenediamine	31.4	0.607	TCR020 TCS00101	500 17000	U U	500 17000	UJ UJ

Semivolatile Continuing Calibration Summary Table
SDG No. 3020

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
95M4BN3005 6/22/95	Indeno(1,2,3-cd)pyrene	40.8	1.707	23R022 23G00101D 23G00201 23G00301 23G00601	10 10 10 10 10	U U U U U	10 10 10 10 10	UJ UJ UJ UJ UJ
95M4BN3005 6/22/95	Dibenz(a,h) anthracene	40.3	1.442	23R022 23G00101D 23G00201 23G00301 23G00601	10 10 10 10 10	U U U U U	10 10 10 10 10	UJ UJ UJ UJ UJ
95M4BN3005 6/22/95	Benzo(g,h,i) perylene	43.0	1.326	23R022 23G00101D 23G00201 23G00301 23G00601	10 10 10 10 10	U U U U U	10 10 10 10 10	UJ UJ UJ UJ UJ

95M4BN3006 6/22/95	Methyl methanesulfonate	34.8	0.251	23R022 23G00101D 23G00201 23G00301 23G00601	10 10 10 10 10	U U U U U	10 10 10 10 10	UJ UJ UJ UJ UJ
95M4BN3006 6/22/95	Phenyl-tert-butylamine	26.6	0.902	23R022 23G00101D 23G00201 23G00301 23G00601	50 50 50 50 50	U U U U U	50 50 50 50 50	UJ UJ UJ UJ UJ
95M4BN3006 6/22/95	4-Aminobiphenyl	25.6	0.511	23R022 23G00101D 23G00201 23G00301 23G00601	50 50 50 50 50	U U U U U	50 50 50 50 50	UJ UJ UJ UJ UJ
95M4BN3006 6/22/95	Methapyrilene	56.4	0.152	23R022 23G00101D 23G00201 23G00301 23G00601	50 50 50 50 50	U U U U U	50 50 50 50 50	UJ UJ UJ UJ UJ
95M4BN3006 6/22/95	2-Acetylamino fluorene	29.2	0.277	23R022 23G00101D 23G00201 23G00301 23G00601	10 10 10 10 10	U U U U U	10 10 10 10 10	UJ UJ UJ UJ UJ
95M4BN3006 6/22/95	Hexachlorophene	68.9	0.282	23R022 23G00101D 23G00201 23G00301 23G00601	500 500 500 500 500	U U U U U	500 500 500 500 500	UJ UJ UJ UJ UJ
95M4BN3007 6/22/95	p-Phenylenediamine	36.2	0.565	23R022 23G00101D 23G00201 23G00301 23G00601	500 500 500 500 500	U U U U U	500 500 500 500 500	UJ UJ UJ UJ UJ
95M4BN3020 6/23/95	Indeno(1,2,3-cd)pyrene	41.2	1.712	23G00701 23G00101	10 10	U U	10 10	UJ UJ
95M4BN3020 6/23/95	Dibenz(a,h) anthracene	40.3	1.442	23G00701 23G00101	10 10	U U	10 10	UJ UJ
95M4BN3020 6/23/95	Benzo(g,h,i) perylene	40.9	1.306	23G00701 23G00101	10 10	U U	10 10	UJ UJ

95M4BN3021 6/23/95	Methyl methanesulfonate	33.8	0.255	23G00701 23G00101	10 10	U U	10 10	UJ UJ
95M4BN3021 6/23/95	Phenyl-tert-butylamine	25.6	0.915	23G00701 23G00101	50 50	U U	50 50	UJ UJ
95M4BN3021 6/23/95	4-Aminobiphenyl	26.8	0.503	23G00701 23G00101	50 50	U U	50 50	UJ UJ
95M4BN3021 6/23/95	Methapyrilene	53.9	0.161	23G00701 23G00101	50 50	U U	50 50	UJ UJ
95M4BN3021 6/23/95	3,3'-Dimethylbenzidine	28.2	0.254	23G00701 23G00101	10 10	U U	10 10	UJ UJ
95M4BN3021 6/23/95	2-Acetylamino fluorene	33.0	1.262	23G00701 23G00101	10 10	U U	10 10	UJ UJ
95M4BN3021 6/23/95	Hexachlorophene	99.9	0.392	23G00701 23G00101	500 500	U U	500 500	UJ UJ
95M4BN3022 6/23/95	p-Phenylenediamine	33.9	0.585	23G00701 23G00101	500 500	U U	500 500	UJ UJ

Semivolatile Continuing Calibration Summary Table
SDG No. 3021

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
95M4BN3020 6/23/95	Indeno(1,2,3-cd)pyrene	41.2	1.712	23R023 23G00401 23G00401D 44G00201 01G00301 01G00201	10 10 10 10 10 10	U U U U U U	10 10 10 10 10 10	UJ UJ UJ UJ UJ UJ
95M4BN3020 6/23/95	Dibenz(a,h) anthracene	40.3	1.442	23R023 23G00401 23G00401D 44G00201 01G00301 01G00201	10 10 10 10 10 10	U U U U U U	10 10 10 10 10 10	UJ UJ UJ UJ UJ UJ

95M4BN3020 6/23/95	Benzo(g,h,i) perylene	40.9	1.306	23R023	10	U	10	UJ
				23G00401	10	U	10	UJ
				23G00401D	10	U	10	UJ
				44G00201	10	U	10	UJ
				01G00301	10	U	10	UJ
				01G00201	10	U	10	UJ
95M4BN3021 6/23/95	Methyl methanesulfonate	33.8	0.255	23R023	10	U	10	UJ
				23G00401	10	U	10	UJ
				23G00401D	10	U	10	UJ
				44G00201	10	U	10	UJ
				01G00301	10	U	10	UJ
				01G00201	10	U	10	UJ
95M4BN3021 6/23/95	Phenyl-tert-butylamine	25.6	0.915	23R023	50	U	50	UJ
				23G00401	50	U	50	UJ
				23G00401D	50	U	50	UJ
				44G00201	50	U	50	UJ
				01G00301	50	U	50	UJ
				01G00201	50	U	50	UJ
95M4BN3021 6/23/95	4-Aminobiphenyl	26.8	0.503	23R023	50	U	50	UJ
				23G00401	50	U	50	UJ
				23G00401D	50	U	50	UJ
				44G00201	50	U	50	UJ
				01G00301	50	U	50	UJ
				01G00201	50	U	50	UJ
95M4BN3021 6/23/95	Methapyrilene	53.9	0.161	23R023	50	U	50	UJ
				23G00401	50	U	50	UJ
				23G00401D	50	U	50	UJ
				44G00201	50	U	50	UJ
				01G00301	50	U	50	UJ
				01G00201	50	U	50	UJ
95M4BN3021 6/23/95	3,3'-Dimethylbenzidine	28.2	0.254	23R023	10	U	10	UJ
				23G00401	10	U	10	UJ
				23G00401D	10	U	10	UJ
				44G00201	10	U	10	UJ
				01G00301	10	U	10	UJ
				01G00201	10	U	10	UJ
95M4BN3021 6/23/95	2-Acetylamino fluorene	33.0	1.262	23R023	10	U	10	UJ
				23G00401	10	U	10	UJ
				23G00401D	10	U	10	UJ
				44G00201	10	U	10	UJ
				01G00301	10	U	10	UJ
				01G00201	10	U	10	UJ

95M4BN3021 6/23/95	Hexachlorophene	99.9	0.392	23R023	500	U	500	UJ
				23G00401	500	U	500	UJ
				23G00401D	500	U	500	UJ
				44G00201	500	U	500	UJ
				01G00301	500	U	500	UJ
				01G00201	500	U	500	UJ
95M4BN3022 6/23/95	p-Phenylenediamine	33.9	0.585	23R023	500	U	500	UJ
				23G00401	500	U	500	UJ
				23G00401D	500	U	500	UJ
				44G00201	500	U	500	UJ
				01G00301	500	U	500	UJ
				01G00201	500	U	500	UJ
95M4BN3035 6/23/95	Methyl methanesulfonate	25.8	0.247	23G00501	10	U	10	UJ
				01G00101	10	U	10	UJ
				44G00101	10	U	10	UJ
				44G00301	10	U	10	UJ
				24G00101	10	U	10	UJ
				45G00201	10	U	10	UJ
				45G00201D	10	U	10	UJ
				45G00101	10	U	10	UJ
95M4BN3035 6/23/95	Phenyl-tert-butylamine	27.4	0.892	23G00501	50	U	50	UJ
				01G00101	50	U	50	UJ
				44G00101	50	U	50	UJ
				44G00301	50	U	50	UJ
				24G00101	50	U	50	UJ
				45G00201	50	U	50	UJ
				45G00201D	50	U	50	UJ
				45G00101	50	U	50	UJ
95M4BN3035 6/23/95	1,4-Naphthoquinone	14.0	0.049	23G00501	1000	U	1000	R
				01G00101	1000	U	1000	R
				44G00101	1000	U	1000	R
				44G00301	1000	U	1000	R
				24G00101	1000	U	1000	R
				45G00201	1000	U	1000	R
				45G00201D	1000	U	1000	R
				45G00101	1000	U	1000	R
95M4BN3035 6/23/95	Methapyrilene	50.1	0.174	23G00501	50	U	50	UJ
				01G00101	50	U	50	UJ
				44G00101	50	U	50	UJ
				44G00301	50	U	50	UJ
				24G00101	50	U	50	UJ
				45G00201	50	U	50	UJ
				45G00201D	50	U	50	UJ
				45G00101	50	U	50	UJ

95M4BN3035 6/23/95	3,3'- Dimethylbenzidine	30.2	0.247	23G00501	10	U	10	UJ
				01G00101	10	U	10	UJ
				44G00101	10	U	10	UJ
				44G00301	10	U	10	UJ
				24G00101	10	U	10	UJ
				45G00201	10	U	10	UJ
				45G00201D	10	U	10	UJ
				45G00101	10	U	10	UJ
95M4BN3035 6/23/95	2-Acetylamino fluorene	33.2	0.261	23G00501	10	U	10	UJ
				01G00101	10	U	10	UJ
				44G00101	10	U	10	UJ
				44G00301	10	U	10	UJ
				24G00101	10	U	10	UJ
				45G00201	10	U	10	UJ
				45G00201D	10	U	10	UJ
				45G00101	10	U	10	UJ
95M4BN3035 6/23/95	Hexachlorophene	99.7	0.368	23G00501	500	U	500	UJ
				01G00101	500	U	500	UJ
				44G00101	500	U	500	UJ
				44G00301	500	U	500	UJ
				24G00101	500	U	500	UJ
				45G00201	500	U	500	UJ
				45G00201D	500	U	500	UJ
				45G00101	500	U	500	UJ
95M4BN3037 6/24/95	p- Phenylenediamine	32.9	0.594	23G00501	500	U	500	UJ
				01G00101	500	U	500	UJ
				44G00101	500	U	500	UJ
				44G00301	500	U	500	UJ
				24G00101	500	U	500	UJ
				45G00201	500	U	500	UJ
				45G00201D	500	U	500	UJ
				45G00101	500	U	500	UJ

Semivolatile Continuing Calibration Summary Table
SDG No. 3022

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

95M4BN3050 6/26/95	Indeno(1,2,3-cd)pyrene	36.5	1.654	14Y006 14R024 14G00401 14G00401D 14G00101	10 10 10 10 10	U U U U U	10 10 10 10 10	UJ UJ UJ UJ UJ
95M4BN3050 6/26/95	Dibenz(a,h) anthracene	35.5	1.393	14Y006 14R024 14G00401 14G00401D 14G00101	10 10 10 10 10	U U U U U	10 10 10 10 10	UJ UJ UJ UJ UJ
95M4BN3050 6/26/95	Benzo(g,h,i) perylene	27.1	1.178	14Y006 14R024 14G00401 14G00401D 14G00101	10 10 10 10 10	U U U U U	10 10 10 10 10	UJ UJ UJ UJ UJ
95M4BN3051 6/26/95	Methyl methanesulfonate	77.4	0.087	14Y006 14R024 14G00401 14G00401D 14G00101	10 10 10 10 10	U U U U U	10 10 10 10 10	UJ UJ UJ UJ UJ
95M4BN3051 6/26/95	2,6-Dichlorophenol	38.0	0.309	14Y006 14R024 14G00401 14G00401D 14G00101	10 10 10 10 10	U U U U U	10 10 10 10 10	UJ UJ UJ UJ UJ
95M4BN3051 6/26/95	Safrole	38.0	0.309	14Y006 14R024 14G00401 14G00401D 14G00101	50 50 50 50 50	U U U U U	50 50 50 50 50	UJ UJ UJ UJ UJ
95M4BN3051 6/26/95	1-Naphthylamine	32.4	0.514	14Y006 14R024 14G00401 14G00401D 14G00101	50 50 50 50 50	U U U U U	50 50 50 50 50	UJ UJ UJ UJ UJ
95M4BN3051 6/26/95	2-Naphthylamine	33.8	0.557	14Y006 14R024 14G00401 14G00401D 14G00101	50 50 50 50 50	U U U U U	50 50 50 50 50	UJ UJ UJ UJ UJ

95M4BN3051 6/26/95	1.4- Naphthoquinone	21.0	0.045	14Y006 14R024 14G00401 14G00401D 14G00101	1000 1000 1000 1000 1000	U U U U U	1000 1000 1000 1000 1000	R R R R R
95M4BN3051 6/26/95	4-Aminobiphenyl	29.7	0.483	14Y006 14R024 14G00401 14G00401D 14G00101	50 50 50 50 50	U U U U U	50 50 50 50 50	UJ UJ UJ UJ UJ
95M4BN3051 6/26/95	Pronamide	29.1	0.550	14Y006 14R024 14G00401 14G00401D 14G00101	10 10 10 10 10	U U U U U	10 10 10 10 10	UJ UJ UJ UJ UJ
95M4BN3051 6/26/95	4-Nitroquinoline-1- oxide	26.5	0.061	14Y006 14R024 14G00401 14G00401D 14G00101	500 500 500 500 500	U U U U U	500 500 500 500 500	UJ UJ UJ UJ UJ
95M4BN3051 6/26/95	Methapyrilene	50.7	0.172	14Y006 14R024 14G00401 14G00401D 14G00101	50 50 50 50 50	U U U U U	50 50 50 50 50	UJ UJ UJ UJ UJ
95M4BN3051 6/26/95	3,3'- Dimethylbenzidine	39.0	0.216	14Y006 14R024 14G00401 14G00401D 14G00101	10 10 10 10 10	U U U U U	10 10 10 10 10	UJ UJ UJ UJ UJ
95M4BN3051 6/26/95	2-Acetylamino fluorene	33.2	0.261	14Y006 14R024 14G00401 14G00401D 14G00101	10 10 10 10 10	U U U U U	10 10 10 10 10	UJ UJ UJ UJ UJ
95M4BN3052 6/26/95	p- Phenylenediamine	43.7	0.498	14Y006 14R024 14G00401 14G00401D 14G00101	500 500 500 500 500	U U U U U	500 500 500 500 500	UJ UJ UJ UJ UJ

95M4BN3065 6/27/95	Indeno(1,2,3-cd)pyrene	30.6	0.583	14G00201	10	U	10	UJ
				14G00601	10	U	10	UJ
				14G00301	10	U	10	UJ
				14G01201	10	U	10	UJ
				14G00501	10	U	10	UJ
				14G00801	10	U	10	UJ
95M4BN3065 6/27/95	Dibenz(a,h) anthracene	29.0	1.326	14G00201	10	U	10	UJ
				14G00601	10	U	10	UJ
				14G00301	10	U	10	UJ
				14G01201	10	U	10	UJ
				14G00501	10	U	10	UJ
				14G00801	10	U	10	UJ
95M4BN3066 6/27/95	Methyl methanesulfonate	78.7	0.082	14G00201	10	U	10	UJ
				14G00601	10	U	10	UJ
				14G00301	10	U	10	UJ
				14G01201	10	U	10	UJ
				14G00501	10	U	10	UJ
				14G00801	10	U	10	UJ
95M4BN3066 6/27/95	2,6-Dichloro-phenol	38.4	0.310	14G00201	10	U	10	UJ
				14G00601	10	U	10	UJ
				14G00301	10	U	10	UJ
				14G01201	10	U	10	UJ
				14G00501	10	U	10	UJ
				14G00801	10	U	10	UJ
95M4BN3066 6/27/95	Safrole	38.4	0.310	14G00201	50	U	50	UJ
				14G00601	50	U	50	UJ
				14G00301	50	U	50	UJ
				14G01201	50	U	50	UJ
				14G00501	50	U	50	UJ
				14G00801	50	U	50	UJ
95M4BN3066 6/27/95	1,4-Naphthoquinone	19.3	0.046	14G00201	1000	U	1000	R
				14G00601	1000	U	1000	R
				14G00301	1000	U	1000	R
				14G01201	1000	U	1000	R
				14G00501	1000	U	1000	R
				14G00801	1000	U	1000	R
95M4BN3066 6/27/95	1-Naphthylamine	34.7	0.496	14G00201	50	U	50	UJ
				14G00601	50	U	50	UJ
				14G00301	50	U	50	UJ
				14G01201	50	U	50	UJ
				14G00501	50	U	50	UJ
				14G00801	50	U	50	UJ

95M4BN3066 6/27/95	2-Naphthylamine	35.9	0.539	14G00201	50	U	50	UJ
				14G00601	50	U	50	UJ
				14G00301	50	U	50	UJ
				14G01201	50	U	50	UJ
				14G00501	50	U	50	UJ
				14G00801	50	U	50	UJ
95M4BN3066 6/27/95	4-Aminobiphenyl	30.1	0.480	14G00201	50	U	50	UJ
				14G00601	50	U	50	UJ
				14G00301	50	U	50	UJ
				14G01201	50	U	50	UJ
				14G00501	50	U	50	UJ
				14G00801	50	U	50	UJ
95M4BN3066 6/27/95	Pronamide	25.8	0.536	14G00201	10	U	10	UJ
				14G00601	10	U	10	UJ
				14G00301	10	U	10	UJ
				14G01201	10	U	10	UJ
				14G00501	10	U	10	UJ
				14G00801	10	U	10	UJ
95M4BN3066 6/27/95	4-Nitroquinoline-1-oxide	26.5	0.061	14G00201	500	U	500	UJ
				14G00601	500	U	500	UJ
				14G00301	500	U	500	UJ
				14G01201	500	U	500	UJ
				14G00501	500	U	500	UJ
				14G00801	500	U	500	UJ
95M4BN3066 6/27/95	Methapyrilene	43.6	0.197	14G00201	50	U	50	UJ
				14G00601	50	U	50	UJ
				14G00301	50	U	50	UJ
				14G01201	50	U	50	UJ
				14G00501	50	U	50	UJ
				14G00801	50	U	50	UJ
95M4BN3066 6/27/95	3,3'-Dimethylbenzidine	37.8	0.220	14G00201	10	U	10	UJ
				14G00601	10	U	10	UJ
				14G00301	10	U	10	UJ
				14G01201	10	U	10	UJ
				14G00501	10	U	10	UJ
				14G00801	10	U	10	UJ
95M4BN3066 6/27/95	2-Acetylamino fluorene	37.1	0.246	14G00201	10	U	10	UJ
				14G00601	10	U	10	UJ
				14G00301	10	U	10	UJ
				14G01201	10	U	10	UJ
				14G00501	10	U	10	UJ
				14G00801	10	U	10	UJ

95M4BN3067 6/27/95	p- Phenylenediamine	43.6	0.499	14G00201 14G00601 14G00301 14G01201 14G00501 14G00801	500 500 500 500 500 500	U U U U U U	500 500 500 500 500 500	UJ UJ UJ UJ UJ UJ

Semivolatile Continuing Calibration Summary Table
SDG No. 3023

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
95M4BN3302 7/13/95	N-nitrosomethyl ethylamine	30.3	0.394	18R025 18G00101 18G00201 18G00301 14G01101	10	U	10	UJ
95M4BN3302 7/13/95	Methyl methane-sulfonate	48.8	0.197	18R025 18G00101 18G00201 18G00301 14G01101	10	U	10	UJ
95M4BN3302 7/13/95	N-nitrosodiethyl amine	30.6	0.386	18R025 18G00101 18G00201 18G00301 14G01101	10	U	10	UJ
95M4BN3302 7/13/95	Phenyltertbutyl amine	35.9	0.788	18R025 18G00101 18G00201 18G00301 14G01101	50	U	50	UJ
95M4BN3302 7/13/95	Hexachloro-propene	30.3	0.124	18R025 18G00101 18G00201 18G00301 14G01101	50	U	50	UJ

95M4BN3302 7/13/95	1,4-Naphthoquinone	22.8	0.044	18R025 18G00101 18G00201 18G00301 14G01101	1000	U	1000	R
95M4BN3302 7/13/95	1-Naphthylamine	27.2	0.553	18R025 18G00101 18G00201 18G00301 14G01101	50	U	50	UJ
95M4BN3302 7/13/95	4-Nitroquinoline-1-oxide	25.3	0.062	18R025 18G00101 18G00201 18G00301 14G01101	500	U	500	UJ
95M4BN3302 7/13/95	Methapyrilene	47.6	0.183	18R025 18G00101 18G00201 18G00301 14G01101	50	U	50	UJ
95M4BN3302 7/13/95	3,3'-Dimethyl benzidine	30.5	0.246	18R025 18G00101 18G00201 18G00301 14G01101	10	U	10	UJ
95M4BN3302 7/13/95	2-Acetylamino-fluorene	44.0	0.219	18R025 18G00101 18G00201 18G00301 14G01101	10	U	10	UJ
95M4BN3302 7/13/95	Hexachloro-phene	32.3	0.113	18R025 18G00101 18G00201 18G00301 14G01101	500	U	500	UJ
95M4BN3303 7/13/95	p-Phenylene-diamine	37.6	0.552	18R025 18G00101 18G00201 18G00301 14G01101	500	U	500	UJ

95M4BN3317 7/14/95	Methyl methane-sulfonate	46.2	0.207	14G01001 14G01401 14G00901 14G00701 14G01301 17R026 17G00101 17G00101D 17G00201 17G00301	10	U	10	UJ
95M4BN3317 7/14/95	Phenyltertbutyl amine	64.4	0.437	14G01001 14G01401 14G00901 14G00701 14G01301 17R026 17G00101 17G00101D 17G00201 17G00301	50	U	50	UJ
95M4BN3317 7/14/95	Hexachloro-propene	33.7	0.118	14G01001 14G01401 14G00901 14G00701 14G01301 17R026 17G00101 17G00101D 17G00201 17G00301	50	U	50	UJ
95M4BN3317 7/14/95	1,4-Naphthoquinone	24.6	0.043	14G01001 14G01401 14G00901 14G00701 14G01301 17R026 17G00101 17G00101D 17G00201 17G00301	1000	U	1000	R

95M4BN3317 7/14/95	1-Naphthylamine	29.1	0.539	14G01001 14G01401 14G00901 14G00701 14G01301 17R026 17G00101 17G00101D 17G00201 17G00301	50	U	50	UJ
95M4BN3317 7/14/95	4-Nitroquinoline-1-oxide	25.3	0.062	14G01001 14G01401 14G00901 14G00701 14G01301 17R026 17G00101 17G00101D 17G00201 17G00301	500	U	500	UJ
95M4BN3317 7/14/95	Methapyrilene	43.8	0.196	14G01001 14G01401 14G00901 14G00701 14G01301 17R026 17G00101 17G00101D 17G00201 17G00301	50	U	50	UJ
95M4BN3317 7/14/95	3,3'-Dimethyl benzidine	33.3	0.236	14G01001 14G01401 14G00901 14G00701 14G01301 17R026 17G00101 17G00101D 17G00201 17G00301	10	U	10	UJ

95M4BN3317 7/14/95	2-Acetylamino-fluorene	42.2	0.226	14G01001 14G01401 14G00901 14G00701 14G01301 17R026 17G00101 17G00101D 17G00201 17G00301	10	U	10	UJ
95M4BN3317 7/14/95	Hexachloro-phene	43.7	0.094	14G01001 14G01401 14G00901 14G00701 14G01301 17R026 17G00101 17G00101D 17G00201 17G00301	500	U	500	UJ
95M4BN3318 7/14/95	p-Phenylene-diamine	32.8	0.595	14G01001 14G01401 14G00901 14G00701 14G01301 17R026 17G00101 17G00101D 17G00201 17G00301	500	U	500	UJ
95M4BN3332 7/14/95	2,4-Dinitrophenol	28.1	0.120	18G00101D	50	U	50	UJ
95M4BN3332 7/14/95	Benzoic acid	46.3	0.108	18G00101D	50	U	50	UJ
95M4BN3333 7/14/95	Methyl methane-sulfonate	49.4	0.195	18G00101D	10	U	10	UJ
95M4BN3333 7/14/95	N-nitrosodiethyl amine	28.2	0.399	18G00101D	10	U	10	UJ
95M4BN3333 7/14/95	Phenylterbutyl amine	34.7	0.803	18G00101D	50	U	50	UJ
95M4BN3333 7/14/95	Hexachloro-propene	34.3	0.117	18G00101D	50	U	50	UJ

95M4BN3333 7/14/95	1,4-Naphthoquinone	26.3	0.042	18G00101D	1000	U	1000	R
95M4BN3333 7/14/95	1-Naphthylamine	32.9	0.510	18G00101D	50	U	50	UJ
95M4BN3333 7/14/95	4-Nitroquinoline-1-oxide	33.7	0.055	18G00101D	500	U	500	UJ
95M4BN3333 7/14/95	Methapyrilene	48.4	0.180	18G00101D	50	U	50	UJ
95M4BN3333 7/14/95	3,3'-Dimethyl benzidine	34.8	0.231	18G00101D	10	U	10	UJ
95M4BN3333 7/14/95	2-Acetylamino-fluorene	45.3	0.214	18G00101D	10	U	10	UJ
95M4BN3333 7/14/95	Hexachloro-phene	92.2	0.013	18G00101D	500	U	500	R
95M4BN3334 7/14/95	p-Phenylene-diamine	40.9	0.523	18G00101D	500	U	500	UJ
95M4BN3419 7/21/95	2,4-Dinitrophenol	27.5	0.121	18G00101RE 18G00101DRE	50	U	50	UJ
95M4BN3420 7/21/95	Methyl methane-sulfonate	55.6	0.171	18G00101RE 18G00101DRE	10	U	10	UJ
95M4BN3420 7/21/95	Phenylterbutyl amine	45.9	0.665	18G00101RE 18G00101DRE	50	U	50	UJ
95M4BN3420 7/21/95	Hexachloro-propene	33.2	0.119	18G00101RE 18G00101DRE	50	U	50	UJ
95M4BN3420 7/21/95	1,4-Naphthoquinone	33.3	0.038	18G00101RE 18G00101DRE	1000	U	1000	R
95M4BN3420 7/21/95	1-Naphthylamine	29.0	0.540	18G00101RE 18G00101DRE	50	U	50	UJ
95M4BN3420 7/21/95	2-Naphthylamine	25.3	0.628	18G00101RE 18G00101DRE	50	U	50	UJ

95M4BN3420 7/21/95	4-Aminobiphenyl	29.4	0.465	18G00101RE 18G00101DRE	50	U	50	UJ
95M4BN3420 7/21/95	4-Nitroquinoline-1-oxide	27.7	0.060	18G00101RE 18G00101DRE	500	U	500	UJ
95M4BN3420 7/21/95	Methapyrilene	31.2	0.240	18G00101RE 18G00101DRE	50	U	50	UJ
95M4BN3420 7/21/95	3,3'-Dimethyl benzidine	26.3	0.261	18G00101RE 18G00101DRE	10	U	10	UJ
95M4BN3420 7/21/95	2-Acetylamino-fluorene	26.6	0.287	18G00101RE 18G00101DRE	10	U	10	UJ
95M4BN3420 7/21/95	Hexachloro-phene	27.0	0.122	18G00101RE 18G00101DRE	500	U	500	UJ

Semivolatile Continuing Calibration Summary Table
SDG No. 3024

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
H0004089.D 6/29/95	p-Phenylenediamine	56.1	0.092	45R027 45G00102 45G00102D 23G00502 23G00503 44G00103 44G00102 01G00103 01G00102 0BG00102 0BG00102D 0BG00103 0BG00101 45G00103	500	U	500	UJ

H0004089.D 6/29/95	4-Nitroquinoline-1-oxide	44.2	0.088	45R027 45G00102 45G00102D 23G00502 23G00503 44G00103 44G00102 01G00103 01G00102 0BG00102 0BG00102D 0BG00103 0BG00101 45G00103	500	U	500	UJ
H0004090.D 6/29/95	Benzoic Acid	46.9	0.166	45R027 45G00102 45G00102D 23G00502 23G00503 44G00103 44G00102 01G00103 01G00102 0BG00102 0BG00102D 0BG00103 0BG00101 45G00103	50	U	50	UJ
H0004109.D 6/29/95	p-Phenylenediamine	50.3	0.104	23G00502RE	500	U	500	UJ
H0004109.D 6/29/95	4-Nitroquinoline-1-oxide	44.0	0.088	23G00502RE	500	U	500	UJ
H0004109.D 6/29/95	Hexachlorophene	32.9	0.108	23G00502RE	500	U	500	UJ
H0004110.D 6/29/95	Benzoic Acid	51.0	0.153	23G00502RE	50	U	50	UJ

Semivolatile Continuing Calibration Summary Table
SDG No. M3026

Semivolatile Initial and Continuing Calibration Tables

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
95M4BN3332 7/14/95	2,4-Dinitrophenol	28.1	0.120	TCY007	50	U	50	UJ
				TCR028	50	U	50	UJ
				TCG00501	50	U	50	UJ
				TCG00501D	50	U	50	UJ
				TCG00601	50	U	50	UJ
				TCG00101	50	U	50	UJ
95M4BN3332 7/14/95	Benzoic acid	46.3	0.108	TCY007	50	U	50	UJ
				TCR028	50	U	50	UJ
				TCG00501	50	U	50	UJ
				TCG00501D	50	U	50	UJ
				TCG00601	50	U	50	UJ
				TCG00101	50	U	50	UJ
95M4BN3333 7/14/95	Methyl methane-sulfonate	49.4	0.195	TCY007	10	U	10	UJ
				TCR028	10	U	10	UJ
				TCG00501	10	U	10	UJ
				TCG00501D	10	U	10	UJ
				TCG00601	10	U	10	UJ
				TCG00101	10	U	10	UJ
95M4BN3333 7/14/95	N-nitrosodiethyl amine	28.2	0.399	TCY007	10	U	10	UJ
				TCR028	10	U	10	UJ
				TCG00501	10	U	10	UJ
				TCG00501D	10	U	10	UJ
				TCG00601	10	U	10	UJ
				TCG00101	10	U	10	UJ
95M4BN3333 7/14/95	Phenyl-tert-butylamine	34.7	0.803	TCY007	50	U	50	UJ
				TCR028	50	U	50	UJ
				TCG00501	50	U	50	UJ
				TCG00501D	50	U	50	UJ
				TCG00601	50	U	50	UJ
				TCG00101	50	U	50	UJ
95M4BN3333 7/14/95	Hexachloro-propene	34.3	0.117	TCY007	50	U	50	UJ
				TCR028	50	U	50	UJ
				TCG00501	50	U	50	UJ
				TCG00501D	50	U	50	UJ
				TCG00601	50	U	50	UJ
				TCG00101	50	U	50	UJ

95M4BN3333 7/14/95	1,4-Naphthoquinone	26.3	0.042	TCY007	1000	U	1000	R
				TCR028	1000	U	1000	R
				TCG00501	1000	U	1000	R
				TCG00501D	1000	U	1000	R
				TCG00601	1000	U	1000	R
				TCG00101	1000	U	1000	R
95M4BN3333 7/14/95	1-Naphthylamine	32.9	0.510	TCY007	50	U	50	UJ
				TCR028	50	U	50	UJ
				TCG00501	50	U	50	UJ
				TCG00501D	50	U	50	UJ
				TCG00601	50	U	50	UJ
				TCG00101	50	U	50	UJ
95M4BN3333 7/14/95	4-Nitroquinoline-1-oxide	33.7	0.055	TCY007	500	U	500	UJ
				TCR028	500	U	500	UJ
				TCG00501	500	U	500	UJ
				TCG00501D	500	U	500	UJ
				TCG00601	500	U	500	UJ
				TCG00101	500	U	500	UJ
95M4BN3333 7/14/95	Methapyrilene	48.4	0.180	TCY007	50	U	50	UJ
				TCR028	50	U	50	UJ
				TCG00501	50	U	50	UJ
				TCG00501D	50	U	50	UJ
				TCG00601	50	U	50	UJ
				TCG00101	50	U	50	UJ
95M4BN3333 7/14/95	3,3'-Dimethyl benzidine	34.8	0.231	TCY007	10	U	10	UJ
				TCR028	10	U	10	UJ
				TCG00501	10	U	10	UJ
				TCG00501D	10	U	10	UJ
				TCG00601	10	U	10	UJ
				TCG00101	10	U	10	UJ
95M4BN3333 7/14/95	2-Acetylamino-fluorene	45.3	0.214	TCY007	10	U	10'	UJ
				TCR028	10	U	10	UJ
				TCG00501	10	U	10	UJ
				TCG00501D	10	U	10	UJ
				TCG00601	10	U	10	UJ
				TCG00101	10	U	10	UJ
95M4BN3333 7/14/95	Hexachloro-phene	92.2	0.013	TCY007	500	U	500	R
				TCR028	500	U	500	R
				TCG00501	500	U	500	R
				TCG00501D	500	U	500	R
				TCG00601	500	U	500	R
				TCG00101	500	U	500	R

95M4BN3334 7/14/95 -	p-Phenylene-diamine	40.9	0.523	TCY007 TCR028 TCG00501 TCG00501D TCG00601 TCG00101	500 500 500 500 500 500	U U U U U U	500 500 500 500 500 500	UJ UJ UJ UJ UJ UJ
95M4BN3358 7/17/95	2,4-Dinitrophenol	27.0	0.122	TCG00401 TCG00201 TCG00301	50 50 50	U U U	50 50 50	UJ UJ UJ
95M4BN3358 7/17/95	Benzoic acid	51.2	0.098	TCG00401 TCG00201 TCG00301	50 50 50	U U U	50 50 50	UJ UJ UJ
95M4BN3359 7/17/95	Methyl methane-sulfonate	55.1	0.173	TCG00401 TCG00201 TCG00301	10 10 10	U U U	10 10 10	UJ UJ UJ
95M4BN3359 7/17/95	Phenyl-tert-butylamine	30.0	0.860	TCG00401 TCG00201 TCG00301	50 50 50	U U U	50 50 50	UJ UJ UJ
95M4BN3359 7/17/95	Hexachloro-propene	29.2	0.126	TCG00401 TCG00201 TCG00301	50 50 50	U U U	50 50 50	UJ UJ UJ
95M4BN3359 7/17/95	1,4-Naphthoquinone	31.6	0.039	TCG00401 TCG00201 TCG00301	1000 1000 1000	U U U	1000 1000 1000	R R R
95M4BN3359 7/17/95	4-Nitroquinoline-1-oxide	33.7	0.055	TCG00401 TCG00201 TCG00301	500 500 500	U U U	500 500 500	UJ UJ UJ
95M4BN3359 7/17/95	Methapyrilene	28.9	0.248	TCG00401 TCG00201 TCG00301	50 50 50	U U U	50 50 50	UJ UJ UJ
95M4BN3359 7/17/95	3,3'-Dimethyl benzidine	26.6	0.260	TCG00401 TCG00201 TCG00301	10 10 10	U U U	10 10 10	UJ UJ UJ
95M4BN3359 7/17/95	2-Acetylamino-fluorene	33.8	0.259	TCG00401 TCG00201 TCG00301	10 10 10	U U U	10 10 10	UJ UJ UJ
95M4BN3359 7/17/95	Hexachloro-phene	87.4	0.021	TCG00401 TCG00201 TCG00301	500 500 500	U U U	500 500 500	R R R

95M4BN3360 7/17/95	p-Phenylene-diamine	27.6	0.641	TCG00401 TCG00201 TCG00301	500 500 500	U U U	500 500 500	UJ UJ UJ

Semivolatile Continuing Calibration Summary Table
SDG No. 3027

CCAL Date and File/Batch Numbers of Stds.	Affected Analyte	%D	RRF	Affected Samples	Lab Value ug/l or ug/kg	Lab Qual	EDS Value ug/l or ug/kg	EDS Qual
95M4BN3358 7/17/95	2,4-Dinitrophenol	27.0	0.122	TRR029 FPZ00101 FSZ00101 QGZ00101 PCZ00101	50 3200 3200 3400 3200	U U U U U	50 3200 3200 3400 3200	UJ UJ UJ UJ UJ
95M4BN3358 7/17/95	Benzoic Acid	51.2	0.098	TRR029 FPZ00101 FSZ00101 QGZ00101 PCZ00101	50 3200 3200 3400 3200	U U U U U	50 3200 3200 3400 3200	UJ UJ UJ UJ UJ
95M4BN3359 7/17/95	Methyl methane-sulfonate	55.1	0.173	TRR029 FPZ00101 FSZ00101 QGZ00101 PCZ00101	10 660 660 710 660	U U U U U	10 660 660 710 660	UJ UJ UJ UJ UJ
95M4BN3359 7/17/95	Phenyl-tert-butylamine	30.0	0.860	TRR029 FPZ00101 FSZ00101 QGZ00101 PCZ00101	50 3200 3200 3400 3200	U U U U U	50 3200 3200 3400 3200	UJ UJ UJ UJ UJ
95M4BN3359 7/17/95	Hexachloro-propene	29.2	0.126	TRR029 FPZ00101 FSZ00101 QGZ00101 PCZ00101	50 3200 3200 3400 3200	U U U U U	50 3200 3200 3400 3200	UJ UJ UJ UJ UJ
95M4BN3359 7/17/95	1,4-Naphthoquinone	31.6	0.039	TRR029 FPZ00101 FSZ00101 QGZ00101 PCZ00101	1000 66000 66000 71000 66000	U U U U U	1000 66000 66000 71000 66000	R R R R R

95M4BN3359 7/17/95	4- Nitroquinoline- 1-oxide	33.7	0.055	TRR029 FPZ00101 FSZ00101 QGZ00101 PCZ00101	500 32000 32000 34000 32000	U U U U U	500 32000 32000 34000 32000	UJ UJ UJ UJ UJ
95M4BN3359 7/17/95	Methapyrilene	28.9	0.248	TRR029 FPZ00101 FSZ00101 QGZ00101 PCZ00101	50 3200 3200 3400 3200	U U U U U	50 3200 3200 3400 3200	UJ UJ UJ UJ UJ
95M4BN3359 7/17/95	3,3-Dimethyl- benzidine	26.6	0.260	TRR029 FPZ00101 FSZ00101 QGZ00101 PCZ00101	10 660 660 710 660	U U U U U	10 660 660 710 660	UJ UJ UJ UJ UJ
95M4BN3359 7/17/95	2-Acetylamino- fluorene	33.8	0.259	TRR029 FPZ00101 FSZ00101 QGZ00101 PCZ00101	10 660 660 710 660	U U U U U	10 660 660 710 660	UJ UJ UJ UJ UJ
95M4BN3359 7/17/95	Hexachloro- phene	87.4	0.021	TRR029 FPZ00101 FSZ00101 QGZ00101 PCZ00101	500 32000 32000 34000 32000	U U U U U	500 32000 32000 34000 32000	R R R R R
95M4BN3360 7/17/95	P-Phenylene- diamine	27.6	0.641	TRR029 FPZ00101 FSZ00101 QGZ00101 PCZ00101	500 32000 32000 34000 32000	U U U U U	500 32000 32000 34000 32000	UJ UJ UJ UJ UJ
95M4BN3374 7/18/95	2,4- Dinitrophenol	25.2	0.125	BCZ00101 TRS00101 TRS00101D TRS00201	3600 3300 3300 3500	U U U U	3600 3300 3300 3500	UJ UJ UJ UJ
95M4BN3374 7/18/95	Benzoic Acid	50.2	0.100	BCZ00101 TRS00101 TRS00101D TRS00201	3600 3300 3300 3500	U U U U	3600 3300 3300 3500	UJ UJ UJ UJ
95M4BN3375 7/18/95	Methyl methane- sulfonate	60.3	0.153	BCZ00101 TRS00101 TRS00101D TRS00201	740 690 690 730	U U U U	740 690 690 730	UJ UJ UJ UJ

95M4BN3375 7/18/95	N-nitrosodiethyl amine	30.0	0.389	BCZ00101 TRS00101 TRS00101D TRS00201	740 690 690 730	U U U U	740 690 690 730	UJ UJ UJ UJ
95M4BN3375 7/18/95	Phenyl tert butyl amine	39.6	0.742	BCZ00101 TRS00101 TRS00101D TRS00201	3600 3300 3300 3500	U U U U	3600 3300 3300 3500	UJ UJ UJ UJ
95M4BN3375 7/18/95	Hexachloro-propene	31.5	0.122	BCZ00101 TRS00101 TRS00101D TRS00201	3600 3300 3300 3500	U U U U	3600 3300 3300 3500	UJ UJ UJ UJ
95M4BN3375 7/18/95	1,4-Naphthoquinone	35.1	0.037	BCZ00101 TRS00101 TRS00101D TRS00201	74000 69000 69000 73000	U U U U	74000 69000 69000 73000	R R R R
95M4BN3375 7/18/95	1-Naphthylamine	32.2	0.515	BCZ00101 TRS00101 TRS00101D TRS00201	3600 3300 3300 3500	U U U U	3600 3300 3300 3500	UJ UJ UJ UJ
95M4BN3375 7/18/95	2-Naphthylamine	29.1	0.596	BCZ00101 TRS00101 TRS00101D TRS00201	3600 3300 3300 3500	U U U U	3600 3300 3300 3500	UJ UJ UJ UJ
95M4BN3375 7/18/95	4-Aminobiphenyl	26.9	0.506	BCZ00101 TRS00101 TRS00101D TRS00201	3600 3300 3300 3500	U U U U	3600 3300 3300 3500	UJ UJ UJ UJ
95M4BN3375 7/18/95	4-Nitroquinoline-1-oxide	45.8	0.045	BCZ00101 TRS00101 TRS00101D TRS00201	36000 33000 33000 35000	U U U U	36000 33000 33000 35000	R R R R
95M4BN3375 7/18/95	Methapyrilene	55.9	0.154	BCZ00101 TRS00101 TRS00101D TRS00201	3600 3300 3300 3500	U U U U	3600 3300 3300 3500	UJ UJ UJ UJ
95M4BN3375 7/18/95	3,3-Dimethyl-benzidine	49.4	0.179	BCZ00101 TRS00101 TRS00101D TRS00201	740 690 690 730	U U U U	740 690 690 730	UJ UJ UJ UJ

95M4BN3375 7/18/95	2-Acetylamino-fluorene	57.8	0.165	BCZ00101 TRS00101 TRS00101D TRS00201	740 690 690 730	U U U U	740 690 690 730	UJ UJ UJ UJ
95M4BN3375 7/18/95	Hexachloro-phene	70.7	0.049	BCZ00101 TRS00101 TRS00101D TRS00201	36000 33000 33000 35000	U U U U	36000 33000 33000 35000	R R R R
95M4BN3376 7/18/95	P-Phenylene-diamine	27.2	0.644	BCZ00101 TRS00101 TRS00101D TRS00201	36000 33000 33000 35000	U U U U	36000 33000 33000 35000	UJ UJ UJ UJ
95M4BN3419 7/21/95	2,4-Dinitrophenol	27.5	0.121	PCZ00101RE	1600	U	1600	UJ
95M4BN3420 7/21/95	Methyl methane-sulfonate	55.6	0.171	PCZ00101RE	330	U	330	UJ
95M4BN3420 7/21/95	Phenyl tert butyl amine	45.9	0.665	PCZ00101RE	1600	U	1600	UJ
95M4BN3420 7/21/95	Hexachloro-propene	33.2	0.119	PCZ00101RE	1600	U	1600	UJ
95M4BN3420 7/21/95	1,4-Naphthoquinone	33.3	0.038	PCZ00101RE	33000	U	33000	R
95M4BN3420 7/21/95	1-Naphthylamine	29.0	0.540	PCZ00101RE	1600	U	1600	UJ
95M4BN3420 7/21/95	2-Naphthylamine	25.3	0.628	PCZ00101RE	1600	U	1600	UJ
95M4BN3420 7/21/95	4-Aminobiphenyl	29.4	0.485	PCZ00101RE	1600	U	1600	UJ
95M4BN3420 7/21/95	4-Nitroquinoline-1-oxide	27.7	0.060	PCZ00101RE	16000	U	16000	UJ
95M4BN3420 7/21/95	Methapyrilene	31.2	0.240	PCZ00101RE	1600	U	1600	UJ
95M4BN3420 7/21/95	3,3-Dimethyl-benzidine	26.3	0.261	PCZ00101RE	330	U	330	UJ
95M4BN3420 7/21/95	2-Acetylamino-fluorene	26.6	0.287	PCZ00101RE	330	U	330	UJ

95M4BN3420 7/21/95	Hexachloro-phene	27.0	0.122	PCZ00101RE	16000	U	16000	UJ

Pesticide/PCB Initial and Continuing Calibration Tables

Pesticide/PCB Continuing Calibration Summary Table SDG No. M3001							
CCAL Date and Time	Affected Analyte	%D	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
4/17/95 20:26	Endrin Aldehyde	52.4	None-Primary Column Okay	--	--	--	--
4/17/95 20:26	Methoxychlor	22.9	None-Primary Column Okay	--	--	--	--
4/17/95 20:26	DCB	27.3	None-Surrogate Compound	--	--	--	--
4/14/95 18:04	Kepone	34.0	45L00101	42	U	42	UJ
			45L00101D	42	U	42	UJ
			45L00201	41	U	41	UJ
			45L00301	42	U	42	UJ
			45L00102	41	U	41	UJ
			45L00102D	41	U	41	UJ
			45L00202	41	U	41	UJ
			45L00302	41	U	41	UJ

Pesticide/PCB Continuing Calibration Summary Table SDG No. M3002							
CCAL Date and Time	Affected Analyte	%D	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
4/22/95 14:51	Aroclor 1260	26.5	45S00601	320	--	320	J

Pesticide/PCB Continuing Calibration Summary Table SDG No. M3003							
CCAL Date and Time	Affected Analyte	%D	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
4/27/95 20:31	Kepone	15.6	None-All samples previouly qualified due to linearity results. See #3 below.	--	--	--	--

Pesticide/PCB Initial and Continuing Calibration Tables

Pesticide/PCB Continuing Calibration Summary Table SDG No. M3004							
CCAL Date and Time	Affected Analyte	%D	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
5/1/95 08:05	Diallate #2	16.0	None-Confirmation Column Okay	--	--	--	--
5/1/95 08:05	Chlorobenzilate	17.2	None-Primary Column Okay	--	--	--	--
4/27/95 20:31	Kepone	15.6	None-All samples previouly qualified due to linearity results. See #3 below.	--	--	--	--

Pesticide/PCB Continuing Calibration Summary Table SDG No. M3005							
CCAL Date and Time	Affected Analyte	%D	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
4/30/95 18:55	DCB	17.4	None-Surrogate Compound	--	--	--	--
5/1/95 06:01	Gamma-BHC	-99.5	None-Primary Column Okay	--	--	--	--
5/1/95 17:06	Gamma-BHC	-99.5	None-Primary Column Okay	--	--	--	--
5/1/95 23:45	DCB	-22.1	None-Surrogate Compound	--	--	--	--
5/1/95 23:45	Endrin Ketone	-17.3	None-Primary Column Okay	--	--	--	--

Pesticide/PCB Initial and Continuing Calibration Tables

Pesticide/PCB Continuing Calibration Summary Table SDG No. M3006							
CCAL Date and Time	Affected Analyte	%D	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
4/29/95 22:57	DCB	16.4	None-Surrogate Compound	--	--	--	--
4/30/95 08:30	DCB	17.3	None-Surrogate Compound	--	--	--	--
4/30/95 18:55	DCB	17.4	None-Surrogate Compound	--	--	--	--
5/2/95 20:54	DCB	23.6	None-Surrogate Compound	--	--	--	--
5/2/95 20:54	Endrin Ketone	19.1	None-Primary Column Okay	--	--	--	--

Pesticide/PCB Continuing Calibration Summary Table SDG No. M3008							
CCAL Date and Time	Affected Analyte	%D	Affected Sample	Lab Conc ug/l	Lab Qual	EDS Conc ug/l	EDS Qual
5/2/95 20:54	DCB	23.6	None-Surrogate Compound	--	--	--	--
5/2/95 20:54	Endrin Ketone	19.1	None-Primary Column okay	--	--	--	--
5/7/95 06:43	DCB	20.5	None-Surrogate Compound	--	--	--	--
5/7/95 09:02	DCB	18.8	None-Surrogate Compound	--	--	--	--

Pesticide/PCB Initial and Continuing Calibration Tables

Pesticide/PCB Continuing Calibration Summary Table SDG No. M3009							
CCAL Date and Time	Affected Analyte	%D	Affected Sample	Lab Conc ug/l	Lab Qual	EDS Conc ug/l	EDS Qual
5/1/95 23:45	DCB	22.1	None-Surrogate Compound	--	--	--	--
5/1/95 23:45	Endrin Ketone	17.3	None-Primary Column okay	--	--	--	--
5/2/95 11:19	Endrin Ketone	15.7	None-Primary Column okay	--	--	--	--
5/2/95 11:19	DCB	20.6	None-Surrogate Compound	--	--	--	--
5/2/95 20:54	Endrin Ketone	19.1	None-Primary Column okay	--	--	--	--
5/2/95 20:54	DCB	23.6	None-Surrogate Compound	--	--	--	--

Pesticide/PCB Continuing Calibration Summary Table SDG No. M3010							
CCAL Date and Time	Affected Analyte	%D	Affected Sample	Lab Conc ug/l	Lab Qual	EDS Conc ug/l	EDS Qual
5/10/95 03:03	Endrin Ketone	15.1	None-Primary Column okay	--	--	--	--
5/10/95 03:03	DCB	16.9	None-Surrogate Compound	--	--	--	--

Pesticide/PCB Initial and Continuing Calibration Tables

Pesticide/PCB Continuing Calibration Summary Table SDG No. M3012							
CCAL Date and Time	Affected Analyte	%D	Affected Sample	Lab Conc ug/l	Lab Qual	EDS Conc ug/l	EDS Qual
5/11/95 03:22	DCB	16.2	None-Surrogate Compound	--	--	--	--

Pesticide/PCB Continuing Calibration Summary Table SDG No. M3015							
CCAL Date and Time	Affected Analyte	%D	Affected Sample	Lab Conc ug/kg	Lab Qual	EDS Conc ug/kg	EDS Qual
06/02/95 09:16	Endosulfan Sulfate	15.2	None-Primary column okay	--	--	--	--
06/02/95 09:16	Endrin Ketone	15.2	None-Primary column okay	--	--	--	--

Pesticide/PCB Continuing Calibration Summary Table SDG No. M3017							
CCAL Date and Time	Affected Analyte	%D	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
6/7/95 00:13	Kepone	42.8	None-All associated samples previously qualified due to linearity problems. See Section #3 below.				

Pesticide/PCB Continuing Calibration Summary Table SDG No. M3018							
CCAL Date and Time	Affected Analyte	%D	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
6/15/95 02:50	Delta-BHC	16.5	None-Acceptable on the primary column				
6/15/95 02:50	Endrin	17.3	None-Acceptable on the primary column				
6/15/95 02:50	Endrin Aldehyde	17.5	None-Acceptable on the primary column				

Pesticide/PCB Initial and Continuing Calibration Tables

Pesticide/PCB Continuing Calibration Summary Table SDG No. M3020							
CCAL Date and Time	Affected Analyte	%D	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
6/22/95 07:23	Endrin Aldehyde	24.6	None-Acceptable on the primary column				
6/22/95 19:36	Endrin Aldehyde	24.8	None-Acceptable on the primary column				
6/22/95 19:36	Endosulfan II	15.6	None-Acceptable on the primary column				
6/23/95 05:28	4,4'-DDT	17.0	None-Acceptable on the primary column				

Pesticide/PCB Continuing Calibration Summary Table SDG No. M3021							
CCAL Date and Time	Affected Analyte	%D	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
6/20/95 10:13	Endrin Aldehyde	18.8	None-Acceptable on the primary column				
6/20/95 22:04	Endrin Aldehyde	15.8	None-Acceptable on the primary column				
6/21/95 07:56	Endrin Aldehyde	20.8	None-Acceptable on the primary column				
6/22/95 19:02	Endosulfan II	23.9	None-Acceptable on the primary column				
6/22/95 23:48	Dichlorobenzene	20.0	None-Surrogate compound				

Pesticide/PCB Continuing Calibration Summary Table SDG No. M3022							
CCAL Date and Time	Affected Analyte	%D	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
7/11/95 19:26	4,4'-DDE	17.4	None-Acceptable on the primary column				
7/12/95 02:50	4,4'-DDE	17.4	None-Acceptable on the primary column				

Pesticide/PCB Initial and Continuing Calibration Tables

Pesticide/PCB Continuing Calibration Summary Table SDG No. M3023							
CCAL Date and Time	Affected Analyte	%D	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
7/12/95 02:50	4,4'-DDE	17.4	None-Acceptable on the primary column				
7/12/95 11:42	4,4'-DDE	16.4	None-Acceptable on the primary column				

Pesticide/PCB Continuing Calibration Summary Table SDG No. M3026							
CCAL Date and Time	Affected Analyte	%D	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
7/21/95 06:28	Methoxychlor	15.1	None-Acceptable on the primary column				
7/21/95 20:52	Methoxychlor	19.1	None-Acceptable on the secondary column				
7/21/95 20:52	Endrin	16.0	None-Acceptable on the secondary column				
7/18/95 20:41	Kepone	15.6	None-All samples previously qualified due to linearity problems				

Pesticide/PCB Continuing Calibration Summary Table SDG No. M3027							
CCAL Date and Time	Affected Analyte	%D	Affected Sample	Lab Conc ug/L	Lab Qual	EDS Conc ug/L	EDS Qual
7/21/95 06:28	Methoxychlor	15.1	None-Acceptable on the primary column				
7/21/95 20:52	Methoxychlor	19.1	None-Acceptable on the secondary column				
7/21/95 20:52	Endrin	16.0	None-Acceptable on the secondary column				
7/24/95 09:35	4,4'-DDT	15.1	None-Acceptable on the primary column				
7/24/95 20:53	Dichlorobenzene	17.2	None-Surrogate compound				
7/18/95 20:41	Kepone	15.6	None-All samples previously qualified due to linearity problems				
7/19/95 09:33	Kepone	27.6	None-All samples previously qualified due to linearity problems				

APPENDIX E
PARCC Criteria Evaluation Summary Table

Sample Event PARCC Criteria Summary Table

SDG Number	Precision	Accuracy	Representativeness	Completeness	Comparability
M3001	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
M3002	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
M3003	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
M3004	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
M3005	Acceptable w/qualifications	Acceptable	Acceptable w/qualifications	Acceptable	Acceptable
M3006	Acceptable	Acceptable	Acceptable w/qualifications	Acceptable	Acceptable
M3008	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
M3009	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
M3010	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
M3011	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
M3012	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
M3013	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
M3015	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
M3016	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
M3017	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
M3018	Acceptable	Acceptable	Acceptable w/qualifications	Acceptable	Acceptable
M3020	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable

Sample Event PARCC Criteria Summary Table

M3021	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
M3022	Acceptable	Acceptable	Acceptable w/qualifications	Acceptable	Acceptable
M3023	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
M3024	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable
M3026	Acceptable	Acceptable	Acceptable w/qualifications	Acceptable	Acceptable
M3027	Acceptable	Acceptable w/qualifications	Acceptable w/qualifications	Acceptable	Acceptable

APPENDIX C

GEOLOGIC AND HYDROGEOLOGIC DATA

C-1 General Soil Chemistry
C-2 Geotechnical Testing
C-3 Technical Memorandum Geophysical Survey

APPENDIX C-1

GENERAL SOIL CHEMISTRY

Report of Analytical Results
INORGANICS

Date Collected: 05/17/95
Date Received: 06/23/95
Sample Matrix: Soil
Sample Description: M3025

Client Sample ID: 44B00137
Lab ReferenceNum: RA071
Lab Sample ID: RA071001

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date of Analysis	Analytical Method(s)
GENERAL pH	8.58	units		07/06/95	SW9045
DEMAND AND GENERAL ORGANIC Total Organic Carbon	9220	mg/Kg	5.0	07/07/95	SW9060
AGRICULTURAL Cation Exchange Capacity	1.4	meq/100g	0.8	07/13/95	SW9080

(3416)

Report of Analytical Results
INORGANICS

Date Collected: 05/17/95
Date Received: 06/27/95
Sample Matrix: Soil
Sample Description: M3025

Client Sample ID: 44B00137
Lab ReferenceNum: RA071
Lab Sample ID: RA071001

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date of Analysis	Analytical Method(s)
GENERAL					
Percent Total Solid	75.7	%		06/30/95	EPA160.3
DEMAND AND GENERAL ORGANIC					
Total Organic Carbon	9220	mg/Kg	5.0	07/07/95	SW9060

(4266)

Report of Analytical Results
INORGANICS

Date Collected: 05/18/95
Date Received: 06/23/95
Sample Matrix: Soil
Sample Description: M3025

Client Sample ID: 01B00148
Lab ReferenceNum: RA071
Lab Sample ID: RA071002

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date of Analysis	Analytical Method(s)
GENERAL pH	9.19	units		07/06/95	SW9045
DEMAND AND GENERAL ORGANIC Total Organic Carbon	1000	mg/Kg	5.0	07/07/95	SW9060
AGRICULTURAL Cation Exchange Capacity	1.6	meq/100g	0.8	07/13/95	SW9080

(3416)

Report of Analytical Results
INORGANICS

Date Collected: 05/18/95
Date Received: 06/27/95
Sample Matrix: Soil
Sample Description: M3025

Client Sample ID: 01B00148
Lab ReferenceNum: RA071
Lab Sample ID: RA071002

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date of Analysis	Analytical Method(s)
GENERAL					
Percent Total Solid	78.5	%		06/30/95	EPA160.3
DEMAND AND GENERAL ORGANIC					
Total Organic Carbon	1000	mg/Kg	5.0	07/07/95	SW9060

(4266)

Report of Analytical Results
INORGANICS

Date Collected: 05/18/95
Date Received: 06/23/95
Sample Matrix: Soil
Sample Description: M3025

Client Sample ID: 01B00166
Lab ReferenceNum: RA071
Lab Sample ID: RA071003

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date of Analysis	Analytical Method(s)
GENERAL					
pH	9.43	units		07/06/95	SW9045
DEMAND AND GENERAL ORGANIC					
Total Organic Carbon	640	mg/Kg	5.0	07/07/95	SW9060
AGRICULTURAL					
Cation Exchange Capacity	2.5	meq/100g	0.8	07/13/95	SW9080

(3416)

Report of Analytical Results
INORGANICS

Date Collected: 05/18/95
Date Received: 06/27/95
Sample Matrix: Soil
Sample Description: M3025

Client Sample ID: 01B00166
Lab ReferenceNum: RA071
Lab Sample ID: RA071003

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date of Analysis	Analytical Method(s)
GENERAL					
Percent Total Solid	81.9	%		06/30/95	EPA160.3
DEMAND AND GENERAL ORGANIC					
Total Organic Carbon	640	mg/Kg	5.0	07/07/95	SW9060

(4266)

Report of Analytical Results
INORGANICS

Date Collected: 05/21/95
Date Received: 06/23/95
Sample Matrix: Soil
Sample Description: M3025

Client Sample ID: 45B00109
Lab ReferenceNum: RA071
Lab Sample ID: RA071004

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date of Analysis	Analytical Method(s)
GENERAL pH	8.94	units		07/06/95	SW9045
DEMAND AND GENERAL ORGANIC Total Organic Carbon	500	mg/Kg	5.0	07/07/95	SW9060
AGRICULTURAL Cation Exchange Capacity	0.8	meq/100g	0.8	07/13/95	SW9080

(3416)

Report of Analytical Results
INORGANICS

Date Collected: 05/21/95
Date Received: 06/27/95
Sample Matrix: Soil
Sample Description: M3025

Client Sample ID: 45B00109
Lab ReferenceNum: RA071
Lab Sample ID: RA071004

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date of Analysis	Analytical Method(s)
GENERAL					
Percent Total Solid	82.4	%		06/30/95	EPA160.3
DEMAND AND GENERAL ORGANIC					
Total Organic Carbon	500	mg/Kg	5.0	07/07/95	SW9060

(4266)

Report of Analytical Results
INORGANICS

Date Collected: 05/21/95
Date Received: 06/23/95
Sample Matrix: Soil
Sample Description: M3025

Client Sample ID: 01800111
Lab ReferenceNum: RA071
Lab Sample ID: RA071005

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date of Analysis	Analytical Method(s)
GENERAL					
pH	8.34	units		07/06/95	SW9045
DEMAND AND GENERAL ORGANIC					
Total Organic Carbon	3360	mg/Kg	5.0	07/07/95	SW9060
AGRICULTURAL					
Cation Exchange Capacity	1.7	meq/100g	0.8	07/13/95	SW9080

(3416)

Report of Analytical Results
INORGANICS

Date Collected: 05/21/95
Date Received: 06/27/95
Sample Matrix: Soil
Sample Description: M3025

Client Sample ID: 01B00111
Lab Referencenum: RA071
Lab Sample ID: RA071005

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date of Analysis	Analytical Method(s)
GENERAL					
Percent Total Solid	72.9	%		06/30/95	EPA160.3
DEMAND AND GENERAL ORGANIC					
Total Organic Carbon	3360	mg/Kg	5.0	07/07/95	SW9060

(4266)

Report of Analytical Results
INORGANICS

Date Collected: 05/21/95
Date Received: 06/23/95
Sample Matrix: Soil
Sample Description: M3025

Client Sample ID: 14B00708
Lab ReferenceNum: RA071
Lab Sample ID: RA071006

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date of Analysis	Analytical Method(s)
GENERAL					
pH	8.27	units		07/06/95	SW9045
DEMAND AND GENERAL ORGANIC					
Total Organic Carbon	226	mg/Kg	5.0	07/07/95	SW9060
AGRICULTURAL					
Cation Exchange Capacity	2.2	meq/100g	0.8	07/13/95	SW9080

(3416)

Report of Analytical Results
INORGANICS

Date Collected: 05/21/95
Date Received: 06/27/95
Sample Matrix: Soil
Sample Description: M3025

Client Sample ID: 14B00708
Lab ReferenceNum: RA071
Lab Sample ID: RA071006

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date of Analysis	Analytical Method(s)
GENERAL					
Percent Total Solid	82.0	%		06/30/95	EPA160.3
DEMAND AND GENERAL ORGANIC					
Total Organic Carbon	226	mg/Kg	5.0	07/07/95	SW9060

(4266)

Report of Analytical Results
INORGANICS

Date Collected: 05/21/95
Date Received: 06/23/95
Sample Matrix: Soil
Sample Description: M3025

Client Sample ID: 14800908
Lab ReferenceNum: RA071
Lab Sample ID: RA071007

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date of Analysis	Analytical Method(s)
GENERAL					
pH	8.68	units		07/06/95	SW9045
DEMAND AND GENERAL ORGANIC					
Total Organic Carbon	164	mg/Kg	5.0	07/07/95	SW9060
AGRICULTURAL					
Cation Exchange Capacity	< 0.8	meq/100g	0.8	07/13/95	SW9080

(3416)

Report of Analytical Results
INORGANICS

Date Collected: 05/21/95
Date Received: 06/27/95
Sample Matrix: Soil
Sample Description: M3025

Client Sample ID: 14B00908
Lab ReferenceNum: RA071
Lab Sample ID: RA071007

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date of Analysis	Analytical Method(s)
GENERAL					
Percent Total Solid	81.8	%		06/30/95	EPA160.3
DEMAND AND GENERAL ORGANIC					
Total Organic Carbon	164	mg/Kg	5.0	07/07/95	SW9060

(4266)

Report of Analytical Results
INORGANICS

Date Collected: 05/23/95
Date Received: 06/23/95
Sample Matrix: Soil
Sample Description: M3025

Client Sample ID: 14B01408
Lab ReferenceNum: RA071
Lab Sample ID: RA071008

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date of Analysis	Analytical Method(s)
GENERAL					
pH	9.13	units		07/06/95	SW9045
DEMAND AND GENERAL ORGANIC					
Total Organic Carbon	152	mg/Kg	5.0	07/07/95	SW9060
AGRICULTURAL					
Cation Exchange Capacity	< 0.8	meq/100g	0.8	07/13/95	SW9080

(3416)

Report of Analytical Results
INORGANICS

Date Collected: 05/23/95
Date Received: 06/27/95
Sample Matrix: Soil
Sample Description: M3025

Client Sample ID: 14801408
Lab ReferenceNum: RA071
Lab Sample ID: RA071008

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date of Analysis	Analytical Method(s)
GENERAL					
Percent Total Solid	80.5	%		06/30/95	EPA160.3
DEMAND AND GENERAL ORGANIC					
Total Organic Carbon	152	mg/Kg	5.0	07/07/95	SW9060

(4266)

Report of Analytical Results
INORGANICS

Date Collected: 05/23/95
Date Received: 06/23/95
Sample Matrix: Soil
Sample Description: M3025

Client Sample ID: 18800306
Lab ReferenceNum: RA071
Lab Sample ID: RA071009

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date of Analysis	Analytical Method(s)
GENERAL					
pH	8.98	units		07/06/95	SW9045
DEMAND AND GENERAL ORGANIC					
Total Organic Carbon	245	mg/Kg	5.0	07/07/95	SW9060
AGRICULTURAL					
Cation Exchange Capacity	1.0	meq/100g	0.8	07/13/95	SW9080

(3416)

Report of Analytical Results
INORGANICS

Date Collected: 05/23/95
Date Received: 06/27/95
Sample Matrix: Soil
Sample Description: M3025

Client Sample ID: 18B00306
Lab ReferenceNum: RA071
Lab Sample ID: RA071009

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date of Analysis	Analytical Method(s)
GENERAL					
Percent Total Solid	80.1	%		06/30/95	EPA160.3
DEMAND AND GENERAL ORGANIC					
Total Organic Carbon	245	mg/Kg	5.0	07/07/95	SW9060

(4266)

Report of Analytical Results
INORGANICS

Date Collected: 05/24/95
Date Received: 06/23/95
Sample Matrix: Soil
Sample Description: M3025

Client Sample ID: 17B00307
Lab ReferenceNum: RA071
Lab Sample ID: RA071010

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date of Analysis	Analytical Method(s)
GENERAL					
pH	8.33	units		07/06/95	SW9045
DEMAND AND GENERAL ORGANIC					
Total Organic Carbon	691	mg/Kg	5.0	07/07/95	SW9060
AGRICULTURAL					
Cation Exchange Capacity	0.8	meq/100g	0.8	07/13/95	SW9080

(3416)

Report of Analytical Results
INORGANICS

Date Collected: 05/24/95
Date Received: 06/27/95
Sample Matrix: Soil
Sample Description: M3025

Client Sample ID: 17B00307
Lab ReferenceNum: RA071
Lab Sample ID: RA071010

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date of Analysis	Analytical Method(s)
GENERAL					
Percent Total Solid	80.6	%		06/30/95	EPA160.3
DEMAND AND GENERAL ORGANIC					
Total Organic Carbon	691	mg/Kg	5.0	07/07/95	SW9060

(4266)

Report of Analytical Results
INORGANICS

Date Collected: None
Date Received: None
Sample Matrix: Soil
Sample Description:

Client Sample ID: METHOD BLANK
Lab ReferenceNum: LABQC
Lab Sample ID: Various

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date of Analysis	Analytical Method(s)
DEMAND AND GENERAL ORGANIC					
Total Organic Carbon	< 5.0	mg/Kg	5.0	07/07/95	SW9060
AGRICULTURAL					
Cation Exchange Capacity	< 0.8	meq/100g	0.8	07/13/95	SW9080

(3416)

Report of Analytical Results
INORGANICS

Date Collected: None
Date Received: None
Sample Matrix: Soil
Sample Description:

Client Sample ID: METHOD BLANK
Lab ReferenceNum: LABQC
Lab Sample ID: METHOD BLANK

CATEGORY NAME Analytical Parameter	Result	Units	Reporting Level	Date of Analysis	Analytical Method(s)
DEMAND AND GENERAL ORGANIC					
Total Organic Carbon	< 5.0	mg/Kg	5.0	07/07/95	SW9060

(4266)

APPENDIX C-2

GEOTECHNICAL TESTING

LAW ENGINEERING INC.
JACKSONVILLE FLORIDA 32207
(904)396-5173

REPORT OF SOIL TESTING

CLIENT: QAL

DATE: July 31, 1995

PROJECT: Soil Testing, Mayport Group III

LAW PROJECT NO: 446-01939-01

On June 20, 1995, two samples of soil were tested for permeabilty (ASTM D5084). The samples were delivered to LAW by a representative of ABB Enviromental. The results are as follows:

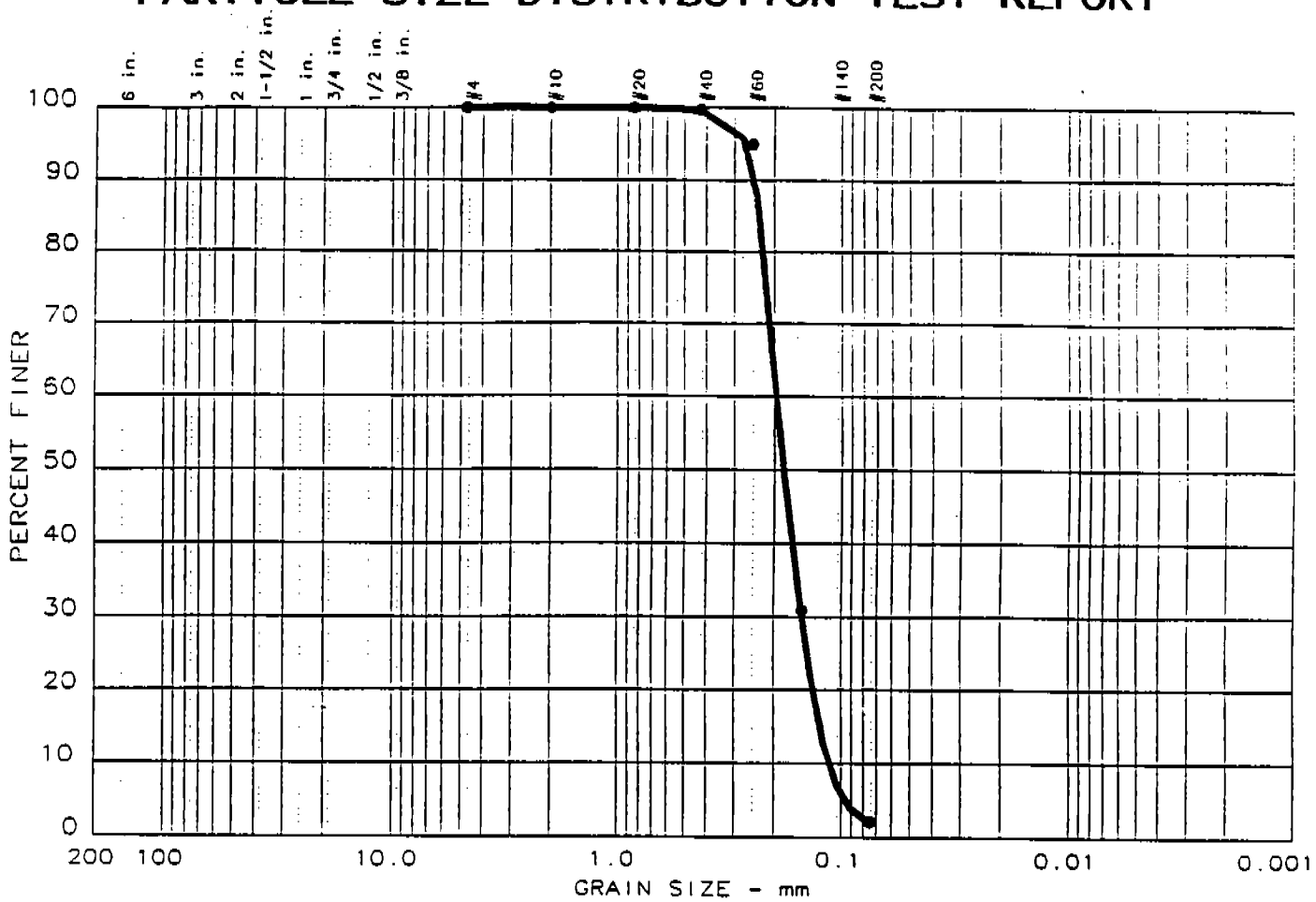
SAMPLE NO.	SAMPLE DEPTH	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	COEFFICIENT OF PERMEABILITY (cm/sec)
MPT-44-MWO1	33.0'-35.0'	71.6	70.2	8.0X10E-8
MPT-1-MWO1	44.0'- 46.0'	31.2	81.9	2.4X10E-4

Respectfully Submitted,
LAW ENGINEERING, INC.

Bryant B. Wildes

Bryant B. Wildes
Chief Engineering Technician

PARTICLE SIZE DISTRIBUTION TEST REPORT



	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	0.0	0.0	97.9	2.1		SP		

SIEVE inches size	PERCENT FINER ●		
	GRAIN SIZE		
D_{60}	0.20		
D_{30}	0.15		
D_{10}	0.11		
	COEFFICIENTS		
C_c	1.00		
C_u	1.7		

SIEVE number size	PERCENT FINER ●		
4	100.0		
10	100.0		
20	100.0		
40	99.7		
60	95.0		
100	30.9		
200	2.1		

Sample information:
● Boring No. MPT-1-MW01
Tan Fine SAND

Remarks:
Depth: 7.0'- 9.0'
Water Content: 12.2%
Dry Density: could not determine

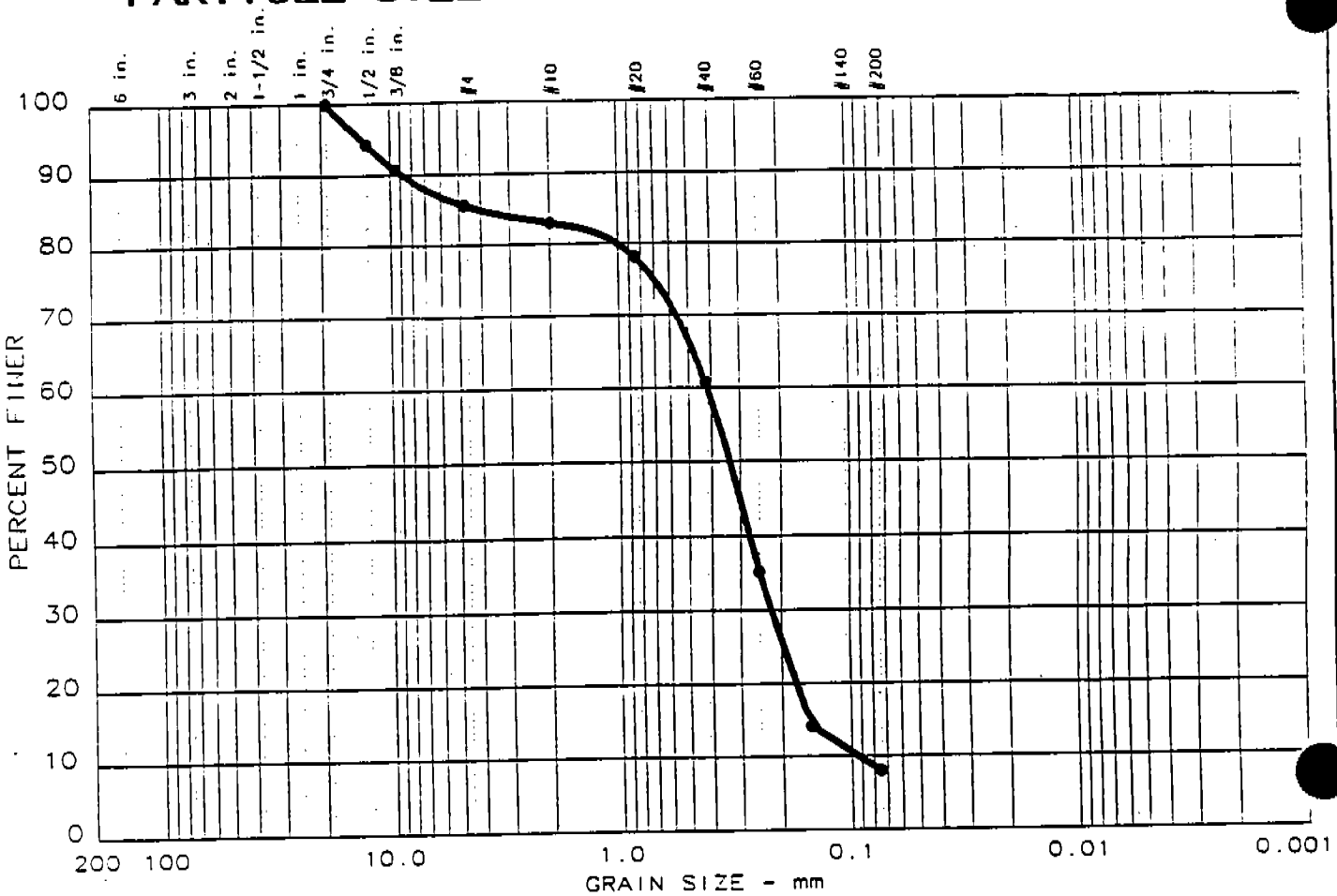
LAW ENGINEERING

Project No.: 446-01939-01
Project: Soil Testing Mayport Group III
CLIENT: CH2M Hill
Date: 8-17-95

Bryant B. Wildes

REVIEWED BY: Bryant B. Wildes

PARTICLE SIZE DISTRIBUTION TEST REPORT



	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	0.0	14.4	77.6	8.0		SP-SM		

SIEVE inches size	PERCENT FINER ●		
0.75	100.0		
0.5	94.3		
0.375	90.7		
GRAIN SIZE			
D_{60}	0.42		
D_{30}	0.22		
D_{10}	0.09		
COEFFICIENTS			
C_c	1.25		
C_u	4.5		

SIEVE number size	PERCENT FINER ●		
4	85.6		
10	83.0		
20	78.1		
40	60.8		
60	35.2		
100	14.2		
200	8.0		

Sample information:

● Boring No. MPT-1-MW01
Brown Slightly Silty
Fine SAND w/ shell

Remarks:
Depth: 62.0'- 64.0'
Water Content: 17.5%
Dry Density: 106.4 pcf

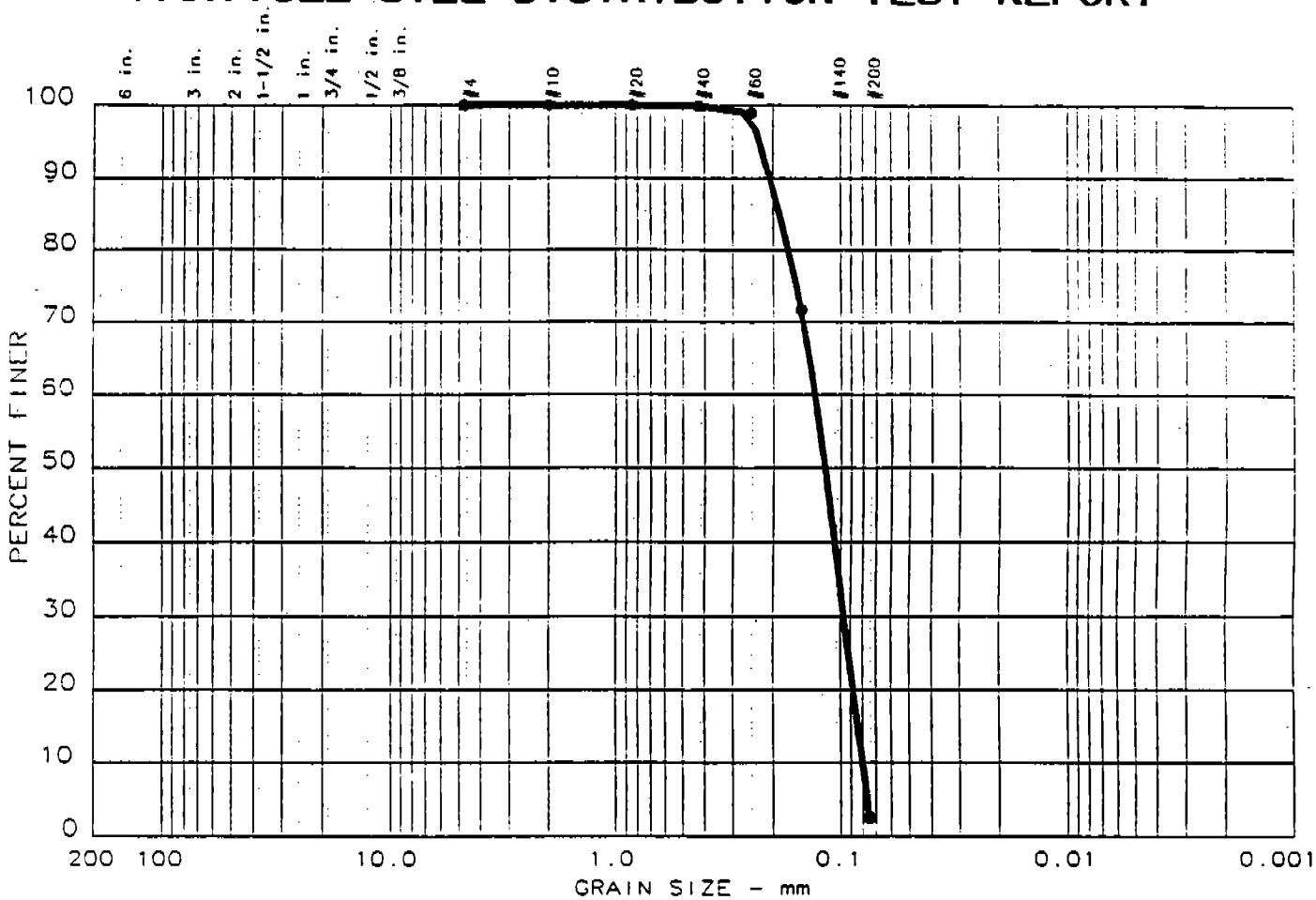
LAW ENGINEERING

Project No.: 446-01939-01
Project: Soil Testing Mayport Group III
CLIENT: CH2M Hill
Date: 8-17-95

Bryant B. Wilder

REVIEWED BY: Bryant B. Wilder

PARTICLE SIZE DISTRIBUTION TEST REPORT



	% -3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	0.0	0.0	97.5	2.5		SP		

SIEVE inches size	PERCENT FINER ●		
	GRAIN SIZE		
D_{60}	0.13		
D_{30}	0.10		
D_{10}	0.08		
	COEFFICIENTS		
C_c	0.89		
C_u	1.6		

SIEVE number size	PERCENT FINER ●		
4	100.0		
10	100.0		
20	100.0		
40	99.9		
60	98.9		
100	71.6		
200	2.5		

Sample information:

● Boring No. MPT-14-MW05
Brown Fine SAND

Remarks:
Depth: 4.0'- 6.0'
Water Content: 23.6%
Dry Density: 85.3 pcf

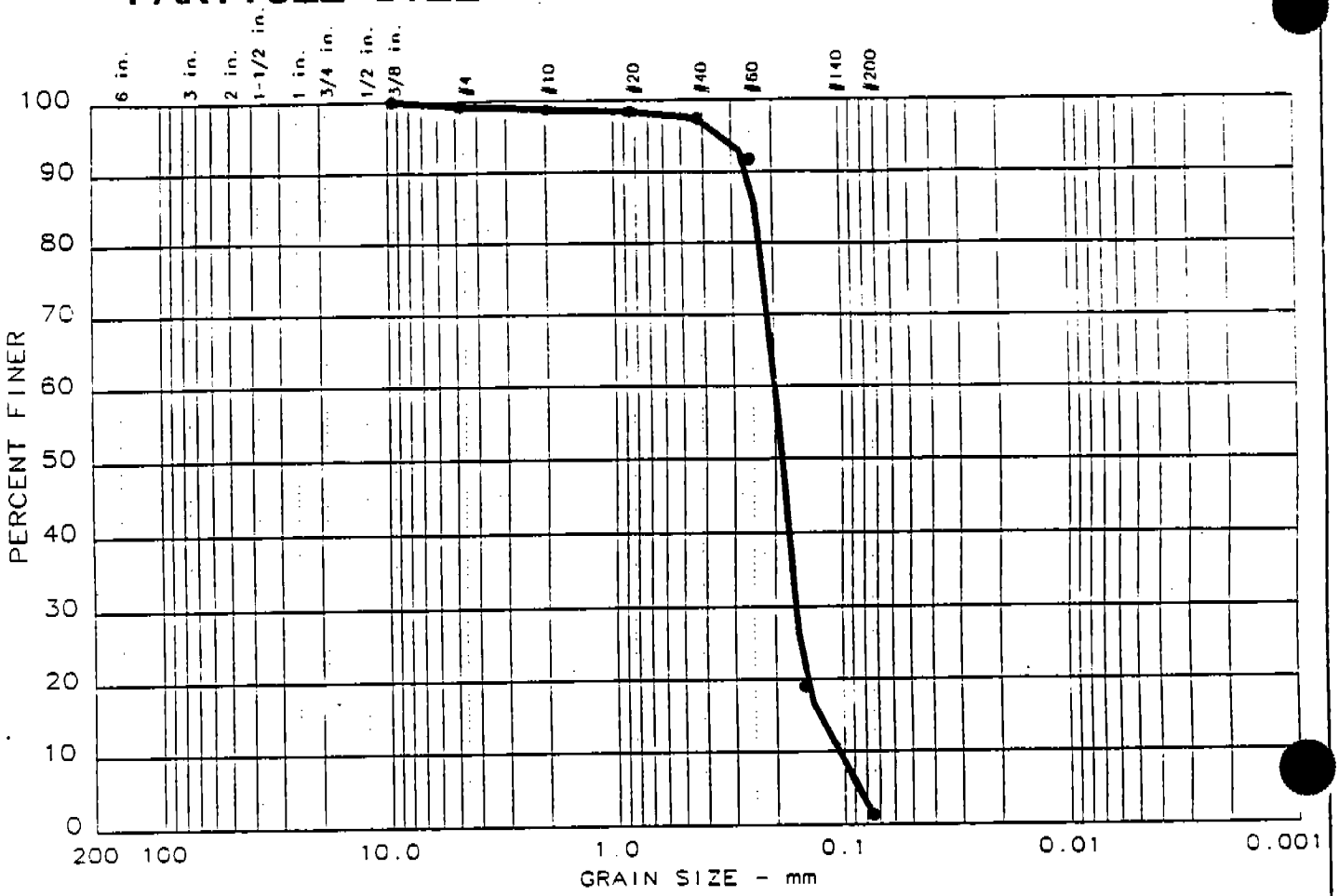
LAW ENGINEERING

Project No.: 446-01939-01
Project: Soil Testing Mayport Group III
CLIENT: CH2M Hill
Date: 8-17-95

Bryant B. Wildes

REVIEWED BY: Bryant B. Wildes

PARTICLE SIZE DISTRIBUTION TEST REPORT



	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	P
●	0.0	0.7	98.0	1.3		SP		

SIEVE inches size	PERCENT FINER ●		
0.375	100.0		
	GRAIN SIZE		
D_{60}	0.20		
D_{30}	0.16		
D_{10}	0.10		
	COEFFICIENTS		
C_c	1.25		
C_u	1.9		

SIEVE number size	PERCENT FINER ●		
4	99.3		
10	98.8		
20	98.4		
40	97.5		
60	91.7		
100	19.0		
200	1.3		

Sample information:
● Boring No. MPT-14-MW07
Grey Fine SAND

Remarks:
Depth: 8.0'- 10.0'
Water Content: 20.9%
Dry Density: could not determine

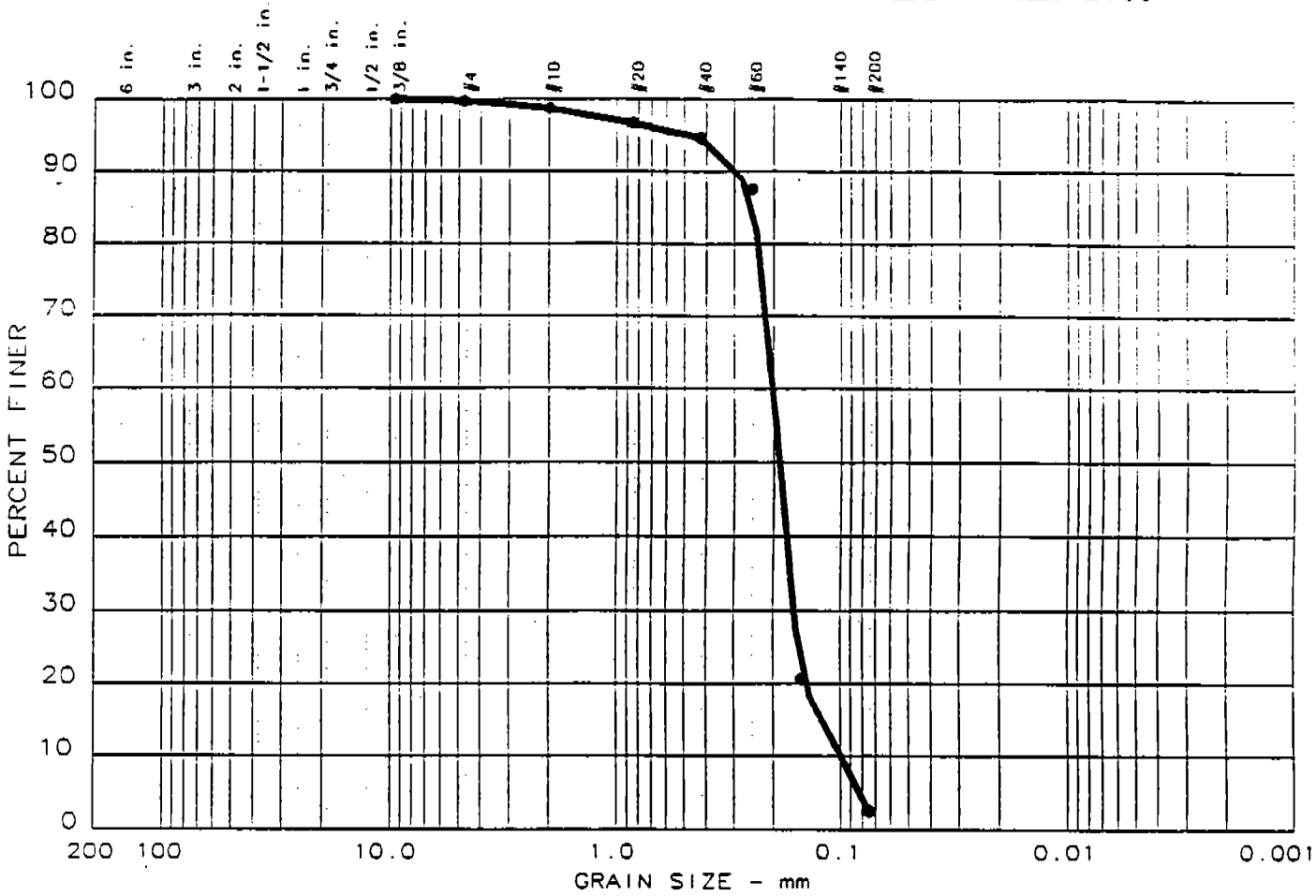
LAW ENGINEERING

Project No.: 446-01939-01
Project: Soil Testing Mayport Group III
CLIENT: CH2M Hill
Date: 8-17-95

Bryant B. Wildes

REVIEWED BY: Bryant B. Wildes

PARTICLE SIZE DISTRIBUTION TEST REPORT



	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	0.0	0.3	97.1	2.6		SP		

SIEVE inches size	PERCENT FINER ●		
0.375	100.0		
	GRAIN SIZE		
D_{60}	0.20		
D_{30}	0.16		
D_{10}	0.09		
	COEFFICIENTS		
C_c	1.29		
C_u	2.0		

SIEVE number size	PERCENT FINER ●		
4	99.7		
10	98.8		
20	96.7		
40	94.7		
60	87.5		
100	20.7		
200	2.5		

Sample information:

● Boring No. MPT-14-MW09
Grey Fine SAND w/ shell

Remarks:
Depth: 8.0'- 10.0'
Water Content: 19.8%
Dry Density: 104.0 pcf

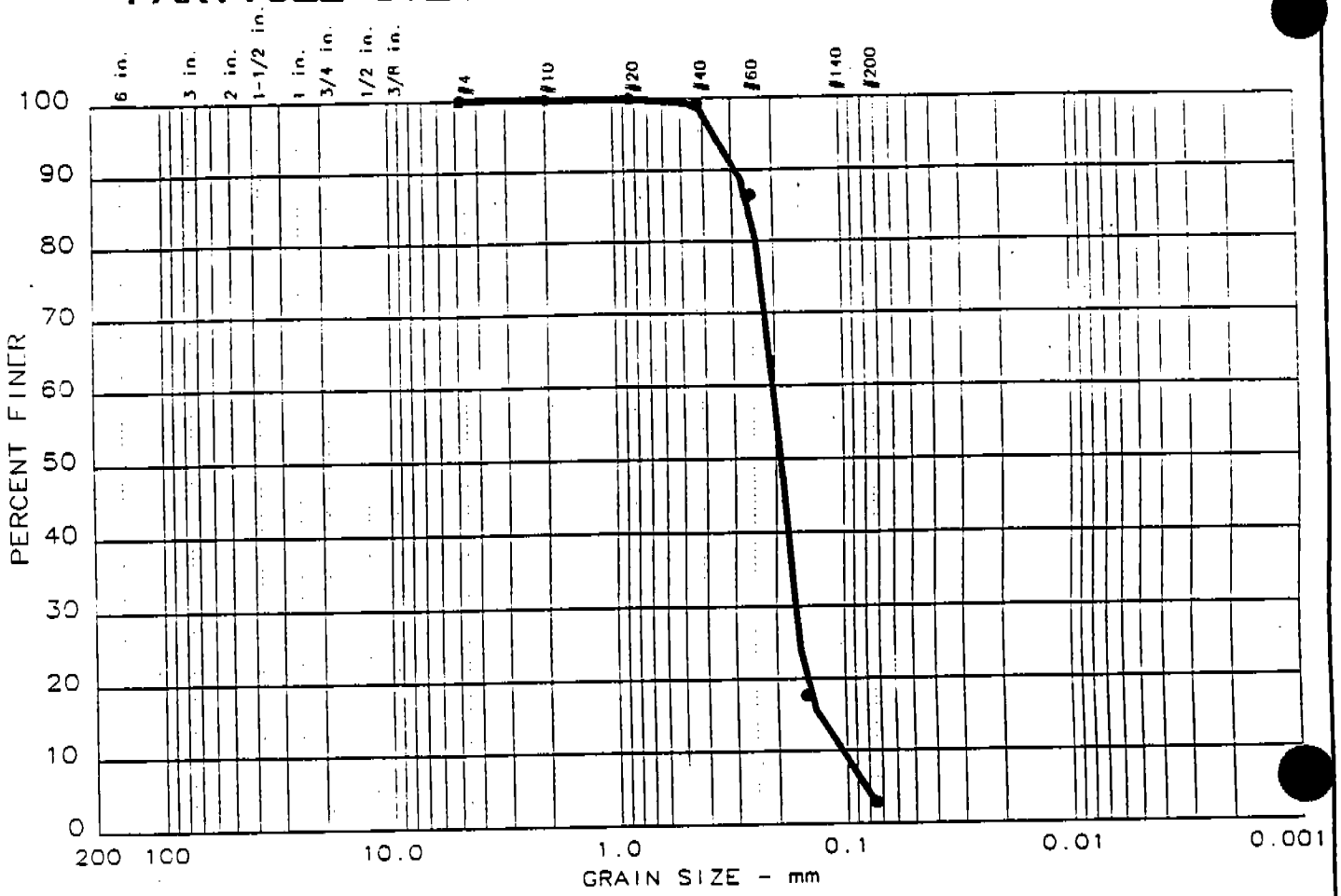
LAW ENGINEERING

Project No.: 446-01939-01
Project: Soil Testing Mayport Group III
CLIENT: CH2M Hill
Date: 8-17-95

Bryant B. Wildes

REVIEWED BY: Bryant B. Wildes

PARTICLE SIZE DISTRIBUTION TEST REPORT



	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	0.0	0.0	97.1	2.9		SP		

SIEVE inches size	PERCENT FINER ●		
	GRAIN SIZE		
D_{60}	0.21		
D_{30}	0.16		
D_{10}	0.10		
	COEFFICIENTS		
C_c	1.26		
C_u	2.0		

SIEVE number size	PERCENT FINER ●		
4	100.0		
10	100.0		
20	100.0		
40	99.2		
60	86.5		
100	17.7		
200	2.9		

Sample information:
● Boring No. MPT-17-MW03
Dark Brown Fine SAND

Remarks:
Depth: 7.0'- 9.0'
Water Content: 23.1%
Dry Density: 97.6 pcf

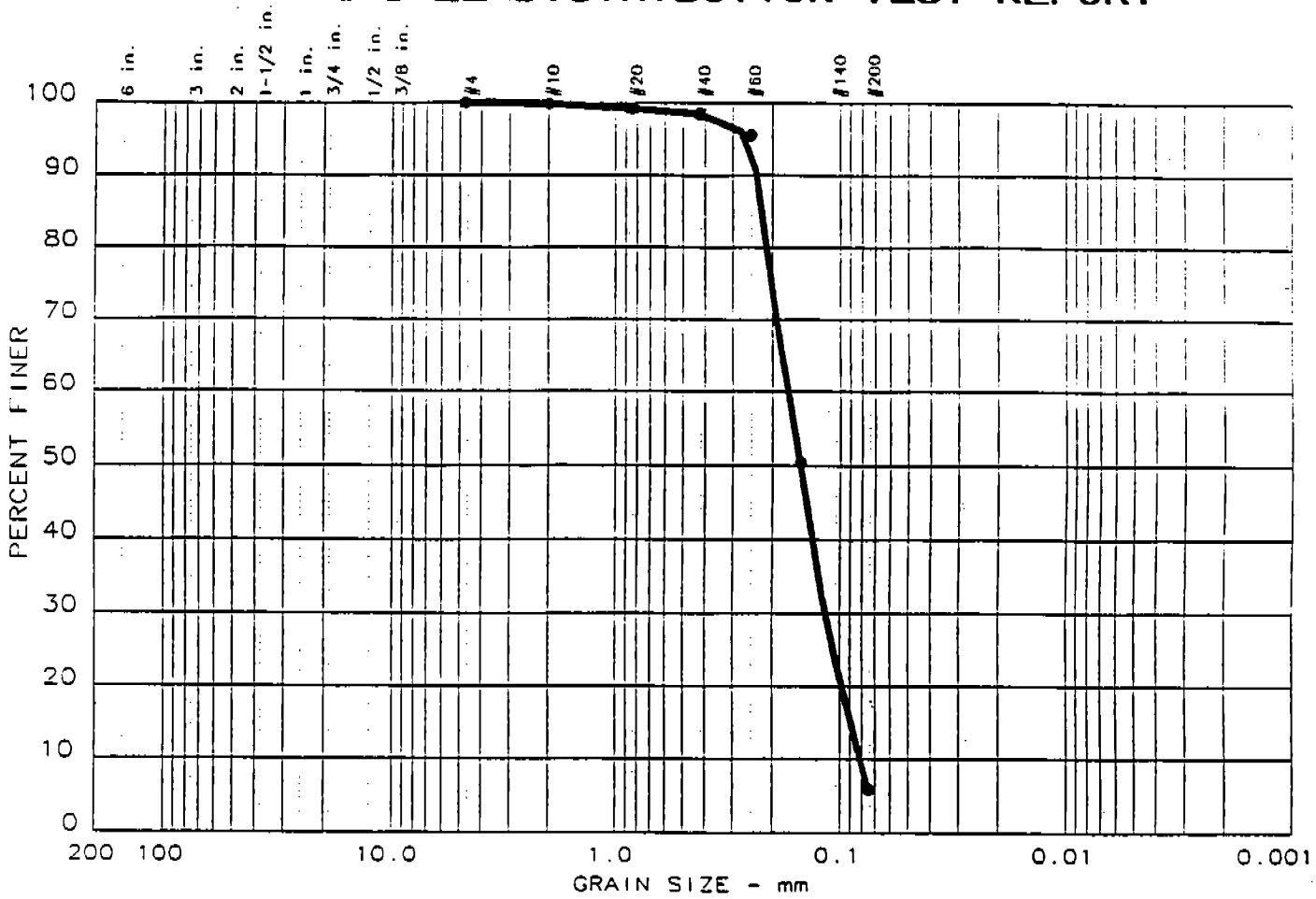
LAW ENGINEERING

Project No.: 446-01939-01
Project: Soil Testing Mayport Group III
CLIENT: CH2M Hill
Date: 8-17-95

Bryant B. Wildes

REVIEWED BY: Bryant B. Wildes

PARTICLE SIZE DISTRIBUTION TEST REPORT



	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	0.0	0.0	94.1	5.9		SP-SM		

SIEVE inches size	PERCENT FINER ●		
	GRAIN SIZE		
D_{60}	0.17		
D_{30}	0.12		
D_{10}	0.08		
	COEFFICIENTS		
C_c	0.96		
C_u	2.1		

SIEVE number size	PERCENT FINER ●		
4	100.0		
10	99.9		
20	99.2		
40	98.6		
60	95.6		
100	50.4		
200	5.9		

Sample information:

● Boring No. MPT-18-MW03
Brown Slightly Silty
Fine SAND w/ shell

Remarks:
Depth: 6.0'- 8.0'
Water Content: 20.2%
Dry Density: could not determine

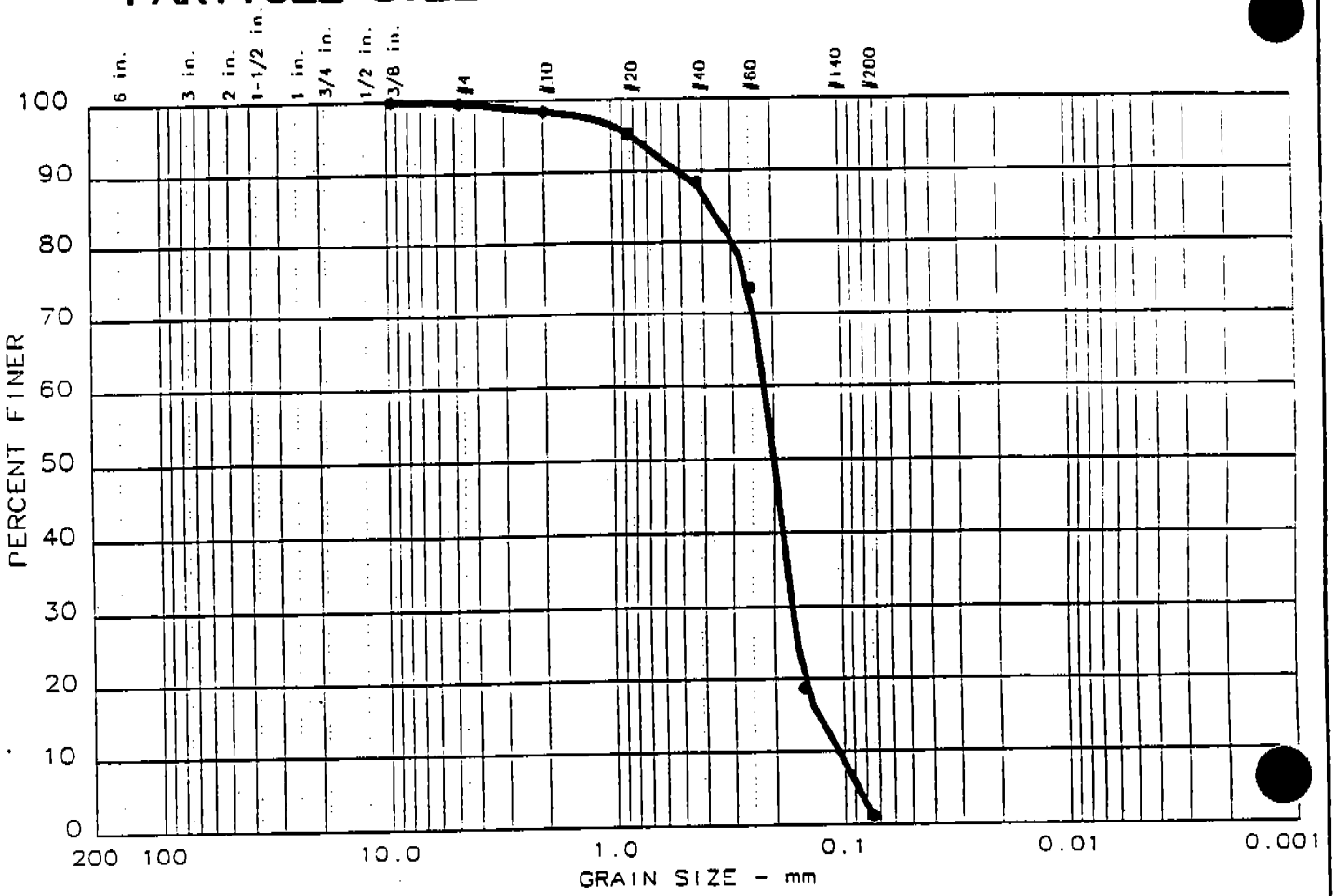
LAW ENGINEERING

Project No.: 446-01939-01
Project: Soil Testing Mayport Group III
CLIENT: CH2M Hill
Date: 8-17-95

Bryant B. Wildes

REVIEWED BY: Bryant B. Wildes

PARTICLE SIZE DISTRIBUTION TEST REPORT



	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	0.0	0.4	98.5	1.1		SP		

SIEVE inches size	PERCENT FINER ●		
0.375	100.0		
	GRAIN SIZE		
D_{60}	0.22		
D_{30}	0.17		
D_{10}	0.10		
	COEFFICIENTS		
C_c	1.18		
C_u	2.1		

SIEVE number size	PERCENT FINER ●		
4	99.6		
10	98.4		
20	95.2		
40	88.4		
60	73.6		
100	18.8		
200	1.1		

Sample information:

● Boring No. MPT-45-MW01
Brown Fine SAND w/shell

Remarks:
Depth: 5.0'- 7.0'
Water Content: 20.5%
Dry Density: 98.7 pcf

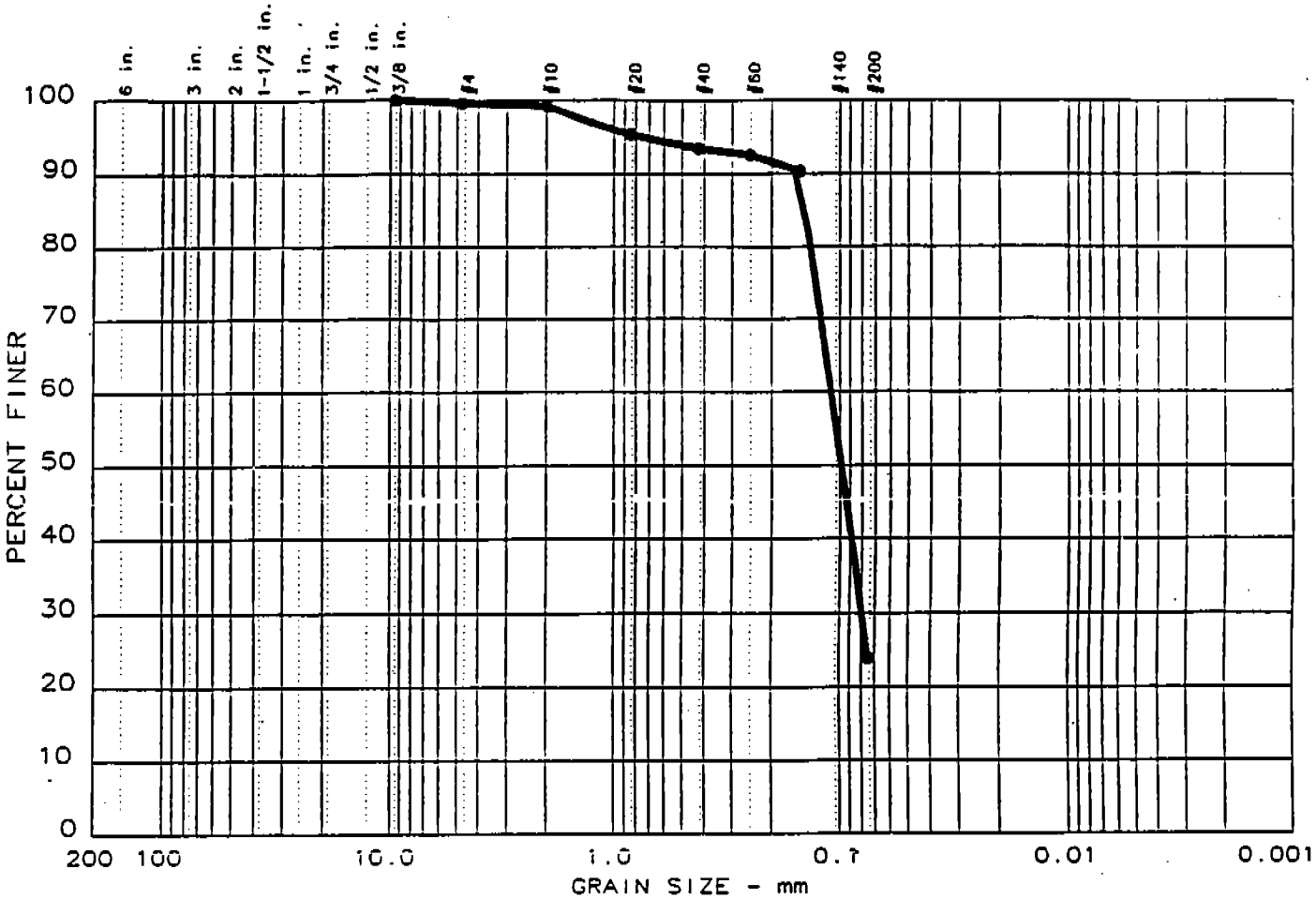
LAW ENGINEERING

Project No.: 446-01939-01
Project: Soil Testing Mayport Group III
CLIENT: CH2M Hill
Date: 8-17-95

Bryant B. Wildes

REVIEWED BY: Bryant B. Wildes

PARTICLE SIZE DISTRIBUTION TEST REPORT



	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	0.0	0.4	75.6	24.0		SM	30	1

SIEVE inches size	PERCENT FINER ●		
0.375	100.0		
	GRAIN SIZE		
D_{60}	0.11		
D_{30}	0.08		
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ●		
4	99.6		
10	99.2		
20	95.4		
40	93.4		
60	92.5		
100	90.3		
200	24.0		

Sample information:

● Boring No. MPT-1-MW01 D
Grey Silty Fine SAND
w/ shell

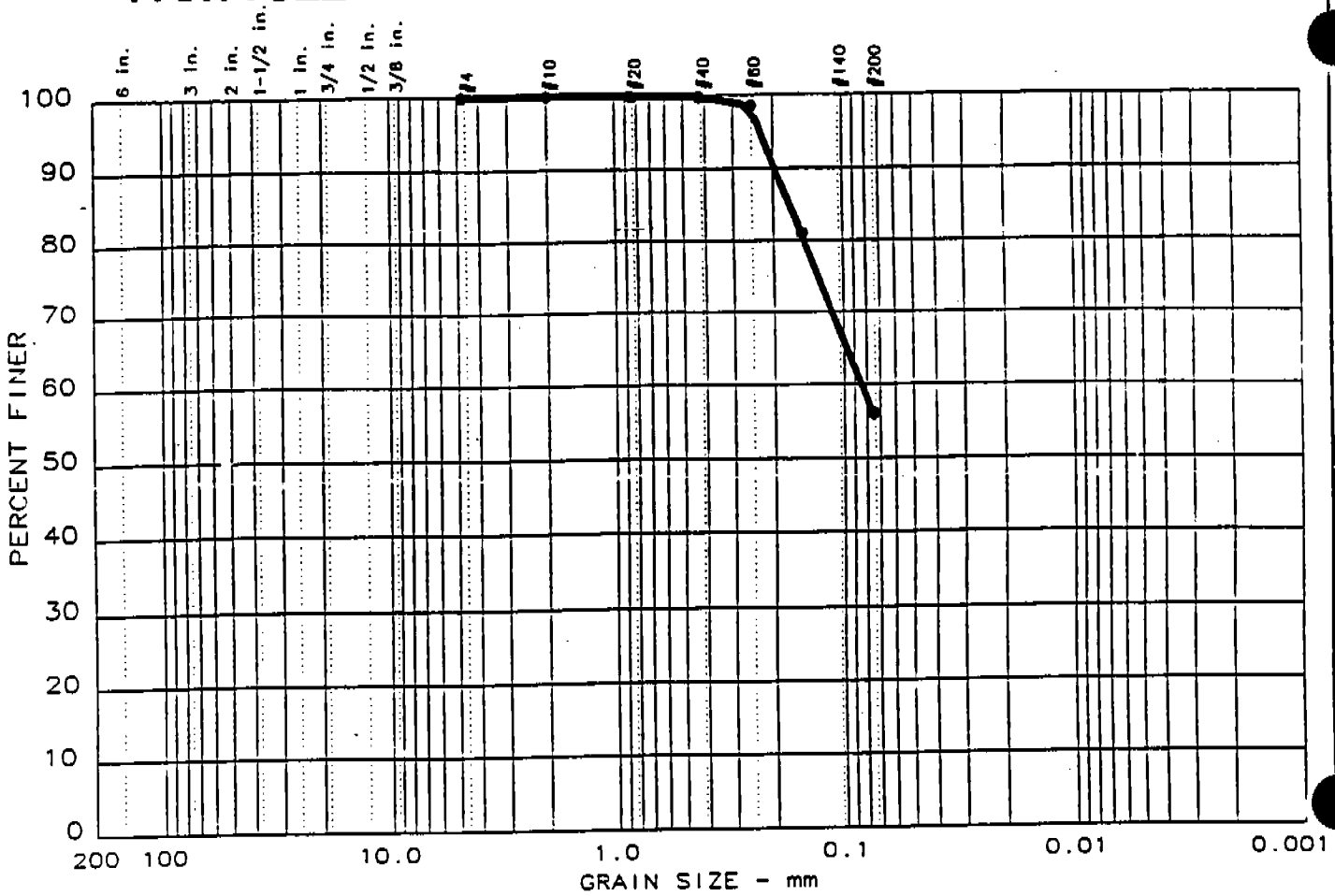
Remarks:
Depth: 44.0'- 46.0'

LAW ENGINEERING

Project No.: 446-01939-01
Project: Soil Testing, Mayport Group III
Client: QAL
Date: 7-31-95 Data Sheet No. ——

Reviewed by: Bryant B. Wildes
Bryant B. Wildes, Chief Engineering Technician

PARTICLE SIZE DISTRIBUTION TEST REPORT



	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	0.0	0.0	43.9	56.1		MH	90	46

SIEVE inches size	PERCENT FINER ●		
GRAIN SIZE			
D_{60}	0.08		
D_{30}			
D_{10}			
COEFFICIENTS			
C_c			
C_u			

SIEVE number size	PERCENT FINER ●		
4	100.0		
10	100.0		
20	99.9		
40	99.8		
60	98.5		
100	81.0		
200	56.1		

Sample information:

● Boring No. MPT-44-MW01
Dark Grey Very Sandy
SILT

Remarks:
Depth: 33.0'- 35.0'

LAW ENGINEERING

Project No.: 446-01939-01
Project: Soil Testing, Mayport Group III
Client: QAL
Date: 7-31-95 Data Sheet No. ——

Reviewed by: Bryant B. Wildes Bryant B Wildes

APPENDIX C-3

TECHNICAL MEMORANDUM GEOPHYSICAL SURVEY

TECHNICAL MEMORANDUM

GEOPHYSICAL SURVEY
NAVAL STATION MAYPORT

ABB Environmental Services Project No. 08534-05

Prepared for
SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORTH CHARLESTON, SOUTH CAROLINA
December 1995

LIST OF FIGURES

FIGURE NO.	TITLE
1	Site Plan and Geophysical Survey Grid
2	Vertical (Magnetic) Gradient Contours
3	Quadrature (Terrain Conductivity) Contours
4	Inphase (Terrain Conductivity) Contours
5	Quadrature (TC) Contours with Annotations and GPR Traverse Locations

APPENDICES

A Magnetic (Total Field) Measurements

B Terrain Conductivity Measurements

C Ground Penetrating Radar Profiling

TECHNICAL MEMORANDUM

PROJECT: Naval Station Mayport

SUBJECT: Geophysical Surveys

PREPARED BY: Richard Allen, Principal Geophysicist

DATE: December 15, 1995

1.0 INTRODUCTION

A geophysical survey was conducted at the Naval Station Mayport in open areas to assess subsurface conditions evidenced by areas of disturbed earth and by distressed vegetation determined from historical aerial photographs (Figure 1). Mounds of disturbed earth may indicate former landfilling activities. Geophysical techniques employed during these surveys included magnetometry (with vertical gradient capability), terrain conductivity and ground penetrating radar. Field work took place on March 23 and 24 and April 19, 1995.

2.0 PERSONNEL

ABB-ES personnel involved in the field program include Richard Allen, Principal Geophysicist; and Tom Cramer, Technician. ABB-ES was assisted by Dynell Jones of MESI. Michael Jaynes was the Field Operations Lead during the investigation.

3.0 FIELD PROGRAM

3.1 MAGNETOMETER AND TERRAIN CONDUCTIVITY SURVEY. The magnetometer and terrain conductivity surveys were conducted concurrently over the area shown on Figure 1 on March 23 and 24, 1995. The instrumentation consisted of a GEM proton precession magnetometer with vertical gradient capability and a Geonics EM31D terrain conductivity meter with Polycorder data logger. The survey was conducted in all areas shown on Figure 1 on a 20- by 20-foot measurement grid.

Prior to the start of the data acquisition, the survey grid was established with a compass and cloth tape. Baselines for the survey grid were referenced to landmarks whenever possible so that the grid could be reproduced at some point in the future if necessary.

A total of 969 magnetometer and 888 terrain conductivity measurements were acquired during the investigation. The only area in which data was not acquired with both instruments was an area of heavy brush in the northeast portion of the survey area north of the athletic field. This area was completed with the magnetometer only.

3.2 GROUND PENETRATING RADAR SURVEY. A confirmatory ground penetrating radar (GPR) survey was conducted on April 19, 1995. The purpose for this work was to further investigate four magnetic and/or terrain conductivity anomalies which could not be explained by obvious cultural features (fences, utilities, large metal objects). A GSSI SIR System III with 300 MHz antenna was used during this

portion of the investigation. A total of eight traverses from 60 to 100 feet long were completed during the GPR survey.

4.0 RESULTS

4.1 MAGNETOMETER AND TERRAIN CONDUCTIVITY SURVEY. The results of the magnetometer and terrain conductivity surveys are presented as Figures 2, 3 and 4. Figure 2 presents the magnetic vertical gradient contours with a contour interval of 10 gammas per meter. Figures 3 and 4 were produced from the terrain conductivity data. Figure 3 presents the quadrature contours and represent conductivity values in units of millimhos per meter. A contour interval of 5 millimhos per meter is used on Figure 3. Figure 4 presents the in-phase component of the conductivity measurement, which is significantly more sensitive to metallic objects and thus is useful in searching for buried metal objects. Data from the in-phase component may be thought of as being equivalent to a metal detector survey. A contour interval of 2 (dimensionless units) was used on Figure 4.

Vertical gradient measurements are very useful in mapping the lateral extent of landfilled materials, since nearly all landfills contain sufficient ferrous materials to be mapped with this technique. As anticipated during the site walkover prior to the start of the geophysical survey, the survey area contains numerous cultural features which have produced significant distortion in the magnetic data. Such features include buried utilities, light poles, vehicles, fencing, buildings, and overhead power lines. Accordingly, only those portions of the study area sufficiently far removed from these surface and buried sources of magnetic interference can be used to assess the presence or absence of landfilled materials and potential contaminant sources which produce distressed vegetation. Magnetic disturbances from cultural features rendered most of the data collected during this investigation unuseable for evaluation. Additional information on the magnetic technique is included as Appendix A.

Conductivity contours are also useful for mapping the lateral extent of landfilled materials, although the instrumentation measures a different physical parameter (i.e., conductivity) and permits an evaluation independent of magnetic data. At Mayport, the conductivity data is more useful than the magnetic data for the stated objectives, as it does not seem to be influenced by cultural features to the extent of the magnetic data. The conductivity contour maps (Figures 3 and 4) do not suggest the presence of landfilled materials in those areas not subject to interference. The well-defined north-south trending anomaly west of the athletic field is undoubtedly due to buried utilities and an overhead power line.

There are several anomalies that were of interest, however, and which were investigated further with GPR. They are evident on the quadrature contour map and are presented along with annotations as Figure 5. The anomalies are labeled "Anomaly #1 through Anomaly #4". Additional information on the terrain conductivity method is included as Appendix B.

4.2 GROUND PENETRATING RADAR SURVEY. Ground penetrating radar traverses were completed along the eight traverses (GPR traverses T1 through T8) indicated on Figure 5. There is no indication that landfilling took place at any of the four geophysical anomalies shown on Figure 5. Areas where landfilling has taken place

usually are evident on GPR data as chaotic reflections with limited penetration. However, at Anomaly #1 (GPR traverses T1, T2, and T3) there are indications of an east-west utility corridor. The source of Anomaly #2 is unknown, but felt not to represent landfilling. The source of Anomalies #3 and #4 (GPR traverses T5 through T8) is probably related to buried north-south utilities.

5.0 SUMMARY

Geophysical surveys were conducted at the Naval Station Mayport for the purpose of assessing subsurface conditions related to areas of disturbed earth and distressed vegetation determined from a review of historical aerial photographs. The mounds of disturbed earth may indicate former landfilling activities. As anticipated, significant interference from cultural objects limited the effectiveness of the magnetic data in assessing subsurface conditions. The terrain conductivity data were somewhat more useful in permitting an evaluation of subsurface conditions. Four geophysical anomalies were mapped which could not be explained by cultural interference. These anomalies were investigated with ground penetrating radar, revealing that three anomalies are possibly related to buried utilities. The source of the fourth anomaly is not known, but is not suspected to be caused by landfilled materials.

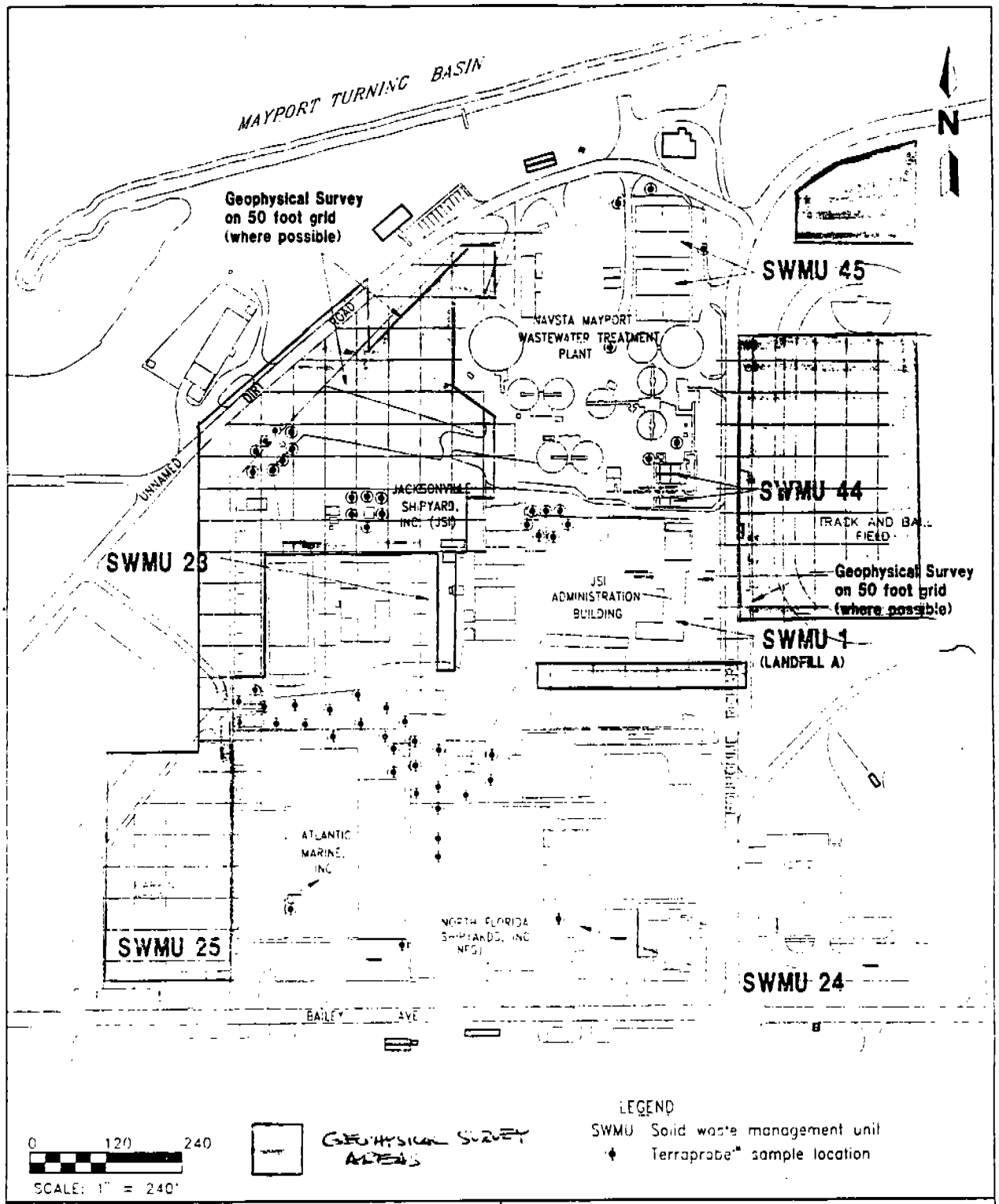


Figure 1
GEOPHYSICAL SURVEY GRID

RCRA FACILITY INVESTIGATION WORKPLAN, ADDENDUM 5

U.S. NAVAL STATION
MAYPORT, FLORIDA

MPT_GRP3.RFI
MVL.11.94

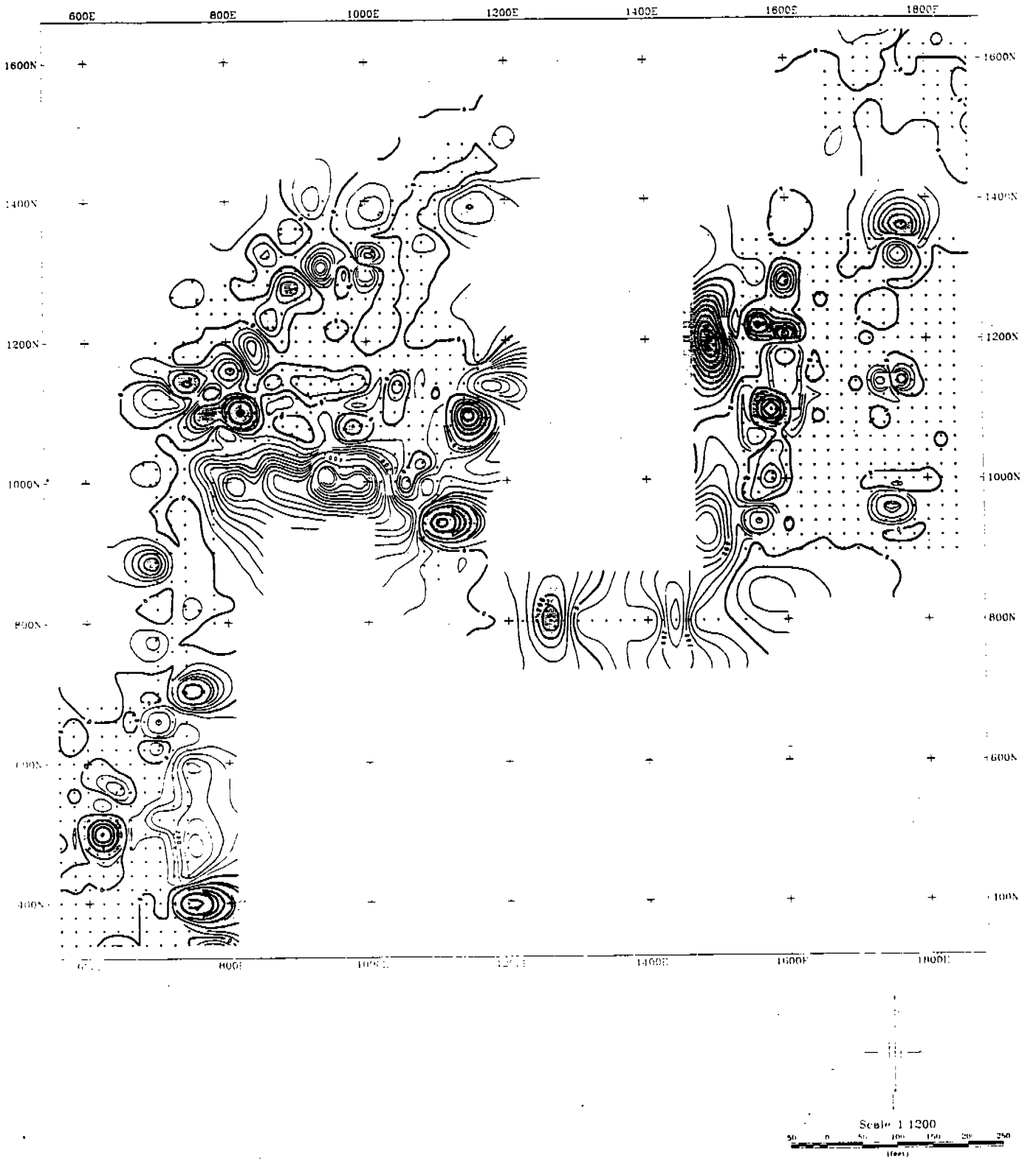


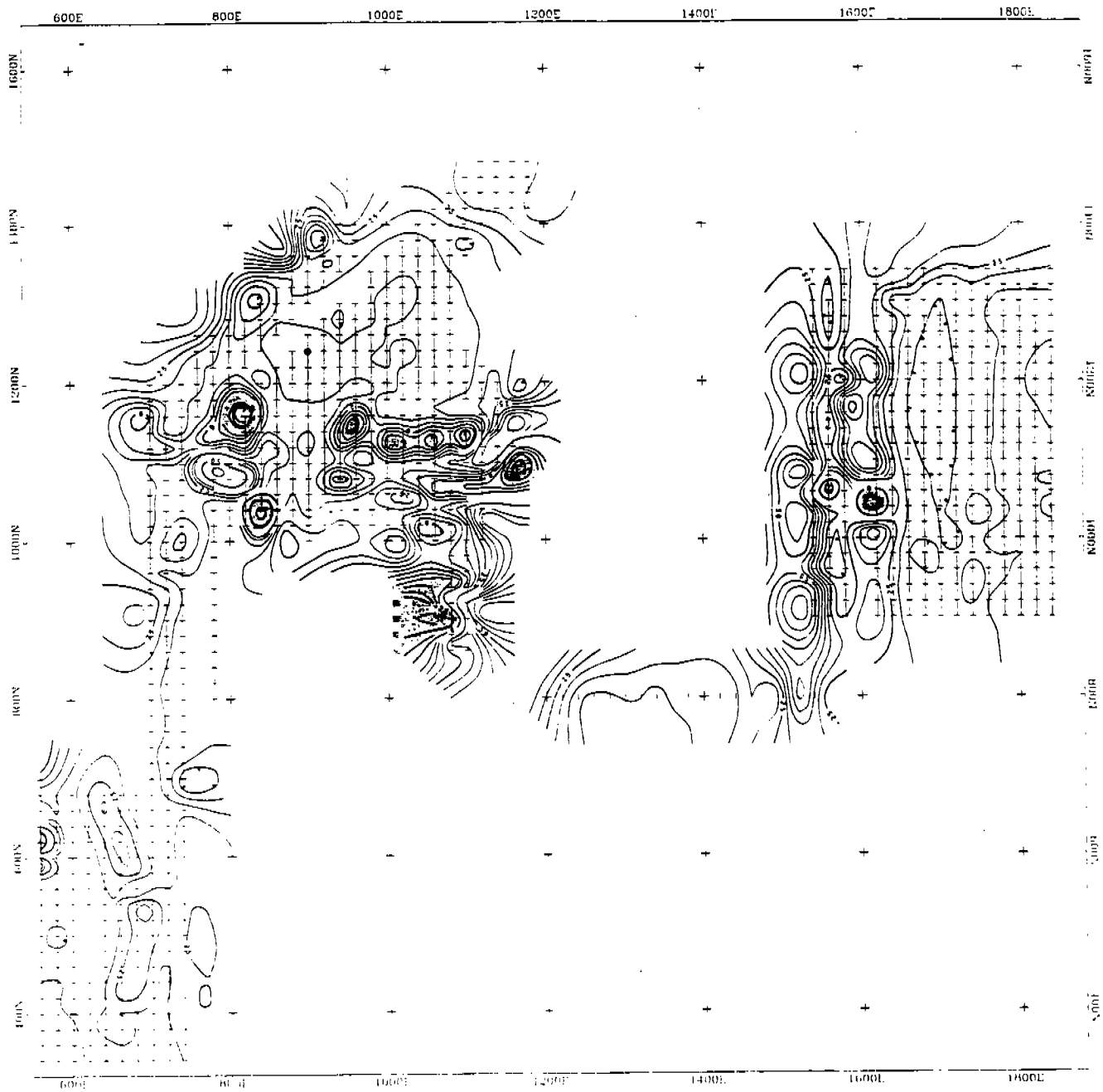
Figure 2

SOUTHERN DIVISION

VERTICAL GRADIENT CONTOURS
RCRA FACILITY INVESTIGATION

NAVAL STATION MAYPORT
MAYPORT, FLORIDA

ABB ENVIRONMENTAL SERVICES, INC.



Scale 1:1200

SOUTHERN DIVISION

QUADRATURE (TC) CONTOURS
RCRA FACILITY INVESTIGATION

NAVAL STATION MAYPORT
MAYPORT, FLORIDA

ABB ENVIRONMENTAL SERVICES, INC

Figure 3

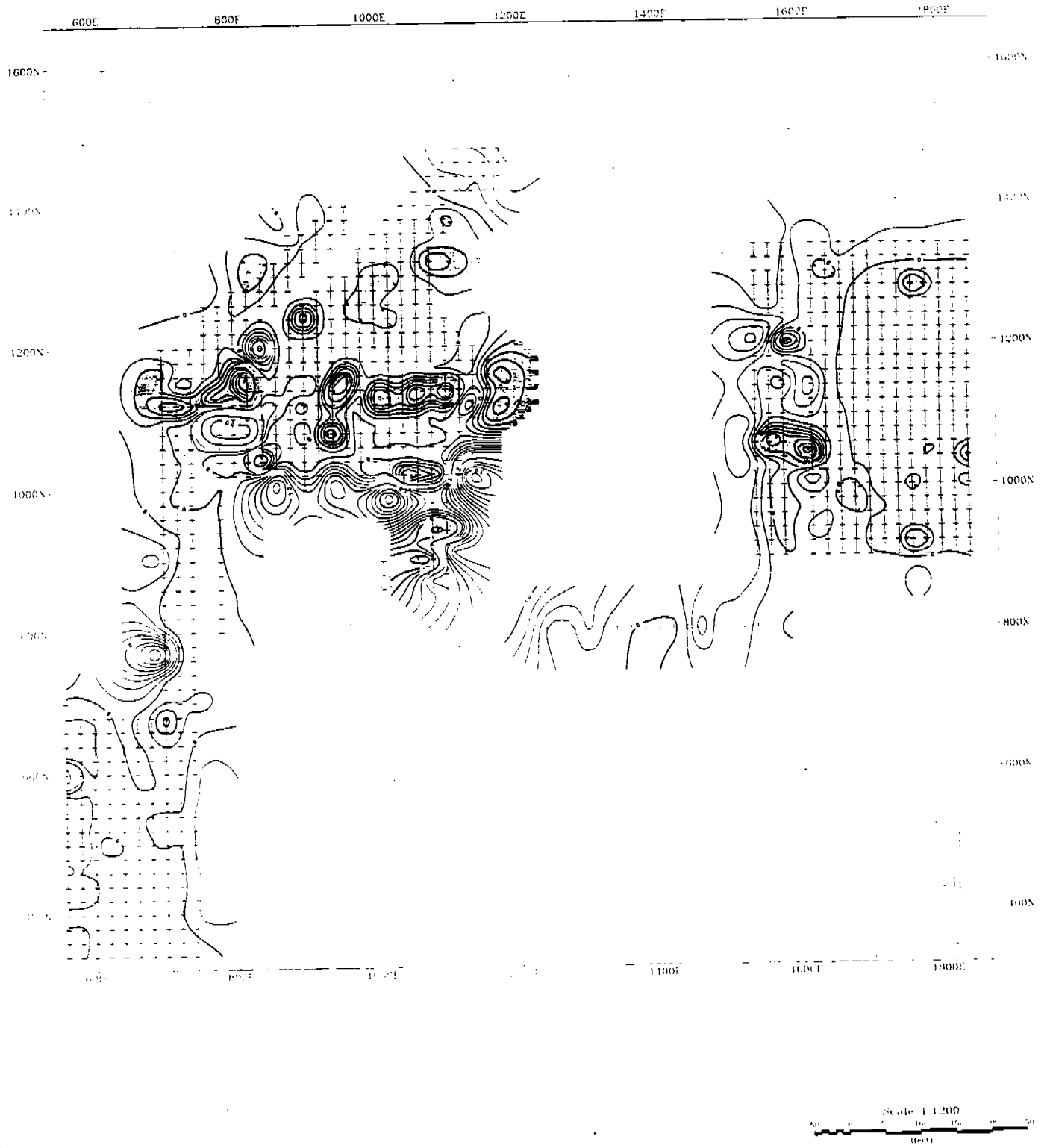
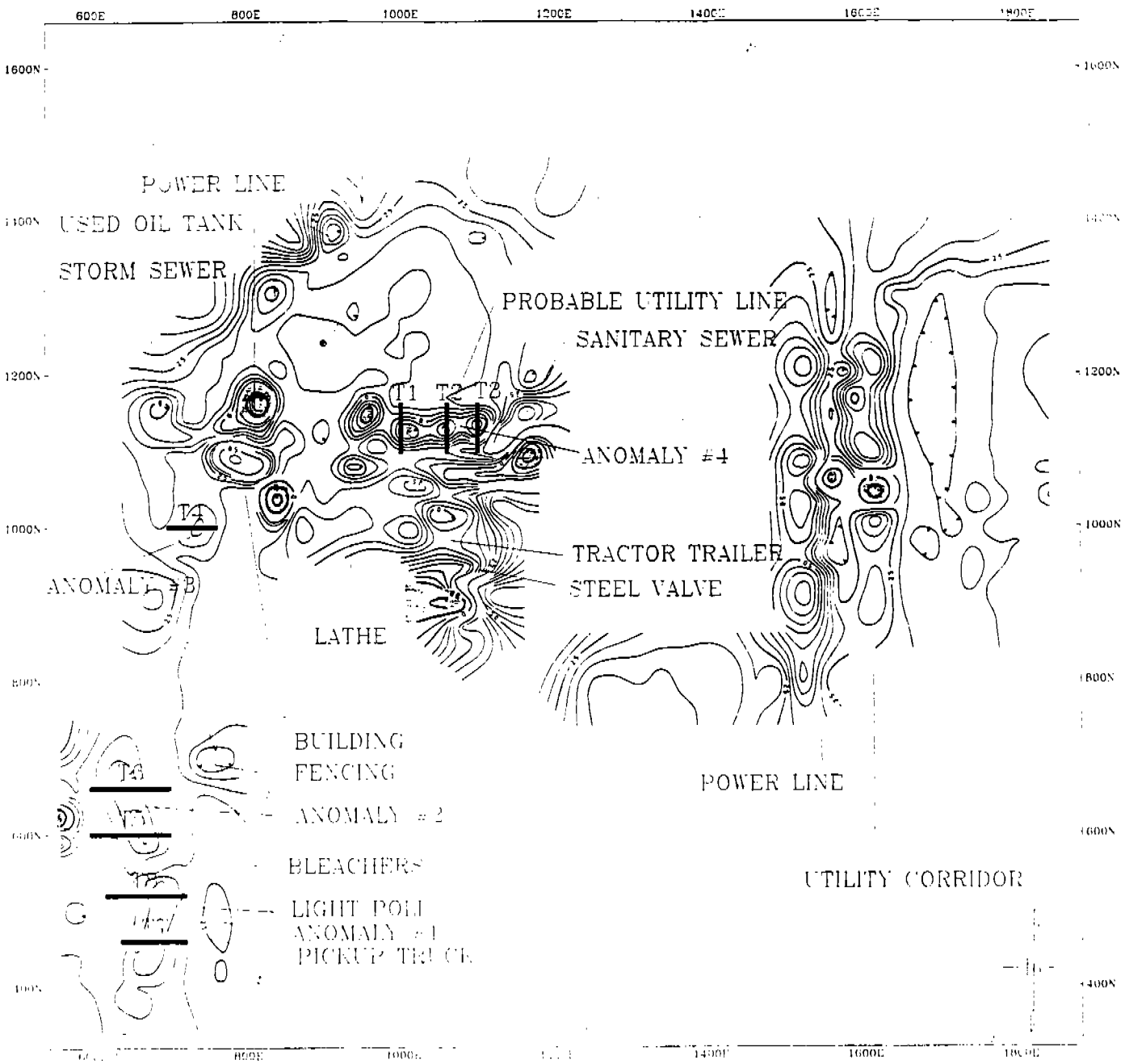


Figure 4

SOUTHERN DIVISION
INPHASE (TC) CONTOURS RCRA FACILITY INVESTIGATION
U. NAVAL STATION MAYPORT, FLORIDA
ABB ENVIRONMENTAL SERVICES, INC.



GPR TRAVERSES

Scale 1:1200

Figure 5

SOUTHERN DIVISION
QUADRATURE (TC) CONTOURS RCRA FACILITY INVESTIGATION
U. NAVAL STATION MAYPORT, FLORIDA
ABB ENVIRONMENTAL SERVICES, INC

APPENDICES

APPENDIX A
MAGNETIC (TOTAL FIELD) MEASUREMENTS

INTRODUCTION

The magnetic method is a versatile, relatively inexpensive, geophysical exploration technique. Magnetic data can be acquired on land or water, or in the air. Aeromagnetic surveys and deep water marine studies are commonly used as a reconnaissance tool for evaluating hydrocarbon prospects. Land-based or coastal water marine magnetic surveys are usually done for evaluating shallow geologic structures in detail (e.g., shallow mineral deposits). These surveys have also been used successfully in locating manmade features such as in archeological prospecting.

More recently, the focus of national attention on the hazardous waste problem has prompted the routine use of magnetometers for locating repositories of buried (drummed) wastes. Locating and quantifying these materials is essential to any remediation effort, and magnetometer surveys can provide an extra measure of safety to those personnel involved in the clean-up activities.

EARTH MAGNETISM

Although the origin of the earth's magnetic field is not well understood, we do know that the earth behaves magnetically as if a large bar magnet were located near its center. The axis of this "magnet" is oriented at a small angle (about 18 degrees in New England) with respect to its axis of rotation. It is this angle that produces the small differences between "true" north and "magnetic" north; the angle is called the declination. The lines of magnetic force are nearly horizontal at the equator and nearly vertical at the poles. The angle between these lines of force and horizontal at any point on the earth's surface is known as the inclination.

The strength of the magnetic field also varies over the surface of the earth, and is stronger at the poles than at the equator. The strength of the field is approximately 60,000 gammas at the poles and 30,000 gammas at the equator (where 1 gamma equals 0.00001 Gauss).

The earth's magnetic field (sometimes referred to as its "ambient" field) is modified locally by both naturally occurring and manmade magnetic materials. Two types of magnetization contribute to this: induced and remanent. Induced magnetization refers to the ability of a material to act as a magnet itself, thereby enhancing the ambient field. The more the ambient field is enhanced by a material, the greater is the "magnetic susceptibility" for that material.

Remanent or permanent magnetization often predominates over induced magnetization in igneous rocks and metals. (Remanent refers to rocks, whereas permanent refers to metals.) Remanent or permanent magnetization is produced in materials that have been heated above the Curie point, allowing magnetic minerals to become aligned with the earth's ambient field before cooling. The remanent field direction is not, in general, parallel to the earth's present field. It may, in fact, act in the opposite direction. The remanent field combines vectorially with the ambient and induced field components, and any quantitative interpretation of magnetic data should consider this if such information is

available.

INSTRUMENTATION

Although many types of magnetometers are available, the most widely used is the "proton precession" type. This device utilizes the precession of spinning protons of hydrogen atoms in a sample of hydrogen-rich fluid (e.g., kerosene, alcohol, or water) to measure the total magnetic field intensity.
Protons spinning in an atomic nucleus behave like tiny magnetic dipoles which can be aligned (polarized) by an external magnetic field. The protons are initially aligned parallel to the earth's field. A second, much stronger magnetic field is produced approximately perpendicular to the earth's field by introducing electric current through a coil of wire. The protons become temporarily aligned with this stronger field. When this stronger field is removed, the protons tend to realign themselves with the earth's field, causing them to precess about this direction at a frequency of approximately 2,000 Hz. The precessing protons will generate a small electric signal in the same coil used to polarize them with a frequency proportional to the total magnetic field intensity and independent of the coil orientation. By measuring the signal frequency, one can obtain the absolute value of the total earth's field intensity to an accuracy of 1 gamma or better. The total magnetic field value measured by the proton precession magnetometer is the net vector sum of the ambient earth's field and any local induced and/or remanent (permanent) perturbations.

FIELD TECHNIQUES

In the field, the operator should avoid any sources of high magnetic gradients such as would be caused by power lines, buildings, and any large iron or steel objects. The operator should also avoid carrying any unnecessary metal articles. Magnetic stations are established at an interval that reflects the nature of the survey and the magnetic gradients encountered.

During environmental investigations, a typical reconnaissance grid might start out at perhaps a 25-foot interval, and would be closed down to 5 or 10 feet in areas where additional detail is desired. If a total field survey is being conducted, base station readings should be taken frequently (every 30 minutes to 1 hour) to provide a check on any diurnal variations and magnetic storms that may occur during a survey. Typically, diurnal variations will not exceed a few tens of gammas, but magnetic storms may produce changes in the earth's field of thousands of gammas in a short period (on the order of hours). If survey requirements dictate, it may be prudent to establish a continuously recording magnetic base station to monitor diurnal variations. If a magnetic storm occurs, survey operations should cease until the storm is over.

A further refinement in magnetic studies can be achieved with the addition of vertical gradient measurements. This involves the simultaneous acquisition by two sensors of two values of the total field. The sensors are mounted on a staff that is held vertically during a measurement. A known distance (commonly one-half or one meter) separates the sensors on the staff. The vertical gradient value is derived by obtaining the difference between the total field values of the lower and upper sensors divided by the distance between them. Vertical gradient measurements tend to be more sensitive to the presence of near-surface metal objects than total field values alone.

There are commercially available magnetometers that record field data in an internal memory, which can be transferred at the completion of field activities to a personal computer for processing. These instruments can record the total field value, the vertical gradient, the time and date of the measurement, and the station location (input by the user), as well as a number of parameters that permit an evaluation of data quality. When vertical gradient measurements are the primary focus of a survey, the diurnal variation is inconsequential, because any variation affects the two sensors on the magnetometer sensor staff equally.

Table A-1 is a tabulation of all the magnetometer (vertical gradient) data acquired during this investigation. The data are presented in the order in which they were acquired during the field operations.

APPENDIX B
TERRAIN CONDUCTIVITY MEASUREMENTS

GENERAL

Terrain conductivity surveys, also referred to as EMI (electro-magnetic induction) surveys, have traditionally been used in mineral exploration for tracing conductive ore bodies (i.e., massive sulfides). More recently, conductivity surveys have been widely used for tracing conductive contaminant plumes in groundwater. Leachate from municipal landfills tends to be much more conductive than naturally occurring groundwater. Accordingly, the shape, extent, and relative impact of a plume can be studied with terrain conductivity surveys. Such surveys have also been successfully used in studying some organic contamination in soil and groundwater since the conductivity of most organic chemicals is much lower than naturally-occurring soils and groundwater.

DATA ACQUISITION

Since the instrument never comes in contact with the ground, data acquisition is more rapid than conventional, galvanic, earth resistivity surveys. However, quantification of conductivity data to yield a layered-earth solution is more difficult than with conventional earth resistivity. Two instruments commonly used in terrain conductivity surveys are the EM-31 and EM 34-3, both manufactured by Geonics, Ltd., in Mississauga, Ontario. These instruments, which have proven to be rapid-reconnaissance exploration tools, are used to assess the conductivity values for soil and rock materials. Although both instruments operate on the same principles, we will limit the following discussion to the EM-31, the instrument selected for this work at the Naval Station Mayport.

PRINCIPLES

The instrumentation consists of a transmitter and receiver. When a measurement is made, the transmitter is energized by an alternating current that produces a magnetic field, designated as the primary field, H_p. This artificial magnetic field induces small electric currents to flow in the earth which, in turn, produce a secondary magnetic field, H_s, which is made up of two components: the quadrature phase and inphase components. The secondary magnetic field is related to the transmitter/receiver separation and to the operating frequency of the transmitter, both of which are selected by the operator. The ratio of the quadrature phase of the secondary field to the primary field (H_s/H_p) is linearly proportional to the terrain conductivity under most conditions. This ratio is measured by the receiver and converted into conductivity values in units of millimhos per meter. Field measurements may be recorded on a digital data logger, which is capable of recording simultaneously both the quadrature phase and in-phase components of the induced magnetic field. The quadrature-phase component, as stated earlier, gives the ground conductivity value in millimhos per meter. The in-phase component, used also for calibration, is significantly more sensitive to metallic objects and hence is useful for looking for buried tanks and drums, among other things. Data from the in-phase component may be thought of as being equivalent to a metal detector survey.

INTERPRETATION

APPENDIX C
GROUND PENETRATING RADAR PROFILING

INTRODUCTION

The GPR technique uses high frequency radio waves to determine the presence of subsurface objects and structures. Energy is radiated downward into the subsurface from an antenna that is pulled slowly across the ground at speeds varying from about 0.25 to 5 mph, depending on the amount of detail desired and the nature of the target. The radio wave energy is reflected from surfaces where there is a contrast in the electrical properties of subsurface materials. These surfaces may be naturally occurring geologic horizons (e.g., soil layers, changes in moisture content, voids and fractures in bedrock) or manmade (e.g., buried utilities, tanks, drums). The reflected energy is processed and displayed as a continuous strip chart recording of distance versus time (where time can be thought of as proportional to depth). The depth of penetration of a GPR system is highly site-specific, and depends (among other factors) on (1) the soil types at the site (clean sands are best), (2) moisture conditions (dry is best), and (3) the frequency of the antenna (the lower the frequency, the deeper the penetration, and the less the resolution capability).

Typical applications for GPR include delineating the boundaries of buried hazardous waste materials and the perimeters of abandoned landfills; finding steel reinforcement bars and voids in concrete structures; recording the depth of geological interfaces, bedrock, and coal seams; locating and mapping buried utilities; bottom and shallow sub-bottom profiling on lakes; and determining glacial ice stratification and thickness.

PRINCIPLES

The radar system consists of a control unit, an antenna assembly (transmitter/receiver), and a recording device for analog field recordings. A tape-recording unit may also be present for further data processing after field activities are completed. The antenna transmits electromagnetic (EM) pulses of short duration into the ground. The pulses are reflected from geologic or manmade surfaces and are picked up by the receiver, which transmits the signals to the control unit for processing and analog display. Shallow objects appear near the top of the strip chart recording (less time elapsed between the outgoing pulse and the return of reflected energy), whereas deeper objects appear farther down the recording (more time elapsed). The time required for the EM pulse to traverse the path down to and back from the reflecting medium is measured in nanoseconds (one nanosecond = (1×10^{-9} seconds). The two-way travel time is proportional to the depth of burial of the reflecting medium and is dependent on the dielectric properties of the medium through which the EM pulse travels. The dielectric properties of a medium are related to the moisture content and composition of a material.

The propagation velocity of the EM pulse is determined by the relative dielectric permittivity of the material (e_r) through which the pulse travels. The relative dielectric permittivity is a measure of the degree to which a medium can resist the flow of the EM pulse: the higher the relative permittivity, the lower the resistance to flow, and vice versa. For most earth materials and rocks, the relative dielectric permittivity does not exceed 10 and is always greater than

TABLE C-1
APPROXIMATE VHF ELECTROMAGNETIC PROPERTIES OF VARIOUS MATERIALS*

MATERIAL	RELATIVE DIELECTRIC PERMITTIVITY	PULSE VELOCITY (NS/FT)
air	1	1
freshwater	81	9
seawater	81	9
sand (dry)	4-6	2.0-2.4
sand (saturated)	30	5.5
silt (saturated)	10	3.1
clay (saturated)	8-12	2.8-3.3
average "dirt"	16	4.0
dry sandy coastal land	10	3.1
marshy forested flat land	12	3.5
rich agricultural land	15	3.9
pastoral land, hilly, forested	13	3.6
freshwater ice	4	2.0
permafrost	4-8	2.0-2.9
granite (dry)	5	2.2
limestone	7-9	2.6
concrete	6.4	2.5
asphalt	3-5	1.7-2.5

* Modified from Geophysical Survey Systems, Inc.

APPENDIX D

HUMAN HEALTH RISK ASSESSMENT SUPPORT DOCUMENTATION

Appendix D-1	Human Health Dose-Response Tables
Appendix D-2	Human Health Risk Assessment Spreadsheets, SWMUs 1, 23, 24, 25, 44, and 45
Appendix D-3	Human Health Risk Assessment Spreadsheets, SWMU 17
Appendix D-4	Human Health Risk Assessment Spreadsheets, SWMUs 14 and 18
Appendix D-5	Supplementary Toxicity Profiles
Appendix D-6	Florida Soil Cleanup Goals (September 29, 1995)
Appendix D-7	Drinking Water Regulations and Health Advisories (May 1995)

APPENDIX D-1

HUMAN HEALTH DOSE-RESPONSE TABLES

Table D-1-1
Oral Dose-Response Data for Carcinogenic Effects

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

Chemical	Weight of Evidence[1]	Oral Slope Factor (mg/kg/day)(-1)	Source[2]	Test Species	Exposure Route	Tumor Type	Study Source[3]
VOLATILES							
1,1-Dichloroethylene	C	6.0e-01	IRIS	Rat	Oral-drinking water	Adrenal	IRIS
SEMIVOLATILES							
2-Methylnaphthalene	D	NE					
Benzo(a)Anthracene	B2	7 3e-01	(1)				
Benzo(a)Pyrene	B2	7.3e+00	IRIS	Mouse	Oral-diet	Forestomach	IRIS
Benzo(b)Fluoranthene	B2	7.3e-01	(1)				
Benzo(g,h,i)perylene	D	NE					
Benzo(k)Fluoranthene	B2	7 3e-02	(1)				
bis(2-Ethylhexyl)phthalate	B2	1 4e-02	IRIS	Rat	Oral-diet	Liver	IRIS
Chrysene	B2	7.3e-03	(1)				
Dibenz(a,h)Anthracene	B2	7.3e+00	(1)				
Fluoranthene	D	NE					
Fluorene	D	NE					
Indeno(1,2,3-cd)Pyrene	B2	7.3e-01	(1)				
Naphthalene	D	NE					
Phenanthrene	D	NE					
Pyrene	D	NE					
PESTICIDES/PCBs							
alpha-Chlordane	B2	1.3e+00	IRIS (2)	Mouse	Oral-diet	Liver	IRIS

Table D-1-1
Oral Dose-Response Data for Carcinogenic Effects

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

Chemical	Weight of Evidence[1]	Oral Slope Factor (mg/kg/day)(-1)	Source[2]	Test Species	Exposure Route	Tumor Type	Study Source[1]
Aroclor-1254	B2	7.7e+00	(3)				
Aroclor-1260	B2	7.7e+00	IRIS	Rat	Oral-diet	Liver	IRIS
Dieldrin	B2	1.6e+01	IRIS	Mouse	Oral-diet	Liver	IRIS
gamma-Chlordane	B2	1.3e+00	IRIS (2)	Mouse	Oral-diet	Liver	IRIS
INORGANICS							
Antimony	D	NE					
Arsenic	A	1.5e+00	IRIS	Human	Oral-drinking water	Skin	IRIS
Beryllium	B2	4.3e+00	IRIS	Rat	Oral-drinking water	Total	IRIS
Cadmium	D	NE					
Chromium	D	NE					
Copper	D	NE					
Iron	D	NE					
Lead	B2	NE					
Magnesium	D	NE					
Manganese	D	NE					
Mercury	C	NE	(4)				
Sodium	D	NE					
Vanadium	D	NE					
Zinc	D	NE					

Table D-1-1
Oral Dose-Response Data for Carcinogenic Effects

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

Chemical	Weight of Evidence[1]	Oral Slope Factor (mg/kg/day)(-1)	Source[2]	Test Species	Exposure Route	Tumor Type	Study Source[1]

[1] 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.

[2] Integrated Risk Information System (IRIS) on-line database search, current as of November 1995. Health Effects Assessment Summary Tables (HEAST), current as of May 1995. See notes for additional sources.

Notes:
- ND = no data.
- NE = not evaluated
- (1) Relative potency factors (USEPA, 1993) have been applied to the ingestion slope factor for benzo(a)pyrene for all PAHs classified as A or B carcinogens.
- (2) The values for chlordane have been used as surrogates for alpha- and gamma-chlordane.
- (3) The ingestion slope factor for PCBs, in which Aroclor-1260 was evaluated, has been used as a surrogate for all Aroclors.
- (4) Classification is based on mercury as mercuric chloride.

Table D-1-2
Oral Dose-Response Data for Noncarcinogenic Effects

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

Chemical	Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor[2]	Study Source[1]
	Oral RfD (mg/kg-day)	Source[1]	Oral RfD (mg/kg-day)	Source[1]						
VOLATILES										
1,1-Dichloroethylene	9.0e-03	IRIS	9.0e-03	HEAST	Oral-drinking water	Medium	Hepatic lesions	Rat	1000 H,A,L	IRIS
SEMIVOLATILES										
2-Methylnaphthalene	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							
bis(2-Ethylhexyl)phthalate	2.0e-02	IRIS	ND		Oral-diet	Medium	Increased liver weight	Guinea pig	1000 H,A,S,L	IRIS
Chrysene	ND		ND							
Dibenz(a,h)Anthracene	ND		ND							
Fluoranthene	4.0e-02	IRIS	4.0e-01	HEAST	Oral-gavage	Low	Increased liver weight, clinical effects	Mouse	3000 H,A,S,D	IRIS
Fluorene	4.0e-02	IRIS	4.0e-01	HEAST	Oral-gavage	Low	Hematologic al changes	Mouse	3000 H,A,S,D	IRIS
Indeno(1,2,3-cd)Pyrene	ND		ND							
Naphthalene	4.0e-02	(1)	ND							

Table D-1-2
Oral Dose-Response Data for Noncarcinogenic Effects

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

Chemical	Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor[2]	Study Source[1]
	Oral RfD (mg/kg-day)	Source[1]	Oral RfD (mg/kg-day)	Source[1]						
Phenanthrene	ND		ND							
Pyrene	3.0e-02	IRIS	3.0e-01	HEAST	Oral-gavag	Low	Renal tubular pathology	Mouse	3000 H,A,S,D	IRIS
PESTICIDES/PCBs										
alpha-Chlordane	6.0e-05	IRIS (4)	6.0e-05	HEAST (4)	Oral-diet	Low	Liver hypertrophy	Rat	1000 H,A,D	IRIS
Aroclor-1254	2.0e-05	IRIS	5.0e-05	HEAST	Oral-capsule	Medium	Immunological and clinical effects	Monkey	300 H,A,S,L	IRIS
Aroclor-1260	2.0e-05	(2)	5.0e-05	(2)						
Dieldrin	5.0e-05	IRIS	5.0e-05	HEAST	Oral-diet	Medium	Liver lesions	Rat	100 H,A	IRIS
gamma-Chlordane	6.0e-05	IRIS (4)	6.0e-05	HEAST (4)	Oral-diet	Low	Liver hypertrophy	Rat	1000 H,A,D	IRIS
INORGANICS										
Antimony	4.0e-04	IRIS	4.0e-04	HEAST	Oral-drinking water	Low	Reduced lifespan	Rat	1000 H,A,L	IRIS
Arsenic	3.0e-04	IRIS	3.0e-04	HEAST	Oral-drinking water	Medium	Hyperpigmentation, keratosis	Human	3 D	IRIS
Beryllium	5.0e-03	IRIS	5.0e-03	HEAST	Oral-drinking water	Low	No effects observed	Rat	100 H,A	IRIS

Table D-1-2
Oral Dose-Response Data for Noncarcinogenic Effects

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

Chemical	Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor[2]	Study Source[1]
	Oral RfD (mg/kg-day)	Source[1]	Oral RfD (mg/kg-day)	Source[1]						
Cadmium Food	1.0e-03	IRIS	ND		Oral-diet	High	Proteinuria	Human	10 H	IRIS
Drinking Water	5.0e-04	IRIS	ND		Oral-drinking water	High	Proteinuria	Human	10 H	IRIS
Chromium	5.0e-03	IRIS (3)	2.0e-02	HEAST (3)	Oral-drinking water	Low	No effects observed	Rat	500 H,A,S	IRIS
Copper	ND	(5)	ND	(5)						
Iron	3.0e-01	3	ND							
Lead	ND		ND							
Magnesium	ND		ND							
Manganese Food	1.4e-01	IRIS	1.4e-01	HEAST	Oral-diet	NA	CNS effects	Human	1	IRIS
All other media	4.7e-02	IRIS	ND		Oral-diet	NA	CNS effects	Human	3	IRIS
Mercury	3.0e-04	IRIS (7)	3.0e-04	HEAST (6)	Oral-diet	High	Autoimmune effects	Rat	1000 H,A,S,L	IRIS
Sodium	ND		ND							
Vanadium	7.0e-03	HEAST	7.0e-03	HEAST	Oral-drinking water	Low	No effects observed	Rat	100 H,A	HEAST
Zinc	3.0e-01	IRIS	3.0e-01	HEAST	Oral-diet supplement	Medium	Decrease in ESOD activity	Human	3 S	IRIS

Table D-1-2
Oral Dose-Response Data for Noncarcinogenic Effects

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

Chemical	Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor[2]	Study Source[1]
	Oral RfD (mg/kg-day)	Source[1]	Oral RfD (mg/kg-day)	Source[1]						

[1] Integrated Risk Information System (IRIS) on-line database search, current as of November 1995. Health Effects Assessment Summary Tables (HEAST), current as of May 1995. See notes for other sources.
[2] 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.
(1) This value was provided by the Environmental Criteria and Assessment Office (ECAO) of the USEPA in response to a specific request.
(2) The chronic and subchronic ingestion RfD for Aroclor-1254 has been used as a surrogate for all Aroclors lacking chemical specific RfDs.
(3) The toxicity values for chromium are based on chromium VI.
(4) The values for chlordane have been used as surrogates for alpha- and gamma-chlordane.
(5) A drinking water standard for copper of 1.3 mg/L exists. Inadequate toxicity information is available to calculate an RfD.
(6) This mercury value is based on inorganic mercury.
(7) This mercury value is based on mercuric chloride.

Table D-1-3
Dermal Dose-Response Data for Carcinogenic Effects

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

Chemical	Weight of Evidence[1]	Oral Slope Factor (mg/kg-day)-1	Oral Absorption Efficiency	Reference[2]	Dermal Slope Factor (mg/kg-day)-1
VOLATILES					
1,1-Dichloroethylene	C	6.0e-01	100%	Putcha et al., 1986	6.0e-01
SEMIVOLATILES					
2-Methylnaphthalene	D	NE			NE
Benzo(a)Anthracene	B2	7.3e-01	91%	(1)	8.0e-01
Benzo(a)Pyrene	B2	7.3e+00	91%	Hecht et al., 1979	8.0e+00
Benzo(b)Fluoranthene	B2	7.3e-01	91%	(1)	8.0e-01
Benzo(g,h,i)perylene	D	NE			NE
Benzo(k)Fluoranthene	B2	7.3e-02	91%	(1)	8.0e-02
bis(2-Ethylhexyl)phthalate	B2	1.4e-02	100%	Chadwick et al., 1982	1.4e-02
Chrysene	B2	7.3e-03	91%	(1)	8.0e-03
Dibenz(a,h)Anthracene	B2	7.3e+00	91%	(1)	8.0+00
Fluoranthene	D	NE			NE
Fluorene	D	NE			
Indeno(1,2,3-cd)Pyrene	B2	7.3e-01	91%	(1)	8.0e-01
Naphthalene	D	NE			NE
Phenanthrene	D	NE			NE
Pyrene	D	NE			NE
PESTICIDES/PCBs					
alpha-Chlordane	B2	1.3e+00	80%	(2)	1.6e+00
Aroclor-1254	B2	7.7e+00	90%	Albro & Fishbein, 1972	8.6e+00
Aroclor-1260	B2	7.7e+00	90%	Albro & Fishbein, 1972	8.6e+00

Table D-1-3
Dermal Dose-Response Data for Carcinogenic Effects

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

Chemical	Weight of Evidence[1]	Oral Slope Factor (mg/kg-day)-1	Oral Absorption Efficiency	Reference[2]	Dermal Slope Factor (mg/kg-day)-1
Dieldrin	B2	1.6e+01	80%		2.0e+01
gamma-Chlordane	B2	1.3e+00	80%	Ohno et al., 1986	1.6e+00
INORGANICS					
Antimony	D	NE			NE
Arsenic	A	1.5e+00	98%	Vahter, 1983	1.5e+00
Beryllium	B2	4.3e+00	1%	Owen, 1990	4.3e+02
Cadmium	D	NE			NE
Chromium	D	NE			NE
Copper	D	NE			NE
Iron	D	NE			NE
Lead	B2	NE			NE
Magnesium	D	NE			NE
Manganese	D	NE			NE
Mercury	C	NE			NE
Sodium	D	NE			NE
Vanadium	D	NE			NE
Zinc	D	NE			NE

Table D-1-3
Dermal Dose-Response Data for Carcinogenic Effects

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

Chemical	Weight of Evidence[1]	Oral Slope Factor (mg/kg-day)-1	Oral Absorption Efficiency	Reference[2]	Dermal Slope Factor (mg/kg-day)-1

[1] 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.

[2] For documentation concerning oral slope factors, refer to Table D-1-1.

Notes: NE = not evaluated.
(1) The oral absorption efficiency of all PAHs is assumed to be identical to that of benzo(a)pyrene, based on structural analogy.
(2) The oral absorption efficiency of alpha-chlordane is assumed to be identical to that of gamma-chlordane, based on structural analogy.

Table D-1-4
Dermal Dose-Response Data for Noncarcinogenic Effects

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

Chemical	Chronic Oral RfD[1] (mg/kg-day)	Subchronic Oral RfD[1] (mg/kg-day)	Oral Absorption Efficiency	Reference	Dermal Chronic RfD (mg/kg-day)	Dermal Subchronic RfD (mg/kg-day)
VOLATILES						
1,1-Dichloroethylene	9.0e-03	9.0e-03	100%	Putcha et al., 1986	9.0e-03	9.0e-03
SEMIVOLATILES						
2-Methylnaphthalene	ND	ND			ND	ND
Benzo(a)Anthracene	ND	ND	91%	(1)	ND	ND
Benzo(a)Pyrene	ND	ND	91%	Hecht et al., 1979	ND	ND
Benzo(b)Fluoranthene	ND	ND	91%	(1)	ND	ND
Benzo(g,h,i)perylene	ND	ND			ND	ND
Benzo(k)Fluoranthene	ND	ND	91%	(1)	ND	ND
bis(2-Ethylhexyl)phthalate	2.0e-02	ND	100%	Chadwick et al., 1982	2.0e-02	ND
Chrysene	ND	ND	91%	(1)	ND	ND
Dibenz(a,h)Anthracene	ND	ND	91%	(1)	ND	ND
Fluoranthene	4.0e-02	4.0e-01	91%	(1)	3.6e-02	3.6e-01
Fluorene	4.0e-02	4.0e-01	91%	(1)	3.6e-02	3.6e-01
Indeno(1,2,3-cd)Pyrene	ND	ND	91%	(1)	ND	ND
Naphthalene	4.0e-02	ND	100%	Chang, 1943	4.0e-02	ND
Phenanthrene	ND	ND	91%	(1)	ND	ND
Pyrene	3.0e-02	3.0e-01	91%	(1)	2.7e-02	2.7e-01
PESTICIDES/PCBs						
alpha-Chlordane	6.0e-05	6.0e-05	80%	(2)	4.8e-05	4.8e-05
Aroclor-1254	2.0e-05	5.0e-05	90%	Albro & Fishbein, 1972	1.8e-05	4.5e-05

Table D-1-4
Dermal Dose-Response Data for Noncarcinogenic Effects

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

Chemical	Chronic Oral RfD[1] (mg/kg-day)	Subchronic Oral RfD[1] (mg/kg-day)	Oral Absorption Efficiency	Reference	Dermal Chronic RfD (mg/kg-day)	Dermal Subchronic RfD (mg/kg-day)
Aroclor-1260	2.0e-05	5.0e-05	90%	Albro & Fishbein, 1972	1.8e-05	4.5e-05
Dieldrin	5.0e-05	5.0e-05	80%	(2)	4.0e-05	4.0e-05
gamma-Chlordane	6.0e-05	6.0e-05	80%	Ohno et al., 1986	4.8e-05	4.8e-05
INORGANICS						
Antimony	4.0e-04	4.0e-04	1%	ATSDR, 1991a	4.0e-06	4.0e-06
Arsenic	3.0e-04	3.0e-04	98%	Vahter, 1983	2.9e-04	2.9e-04
Beryllium	5.0e-03	5.0e-03	1%	Owen, 1990	5.0e-05	5.0e-05
Cadmium	1.0e-03	ND	1%	McLellan et al, 1978	1.0e-05	ND
Chromium	5.0e-03	2.0e-02	11%	Ogawa, 1976	5.5e-04	2.2e-03
Copper	ND	ND			ND	ND
Iron	3.0e-01	ND	2%	Goyer, 1991	6.0e-03	ND
Lead	ND	ND			ND	ND
Magnesium	ND	ND			ND	ND
Manganese	4.7e-02	ND	4%	ATSDR, 1991b	1.9e-03	ND
Mercury	3.0e-04	3.0e-04	20%	Nielsen, 1992	6.0e-05	6.0e-05
Sodium	ND	ND			ND	ND
Vanadium	7.0e-03	7.0e-03	3%	ATSDR, 1991c	2.1e-04	2.1e-04
Zinc	3.0e-01	3.0e-01	34%	Sandstrom et al., 1987	1.0e-01	1.0e-01

[1] For documentation concerning chronic and subchronic oral RfDs, refer to Table D-1-2. See notes for additional sources.

Notes: ND = no data.
(1) The oral absorption efficiency of all PAHs is assumed to be identical to that of benzo(a)pyrene, based on structural analogy.
(2) The oral absorption efficiency of alpha-chlordane is assumed to be identical to that of gamma-chlordane, based on structural analogy.

Table D-1-5
Inhalation Dose-Response Data for Carcinogenic Effects

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

Chemical	Weight of Evidence[1]	Inhalation Slope Factor (mg/kg/day)(-1)	Source[2]	Inhalation Unit Risk ($\mu g/m^3$)(-1)	Source[2]	Test Species	Exposure Route	Tumor Type	Study Source
VOLATILES									
1,1-Dichloroethylene	C	1.2e+00	HEAST	5.0e-05	IRIS	Mouse	Inhalation	Kidney	IRIS
SEMIVOLATILES									
2-Methylnaphthalene	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					
bis(2-Ethylhexyl)phthalate	D	NE		NE					
Chrysene	B2	NE		NE					
Dibenz(a,h)Anthracene	B2	NE		NE					
Fluoranthene	D	NE		NE					
Fluorene	D	NE		NE					
Indeno(1,2,3-cd)Pyrene	B2	NE		NE					
Naphthalene	D	NE		NE					
Phenanthrene	D	NE		NE					
Pyrene	D	NE		NE					
PESTICIDES/PCBs									
alpha-Chlordane	B2	1.3e+00	HEAST (2)	3.7e-04	IRIS (2)	Mouse	Oral-diet	Liver	IRIS

Table D-1-5
Inhalation Dose-Response Data for Carcinogenic Effects

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

Chemical	Weight of Evidence[1]	Inhalation Slope Factor (mg/kg/day)(-1)	Source[2]	Inhalation Unit Risk ($\mu g/m^3$)(-1)	Source[2]	Test Species	Exposure Route	Tumor Type	Study Source
Aroclor-1254	B2	NE		NE					
Aroclor-1260	B2	NE		NE					
Dieldrin	B2	1.6e+01	HEAST	4.6e-03	IRIS	Mouse	Oral-diet	Liver	IRIS
gamma-Chlordane	B2	1.3e+00	HEAST (2)	3.7e-04	IRIS (2)	Mouse	Oral-diet	Liver	IRIS
INORGANICS									
Antimony	D	NE		NE					
Arsenic	A	5.0e+01	HEAST	4.3e-03	IRIS	Human	Inhalation	Lung	IRIS
Beryllium	B2	8.4e+00	HEAST	2.4e-03	IRIS	Human	Inhalation	Lung	IRIS
Cadmium	B1	NE		1.8e-03	IRIS	Human	Inhalation	Lung	IRIS
Chromium	A	4.1e+01	HEAST (1)	1.2e-02	IRIS (1)	Human	Inhalation	Lung	IRIS
Copper	D	NE		NE					
Iron	D	NE		NE					
Lead	D	NE		NE					
Magnesium	D	NE		NE					
Manganese	D	NE		NE					
Mercury	C	NE	(3)	NE					
Sodium	D	NE		NE					
Vanadium	D	NE		NE					
Zinc	D	NE		NE					

Table D-1-5
Inhalation Dose-Response Data for Carcinogenic Effects

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

Chemical	Weight of Evidence[1]	Inhalation Slope Factor (mg/kg/day)(-1)	Source[2]	Inhalation Unit Risk ($\mu g/m^3$)(-1)	Source[2]	Test Species	Exposure Route	Tumor Type	Study Source

[1] 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

[2] Integrated Risk Information System (IRIS) on-line database search, current as of November 1995. Health Effects Assessment Summary Tables (HEAST), current as of May 1995.

Notes: NE = not evaluated
(1) The toxicity values for chromium are based on chromium VI.
(2) The values for chlordane have been used as surrogates for alpha- and gamma-chlordane.
(3) Classification is based on mercury as mercuric chloride.

Table D-1-6
Inhalation Dose-Response Data for Noncarcinogenic Effects

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

Chemical	Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor[2]	Study Source
	RfC ($\mu g/m^3$)	Source[1]	RfC ($\mu g/m^3$)	Source[1]						
VOLATILES										
1,1-Dichloroethylene	ND		ND							
SEMIVOLATILES										
2-Methylnaphthalene	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							
bis(2-Ethylhexyl)phthalate	ND		ND							
Chrysene	ND		ND							
Dibenz(a,h)Anthracene	ND		ND							
Fluoranthene	ND		ND							
Fluorene	ND		ND							
Indeno(1,2,3-cd)Pyrene	ND		ND							
Naphthalene	ND		ND							
Phenanthrene	ND		ND							
Pyrene	ND		ND							
PESTICIDES/PCBs										
alpha-Chlordane	ND		ND							

Table D-1-6
Inhalation Dose-Response Data for Noncarcinogenic Effects

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

Chemical	Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor[2]	Study Source
	RfC ($\mu g/m^3$)	Source[1]	RfC ($\mu g/m^3$)	Source[1]						
Aroclor-1254	ND		ND							
Aroclor-1260	ND		ND							
Dieldrin	ND		ND							
gamma-Chlordane	ND		ND							
INORGANICS										
Antimony	ND		ND							
Arsenic	ND		ND							
Beryllium	ND		ND							
Cadmium	ND		ND							
Chromium	ND		ND							
Copper	ND		ND							
Iron	ND		ND							
Lead	ND		ND							
Magnesium	ND		ND							
Manganese	5.0e-02	IRIS	ND		Inhalation	Medium	Impaired neurobehavioal function	Human	1000 H,L,D	IRIS
Mercury	3.0e-01	HEAST (1)	3.0e-01	HEAST (1)	Inhalation	Low	Neurotoxicity	Human	30 H,D	HEAST
Sodium	ND		ND							
Vanadium	ND		ND							
Zinc	ND		ND							

Table D-1-6
Inhalation Dose-Response Data for Noncarcinogenic Effects

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

Chemical	Chronic		Subchronic		Study Type	Confidence Level	Critical Effect	Test Animal	Uncertainty Factor[2]	Study Source
	RfC ($\mu g/m^3$)	Source[1]	RfC ($\mu g/m^3$)	Source[1]						

[1] Integrated Risk Information System (IRIS) on-line database search, current as of November 1995. Health Effects Assessment Summary Tables (HEAST), current as May 1995.
[2] 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.
(1) The mercury RfC values were developed specifically for elemental mercury.

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APPENDIX D-2

HUMAN HEALTH RISK ASSESSMENT SPREADSHEETS, SWMUS 1, 23, 24, 25, 44, AND 45

TABLE D-2-1

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
ADOLESCENT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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	Inorganics
	CF	1.00E-09	kg/mg	Organics
BODY WEIGHT	BW	40	kg	USEPA, 1989
AGE-SPECIFIC BODY WEIGHT	BWi	age-specific	kg	USEPA, 1989
EXPOSURE FREQUENCY	EF	45	days/year [1]	Assumption
EXPOSURE DURATION	ED	11	years	Assumption
AGE-SPECIFIC EXPOSURE DURATION	EDi	age-specific	years	Assumption
AGE-WEIGHTED SURFACE AREA [2]	SA_{adult}	1136	cm²-year/kg	Per USEPA, 1992a
DOSE ABSORBED PER EVENT	$DA_{__}$	chemical-specific	mg/cm²-event	Per USEPA, 1992a
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	11	years	Assumption

[1] Units for exposure frequency are in events/year in the calculation of the dermally absorbed dose.
[2] 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 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)

INTAKE-INGESTION = $\frac{CS \times IR \times FI \times CF \times EF \times ED}{BW \times AT \times 365\ days/yr}$

INTAKE-DERMAL = $(DA_{__} \times EF / AT \times 365\ days/year) \times SA_{adult}$

Where:

SA_{adult} = SUM (SAi x EDi / BWi)
$DA_{__}$ = CS x AF x ABSd x CF

Note: For noncarcinogenic effects: AT = ED.

TABLE D-2-1

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
ADOLESCENT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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 [1,3] (mg/kg-day)^-1	CANCER RISK DERMAL	TOTAL CANCER RISK
Benzo(a)anthracene	O	388	ug/kg	1.9E-08	0.73	1.4E-08	0.01	7.8E-09	0.8	6.2E-09	2.0E-08
Benzo(a)pyrene	O	380	ug/kg	1.8E-08	7.3	1.3E-07	0.01	7.6E-09	8	6.1E-08	2.0E-07
Benzo(b)fluoranthene	O	399	ug/kg	1.9E-08	0.73	1.4E-08	0.01	8.0E-09	0.8	6.4E-09	2.0E-08
Benzo(k)fluoranthene	O	403	ug/kg	2.0E-08	0.073	1.4E-09	0.01	8.1E-09	0.08	6.5E-10	2.1E-09
Chrysene	O	412	ug/kg	2.0E-08	0.0073	1.5E-10	0.01	8.2E-09	0.008	6.6E-11	2.1E-10
Dibenz(a,h)anthracene	O	376	ug/kg	1.8E-08	7.3	1.3E-07	0.01	7.5E-09	8	6.0E-08	1.9E-07
Indeno(1,2,3-cd)pyrene	O	372	ug/kg	1.8E-08	0.73	1.3E-08	0.01	7.4E-09	0.8	6.0E-09	1.9E-08
Aroclor-1254	O	29.7	ug/kg	1.4E-09	7.7	1.1E-08	0.06	3.6E-09	8.6	3.1E-08	4.2E-08
Aroclor-1260	O	41.7	ug/kg	2.0E-09	7.7	1.6E-08	0.06	5.0E-09	8.6	4.3E-08	5.9E-08
Chlordane	O	26.8	ug/kg	1.3E-09	1.3	1.7E-09	0.25	1.3E-08	1.6	2.1E-08	2.3E-08
Dieldrin	O	2.6	ug/kg	1.3E-10	16	2.0E-09	0.25	1.3E-09	20	2.6E-08	2.8E-08
Arsenic	I	1.7	mg/kg	8.2E-08	1.5	1.2E-07	0.001	3.4E-09	1.5	5.1E-09	1.3E-07
Beryllium	I	0.22	mg/kg	1.1E-08	4.3	4.6E-08	0.001	4.4E-10	430	1.9E-07	2.4E-07
Lead	I	62.8	mg/kg	3.0E-06	NE		0.001	1.3E-07	NE		
Mercury	I	0.14	mg/kg	6.8E-09	NE		0.001	2.8E-10	NE		
					SUMMARY CANCER RISK	5E-07				5E-07	1E-06

[1] Relative potency factors were applied to the CSFs of carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment of Polycyclic Aromatic Hydrocarbons," USEPA, 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.
NE = not evaluated.

TABLE D-2-1

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
ADOLESCENT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMU's
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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
Benzo(a)anthracene	O	388	ug/kg	1.2E-07	ND		0.01	4.9E-08	ND		
Benzo(a)pyrene	O	380	ug/kg	1.2E-07	ND		0.01	4.8E-08	ND		
Benzo(b)fluoranthene	O	399	ug/kg	1.2E-07	ND		0.01	5.1E-08	ND		
Benzo(k)fluoranthene	O	403	ug/kg	1.2E-07	ND		0.01	5.1E-08	ND		
Chrysene	O	412	ug/kg	1.3E-07	ND		0.01	5.2E-08	ND		
Dibenz(a,h)anthracene	O	376	ug/kg	1.2E-07	ND		0.01	4.8E-08	ND		
Indeno(1,2,3-cd)pyrene	O	372	ug/kg	1.1E-07	ND		0.01	4.7E-08	ND		
Aroclor-1254	O	29.7	ug/kg	9.2E-09	0.00002	4.6E-04	0.06	2.3E-08	0.000018	1.3E-03	1.7E-03
Aroclor-1260	O	41.7	ug/kg	1.3E-08	0.00002	6.4E-04	0.06	3.2E-08	0.000018	1.8E-03	2.4E-03
Chlordane	O	26.8	ug/kg	8.3E-09	0.00006	1.4E-04	0.25	8.5E-08	0.000048	1.8E-03	1.9E-03
Dieldrin	O	2.6	ug/kg	8.0E-10	0.00005	1.6E-05	0.25	8.3E-09	0.00004	2.1E-04	2.2E-04
Antimony	I	3.2	mg/kg	9.9E-07	0.0004	2.5E-03	0.001	4.1E-08	0.000004	1.0E-02	1.3E-02
Arsenic	I	1.7	mg/kg	5.2E-07	0.0003	1.7E-03	0.001	2.2E-08	0.00029	7.5E-05	1.8E-03
Beryllium	I	0.22	mg/kg	6.8E-08	0.005	1.4E-05	0.001	2.8E-09	0.00005	5.6E-05	7.0E-05
Cadmium	I	0.85	mg/kg	2.6E-07	0.001	2.6E-04	0.001	1.1E-08	0.00001	1.1E-03	1.3E-03
Chromium	I	12.9	mg/kg	4.0E-06	0.005	8.0E-04	0.001	1.6E-07	0.00055	3.0E-04	1.1E-03
Copper	I	130	mg/kg	4.0E-05	ND		0.001	1.7E-06	ND		
Lead	I	62.8	mg/kg	1.9E-05	ND		0.001	8.0E-07	ND		
Mercury	I	0.14	mg/kg	4.3E-08	0.0003	1.4E-04	0.001	1.8E-09	0.00006	3.0E-05	1.7E-04
Zinc	I	302	mg/kg	9.3E-05	0.3	3.1E-04	0.001	3.8E-06	0.1	3.8E-05	3.5E-04
					SUMMARY HAZARD INDEX	7E-03				2E-02	2E-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.

TABLE D-2-3

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
ADULT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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	inorganics
	CF	1.00E-09	kg/ug	organics
BODY WEIGHT	BW	70	kg	USEPA, 1991
EXPOSURE FREQUENCY	EF	45	days/year [1]	Assumption
EXPOSURE DURATION	ED	19	years	Assumption
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	19	years	Assumption

[1] 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.

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 ABSd x CF

Note: For noncarcinogenic effects: AT = ED

TABLE D-2-3

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
ADULT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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 [1,3] (mg/kg-day)^-1	CANCER RISK DERMAL	TOTAL CANCER RISK
Benzo(a)anthracene	O	388	ug/kg	1.9E-08	0.73	1.4E-08	0.01	1.1E-08	0.8	8.5E-09	2.2E-08
Benzo(a)pyrene	O	380	ug/kg	1.8E-08	7.3	1.3E-07	0.01	1.0E-08	8	8.4E-08	2.2E-07
Benzo(b)fluoranthene	O	399	ug/kg	1.9E-08	0.73	1.4E-08	0.01	1.1E-08	0.8	8.8E-09	2.3E-08
Benzo(k)fluoranthene	O	403	ug/kg	1.9E-08	0.073	1.4E-09	0.01	1.1E-08	0.08	8.9E-10	2.3E-09
Chrysene	O	412	ug/kg	2.0E-08	0.0073	1.4E-10	0.01	1.1E-08	0.008	9.1E-11	2.3E-10
Dibenz(a,h)anthracene	O	376	ug/kg	1.8E-08	7.3	1.3E-07	0.01	1.0E-08	8	8.3E-08	2.1E-07
Indeno(1,2,3-cd)pyrene	O	372	ug/kg	1.8E-08	0.73	1.3E-08	0.01	1.0E-08	0.8	8.2E-09	2.1E-08
Aroclor-1254	O	29.7	ug/kg	1.4E-09	7.7	1.1E-08	0.06	4.9E-09	8.6	4.2E-08	5.3E-08
Aroclor-1260	O	41.7	ug/kg	2.0E-09	7.7	1.5E-08	0.06	6.9E-09	8.6	5.9E-08	7.4E-08
Chlordane	O	26.8	ug/kg	1.3E-09	1.3	1.7E-09	0.25	1.8E-08	1.6	2.9E-08	3.1E-08
Dieldrin	O	2.6	ug/kg	1.2E-10	16	2.0E-09	0.25	1.8E-09	20	3.6E-08	3.8E-08
Arsenic	I	1.7	mg/kg	8.1E-08	1.5	1.2E-07	0.001	4.7E-09	1.5	7.0E-09	1.3E-07
Beryllium	I	0.22	mg/kg	1.1E-08	4.3	4.5E-08	0.001	6.0E-10	430	2.6E-07	3.1E-07
Lead	I	62.8	mg/kg	3.0E-06	NE		0.001	1.7E-07	NE		
Mercury	I	0.14	mg/kg	6.7E-09	NE		0.001	3.8E-10	NE		
						SUMMARY CANCER RISK				6E-07	1E-06

[1] Relative potency factors were applied to the CSFs for carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment for Polycyclic Aromatic Hydrocarbons," USEPA, 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.
NE = not evaluated.

TABLE D-2-3

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
ADULT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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
Benzo(a)anthracene	O	388	ug/kg	6.8E-08	ND		0.01	3.9E-08	ND		
Benzo(a)pyrene	O	380	ug/kg	6.7E-08	ND		0.01	3.8E-08	ND		
Benzo(b)fluoranthene	O	399	ug/kg	7.0E-08	ND		0.01	4.0E-08	ND		
Benzo(k)fluoranthene	O	403	ug/kg	7.1E-08	ND		0.01	4.1E-08	ND		
Chrysene	O	412	ug/kg	7.3E-08	ND		0.01	4.2E-08	ND		
Dibenz(a,h)anthracene	O	376	ug/kg	6.6E-08	ND		0.01	3.8E-08	ND		
Indeno(1,2,3-cd)pyrene	O	372	ug/kg	6.6E-08	ND		0.01	3.8E-08	ND		
Aroclor-1254	O	29.7	ug/kg	5.2E-09	0.00002	2.6E-04	0.06	1.8E-08	0.000018	1.0E-03	1.3E-03
Aroclor-1260	O	41.7	ug/kg	7.3E-09	0.00002	3.7E-04	0.06	2.5E-08	0.000018	1.4E-03	1.8E-03
Chlordane	O	26.8	ug/kg	4.7E-09	0.00006	7.9E-05	0.25	6.8E-08	0.000048	1.4E-03	1.5E-03
Dieldrin	O	2.6	ug/kg	4.6E-10	0.00005	9.2E-06	0.25	6.6E-09	0.00004	1.6E-04	1.7E-04
Antimony	I	3.2	mg/kg	5.6E-07	0.0004	1.4E-03	0.001	3.2E-08	0.000004	8.1E-03	9.5E-03
Arsenic	I	1.7	mg/kg	3.0E-07	0.0003	1.0E-03	0.001	1.7E-08	0.00029	5.9E-05	1.1E-03
Beryllium	I	0.22	mg/kg	3.9E-08	0.005	7.7E-06	0.001	2.2E-09	0.00005	4.5E-05	5.2E-05
Cadmium	I	0.85	mg/kg	1.5E-07	0.001	1.5E-04	0.001	8.6E-09	0.00001	8.6E-04	1.0E-03
Chromium	I	12.9	mg/kg	2.3E-06	0.005	4.5E-04	0.001	1.3E-07	0.00055	2.4E-04	6.9E-04
Copper	I	130	mg/kg	2.3E-05	ND		0.001	1.3E-06	ND		
Lead	I	62.8	mg/kg	1.1E-05	ND		0.001	6.4E-07	ND		
Mercury	I	0.14	mg/kg	2.5E-08	0.0003	8.2E-05	0.001	1.4E-09	0.00006	2.4E-05	1.1E-04
Zinc	I	302	mg/kg	5.3E-05	0.3	1.8E-04	0.001	3.1E-06	0.1	3.1E-05	2.1E-04
					SUMMARY HAZARD INDEX	4E-03				1E-02	2E-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.

TABLE D-2-4

INHALATION OF PARTICULATES - SURFACE SOIL
ADULT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical specific	chemical-specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	[1]
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

[1] PEF has been derived in Appendix D-5 to the RFI General Information Report.
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.

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

TABLE D-2-4

INHALATION OF PARTICULATES - SURFACE SOIL
ADULT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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
Benzo(a)anthracene	O	388	ug/kg	7.81E-09	4.6E-11	ND	
Benzo(a)pyrene	O	380	ug/kg	7.65E-09	4.5E-11	ND	
Benzo(b)fluoranthene	O	399	ug/kg	8.03E-09	4.7E-11	ND	
Benzo(k)fluoranthene	O	403	ug/kg	8.11E-09	4.8E-11	ND	
Chrysene	O	412	ug/kg	8.29E-09	4.9E-11	ND	
Dibenz(a,h)anthracene	O	376	ug/kg	7.57E-09	4.4E-11	ND	
Indeno(1,2,3-cd)pyrene	O	372	ug/kg	7.48E-09	4.4E-11	ND	
Aroclor-1254	O	29.7	ug/kg	5.98E-10	3.5E-12	ND	
Aroclor-1260	O	41.7	ug/kg	8.39E-10	4.9E-12	ND	
Chlordane	O	26.8	ug/kg	5.39E-10	3.2E-12	ND	
Dieldrin	O	2.6	ug/kg	5.23E-11	3.1E-13	ND	
Antimony	I	3.2	mg/kg	6.44E-08	3.8E-10	ND	
Arsenic	I	1.7	mg/kg	3.42E-08	2.0E-10	ND	
Beryllium	I	0.22	mg/kg	4.43E-09	2.6E-11	ND	
Cadmium	I	0.85	mg/kg	1.71E-08	1.0E-10	ND	
Chromium	I	12.9	mg/kg	2.60E-07	1.5E-09	ND	
Copper	I	130	mg/kg	2.62E-06	1.5E-08	ND	
Lead	I	62.8	mg/kg	1.26E-06	7.4E-09	ND	
Mercury	I	0.14	mg/kg	2.82E-09	1.7E-11	ND	
Zinc	I	302	mg/kg	6.08E-06	3.6E-08	ND	
						SUMMARY HAZARD INDEX	0E+00

ND = no data available.

TABLE D-2-4

INHALATION OF PARTICULATES - SURFACE SOIL
ADULT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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
Benzo(a)anthracene	O	388	ug/kg	7.81E-09	1.2E-11	NE	
Benzo(a)pyrene	O	380	ug/kg	7.65E-09	1.2E-11	NE	
Benzo(b)fluoranthene	O	399	ug/kg	8.03E-09	1.3E-11	NE	
Benzo(k)fluoranthene	O	403	ug/kg	8.11E-09	1.3E-11	NE	
Chrysene	O	412	ug/kg	8.29E-09	1.3E-11	NE	
Dibenz(a,h)anthracene	O	376	ug/kg	7.57E-09	1.2E-11	NE	
Indeno(1,2,3-cd)pyrene	O	372	ug/kg	7.48E-09	1.2E-11	NE	
Aroclor-1254	O	29.7	ug/kg	5.98E-10	9.5E-13	NE	
Aroclor-1260	O	41.7	ug/kg	8.39E-10	1.3E-12	NE	
Chlordane	O	26.8	ug/kg	5.39E-10	8.6E-13	1.3	1.1E-12
Dieldrin	O	2.6	ug/kg	5.23E-11	8.3E-14	16	1.3E-12
Arsenic	I	1.7	mg/kg	3.42E-08	5.4E-11	50	2.7E-09
Beryllium	I	0.22	mg/kg	4.43E-09	7.1E-12	8.4	5.9E-11
Mercury	I	0.14	mg/kg	2.82E-09	4.5E-12	NE	
						SUMMARY CANCER RISK	3E-09

NE = not evaluated.

TABLE D-2-5

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
OCCUPATIONAL WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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 [1]	USEPA, 1991
EXPOSURE DURATION	ED	25	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	25	years	USEPA, 1991

[1] 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 9[illegible]-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

TABLE D-2-5

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
OCCUPATIONAL WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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 [1,3] (mg/kg-day)^-1	CANCER RISK DERMAL	TOTAL CANCER RISK
Benzo(a)anthracene	O	388	ug/kg	6.8E-08	0.73	4.9E-08	0.01	3.1E-08	0.8	2.5E-08	7.4E-08
Benzo(a)pyrene	O	380	ug/kg	6.6E-08	7.3	4.8E-07	0.01	3.1E-08	8	2.4E-07	7.3E-07
Benzo(b)fluoranthene	O	399	ug/kg	7.0E-08	0.73	5.1E-08	0.01	3.2E-08	0.8	2.6E-08	7.7E-08
Benzo(k)fluoranthene	O	403	ug/kg	7.0E-08	0.073	5.1E-09	0.01	3.2E-08	0.08	2.6E-09	7.7E-09
Chrysene	O	412	ug/kg	7.2E-08	0.0073	5.3E-10	0.01	3.3E-08	0.008	2.6E-10	7.9E-10
Dibenz(a,h)anthracene	O	376	ug/kg	6.6E-08	7.3	4.8E-07	0.01	3.0E-08	8	2.4E-07	7.2E-07
Indeno(1,2,3-cd)pyrene	O	372	ug/kg	6.5E-08	0.73	4.7E-08	0.01	3.0E-08	0.8	2.4E-08	7.1E-08
Aroclor-1254	O	29.7	ug/kg	5.2E-09	7.7	4.0E-08	0.06	1.4E-08	8.6	1.2E-07	1.6E-07
Aroclor-1260	O	41.7	ug/kg	7.3E-09	7.7	5.6E-08	0.06	2.0E-08	8.6	1.7E-07	2.3E-07
Chlordane	O	26.8	ug/kg	4.7E-09	1.3	6.1E-09	0.25	5.4E-08	1.6	8.6E-08	9.2E-08
Dieldrin	O	2.6	ug/kg	4.5E-10	16	7.3E-09	0.25	5.2E-09	20	1.0E-07	1.1E-07
Arsenic	I	1.7	mg/kg	3.0E-07	1.5	4.5E-07	0.001	1.4E-08	1.5	2.0E-08	4.7E-07
Beryllium	I	0.22	mg/kg	3.8E-08	4.3	1.7E-07	0.001	1.8E-09	430	7.6E-07	9.3E-07
Lead	I	62.8	mg/kg	1.1E-05	NE		0.001	5.0E-07	NE		
Mercury	I	0.14	mg/kg	2.4E-08	NE		0.001	1.1E-09	NE		
SUMMARY CANCER RISK						2E-06				2E-06	4E-06

[1] Relative potency factors have been applied to the CSFs of carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment for Polycyclic Aromatic Hydrocarbons," USEPA, 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.
NE = not evaluated.

TABLE D-2-5

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
OCCUPATIONAL WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMU's
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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
Benzo(a)anthracene	O	388	ug/kg	1.9E-07	ND		0.01	8.7E-08	ND		
Benzo(a)pyrene	O	380	ug/kg	1.9E-07	ND		0.01	8.6E-08	ND		
Benzo(b)fluoranthene	O	399	ug/kg	2.0E-07	ND		0.01	9.0E-08	ND		
Benzo(k)fluoranthene	O	403	ug/kg	2.0E-07	ND		0.01	9.1E-08	ND		
Chrysene	O	412	ug/kg	2.0E-07	ND		0.01	9.3E-08	ND		
Dibenz(a,h)anthracene	O	376	ug/kg	1.8E-07	ND		0.01	8.5E-08	ND		
Indeno(1,2,3-cd)pyrene	O	372	ug/kg	1.8E-07	ND		0.01	8.4E-08	ND		
Aroclor-1254	O	29.7	ug/kg	1.5E-08	0.00002	7.3E-04	0.06	4.0E-08	0.000018	2.2E-03	3.0E-03
Aroclor-1260	O	41.7	ug/kg	2.0E-08	0.00002	1.0E-03	0.06	5.6E-08	0.000018	3.1E-03	4.1E-03
Chlordane	O	26.8	ug/kg	1.3E-08	0.00006	2.2E-04	0.25	1.5E-07	0.000048	3.1E-03	3.4E-03
Dieldrin	O	2.6	ug/kg	1.3E-09	0.00005	2.5E-05	0.25	1.5E-08	0.00004	3.7E-04	3.9E-04
Antimony	I	3.2	mg/kg	1.6E-06	0.0004	3.9E-03	0.001	7.2E-08	0.000004	1.8E-02	2.2E-02
Arsenic	I	1.7	mg/kg	8.3E-07	0.0003	2.8E-03	0.001	3.8E-08	0.00029	1.3E-04	2.9E-03
Beryllium	I	0.22	mg/kg	1.1E-07	0.005	2.2E-05	0.001	5.0E-09	0.00005	9.9E-05	1.2E-04
Cadmium	I	0.85	mg/kg	4.2E-07	0.001	4.2E-04	0.001	1.9E-08	0.00001	1.9E-03	2.3E-03
Chromium	I	12.9	mg/kg	6.3E-06	0.005	1.3E-03	0.001	2.9E-07	0.00055	5.3E-04	1.8E-03
Copper	I	130	mg/kg	6.4E-05	ND		0.001	2.9E-06	ND		
Lead	I	62.8	mg/kg	3.1E-05	ND		0.001	1.4E-06	ND		
Mercury	I	0.14	mg/kg	6.8E-08	0.0003	2.3E-04	0.001	3.2E-09	0.00006	5.3E-05	2.8E-04
Zinc	I	302	mg/kg	1.5E-04	0.3	4.9E-04	0.001	6.8E-06	0.1	6.8E-05	5.6E-04
SUMMARY HAZARD INDEX						1E-02				3E-02	4E-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.

TABLE D-2-6

INHALATION OF PARTICULATES - SURFACE SOIL
OCCUPATIONAL WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical-specific	chemical-specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	[1]
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

[1] PEF has been derived in Appendix D-5 to the RFI General Information Report.
USEPA, 1991 Human Health Evaluation Manual, Supplemental Guidance "Standard Default Exposure Factors", OSWER Directive 9285.6-03

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 x CF x (1/PEF)

Note: For noncarcinogenic effects, AT = ED.

TABLE D-2-6

INHALATION OF PARTICULATES - SURFACE SOIL
OCCUPATIONAL WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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
Benzo(a)anthracene	O	388	ug/kg	7.81E-09	5.5E-10	NE	
Benzo(a)pyrene	O	380	ug/kg	7.65E-09	5.3E-10	NE	
Benzo(b)fluoranthene	O	399	ug/kg	8.03E-09	5.6E-10	NE	
Benzo(k)fluoranthene	O	403	ug/kg	8.11E-09	5.7E-10	NE	
Chrysene	O	412	ug/kg	8.29E-09	5.8E-10	NE	
Dibenz(a,h)anthracene	O	376	ug/kg	7.57E-09	5.3E-10	NE	
Indeno(1,2,3-cd)pyrene	O	372	ug/kg	7.48E-09	5.2E-10	NE	
Aroclor-1254	O	29.7	ug/kg	5.98E-10	4.2E-11	NE	
Aroclor-1260	O	41.7	ug/kg	8.39E-10	5.9E-11	NE	
Chlordane	O	26.8	ug/kg	5.39E-10	3.8E-11	1.3	4.9E-11
Dieldrin	O	2.6	ug/kg	5.23E-11	3.7E-12	16	5.9E-11
Arsenic	I	1.7	mg/kg	3.42E-08	2.4E-09	50	1.2E-07
Beryllium	I	0.22	mg/kg	4.43E-09	3.1E-10	8.4	2.6E-09
Mercury	I	0.14	mg/kg	2.82E-09	2.0E-10	NE	
						SUMMARY CANCER RISK	1E-07

NE = not evaluated.

TABLE D-2-6

INHALATION OF PARTICULATES - SURFACE SOIL
OCCUPATIONAL WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMU's
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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
Benzo(a)anthracene	O	388	ug/kg	7.81E-09	1.5E-09	ND	
Benzo(a)pyrene	O	380	ug/kg	7.65E-09	1.5E-09	ND	
Benzo(b)fluoranthene	O	399	ug/kg	8.03E-09	1.6E-09	ND	
Benzo(k)fluoranthene	O	403	ug/kg	8.11E-09	1.6E-09	ND	
Chrysene	O	412	ug/kg	8.29E-09	1.6E-09	ND	
Dibenz(a,h)anthracene	O	376	ug/kg	7.57E-09	1.5E-09	ND	
Indeno(1,2,3-cd)pyrene	O	372	ug/kg	7.48E-09	1.5E-09	ND	
Aroclor-1254	O	29.7	ug/kg	5.98E-10	1.2E-10	ND	
Aroclor-1260	O	41.7	ug/kg	8.39E-10	1.6E-10	ND	
Chlordane	O	26.8	ug/kg	5.39E-10	1.1E-10	ND	
Dieldrin	O	2.6	ug/kg	5.23E-11	1.0E-11	ND	
Antimony	I	3.2	mg/kg	6.44E-08	1.3E-08	ND	
Arsenic	I	1.7	mg/kg	3.42E-08	6.7E-09	ND	
Beryllium	I	0.22	mg/kg	4.43E-09	8.7E-10	ND	
Cadmium	I	0.85	mg/kg	1.71E-08	3.3E-09	ND	
Chromium	I	12.9	mg/kg	2.60E-07	5.1E-08	ND	
Copper	I	130	mg/kg	2.62E-06	5.1E-07	ND	
Lead	I	62.8	mg/kg	1.26E-06	2.5E-07	ND	
Mercury	I	0.14	mg/kg	2.82E-09	5.5E-10	ND	
Zinc	I	302	mg/kg	6.08E-06	1.2E-06	ND	
						SUMMARY HAZARD INDEX	0E+00

ND = no data available.

TABLE D-2-7

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
SITE MAINTENANCE WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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 [1]	Assumption
EXPOSURE DURATION	ED	25	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	25	years	USEPA, 1991

[1] 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 9[illegible] 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

TABLE D-2-7

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
SITE MAINTENANCE WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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 [1,3] (mg/kg-day)^-1	CANCER RISK DERMAL	TOTAL CANCER RISK
Benzo(a)anthracene	O	388	ug/kg	1.9E-08	0.73	1.4E-08	0.01	9.4E-09	0.8	7.5E-09	2.1E-08
Benzo(a)pyrene	O	380	ug/kg	1.9E-08	7.3	1.4E-07	0.01	9.2E-09	8	7.3E-08	2.1E-07
Benzo(b)fluoranthene	O	399	ug/kg	2.0E-08	0.73	1.4E-08	0.01	9.6E-09	0.8	7.7E-09	2.2E-08
Benzo(k)fluoranthene	O	403	ug/kg	2.0E-08	0.073	1.5E-09	0.01	9.7E-09	0.08	7.8E-10	2.2E-09
Chrysene	O	412	ug/kg	2.0E-08	0.0073	1.5E-10	0.01	9.9E-09	0.008	7.9E-11	2.3E-10
Dibenz(a,h)anthracene	O	376	ug/kg	1.9E-08	7.3	1.4E-07	0.01	9.1E-09	8	7.3E-08	2.1E-07
Indeno(1,2,3-cd)pyrene	O	372	ug/kg	1.8E-08	0.73	1.3E-08	0.01	9.0E-09	0.8	7.2E-09	2.1E-08
Aroclor-1254	O	29.7	ug/kg	1.5E-09	7.7	1.1E-08	0.06	4.3E-09	8.6	3.7E-08	4.8E-08
Aroclor-1260	O	41.7	ug/kg	2.1E-09	7.7	1.6E-08	0.06	6.0E-09	8.6	5.2E-08	6.8E-08
Chlordane	O	26.8	ug/kg	1.3E-09	1.3	1.7E-09	0.25	1.6E-08	1.6	2.6E-08	2.8E-08
Dieldrin	O	2.6	ug/kg	1.3E-10	16	2.1E-09	0.25	1.6E-09	20	3.1E-08	3.3E-08
Arsenic	I	1.7	mg/kg	8.4E-08	1.5	1.3E-07	0.001	4.1E-09	1.5	6.1E-09	1.3E-07
Beryllium	I	0.22	mg/kg	1.1E-08	4.3	4.7E-08	0.001	5.3E-10	430	2.3E-07	2.7E-07
Lead	I	62.8	mg/kg	3.1E-06	NE		0.001	1.5E-07	NE		
Mercury	I	0.14	mg/kg	6.9E-09	NE		0.001	3.4E-10	NE		
SUMMARY CANCER RISK						5E-07				5E-07	1E-06

[1] Relative potency factors were applied to the CSFs for carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment for Polycyclic Aromatic Hydrocarbons," USEPA, 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.
NE = not evaluated.

TABLE D-2-7

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
SITE MAINTENANCE WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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
Benzo(a)anthracene	O	388	ug/kg	5.4E-08	ND		0.01	2.6E-08	ND		
Benzo(a)pyrene	O	380	ug/kg	5.3E-08	ND		0.01	2.6E-08	ND		
Benzo(b)fluoranthene	O	399	ug/kg	5.5E-08	ND		0.01	2.7E-08	ND		
Benzo(k)fluoranthene	O	403	ug/kg	5.6E-08	ND		0.01	2.7E-08	ND		
Chrysene	O	412	ug/kg	5.7E-08	ND		0.01	2.8E-08	ND		
Dibenz(a,h)anthracene	O	376	ug/kg	5.2E-08	ND		0.01	2.5E-08	ND		
Indeno(1,2,3-cd)pyrene	O	372	ug/kg	5.2E-08	ND		0.01	2.5E-08	ND		
Aroclor-1254	O	29.7	ug/kg	4.1E-09	0.00002	2.1E-04	0.06	1.2E-08	0.000018	6.7E-04	8.7E-04
Aroclor-1260	O	41.7	ug/kg	5.8E-09	0.00002	2.9E-04	0.06	1.7E-08	0.000018	9.4E-04	1.2E-03
Chlordane	O	26.8	ug/kg	3.7E-09	0.00006	6.2E-05	0.25	4.5E-08	0.000048	9.4E-04	1.0E-03
Dieldrin	O	2.6	ug/kg	3.6E-10	0.00005	7.2E-06	0.25	4.4E-09	0.00004	1.1E-04	1.2E-04
Antimony	I	3.2	mg/kg	4.4E-07	0.0004	1.1E-03	0.001	2.2E-08	0.000004	5.4E-03	6.5E-03
Arsenic	I	1.7	mg/kg	2.4E-07	0.0003	7.9E-04	0.001	1.1E-08	0.00029	4.0E-05	8.2E-04
Beryllium	I	0.22	mg/kg	3.0E-08	0.005	6.1E-06	0.001	1.5E-09	0.00005	3.0E-05	3.6E-05
Cadmium	I	0.85	mg/kg	1.2E-07	0.001	1.2E-04	0.001	5.7E-09	0.00001	5.7E-04	6.9E-04
Chromium	I	12.9	mg/kg	1.8E-06	0.005	3.6E-04	0.001	8.7E-08	0.00055	1.6E-04	5.2E-04
Copper	I	130	mg/kg	1.8E-05	ND		0.001	8.8E-07	ND		
Lead	I	62.8	mg/kg	8.7E-06	ND		0.001	4.2E-07	ND		
Mercury	I	0.14	mg/kg	1.9E-08	0.0003	6.5E-05	0.001	9.5E-10	0.00006	1.6E-05	8.0E-05
Zinc	I	302	mg/kg	4.2E-05	0.3	1.4E-04	0.001	2.0E-06	0.1	2.0E-05	1.6E-04
SUMMARY HAZARD INDEX						3E-03				9E-03	1E-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.

TABLE D-2-8

INHALATION OF PARTICULATES - SURFACE SOIL
SITE MAINTENANCE WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMU's
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical-specific	chemical-specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	[1]
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

[1] PEF has been derived in Appendix D-5 to the General Information Report
USEPA, 1991 Human Health Evaluation Manual, Supplemental Guidance "Standard Default Exposure Factors", OSWER Directive 9285.6-03

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 x CF x (1/PEF)

Note: For noncarcinogenic effects, AT = ED

TABLE D-2-8

INHALATION OF PARTICULATES - SURFACE SOIL
SITE MAINTENANCE WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMU's
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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
Benzo(a)anthracene	O	388	ug/kg	7.81E-09	6.5E-11	NE	
Benzo(a)pyrene	O	380	ug/kg	7.65E-09	6.4E-11	NE	
Benzo(b)fluoranthene	O	399	ug/kg	8.03E-09	6.7E-11	NE	
Benzo(k)fluoranthene	O	403	ug/kg	8.11E-09	6.8E-11	NE	
Chrysene	O	412	ug/kg	8.29E-09	7.0E-11	NE	
Dibenz(a,h)anthracene	O	376	ug/kg	7.57E-09	6.3E-11	NE	
Indeno(1,2,3-cd)pyrene	O	372	ug/kg	7.48E-09	6.3E-11	NE	
Aroclor-1254	O	29.7	ug/kg	5.98E-10	5.0E-12	NE	
Aroclor-1260	O	41.7	ug/kg	8.39E-10	7.0E-12	NE	
Chlordane	O	26.8	ug/kg	5.39E-10	4.5E-12	1.3	5.9E-12
Dieldrin	O	2.6	ug/kg	5.23E-11	4.4E-13	16	7.0E-12
Arsenic	I	1.7	mg/kg	3.42E-08	2.9E-10	50	1.4E-08
Beryllium	I	0.22	mg/kg	4.43E-09	3.7E-11	8.4	3.1E-10
Mercury	I	0.14	mg/kg	2.82E-09	2.4E-11	NE	
						SUMMARY CANCER RISK	1E-08

NE = not evaluated.

TABLE D-2-8

INHALATION OF PARTICULATES - SURFACE SOIL
SITE MAINTENANCE WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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
Benzo(a)anthracene	O	388	ug/kg	7.81E-09	1.8E-10	ND	
Benzo(a)pyrene	O	380	ug/kg	7.65E-09	1.8E-10	ND	
Benzo(b)fluoranthene	O	399	ug/kg	8.03E-09	1.9E-10	ND	
Benzo(k)fluoranthene	O	403	ug/kg	8.11E-09	1.9E-10	ND	
Chrysene	O	412	ug/kg	8.29E-09	1.9E-10	ND	
Dibenz(a,h)anthracene	O	376	ug/kg	7.57E-09	1.8E-10	ND	
Indeno(1,2,3-cd)pyrene	O	372	ug/kg	7.48E-09	1.8E-10	ND	
Aroclor-1254	O	29.7	ug/kg	5.98E-10	1.4E-11	ND	
Aroclor-1260	O	41.7	ug/kg	8.39E-10	2.0E-11	ND	
Chlordane	O	26.8	ug/kg	5.39E-10	1.3E-11	ND	
Dieldrin	O	2.6	ug/kg	5.23E-11	1.2E-12	ND	
Antimony	I	3.2	mg/kg	6.44E-08	1.5E-09	ND	
Arsenic	I	1.7	mg/kg	3.42E-08	8.0E-10	ND	
Beryllium	I	0.22	mg/kg	4.43E-09	1.0E-10	ND	
Cadmium	I	0.85	mg/kg	1.71E-08	4.0E-10	ND	
Chromium	I	12.9	mg/kg	2.60E-07	6.1E-09	ND	
Copper	I	130	mg/kg	2.62E-06	6.1E-08	ND	
Lead	I	62.8	mg/kg	1.26E-06	3.0E-08	ND	
Mercury	I	0.14	mg/kg	2.82E-09	6.6E-11	ND	
Zinc	I	302	mg/kg	6.08E-06	1.4E-07	ND	
						SUMMARY HAZARD INDEX	0E+00

ND = no data available.

TABLE D-2-9

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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 [1]	Assumption
EXPOSURE DURATION	ED	1	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	1	years	USEPA, 1991

[1] 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

TABLE D-2-9

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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
Benzo(a)anthracene	O	388	ug/kg	3.1E-09	0.73	2.3E-09	0.01	3.7E-10	0.8	3.0E-10	2.6E-09
Benzo(a)pyrene	O	380	ug/kg	3.1E-09	7.3	2.2E-08	0.01	3.7E-10	8	2.9E-09	2.5E-08
Benzo(b)fluoranthene	O	399	ug/kg	3.2E-09	0.73	2.3E-09	0.01	3.8E-10	0.8	3.1E-10	2.7E-09
Benzo(k)fluoranthene	O	403	ug/kg	3.2E-09	0.073	2.4E-10	0.01	3.9E-10	0.08	3.1E-11	2.7E-10
Chrysene	O	412	ug/kg	3.3E-09	0.0073	2.4E-11	0.01	4.0E-10	0.008	3.2E-12	2.7E-11
Dibenz(a,h)anthracene	O	376	ug/kg	3.0E-09	7.3	2.2E-08	0.01	3.6E-10	8	2.9E-09	2.5E-08
Indeno(1,2,3-cd)pyrene	O	372	ug/kg	3.0E-09	0.73	2.2E-09	0.01	3.6E-10	0.8	2.9E-10	2.5E-09
Aroclor-1254	O	29.7	ug/kg	2.4E-10	7.7	1.8E-09	0.06	1.7E-10	8.6	1.5E-09	3.3E-09
Aroclor-1260	O	41.7	ug/kg	3.4E-10	7.7	2.6E-09	0.06	2.4E-10	8.6	2.1E-09	4.7E-09
Chlordane	O	26.8	ug/kg	2.2E-10	1.3	2.8E-10	0.25	6.5E-10	1.6	1.0E-09	1.3E-09
Dieldrin	O	2.6	ug/kg	2.1E-11	16	3.3E-10	0.25	6.3E-11	20	1.3E-09	1.6E-09
Arsenic	I	1.7	mg/kg	1.4E-08	1.5	2.1E-08	0.001	1.6E-10	1.5	2.5E-10	2.1E-08
Beryllium	I	0.22	mg/kg	1.8E-09	4.3	7.6E-09	0.001	2.1E-11	430	9.1E-09	1.7E-08
Lead	I	62.8	mg/kg	5.1E-07	NE		0.001	6.1E-09	NE		
Mercury	I	0.14	mg/kg	1.1E-09	NE		0.001	1.4E-11	NE		
SUMMARY CANCER RISK						8E-08				2E-08	1E-07

[1] Relative potency factors have been applied to the CSFs for carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment for Polycyclic Aromatic Hydrocarbons," USEPA, 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.
NE = not evaluated.

TABLE D-2-9

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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
Benzo(a)anthracene	O	388	ug/kg	2.2E-07	ND		0.01	2.6E-08	ND		
Benzo(a)pyrene	O	380	ug/kg	2.1E-07	ND		0.01	2.6E-08	ND		
Benzo(b)fluoranthene	O	399	ug/kg	2.2E-07	ND		0.01	2.7E-08	ND		
Benzo(k)fluoranthene	O	403	ug/kg	2.3E-07	ND		0.01	2.7E-08	ND		
Chrysene	O	412	ug/kg	2.3E-07	ND		0.01	2.8E-08	ND		
Dibenz(a,h)anthracene	O	376	ug/kg	2.1E-07	ND		0.01	2.5E-08	ND		
Indeno(1,2,3-cd)pyrene	O	372	ug/kg	2.1E-07	ND		0.01	2.5E-08	ND		
Aroclor-1254	O	29.7	ug/kg	1.7E-08	0.00005	3.3E-04	0.06	1.2E-08	0.000045	2.7E-04	6.0E-04
Aroclor-1260	O	41.7	ug/kg	2.4E-08	0.00005	4.7E-04	0.06	1.7E-08	0.000045	3.8E-04	8.5E-04
Chlordane	O	26.8	ug/kg	1.5E-08	0.00006	2.5E-04	0.25	4.5E-08	0.000048	9.4E-04	1.2E-03
Dieldrin	O	2.6	ug/kg	1.5E-09	0.00005	2.9E-05	0.25	4.4E-09	0.00004	1.1E-04	1.4E-04
Antimony	I	3.2	mg/kg	1.8E-06	0.0004	4.5E-03	0.001	2.2E-08	0.000004	5.4E-03	9.9E-03
Arsenic	I	1.7	mg/kg	9.6E-07	0.0003	3.2E-03	0.001	1.1E-08	0.00029	4.0E-05	3.2E-03
Beryllium	I	0.22	mg/kg	1.2E-07	0.005	2.5E-05	0.001	1.5E-09	0.00005	3.0E-05	5.5E-05
Cadmium	I	0.85	mg/kg	4.8E-07	0.001	4.8E-04	0.001	5.7E-09	0.00001	5.7E-04	1.1E-03
Chromium	I	12.9	mg/kg	7.3E-06	0.02	3.6E-04	0.001	8.7E-08	0.0022	4.0E-05	4.0E-04
Copper	I	130	mg/kg	7.3E-05	ND		0.001	8.8E-07	ND		
Lead	I	62.8	mg/kg	3.5E-05	ND		0.001	4.2E-07	ND		
Mercury	I	0.14	mg/kg	7.9E-08	0.0003	2.6E-04	0.001	9.5E-10	0.00006	1.6E-05	2.8E-04
Zinc	I	302	mg/kg	1.7E-04	0.3	5.7E-04	0.001	2.0E-06	0.1	2.0E-05	5.9E-04
SUMMARY HAZARD INDEX						1E-02				8E-03	2E-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.

TABLE D-2-10

INHALATION OF PARTICULATES - SURFACE SOIL
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical-specific	chemical-specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m³/kg	[1]
CONCENTRATION AIR	CA	chemical-specific	mg/m³	
INHALATION RATE	IR	2.5	m³/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

[1] PEF has been derived in Appendix D-5 to the General Information Report.
USEPA, 1991 Human Health Evaluation Manual, Supplemental Guidance
Standard Default Exposure Factors; OSWER Directive 9285.6-03

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 x CF x (1/PEF)

Note: For noncarcinogens, AT = ED.

TABLE D-2-10

INHALATION OF PARTICULATES - SURFACE SOIL
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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
Benzo(a)anthracene	O	388	ug/kg	7.81E-09	2.6E-12	NE	
Benzo(a)pyrene	O	380	ug/kg	7.65E-09	2.6E-12	NE	
Benzo(b)fluoranthene	O	399	ug/kg	8.03E-09	2.7E-12	NE	
Benzo(k)fluoranthene	O	403	ug/kg	8.11E-09	2.7E-12	NE	
Chrysene	O	412	ug/kg	8.29E-09	2.8E-12	NE	
Dibenz(a,h)anthracene	O	376	ug/kg	7.57E-09	2.5E-12	NE	
Indeno(1,2,3-cd)pyrene	O	372	ug/kg	7.48E-09	2.5E-12	NE	
Aroclor-1254	O	29.7	ug/kg	5.98E-10	2.0E-13	NE	
Aroclor-1260	O	41.7	ug/kg	8.39E-10	2.8E-13	NE	
Chlordane	O	26.8	ug/kg	5.39E-10	1.8E-13	1.3	2.4E-13
Dieldrin	O	2.6	ug/kg	5.23E-11	1.8E-14	16	2.8E-13
Arsenic	I	1.7	mg/kg	3.42E-08	1.1E-11	50	5.7E-10
Beryllium	I	0.22	mg/kg	4.43E-09	1.5E-12	8.4	1.2E-11
Mercury	I	0.14	mg/kg	2.82E-09	9.5E-13	NE	
						SUMMARY CANCER RISK	6E-10

NE = not evaluated.

TABLE D-2-10

INHALATION OF PARTICULATES - SURFACE SOIL
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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
Benzo(a)anthracene	O	388	ug/kg	7.81E-09	1.8E-10	ND	
Benzo(a)pyrene	O	380	ug/kg	7.65E-09	1.8E-10	ND	
Benzo(b)fluoranthene	O	399	ug/kg	8.03E-09	1.9E-10	ND	
Benzo(k)fluoranthene	O	403	ug/kg	8.11E-09	1.9E-10	ND	
Chrysene	O	412	ug/kg	8.29E-09	1.9E-10	ND	
Dibenz(a,h)anthracene	O	376	ug/kg	7.57E-09	1.8E-10	ND	
Indeno(1,2,3-cd)pyrene	O	372	ug/kg	7.48E-09	1.8E-10	ND	
Aroclor-1254	O	29.7	ug/kg	5.98E-10	1.4E-11	ND	
Aroclor-1260	O	41.7	ug/kg	8.39E-10	2.0E-11	ND	
Chlordane	O	26.8	ug/kg	5.39E-10	1.3E-11	ND	
Dieldrin	O	2.6	ug/kg	5.23E-11	1.2E-12	ND	
Antimony	I	3.2	mg/kg	6.44E-08	1.5E-09	ND	
Arsenic	I	1.7	mg/kg	3.42E-08	8.0E-10	ND	
Beryllium	I	0.22	mg/kg	4.43E-09	1.0E-10	ND	
Cadmium	I	0.85	mg/kg	1.71E-08	4.0E-10	ND	
Chromium	I	12.9	mg/kg	2.60E-07	6.1E-09	ND	
Copper	I	130	mg/kg	2.62E-06	6.1E-08	ND	
Lead	I	62.8	mg/kg	1.26E-06	3.0E-08	ND	
Mercury	I	0.14	mg/kg	2.82E-09	6.6E-11	ND	
Zinc	I	302	mg/kg	6.08E-06	1.4E-07	ND	
						SUMMARY HAZARD INDEX	0E+00

ND = no data available.

TABLE D-2-11

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF DRIED SLUDGE
ADOLESCENT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA (SWMU 45)

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
CONCENTRATION SLUDGE	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	Inorganics
	CF	1.00E-09	kg/mg	Organics
BODY WEIGHT	BW	40	kg	USEPA, 1989
AGE-SPECIFIC BODY WEIGHT	BWi	age-specific	kg	USEPA, 1989
EXPOSURE FREQUENCY	EF	45	days/year [1]	Assumption
EXPOSURE DURATION	ED	11	years	Assumption
AGE-SPECIFIC EXPOSURE DURATION	EDi	age-specific	years	Assumption
AGE-WEIGHTED SURFACE AREA [2]	SA_{age}	1136	cm²-year/kg	Per USEPA, 1992a
DOSE ABSORBED PER EVENT	DA_{event}	chemical-specific	mg/cm²-event	Per USEPA, 1992a
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	11	years	Assumption

[1] Units for exposure frequency are in events/year in the calculation of the dermally absorbed dose.
[2] 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 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)

INTAKE-INGESTION = $\frac{CS \times IR \times FI \times CF \times EF \times ED}{BW \times AT \times 365\ days/yr}$

INTAKE-DERMAL = $(DA_{event} \times EF / AT \times 365\ days/year) \times SA_{age}$

Where:

SA_{age} = SUM (SAI x EDI / BWI)
DA_{event} = CS x AF x ABSd x CF

Note: For noncarcinogenic effects: AT = ED.

TABLE D-2-11

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF DRIED SLUDGE
ADOLESCENT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA (SWMU 45)

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SLUDGE 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
Benzo(a)anthracene	O	260	ug/kg	1.3E-08	0.73	9.2E-09	0.01	5.2E-09	0.8	4.2E-09	1.3E-08
Benzo(a)pyrene	O	250	ug/kg	1.2E-08	7.3	8.8E-08	0.01	5.0E-09	8	4.0E-08	1.3E-07
Benzo(b)fluoranthene	O	290	ug/kg	1.4E-08	0.73	1.0E-08	0.01	5.8E-09	0.8	4.6E-09	1.5E-08
Benzo(k)fluoranthene	O	330	ug/kg	1.6E-08	0.073	1.2E-09	0.01	6.6E-09	0.08	5.3E-10	1.7E-09
Chrysene	O	280	ug/kg	1.4E-08	0.0073	9.9E-11	0.01	5.6E-09	0.008	4.5E-11	1.4E-10
Indeno(1,2,3-cd)pyrene	O	180	ug/kg	8.7E-09	0.73	6.4E-09	0.01	3.6E-09	0.8	2.9E-09	9.2E-09
Arsenic	I	0.96	mg/kg	4.6E-08	1.5	7.0E-08	0.001	1.9E-09	1.5	2.9E-09	7.3E-08
					SUMMARY CANCER RISK	2E-07				6E-08	2E-07

[1] Relative potency factors were applied to the CSFs for carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment for Polycyclic Aromatic Hydrocarbons," USEPA, 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.
NE = not evaluated.

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SLUDGE 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
Benzo(a)anthracene	O	260	ug/kg	8.0E-08	ND		0.01	3.3E-08	ND		
Benzo(a)pyrene	O	250	ug/kg	7.7E-08	ND		0.01	3.2E-08	ND		
Benzo(b)fluoranthene	O	290	ug/kg	8.9E-08	ND		0.01	3.7E-08	ND		
Benzo(k)fluoranthene	O	330	ug/kg	1.0E-07	ND		0.01	4.2E-08	ND		
Chrysene	O	280	ug/kg	8.6E-08	ND		0.01	3.6E-08	ND		
Indeno(1,2,3-cd)pyrene	O	180	ug/kg	5.5E-08	ND		0.01	2.3E-08	ND		
Endrin ketone	O	0.97	ug/kg	3.0E-10	ND		0.25	3.1E-09	ND		
Antimony	I	2.7	mg/kg	8.3E-07	0.0004	2.1E-03	0.001	3.4E-08	0.000004	8.6E-03	1.1E-02
Arsenic	I	0.96	mg/kg	3.0E-07	0.0003	9.9E-04	0.001	1.2E-08	0.00029	4.2E-05	1.0E-03
Copper	I	428	mg/kg	1.3E-04	ND		0.001	5.4E-06	ND		
					SUMMARY HAZARD INDEX	3E-03				9E-03	1E-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.

TABLE D-2-12

INHALATION OF PARTICULATES - DRIED SLUDGE
ADOLESCENT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA (SWMU 45)

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SLUDGE CONCENTRATION	C	chemical specific	chemical-specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	[1]
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

[1] PEF has been derived in Appendix D-5 to the General Information Report.
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.

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

TABLE D-2-12

INHALATION OF PARTICULATES - DRIED SLUDGE
ADOLESCENT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA (SWMU 45)

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SLUDGE CONCENTRATION	UNITS	AIR CONCENTRATION (mg/m³)	INTAKE (mg/kg-day)	INHALATION CSF (mg/kg-day)^-1	CANCER RISK
Benzo(a)anthracene	O	260	ug/kg	5.23E-09	8.4E-12	NE	
Benzo(a)pyrene	O	250	ug/kg	5.03E-09	8.1E-12	NE	
Benzo(b)fluoranthene	O	290	ug/kg	5.84E-09	9.4E-12	NE	
Benzo(k)fluoranthene	O	330	ug/kg	6.64E-09	1.1E-11	NE	
Chrysene	O	280	ug/kg	5.63E-09	9.1E-12	NE	
Indeno(1,2,3-cd)pyrene	O	180	ug/kg	3.62E-09	5.8E-12	NE	
Arsenic	I	0.96	mg/kg	1.93E-08	3.1E-11	50	1.6E-09
						SUMMARY CANCER RISK	2E-09

NE = not evaluated.

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SLUDGE CONCENTRATION	UNITS	AIR CONCENTRATION (mg/m³)	INTAKE (mg/kg-day)	INHALATION RfD (mg/kg-day)	HAZARD QUOTIENT
Benzo(a)anthracene	O	260	ug/kg	5.23E-09	5.4E-11	ND	
Benzo(a)pyrene	O	250	ug/kg	5.03E-09	5.2E-11	ND	
Benzo(b)fluoranthene	O	290	ug/kg	5.84E-09	6.0E-11	ND	
Benzo(k)fluoranthene	O	330	ug/kg	6.64E-09	6.8E-11	ND	
Chrysene	O	280	ug/kg	5.63E-09	5.8E-11	ND	
Indeno(1,2,3-cd)pyrene	O	180	ug/kg	3.62E-09	3.7E-11	ND	
Endrin ketone	O	0.97	ug/kg	1.95E-11	2.0E-13	ND	
Antimony	I	2.7	mg/kg	5.43E-08	5.6E-10	ND	
Arsenic	I	0.96	mg/kg	1.93E-08	2.0E-10	ND	
Copper	I	428	mg/kg	8.61E-06	8.8E-08	ND	
						SUMMARY HAZARD INDEX	0E+00

ND = no data available.

TABLE D-2-13

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF DRIED SLUDGE
ADULT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA (SWMU 45)

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
CONCENTRATION SLUDGE	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	inorganics
	CF	1.00E-09	kg/ug	organics
BODY WEIGHT	BW	70	kg	USEPA, 1991
EXPOSURE FREQUENCY	EF	45	days/year [1]	Assumption
EXPOSURE DURATION	ED	19	years	Assumption
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	19	years	Assumption

[1] 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.

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

TABLE D-2-13

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF DRIED SLUDGE
ADULT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA (SWMU 45)

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SLUDGE 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 [1,3] (mg/kg-day)^-1	CANCER RISK DERMAL	TOTAL CANCER RISK
Benzo(a)anthracene	O	260	ug/kg	1.2E-08	0.73	9.1E-09	0.01	7.1E-09	0.8	5.7E-09	1.5E-08
Benzo(a)pyrene	O	250	ug/kg	1.2E-08	7.3	8.7E-08	0.01	6.9E-09	8	5.5E-08	1.4E-07
Benzo(b)fluoranthene	O	290	ug/kg	1.4E-08	0.73	1.0E-08	0.01	8.0E-09	0.8	6.4E-09	1.6E-08
Benzo(k)fluoranthene	O	330	ug/kg	1.6E-08	0.073	1.2E-09	0.01	9.1E-09	0.08	7.3E-10	1.9E-09
Chrysene	O	280	ug/kg	1.3E-08	0.0073	9.8E-11	0.01	7.7E-09	0.008	6.2E-11	1.6E-10
Indeno(1,2,3-cd)pyrene	O	180	ug/kg	8.6E-09	0.73	6.3E-09	0.01	4.9E-09	0.8	4.0E-09	1.0E-08
Arsenic	I	0.96	mg/kg	4.6E-08	1.5	6.9E-08	0.001	2.6E-09	1.5	4.0E-09	7.3E-08
					SUMMARY CANCER RISK	2E-07				9E-08	3E-07

[1] Relative potency factors were applied to the CSFs for carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment for Polycyclic Aromatic Hydrocarbons," USEPA, 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.
NE = not evaluated.

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SLUDGE 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
Benzo(a)anthracene	O	260	ug/kg	4.6E-08	ND		0.01	2.6E-08	ND		
Benzo(a)pyrene	O	250	ug/kg	4.4E-08	ND		0.01	2.5E-08	ND		
Benzo(b)fluoranthene	O	290	ug/kg	5.1E-08	ND		0.01	2.9E-08	ND		
Benzo(k)fluoranthene	O	330	ug/kg	5.8E-08	ND		0.01	3.3E-08	ND		
Chrysene	O	280	ug/kg	4.9E-08	ND		0.01	2.8E-08	ND		
Indeno(1,2,3-cd)pyrene	O	180	ug/kg	3.2E-08	ND		0.01	1.8E-08	ND		
Endrin ketone	O	0.97	ug/kg	1.7E-10	ND		0.25	2.5E-09	ND		
Antimony	I	2.7	mg/kg	4.8E-07	0.0004	1.2E-03	0.001	2.7E-08	0.000004	6.8E-03	8.0E-03
Arsenic	I	0.96	mg/kg	1.7E-07	0.0003	5.6E-04	0.001	9.7E-09	0.00029	3.4E-05	6.0E-04
Copper	I	428	mg/kg	7.5E-05	ND		0.001	4.3E-06	ND		
					SUMMARY HAZARD INDEX	2E-03				7E-03	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 D-2-14

INHALATION OF PARTICULATES - DRIED SLUDGE
ADULT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA (SWMU 45)

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SLUDGE CONCENTRATION	C	chemical-specific	chemical-specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	[1]
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

[1] PEF has been derived in Appendix D-5 to the RFI General Information Report.
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.

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

TABLE D-2-14

INHALATION OF PARTICULATES - DRIED SLUDGE
ADULT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA (SWMU 45)

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SLUDGE CONCENTRATION	UNITS	AIR CONCENTRATION (mg/m³)	INTAKE (mg/kg-day)	INHALATION CSF (mg/kg-day)^-1	CANCER RISK
Benzo(a)anthracene	O	260	ug/kg	5.23E-09	8.3E-12	NE	
Benzo(a)pyrene	O	250	ug/kg	5.03E-09	8.0E-12	NE	
Benzo(b)fluoranthene	O	290	ug/kg	5.84E-09	9.3E-12	NE	
Benzo(k)fluoranthene	O	330	ug/kg	6.64E-09	1.1E-11	NE	
Chrysene	O	280	ug/kg	5.63E-09	9.0E-12	NE	
Indeno(1,2,3-cd)pyrene	O	180	ug/kg	3.62E-09	5.8E-12	NE	
Arsenic	I	0.96	mg/kg	1.93E-08	3.1E-11	50	1.5E-09
						SUMMARY CANCER RISK	2E-09

NE = not evaluated.

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SLUDGE CONCENTRATION	UNITS	AIR CONCENTRATION (mg/m³)	INTAKE (mg/kg-day)	INHALATION RfD (mg/kg-day)	HAZARD QUOTIENT
Benzo(a)anthracene	O	260	ug/kg	5.23E-09	3.1E-11	ND	
Benzo(a)pyrene	O	250	ug/kg	5.03E-09	3.0E-11	ND	
Benzo(b)fluoranthene	O	290	ug/kg	5.84E-09	3.4E-11	ND	
Benzo(k)fluoranthene	O	330	ug/kg	6.64E-09	3.9E-11	ND	
Chrysene	O	280	ug/kg	6.64E-09	3.9E-11	ND	
Indeno(1,2,3-cd)pyrene	O	180	ug/kg	3.62E-09	2.1E-11	ND	
Endrin ketone	O	0.97	ug/kg	1.95E-11	1.1E-13	ND	
Antimony	I	2.7	mg/kg	5.43E-08	3.2E-10	ND	
Arsenic	I	0.96	mg/kg	1.93E-08	1.1E-10	ND	
Copper	I	428	mg/kg	8.61E-06	5.1E-08	ND	
						SUMMARY HAZARD INDEX	0E+00

ND = no data available.

TABLE D-2-15

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF DRIED SLUDGE
OCCUPATIONAL WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA (SWMU 45)

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
CONCENTRATION SLUDGE	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 [1]	USEPA, 1991
EXPOSURE DURATION	ED	25	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	25	years	USEPA, 1991

[1] 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

TABLE D-2-15

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF DRIED SLUDGE
OCCUPATIONAL WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA (SWMU 45)

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SLUDGE 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 [1,3] (mg/kg-day)^-1	CANCER RISK DERMAL	TOTAL CANCER RISK
Benzo(a)anthracene	O	260	ug/kg	4.5E-08	0.73	3.3E-08	0.01	2.1E-08	0.8	1.7E-08	5.0E-08
Benzo(a)pyrene	O	250	ug/kg	4.4E-08	7.3	3.2E-07	0.01	2.0E-08	8	1.6E-07	4.8E-07
Benzo(b)fluoranthene	O	290	ug/kg	5.1E-08	0.73	3.7E-08	0.01	2.3E-08	0.8	1.9E-08	5.6E-08
Benzo(k)fluoranthene	O	330	ug/kg	5.8E-08	0.073	4.2E-09	0.01	2.7E-08	0.08	2.1E-09	6.3E-09
Chrysene	O	280	ug/kg	4.9E-08	0.0073	3.6E-10	0.01	2.3E-08	0.008	1.8E-10	5.4E-10
Indeno(1,2,3-cd)pyrene	O	180	ug/kg	3.1E-08	0.73	2.3E-08	0.01	1.4E-08	0.8	1.2E-08	3.5E-08
Arsenic	I	0.96	mg/kg	1.7E-07	1.5	2.5E-07	0.001	7.7E-09	1.5	1.2E-08	2.6E-07
SUMMARY CANCER RISK						7E-07				2E-07	9E-07

[1] Relative potency factors were applied to the CSF's for carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment for Polycyclic Aromatic Hydrocarbons," USEPA, 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.
NE = not evaluated.

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SLUDGE 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
Benzo(a)anthracene	O	260	ug/kg	1.3E-07	ND		0.01	5.9E-08	ND		
Benzo(a)pyrene	O	250	ug/kg	1.2E-07	ND		0.01	5.6E-08	ND		
Benzo(b)fluoranthene	O	290	ug/kg	1.4E-07	ND		0.01	6.5E-08	ND		
Benzo(k)fluoranthene	O	330	ug/kg	1.6E-07	ND		0.01	7.4E-08	ND		
Chrysene	O	280	ug/kg	1.4E-07	ND		0.01	6.3E-08	ND		
Indeno(1,2,3-cd)pyrene	O	180	ug/kg	8.8E-08	ND		0.01	4.1E-08	ND		
Endrin ketone	O	0.97	ug/kg	4.7E-10	ND		0.25	5.5E-09	ND		
Antimony	I	2.7	mg/kg	1.3E-06	0.0004	3.3E-03	0.001	6.1E-08	0.000004	1.5E-02	1.8E-02
Arsenic	I	0.96	mg/kg	4.7E-07	0.0003	1.6E-03	0.001	2.2E-08	0.00029	7.4E-05	1.6E-03
Copper	I	428	mg/kg	2.1E-04	ND		0.001	9.6E-06	ND		
SUMMARY HAZARD INDEX						5E-03				2E-02	2E-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.

TABLE D-2-16

INHALATION OF PARTICULATES - DRIED SLUDGE
OCCUPATIONAL WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA (SWMU 45)

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SLUDGE CONCENTRATION	C	chemical-specific	chemical-specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	[1]
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

[1] PEF has been derived in Appendix D-5 to the RFI General Information Report
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance
"Standard Default Exposure Factors", OSWER Directive 9285.6-03

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 x CF x (1/PEF)

Note: For noncarcinogenic effects, AT = ED.

TABLE D-2-16

INHALATION OF PARTICULATES - DRIED SLUDGE
OCCUPATIONAL WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA (SWMU 45)

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SLUDGE CONCENTRATION	UNITS	AIR CONCENTRATION (mg/m³)	INTAKE (mg/kg-day)	INHALATION CSF (mg/kg-day)^-1	CANCER RISK
Benzo(a)anthracene	O	260	ug/kg	5.23E-09	3.7E-10	NE	
Benzo(a)pyrene	O	250	ug/kg	5.03E-09	3.5E-10	NE	
Benzo(b)fluoranthene	O	290	ug/kg	5.84E-09	4.1E-10	NE	
Benzo(k)fluoranthene	O	330	ug/kg	6.64E-09	4.6E-10	NE	
Chrysene	O	280	ug/kg	5.63E-09	3.9E-10	NE	
Indeno(1,2,3-cd)pyrene	O	180	ug/kg	3.62E-09	2.5E-10	NE	
Arsenic	I	0.96	mg/kg	1.93E-08	1.4E-09	50	6.8E-08
						SUMMARY CANCER RISK	7E-08

NE = not evaluated.

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SLUDGE CONCENTRATION	UNITS	AIR CONCENTRATION (mg/m³)	INTAKE (mg/kg-day)	INHALATION RfD (mg/kg-day)	HAZARD QUOTIENT
Benzo(a)anthracene	O	260	ug/kg	5.23E-09	1.0E-09	ND	
Benzo(a)pyrene	O	250	ug/kg	5.03E-09	9.8E-10	ND	
Benzo(b)fluoranthene	O	290	ug/kg	5.84E-09	1.1E-09	ND	
Benzo(k)fluoranthene	O	330	ug/kg	6.64E-09	1.3E-09	ND	
Chrysene	O	280	ug/kg	5.63E-09	1.1E-09	ND	
Indeno(1,2,3-cd)pyrene	O	180	ug/kg	3.62E-09	7.1E-10	ND	
Endrin ketone	O	0.97	ug/kg	1.95E-11	3.8E-12	ND	
Antimony	I	2.7	mg/kg	5.43E-08	1.1E-08	ND	
Arsenic	I	0.96	mg/kg	1.93E-08	3.8E-09	ND	
Copper	I	428	mg/kg	8.61E-06	1.7E-06	ND	
						SUMMARY HAZARD INDEX	0E+00

ND = no data available.

ABB Environmental Services, Inc.
OWSLINH.XLS
12/14/95

TABLE D-2-17

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF DRIED SLUDGE
SITE MAINTENANCE WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA (SWMU 45)

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
CONCENTRATION SLUDGE	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 [1]	Assumption
EXPOSURE DURATION	ED	25	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	25	years	USEPA, 1991

[1] 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

TABLE D-2-17

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF DRIED SLUDGE
SITE MAINTENANCE WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA (SWMU 45)

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SLUDGE 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 [1,3] (mg/kg-day)^-1	CANCER RISK DERMAL	TOTAL CANCER RISK
Benzo(a)anthracene	O	260	ug/kg	1.3E-08	0.73	9.4E-09	0.01	6.3E-09	0.8	5.0E-09	1.4E-08
Benzo(a)pyrene	O	250	ug/kg	1.2E-08	7.3	9.0E-08	0.01	6.0E-09	8	4.8E-08	1.4E-07
Benzo(b)fluoranthene	O	290	ug/kg	1.4E-08	0.73	1.0E-08	0.01	7.0E-09	0.8	5.6E-09	1.6E-08
Benzo(k)fluoranthene	O	330	ug/kg	1.6E-08	0.073	1.2E-09	0.01	8.0E-09	0.08	6.4E-10	1.8E-09
Chrysene	O	280	ug/kg	1.4E-08	0.0073	1.0E-10	0.01	6.8E-09	0.008	5.4E-11	1.6E-10
Indeno(1,2,3-cd)pyrene	O	180	ug/kg	8.9E-09	0.73	6.5E-09	0.01	4.3E-09	0.8	3.5E-09	1.0E-08
Arsenic	I	0.96	mg/kg	4.8E-08	1.5	7.1E-08	0.001	2.3E-09	1.5	3.5E-09	7.5E-08
SUMMARY CANCER RISK						2E-07				7E-08	3E-07

[1] Relative potency factors were applied to the CSFs for carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment for Polycyclic Aromatic Hydrocarbons," USEPA, 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.
NE = not evaluated.

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SLUDGE 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 [1] (mg/kg-day)	HAZARD QUOTIENT DERMAL	TOTAL HAZARD QUOTIENT
Benzo(a)anthracene	O	260	ug/kg	3.6E-08	ND		0.01	1.8E-08	ND		
Benzo(a)pyrene	O	250	ug/kg	3.5E-08	ND		0.01	1.7E-08	ND		
Benzo(b)fluoranthene	O	290	ug/kg	4.0E-08	ND		0.01	2.0E-08	ND		
Benzo(k)fluoranthene	O	330	ug/kg	4.6E-08	ND		0.01	2.2E-08	ND		
Chrysene	O	280	ug/kg	3.9E-08	ND		0.01	1.9E-08	ND		
Indeno(1,2,3-cd)pyrene	O	180	ug/kg	2.5E-08	ND		0.01	1.2E-08	ND		
Endrin ketone	O	0.97	ug/kg	1.3E-10	ND		0.25	1.6E-09	ND		
Antimony	I	2.7	mg/kg	3.7E-07	0.0004	9.4E-04	0.001	1.8E-08	0.000004	4.6E-03	5.5E-03
Arsenic	I	0.96	mg/kg	1.3E-07	0.0003	4.4E-04	0.001	6.5E-09	0.00029	2.2E-05	4.7E-04
Copper	I	428	mg/kg	5.9E-05	ND		0.001	2.9E-06	ND		
SUMMARY HAZARD INDEX						1E-03				5E-03	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.
ND = no data available.

TABLE D-2-18

INHALATION OF PARTICULATES - DRIED SLUDGE
SITE MAINTENANCE WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA (SWMU 45)

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SLUDGE CONCENTRATION	C	chemical-specific	chemical-specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	[1]
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

[1] PEF has been derived in Appendix D-5 to the General Information Report.
USEPA, 1991 Human Health Evaluation Manual, Supplemental Guidance "Standard Default Exposure Factors", OSWER Directive 9285.6-03.

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 x CF x (1/PEF)

Note: For noncarcinogenic effects, AT = ED

TABLE D-2-18

INHALATION OF PARTICULATES - DRIED SLUDGE
SITE MAINTENANCE WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA (SWMU 45)

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SLUDGE CONCENTRATION	UNITS	AIR CONCENTRATION (mg/m³)	INTAKE (mg/kg-day)	INHALATION CSF (mg/kg-day)^-1	CANCER RISK
Benzo(a)anthracene	O	260	ug/kg	5.23E-09	4.4E-11	NE	
Benzo(a)pyrene	O	250	ug/kg	5.03E-09	4.2E-11	NE	
Benzo(b)fluoranthene	O	290	ug/kg	5.84E-09	4.9E-11	NE	
Benzo(k)fluoranthene	O	330	ug/kg	6.64E-09	5.6E-11	NE	
Chrysene	O	280	ug/kg	5.63E-09	4.7E-11	NE	
Indeno(1,2,3-cd)pyrene	O	180	ug/kg	3.62E-09	3.0E-11	NE	
Arsenic	I	0.96	mg/kg	1.93E-08	1.6E-10	50	8.1E-09
						SUMMARY CANCER RISK	8E-09

NE = not evaluated.

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SLUDGE CONCENTRATION	UNITS	AIR CONCENTRATION (mg/m³)	INTAKE (mg/kg-day)	INHALATION RfD (mg/kg-day)	HAZARD QUOTIENT
Benzo(a)anthracene	O	260	ug/kg	5.23E-09	1.2E-10	ND	
Benzo(a)pyrene	O	250	ug/kg	5.03E-09	1.2E-10	ND	
Benzo(b)fluoranthene	O	290	ug/kg	5.84E-09	1.4E-10	ND	
Benzo(k)fluoranthene	O	330	ug/kg	6.64E-09	1.6E-10	ND	
Chrysene	O	280	ug/kg	5.63E-09	1.3E-10	ND	
Indeno(1,2,3-cd)pyrene	O	180	ug/kg	3.62E-09	8.5E-11	ND	
Endrin ketone	O	0.97	ug/kg	1.95E-11	4.6E-13	ND	
Antimony	I	2.7	mg/kg	5.43E-08	1.3E-09	ND	
Arsenic	I	0.96	mg/kg	1.93E-08	4.5E-10	ND	
Copper	I	428	mg/kg	8.61E-06	2.0E-07	ND	
						SUMMARY HAZARD INDEX	0E+00

ND = no data available.

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12/14/95

TABLE D-2-19

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF DRIED SLUDGE
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA (SWMU 45)

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
CONCENTRATION SLUDGE	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 [1]	Assumption
EXPOSURE DURATION	ED	1	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	1	years	USEPA, 1991

[1] 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

TABLE D-2-19

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF DRIED SLUDGE
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMU's
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA (SWMU 45)

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SLUDGE 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 [1,3] (mg/kg-day)^-1	CANCER RISK DERMAL	TOTAL CANCER RISK
Benzo(a)anthracene	O	260	ug/kg	2.1E-09	0.73	1.5E-09	0.01	2.5E-10	0.8	2.0E-10	1.7E-09
Benzo(a)pyrene	O	250	ug/kg	2.0E-09	7.3	1.5E-08	0.01	2.4E-10	8	1.9E-09	1.7E-08
Benzo(b)fluoranthene	O	290	ug/kg	2.3E-09	0.73	1.7E-09	0.01	2.8E-10	0.8	2.2E-10	1.9E-09
Benzo(k)fluoranthene	O	330	ug/kg	2.7E-09	0.073	1.9E-10	0.01	3.2E-10	0.08	2.5E-11	2.2E-10
Chrysene	O	280	ug/kg	2.3E-09	0.0073	1.6E-11	0.01	2.7E-10	0.008	2.2E-12	1.9E-11
Indeno(1,2,3-cd)pyrene	O	180	ug/kg	1.4E-09	0.73	1.1E-09	0.01	1.7E-10	0.8	1.4E-10	1.2E-09
Arsenic	I	0.96	mg/kg	7.7E-09	1.5	1.2E-08	0.001	9.3E-11	1.5	1.4E-10	1.2E-08
					SUMMARY CANCER RISK	3E-08				3E-09	3E-08

[1] Relative potency factors were applied to the CSF's for carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment for Polycyclic Aromatic Hydrocarbons," USEPA, 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.
NE = not evaluated.

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SLUDGE 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
Benzo(a)anthracene	O	260	ug/kg	1.5E-07	ND		0.01	1.8E-08	ND		
Benzo(a)pyrene	O	250	ug/kg	1.4E-07	ND		0.01	1.7E-08	ND		
Benzo(b)fluoranthene	O	290	ug/kg	1.6E-07	ND		0.01	2.0E-08	ND		
Benzo(k)fluoranthene	O	330	ug/kg	1.9E-07	ND		0.01	2.2E-08	ND		
Chrysene	O	280	ug/kg	1.6E-07	ND		0.01	1.9E-08	ND		
Indeno(1,2,3-cd)pyrene	O	180	ug/kg	1.0E-07	ND		0.01	1.2E-08	ND		
Endrin ketone	O	0.97	ug/kg	5.5E-10	ND		0.25	1.6E-09	ND		
Antimony	I	2.7	mg/kg	1.5E-06	0.0004	3.8E-03	0.001	1.8E-08	0.000004	4.6E-03	8.4E-03
Arsenic	I	0.96	mg/kg	5.4E-07	0.0003	1.8E-03	0.001	6.5E-09	0.00029	2.2E-05	1.8E-03
Copper	I	428	mg/kg	2.4E-04	ND		0.001	2.9E-06	ND		
					SUMMARY HAZARD INDEX	6E-03				5E-03	1E-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.

TABLE D-2-20

INHALATION OF PARTICULATES - DRIED SLUDGE
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA (SWMU 45)

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SLUDGE CONCENTRATION	C	chemical-specific	chemical-specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	[1]
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

[1] PEF has been derived in Appendix D-5 to the General Information Report.
USEPA, 1991 Human Health Evaluation Manual, Supplemental Guidance
Standard Default Exposure Factors, OSWER Directive 9285.6-03

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 x CF x (1/PEF)

Note: For noncarcinogens, AT = ED.

TABLE D-2-20

INHALATION OF PARTICULATES - DRIED SLUDGE
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA (SWMU 45)

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SLUDGE CONCENTRATION	UNITS	AIR CONCENTRATION (ug/m³)	INTAKE (mg/kg-day)	INHALATION CSF (mg/kg-day)^-1	CANCER RISK
Benzo(a)anthracene	O	260	ug/kg	5.23E-09	1.8E-12	NE	
Benzo(a)pyrene	O	250	ug/kg	5.03E-09	1.7E-12	NE	
Benzo(b)fluoranthene	O	290	ug/kg	5.84E-09	2.0E-12	NE	
Benzo(k)fluoranthene	O	330	ug/kg	6.64E-09	2.2E-12	NE	
Chrysene	O	280	ug/kg	5.63E-09	1.9E-12	NE	
Indeno(1,2,3-cd)pyrene	O	180	ug/kg	3.62E-09	1.2E-12	NE	
Arsenic	I	0.96	mg/kg	1.93E-08	6.5E-12	50	3.2E-10
						SUMMARY CANCER RISK	3E-10

NE = not evaluated.

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SLUDGE CONCENTRATION	UNITS	AIR CONCENTRATION (mg/m³)	INTAKE (mg/kg-day)	INHALATION RfD (mg/kg-day)	HAZARD QUOTIENT
Benzo(a)anthracene	O	260	ug/kg	5.23E-09	1.2E-10	ND	
Benzo(a)pyrene	O	250	ug/kg	5.03E-09	1.2E-10	ND	
Benzo(b)fluoranthene	O	290	ug/kg	5.84E-09	1.4E-10	ND	
Benzo(k)fluoranthene	O	330	ug/kg	6.64E-09	1.6E-10	ND	
Chrysene	O	280	ug/kg	5.63E-09	1.3E-10	ND	
Indeno(1,2,3-cd)pyrene	O	180	ug/kg	3.62E-09	8.5E-11	ND	
Endrin ketone	O	0.97	ug/kg	1.95E-11	4.6E-13	ND	
Antimony	I	2.7	mg/kg	5.43E-08	1.3E-09	ND	
Arsenic	I	0.96	mg/kg	1.93E-08	4.5E-10	ND	
Copper	I	428	mg/kg	8.61E-06	2.0E-07	ND	
						SUMMARY HAZARD INDEX	0E+00

ND = no data available.

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TABLE D-2-21

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
CHILD RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMU's
U.S NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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, 1991
AGE-SPECIFIC BODY WEIGHT	BW	age-specific	kg	USEPA, 1989
EXPOSURE FREQUENCY	EF	350	days/year [1]	Assumption
EXPOSURE DURATION	ED	6	years	Assumption
AGE-SPECIFIC EXPOSURE DURATION	ED	age-specific	years	Assumption
AGE-WEIGHTED SURFACE AREA [2]	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

[1] Units for exposure frequency are in events/year in the calculation of the dermally absorbed dose.
[2] In estimating the dermally absorbed dose for children age1 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.
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

Note: For noncarcinogenic effects, AT = ED.

TABLE D-2-21

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
CHILD RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMU's
U.S NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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, 3] (mg/kg-day)-1	CANCER RISK DERMAL	TOTAL CANCER RISK
Benzo(a)anthracene	O	388	ug/kg	4.3E-07	0.73	3.1E-07	0.01	4.1E-08	0.8	3.3E-08	3.4E-07
Benzo(a)pyrene	O	380	ug/kg	4.2E-07	7.3	3.0E-06	0.01	4.0E-08	8	3.2E-07	3.4E-06
Benzo(b)fluoranthene	O	399	ug/kg	4.4E-07	0.73	3.2E-07	0.01	4.2E-08	0.8	3.3E-08	3.5E-07
Benzo(k)fluoranthene	O	403	ug/kg	4.4E-07	0.073	3.2E-08	0.01	4.2E-08	0.08	3.4E-09	3.6E-08
Chrysene	O	412	ug/kg	4.5E-07	0.0073	3.3E-09	0.01	4.3E-08	0.008	3.5E-10	3.6E-09
Dibenz(a,h)anthracene	O	376	ug/kg	4.1E-07	7.3	3.0E-06	0.01	3.9E-08	8	3.2E-07	3.3E-06
Indeno(1,2,3-cd)pyrene	O	372	ug/kg	4.1E-07	0.73	3.0E-07	0.01	3.9E-08	0.8	3.1E-08	3.3E-07
Aroclor-1254	O	29.7	ug/kg	3.3E-08	7.7	2.5E-07	0.06	1.9E-08	8.6	1.6E-07	4.1E-07
Aroclor-1260	O	41.7	ug/kg	4.6E-08	7.7	3.5E-07	0.06	2.6E-08	8.6	2.3E-07	5.8E-07
Chlordane	O	26.8	ug/kg	2.9E-08	1.3	3.8E-08	0.25	7.0E-08	1.6	1.1E-07	1.5E-07
Dieldrin	O	2.6	ug/kg	2.8E-09	16	4.6E-08	0.25	6.8E-09	20	1.4E-07	1.8E-07
Arsenic	I	1.7	mg/kg	1.9E-06	1.5	2.8E-06	0.001	1.8E-08	1.5	2.7E-08	2.8E-06
Beryllium	I	0.22	mg/kg	2.4E-07	4.3	1.0E-06	0.001	2.3E-09	430	9.9E-07	2.0E-06
Lead	I	62.8	mg/kg	6.9E-05	NE		0.001	6.6E-07	NE		
Mercury	I	0.14	mg/kg	1.5E-07	NE		0.001	1.5E-09	NE		
				SUMMARY CANCER RISK		1E-05				2E-06	1E-05

[1] Relative potency factors were applied to the CSFs of carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment of Polycyclic Aromatic Hydrocarbons," USEPA, 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.
NE = not evaluated.

TABLE D-2-21

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
CHILD RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMU's
U.S NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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
Benzo(a)anthracene	O	388	ug/kg	5.0E-06	ND		0.01	4.7E-07	ND		
Benzo(a)pyrene	O	380	ug/kg	4.9E-06	ND		0.01	4.7E-07	ND		
Benzo(b)fluoranthene	O	399	ug/kg	5.1E-06	ND		0.01	4.9E-07	ND		
Benzo(k)fluoranthene	O	403	ug/kg	5.2E-06	ND		0.01	4.9E-07	ND		
Chrysene	O	412	ug/kg	5.3E-06	ND		0.01	5.0E-07	ND		
Dibenz(a,h)anthracene	O	376	ug/kg	4.8E-06	ND		0.01	4.6E-07	ND		
Indeno(1,2,3-cd)pyrene	O	372	ug/kg	4.8E-06	ND		0.01	4.6E-07	ND		
Aroclor-1254	O	29.7	ug/kg	3.8E-07	0.00002	1.9E-02	0.06	2.2E-07	0.000018	1.2E-02	3.1E-02
Aroclor-1260	O	41.7	ug/kg	5.3E-07	0.00002	2.7E-02	0.06	3.1E-07	0.000018	1.7E-02	4.4E-02
Chlordane	O	26.8	ug/kg	3.4E-07	0.00006	5.7E-03	0.25	8.2E-07	0.000048	1.7E-02	2.3E-02
Dieldrin	O	2.6	ug/kg	3.3E-08	0.00005	6.6E-04	0.25	8.0E-08	0.00004	2.0E-03	2.7E-03
Antimony	I	3.2	mg/kg	4.1E-05	0.0004	1.0E-01	0.001	3.9E-07	0.000004	9.8E-02	2.0E-01
Arsenic	I	1.7	mg/kg	2.2E-05	0.0003	7.2E-02	0.001	2.1E-07	0.00029	7.2E-04	7.3E-02
Beryllium	I	0.22	mg/kg	2.8E-06	0.005	5.6E-04	0.001	2.7E-08	0.00005	5.4E-04	1.1E-03
Cadmium	I	0.85	mg/kg	1.1E-05	0.001	1.1E-02	0.001	1.0E-07	0.00001	1.0E-02	2.1E-02
Chromium	I	12.9	mg/kg	1.6E-04	0.005	3.3E-02	0.001	1.6E-06	0.00055	2.9E-03	3.6E-02
Copper	I	130	mg/kg	1.7E-03	ND		0.001	1.6E-05	ND		
Lead	I	62.8	mg/kg	8.0E-04	ND		0.001	7.7E-06	ND		
Mercury	I	0.14	mg/kg	1.8E-06	0.0003	6.0E-03	0.001	1.7E-08	0.00006	2.9E-04	6.3E-03
Zinc	I	302	mg/kg	3.9E-03	0.3	1.3E-02	0.001	3.7E-05	0.1	3.7E-04	1.3E-02
SUMMARY HAZARD INDEX						3E-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.

TABLE D-2-22

INHALATION OF PARTICULATES - SURFACE SOIL
CHILD RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical-specific	chemical-specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	[1]
CONCENTRATION IN 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	USEPA, 1991
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

[1] PEF has been derived in Appendix D-5 to the RFI General Information Report.
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.

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

TABLE D-2-22

INHALATION OF PARTICULATES - SURFACE SOIL
CHILD RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMU's
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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
Benzo(a)anthracene	O	388	ug/kg	7.81E-09	8.6E-10	NE	
Benzo(a)pyrene	O	380	ug/kg	7.65E-09	8.4E-10	NE	
Benzo(b)fluoranthene	O	399	ug/kg	8.03E-09	8.8E-10	NE	
Benzo(k)fluoranthene	O	403	ug/kg	8.11E-09	8.9E-10	NE	
Chrysene	O	412	ug/kg	8.29E-09	9.1E-10	NE	
Dibenz(a,h)anthracene	O	376	ug/kg	7.57E-09	8.3E-10	NE	
Indeno(1,2,3-cd)pyrene	O	372	ug/kg	7.48E-09	8.2E-10	NE	
Aroclor-1254	O	29.7	ug/kg	5.98E-10	6.5E-11	NE	
Aroclor-1260	O	41.7	ug/kg	8.39E-10	9.2E-11	NE	
Chlordane	O	26.8	ug/kg	5.39E-10	5.9E-11	1.3	7.7E-11
Dieldrin	O	2.6	ug/kg	5.23E-11	5.7E-12	16	9.2E-11
Arsenic	I	1.7	mg/kg	3.42E-08	3.7E-09	50	1.9E-07
Beryllium	I	0.22	mg/kg	4.43E-09	4.8E-10	8.4	4.1E-09
Mercury	I	0.14	mg/kg	2.82E-09	3.1E-10	NE	
						SUMMARY CANCER RISK	2E-07

NE = not evaluated.

TABLE D-2-22

INHALATION OF PARTICULATES - SURFACE SOIL
CHILD RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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
Benzo(a)anthracene	O	388	ug/kg	7.81E-09	1.0E-08	ND	
Benzo(a)pyrene	O	380	ug/kg	7.65E-09	9.8E-09	ND	
Benzo(b)fluoranthene	O	399	ug/kg	8.03E-09	1.0E-08	ND	
Benzo(k)fluoranthene	O	403	ug/kg	8.11E-09	1.0E-08	ND	
Chrysene	O	412	ug/kg	8.29E-09	1.1E-08	ND	
Dibenz(a,h)anthracene	O	376	ug/kg	7.57E-09	9.7E-09	ND	
Indeno(1,2,3-cd)pyrene	O	372	ug/kg	7.48E-09	9.6E-09	ND	
Aroclor-1254	O	29.7	ug/kg	5.98E-10	7.6E-10	ND	
Aroclor-1260	O	41.7	ug/kg	8.39E-10	1.1E-09	ND	
Chlordane	O	26.8	ug/kg	5.39E-10	6.9E-10	ND	
Dieldrin	O	2.6	ug/kg	5.23E-11	6.7E-11	ND	
Antimony	I	3.2	mg/kg	6.44E-08	8.2E-08	ND	
Arsenic	I	1.7	mg/kg	3.42E-08	4.4E-08	ND	
Beryllium	I	0.22	mg/kg	4.43E-09	5.7E-09	ND	
Cadmium	I	0.85	mg/kg	1.71E-08	2.2E-08	ND	
Chromium	I	12.9	mg/kg	2.60E-07	3.3E-07	ND	
Copper	I	130	mg/kg	2.62E-06	3.3E-06	ND	
Lead	I	62.8	mg/kg	1.26E-06	1.6E-06	ND	
Mercury	I	0.14	mg/kg	2.82E-09	3.6E-09	ND	
Zinc	I	302	mg/kg	6.08E-06	7.8E-06	ND	
SUMMARY HAZARD INDEX							0E+00

ND = no data available.

TABLE D-2-23

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMU's
U.S. NAVAL STATION MAYPORT, FLORIDA
SHIPYARD AREA

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-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 [1]	Assumption
EXPOSURE DURATION	ED	24	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	24	years	USEPA, 1991

[1] 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 ABSd x CF

Note: For noncarcinogenic effects, AT = ED.

TABLE D-2-23

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION MAYPORT, FLORIDA
SHIPYARD AREA

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
Benzo(a)anthracene	O	388	ug/kg	1.8E-07	0.73	1.3E-07	0.01	1.0E-07	0.8	8.4E-08	2.2E-07
Benzo(a)pyrene	O	380	ug/kg	1.8E-07	7.3	1.3E-06	0.01	1.0E-07	8	8.2E-07	2.1E-06
Benzo(b)fluoranthene	O	399	ug/kg	1.9E-07	0.73	1.4E-07	0.01	1.1E-07	0.8	8.6E-08	2.2E-07
Benzo(k)fluoranthene	O	403	ug/kg	1.9E-07	0.073	1.4E-08	0.01	1.1E-07	0.08	8.7E-09	2.3E-08
Chrysene	O	412	ug/kg	1.9E-07	0.0073	1.4E-09	0.01	1.1E-07	0.008	8.9E-10	2.3E-09
Dibenz(a,h)anthracene	O	376	ug/kg	1.8E-07	7.3	1.3E-06	0.01	1.0E-07	8	8.1E-07	2.1E-06
Indeno(1,2,3-cd)pyrene	O	372	ug/kg	1.7E-07	0.73	1.3E-07	0.01	1.0E-07	0.8	8.0E-08	2.1E-07
Aroclor-1254	O	29.7	ug/kg	1.4E-08	7.7	1.1E-07	0.06	4.8E-08	8.6	4.1E-07	5.2E-07
Aroclor-1260	O	41.7	ug/kg	2.0E-08	7.7	1.5E-07	0.06	6.8E-08	8.6	5.8E-07	7.3E-07
Chlordane	O	26.8	ug/kg	1.3E-08	1.3	1.6E-08	0.25	1.8E-07	1.6	2.9E-07	3.1E-07
Dieldrin	O	2.6	ug/kg	1.2E-09	16	2.0E-08	0.25	1.8E-08	20	3.5E-07	3.7E-07
Arsenic	I	1.7	mg/kg	8.0E-07	1.5	1.2E-06	0.001	4.6E-08	1.5	6.9E-08	1.3E-06
Beryllium	I	0.22	mg/kg	1.0E-07	4.3	4.4E-07	0.001	5.9E-09	430	2.6E-06	3.0E-06
Lead	I	62.8	mg/kg	2.9E-05	NE		0.001	1.7E-06	NE		
Mercury	I	0.14	mg/kg	6.6E-08	NE		0.001	3.8E-09	NE		
SUMMARY CANCER RISK						5E-06				6E-06	1E-05

[1] Relative potency factors were applied to the CSFs for carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment of Polycyclic Aromatic Hydrocarbons," USEPA, 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.
NE = not evaluated.

TABLE D-2-23

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION MAYPORT, FLORIDA
SHIPYARD AREA

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
Benzo(a)anthracene	O	388	ug/kg	5.3E-07	ND		0.01	3.1E-07	ND		
Benzo(a)pyrene	O	380	ug/kg	5.2E-07	ND		0.01	3.0E-07	ND		
Benzo(b)fluoranthene	O	399	ug/kg	5.5E-07	ND		0.01	3.1E-07	ND		
Benzo(k)fluoranthene	O	403	ug/kg	5.5E-07	ND		0.01	3.2E-07	ND		
Chrysene	O	412	ug/kg	5.6E-07	ND		0.01	3.2E-07	ND		
Dibenz(a,h)anthracene	O	376	ug/kg	5.2E-07	ND		0.01	3.0E-07	ND		
Indeno(1,2,3-cd)pyrene	O	372	ug/kg	5.1E-07	ND		0.01	2.9E-07	ND		
Aroclor-1254	O	29.7	ug/kg	4.1E-08	0.00002	2.0E-03	0.06	1.4E-07	0.000018	7.8E-03	9.8E-03
Aroclor-1260	O	41.7	ug/kg	5.7E-08	0.00002	2.9E-03	0.06	2.0E-07	0.000018	1.1E-02	1.4E-02
Chlordane	O	26.8	ug/kg	3.7E-08	0.00006	6.1E-04	0.25	5.3E-07	0.000048	1.1E-02	1.2E-02
Dieldrin	O	2.6	ug/kg	3.6E-09	0.00005	7.1E-05	0.25	5.1E-08	0.00004	1.3E-03	1.4E-03
Antimony	I	3.2	mg/kg	4.4E-06	0.0004	1.1E-02	0.001	2.5E-07	0.000004	6.3E-02	7.4E-02
Arsenic	I	1.7	mg/kg	2.3E-06	0.0003	7.8E-03	0.001	1.3E-07	0.00029	4.6E-04	8.2E-03
Beryllium	I	0.22	mg/kg	3.0E-07	0.005	6.0E-05	0.001	1.7E-08	0.00005	3.5E-04	4.1E-04
Cadmium	I	0.85	mg/kg	1.2E-06	0.001	1.2E-03	0.001	6.7E-08	0.00001	6.7E-03	7.9E-03
Chromium	I	12.9	mg/kg	1.8E-05	0.005	3.5E-03	0.001	1.0E-06	0.00055	1.8E-03	5.4E-03
Copper	I	130	mg/kg	1.8E-04	ND		0.001	1.0E-05	ND		
Lead	I	62.8	mg/kg	8.6E-05	ND		0.001	4.9E-06	ND		
Mercury	I	0.14	mg/kg	1.9E-07	0.0003	6.4E-04	0.001	1.1E-08	0.00006	1.8E-04	8.2E-04
Zinc	I	302	mg/kg	4.1E-04	0.3	1.4E-03	0.001	2.4E-05	0.1	2.4E-04	1.6E-03
SUMMARY HAZARD INDEX						3E-02				1E-01	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.

TABLE D-2-24

INHALATION OF PARTICULATES - SURFACE SOIL
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMU's
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical-specific	chemical-specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	[1]
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

[1] PEF has been derived in Appendix D-5 to the General Information Report.
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.

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

TABLE D-2-24

INHALATION OF PARTICULATES - SURFACE SOIL
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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
Benzo(a)anthracene	O	388	ug/kg	7.81E-09	7.3E-10	NE	
Benzo(a)pyrene	O	380	ug/kg	7.65E-09	7.2E-10	NE	
Benzo(b)fluoranthene	O	399	ug/kg	8.03E-09	7.5E-10	NE	
Benzo(k)fluoranthene	O	403	ug/kg	8.11E-09	7.6E-10	NE	
Chrysene	O	412	ug/kg	8.29E-09	7.8E-10	NE	
Dibenz(a,h)anthracene	O	376	ug/kg	7.57E-09	7.1E-10	NE	
Indeno(1,2,3-cd)pyrene	O	372	ug/kg	7.48E-09	7.0E-10	NE	
Aroclor-1254	O	29.7	ug/kg	5.98E-10	5.6E-11	NE	
Aroclor-1260	O	41.7	ug/kg	8.39E-10	7.9E-11	NE	
Chlordane	O	26.8	ug/kg	5.39E-10	5.1E-11	1.3	**6.6E-11**
Dieldrin	O	2.6	ug/kg	5.23E-11	4.9E-12	16	**7.9E-11**
Arsenic	I	1.7	mg/kg	3.42E-08	3.2E-09	50	**1.6E-07**
Beryllium	I	0.22	mg/kg	4.43E-09	4.2E-10	8.4	**3.5E-09**
Mercury	I	0.14	mg/kg	2.82E-09	2.6E-10	NE	
						SUMMARY CANCER RISK	**2E-07**

NE = not evaluated.

TABLE D-2-24

INHALATION OF PARTICULATES - SURFACE SOIL
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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
Benzo(a)anthracene	O	388	ug/kg	7.81E-09	2.1E-09	ND	
Benzo(a)pyrene	O	380	ug/kg	7.65E-09	2.1E-09	ND	
Benzo(b)fluoranthene	O	399	ug/kg	8.03E-09	2.2E-09	ND	
Benzo(k)fluoranthene	O	403	ug/kg	8.11E-09	2.2E-09	ND	
Chrysene	O	412	ug/kg	8.29E-09	2.3E-09	ND	
Dibenz(a,h)anthracene	O	376	ug/kg	7.57E-09	2.1E-09	ND	
Indeno(1,2,3-cd)pyrene	O	372	ug/kg	7.48E-09	2.0E-09	ND	
Aroclor-1254	O	29.7	ug/kg	5.98E-10	1.6E-10	ND	
Aroclor-1260	O	41.7	ug/kg	8.39E-10	2.3E-10	ND	
Chlordane	O	26.8	ug/kg	5.39E-10	1.5E-10	ND	
Dieldrin	O	2.6	ug/kg	5.23E-11	1.4E-11	ND	
Antimony	I	3.2	mg/kg	6.44E-08	1.8E-08	ND	
Arsenic	I	1.7	mg/kg	3.42E-08	9.4E-09	ND	
Beryllium	I	0.22	mg/kg	4.43E-09	1.2E-09	ND	
Cadmium	I	0.85	mg/kg	1.71E-08	4.7E-09	ND	
Chromium	I	12.9	mg/kg	2.60E-07	7.1E-08	ND	
Copper	I	130	mg/kg	2.62E-06	7.2E-07	ND	
Lead	I	62.8	mg/kg	1.26E-06	3.5E-07	ND	
Mercury	I	0.14	mg/kg	2.82E-09	7.7E-10	ND	
Zinc	I	302	mg/kg	6.08E-06	1.7E-06	ND	
SUMMARY HAZARD INDEX							0E+00

ND = no data available.

TABLE D-2-25

INGESTION OF GROUNDWATER AS DRINKING WATER (UNFILTERED SAMPLES)
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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)

$$\text{INTAKE} = \frac{CW \times IR \times EF \times ED \times CF}{BW \times AT \times 365 \text{ days/year}}$$

Note: For noncarcinogenic effects, AT = ED.

TABLE D-2-25

INGESTION OF GROUNDWATER AS DRINKING WATER (UNFILTERED SAMPLES)
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

CARCINOGENIC EFFECTS

COMPOUND	WATER CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	CANCER SLOPE FACTOR (mg/kg-day)^-1	CANCER RISK INGESTION
1,1-Dichloroethene	2.7	ug/l	3.2E-05	0.6	1.9E-05
bis(2-Ethylhexyl)phthalate	5	ug/l	5.9E-05	0.014	8.2E-07
Arsenic	47	ug/l	5.5E-04	1.5	8.3E-04
TOTAL CANCER RISK					8E-04

NONCARCINOGENIC EFFECTS

COMPOUND	WATER CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	REFERENCE DOSE (mg/kg-day)	HAZARD QUOTIENT INGESTION
1,1-Dichloroethene	2.7	ug/l	7.4E-05	0.009	8.2E-03
bis(2-Ethylhexyl)phthalate	5	ug/l	1.4E-04	0.02	6.8E-03
Antimony	10.7	ug/l	2.9E-04	0.0004	7.3E-01
Arsenic	47	ug/l	1.3E-03	0.0003	4.3E+00
Iron	9040	ug/l	2.5E-01	0.3	8.3E-01
Magnesium	250196	ug/l	6.9E+00	ND	
Manganese	290	ug/l	7.9E-03	0.005	1.6E+00
Sodium	4828276	ug/l	1.3E+02	ND	
Vanadium	18.5	ug/l	5.1E-04	0.007	7.2E-02
TOTAL HAZARD INDEX					8E+00

ND = no data available.

TABLE D-2-27

INHALATION EXPOSURE TO VOCs WHILE SHOWERING
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

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	30	years	USEPA, 1991
CONVERSION FACTOR 2	CF_2	365	days/year	
AVERAGING TIME CANCER	AT	70	years	USEPA, 1989
AVERAGING TIME NONCANCER	AT	30	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 D-2-27

INHALATION EXPOSURE TO VOCs WHILE SHOWERING
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SHIPYARD AREA

CARCINOGENIC EFFECTS

COMPOUND	VOLATILE OR NON-VOLATILE? V/NV	SHOWER AIR CONCENTRATION [1] (ug/m³)	AVERAGE AIR CONCENTRATION LIFETIME (ug/m³)	INHALATION CANCER UNIT RISK (ug/m³)⁻¹	CANCER RISK
1,1-Dichloroethene	V	14	4.8E-02	5.0E-05	2.4E-06
				SUMMARY CANCER RISK	2E-06

[1] This value is calculated in Table D-2-16 in this appendix.

NONCARCINOGENIC EFFECTS

COMPOUND	VOLATILE OR NON-VOLATILE? V/NV	SHOWER AIR CONCENTRATION [1] (ug/m³)	AVERAGE AIR CONCENTRATION FOR TIME PERIOD (ug/m³)	CHRONIC INHALATION RfC [2] (ug/m³)	HAZARD QUOTIENT
1,1-Dichloroethene	V	14	1.1E-01	ND	
				SUMMARY HAZARD INDEX	0.0E+00

[1] This value is calculated in Table D-2-16 in this appendix.
[2] RfC is the Reference Concentration published by USEPA.
ND = no data available.

APPENDIX D-3

HUMAN HEALTH RISK ASSESSMENT SPREADSHEETS, SWMU 17

TABLE D-3-1

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
ADOLESCENT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION MAYPORT, FLORIDA
SWMU 17

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	Inorganic conversion
	CF	1.00E-09	kg/mg	Organic conversion
BODY WEIGHT	BW	40	kg	USEPA, 1989
AGE-SPECIFIC BODY WEIGHT	BWi	age-specific	kg	USEPA, 1989
EXPOSURE FREQUENCY	EF	45	days/year [1]	Assumption
EXPOSURE DURATION	ED	11	years	Assumption
AGE-SPECIFIC EXPOSURE DURATION	EDi	age-specific	years	Assumption
AGE-WEIGHTED SURFACE AREA [2]	SA_{age}	1136	cm²-year/kg	Per USEPA, 1992a
DOSE ABSORBED PER EVENT	$DA_{__}$	chemical-specific	mg/cm²-event	Per USEPA, 1992a
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	11	years	Assumption

[1] Units for exposure frequency are in events/year in the calculation of the dermally absorbed dose.
[2] 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 Dermal Guidance Summary Appendix to this document.
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)

INTAKE-INGESTION = $\frac{CS \times IR \times FI \times CF \times EF \times ED}{BW \times AT \times 365\ days/yr}$

INTAKE-DERMAL = $(DA_{__} \times EF / AT \times 365\ days/year) \times SA_{age}$

Where:

SA_{age} = SUM (SAI x EDI / BWI)
$DA_{__}$ = CS x AF x ABSd x CF

Note: For noncarcinogenic effects: AT = ED.

TABLE D-3-1

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
ADOLESCENT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION MAYPORT, FLORIDA
SWMU 17

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 [1,3] (mg/kg-day)^-1	CANCER RISK DERMAL	TOTAL CANCER RISK
Benzo(a)anthracene	O	170	ug/kg	8.2E-09	0.73	6.0E-09	0.01	3.4E-09	0.8	2.7E-09	8.7E-09
Benzo(a)pyrene	O	270	ug/kg	1.3E-08	7.3	9.5E-08	0.01	5.4E-09	8	4.3E-08	1.4E-07
Benzo(b)fluoranthene	O	280	ug/kg	1.4E-08	0.73	9.9E-09	0.01	5.6E-09	0.8	4.5E-09	1.4E-08
Benzo(k)fluoranthene	O	370	ug/kg	1.8E-08	0.073	1.3E-09	0.01	7.4E-09	0.08	5.9E-10	1.9E-09
Chrysene	O	290	ug/kg	1.4E-08	0.0073	1.0E-10	0.01	5.8E-09	0.008	4.6E-11	1.5E-10
Dibenz(a,h)anthracene	O	140	ug/kg	6.8E-09	7.3	5.0E-08	0.01	2.8E-09	8	2.2E-08	7.2E-08
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	1.4E-08	0.73	9.9E-09	0.01	5.6E-09	0.8	4.5E-09	1.4E-08
Arsenic	I	1.2	mg/kg	5.8E-08	1.5	8.7E-08	0.001	2.4E-09	1.5	3.6E-09	9.1E-08
Beryllium	I	0.17	mg/kg	8.2E-09	4.3	3.5E-08	0.001	3.4E-10	430	1.5E-07	1.8E-07
					SUMMARY CANCER RISK	3E-07				3E-07	5E-07

[1] Relative potency factors were applied to the CSFs for carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment of Polycyclic Aromatic Hydrocarbons," USEPA, 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.

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
Benzo(a)anthracene	O	170	ug/kg	5.2E-08	ND		0.01	2.2E-08	ND		
Benzo(a)pyrene	O	270	ug/kg	8.3E-08	ND		0.01	3.4E-08	ND		
Benzo(b)fluoranthene	O	280	ug/kg	8.6E-08	ND		0.01	3.6E-08	ND		
Benzo(k)fluoranthene	O	370	ug/kg	1.1E-07	ND		0.01	4.7E-08	ND		
Chrysene	O	290	ug/kg	8.9E-08	ND		0.01	3.7E-08	ND		
Dibenz(a,h)anthracene	O	140	ug/kg	4.3E-08	ND		0.01	1.8E-08	ND		
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	8.6E-08	ND		0.01	3.6E-08	ND		
Arsenic	I	1.2	mg/kg	3.7E-07	0.0003	1.2E-03	0.001	1.5E-08	0.00029	5.3E-05	1.3E-03
Beryllium	I	0.17	mg/kg	5.2E-08	0.005	1.0E-05	0.001	2.2E-09	0.00005	4.3E-05	5.4E-05
					SUMMARY HAZARD INDEX	1E-03				1E-04	1E-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 D-3-2

INHALATION OF PARTICULATES - SURFACE SOIL
ADOLESCENT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMU 17

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical-specific	chemical-specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	[1]
CONCENTRATION IN 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

[1] PEF has been derived in Appendix D-5 to the General Information Report.
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.

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

TABLE D-3-2

INHALATION OF PARTICULATES - SURFACE SOIL
ADOLESCENT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMU's
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMU 17

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
Benzo(a)anthracene	O	170	ug/kg	3.42E-09	5.5E-12	NE	
Benzo(a)pyrene	O	270	ug/kg	5.43E-09	8.8E-12	NE	
Benzo(b)fluoranthene	O	280	ug/kg	5.63E-09	9.1E-12	NE	
Benzo(k)fluoranthene	O	370	ug/kg	7.44E-09	1.2E-11	NE	
Chrysene	O	290	ug/kg	5.84E-09	9.4E-12	NE	
Dibenz(a,h)anthracene	O	140	ug/kg	2.82E-09	4.5E-12	NE	
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	5.63E-09	9.1E-12	NE	
Arsenic	I	1.2	mg/kg	2.41E-08	3.9E-11	50	1.9E-09
Beryllium	I	0.17	mg/kg	3.42E-09	5.5E-12	8.4	4.6E-11
						SUMMARY CANCER RISK	2E-09

NE = not evaluated.

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
Benzo(a)anthracene	O	170	ug/kg	3.42E-09	3.5E-11	ND	
Benzo(a)pyrene	O	270	ug/kg	5.43E-09	5.6E-11	ND	
Benzo(b)fluoranthene	O	280	ug/kg	5.63E-09	5.8E-11	ND	
Benzo(k)fluoranthene	O	370	ug/kg	7.44E-09	7.6E-11	ND	
Chrysene	O	290	ug/kg	5.84E-09	6.0E-11	ND	
Dibenz(a,h)anthracene	O	140	ug/kg	2.82E-09	2.9E-11	ND	
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	5.63E-09	5.8E-11	ND	
Arsenic	I	1.2	mg/kg	2.41E-08	2.5E-10	ND	
Beryllium	I	0.17	mg/kg	3.42E-09	3.5E-11	ND	
						SUMMARY HAZARD INDEX	0E+00

ND = no data available.

ABB Environmental Services, Inc.
CTSSINH.XLS
12/15/9[illegible]

TABLE D-3-3

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
ADULT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMU 17

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	inorganics
	CF	1.00E-09	kg/ug	organics
BODY WEIGHT	BW	70	kg	USEPA, 1991
EXPOSURE FREQUENCY	EF	45	days/year [1]	Assumption
EXPOSURE DURATION	ED	19	years	Assumption
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	19	years	Assumption

[1] 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.

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 ABSd x CF

Note: For noncarcinogenic effects: AT = ED

TABLE D-3-3

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
ADULT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMU's
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMU 17

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 [1,3] (mg/kg-day)^-1	CANCER RISK DERMAL	TOTAL CANCER RISK
Benzo(a)anthracene	O	170	ug/kg	8.1E-09	0.73	5.9E-09	0.01	4.7E-09	0.8	3.7E-09	9.7E-09
Benzo(a)pyrene	O	270	ug/kg	1.3E-08	7.3	9.4E-08	0.01	7.4E-09	8	5.9E-08	1.5E-07
Benzo(b)fluoranthene	O	280	ug/kg	1.3E-08	0.73	9.8E-09	0.01	7.7E-09	0.8	6.2E-09	1.6E-08
Benzo(k)fluoranthene	O	370	ug/kg	1.8E-08	0.073	1.3E-09	0.01	1.0E-08	0.08	8.1E-10	2.1E-09
Chrysene	O	290	ug/kg	1.4E-08	0.0073	1.0E-10	0.01	8.0E-09	0.008	6.4E-11	1.6E-10
Dibenz(a,h)anthracene	O	140	ug/kg	6.7E-09	7.3	4.9E-08	0.01	3.8E-09	8	3.1E-08	8.0E-08
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	1.3E-08	0.73	9.8E-09	0.01	7.7E-09	0.8	6.2E-09	1.6E-08
Arsenic	I	1.2	mg/kg	5.7E-08	1.5	8.6E-08	0.001	3.3E-09	1.5	4.9E-09	9.1E-08
Beryllium	I	0.17	mg/kg	8.1E-09	4.3	3.5E-08	0.001	4.7E-10	430	2.0E-07	2.4E-07
SUMMARY CANCER RISK						3E-07				3E-07	6E-07

[1] Relative potency factors were applied to the CSFs for carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment of Polycyclic Aromatic Hydrocarbons," USEPA, 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.

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
Benzo(a)anthracene	O	170	ug/kg	3.0E-08	ND		0.01	1.7E-08	ND		
Benzo(a)pyrene	O	270	ug/kg	4.8E-08	ND		0.01	2.7E-08	ND		
Benzo(b)fluoranthene	O	280	ug/kg	4.9E-08	ND		0.01	2.8E-08	ND		
Benzo(k)fluoranthene	O	370	ug/kg	6.5E-08	ND		0.01	3.7E-08	ND		
Chrysene	O	290	ug/kg	5.1E-08	ND		0.01	2.9E-08	ND		
Dibenz(a,h)anthracene	O	140	ug/kg	2.5E-08	ND		0.01	1.4E-08	ND		
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	4.9E-08	ND		0.01	2.8E-08	ND		
Arsenic	I	1.2	mg/kg	2.1E-07	0.0003	7.0E-04	0.001	1.2E-08	0.00029	4.2E-05	7.5E-04
Beryllium	I	0.17	mg/kg	3.0E-08	0.005	6.0E-06	0.001	1.7E-09	0.00005	3.4E-05	4.0E-05
SUMMARY HAZARD INDEX						7E-04				8E-05	8E-04

[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 D-3-4

INHALATION OF PARTICULATES - SURFACE SOIL
ADULT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMU 17

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical-specific	chemical-specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	[1]
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

[1] PEF has been derived in Appendix D-5 to the RFI General Information Report.
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.

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

TABLE D-3-4

INHALATION OF PARTICULATES - SURFACE SOIL
ADULT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMU 17

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
Benzo(a)anthracene	O	170	ug/kg	3.42E-09	5.4E-12	NE	
Benzo(a)pyrene	O	270	ug/kg	5.43E-09	8.7E-12	NE	
Benzo(b)fluoranthene	O	280	ug/kg	5.63E-09	9.0E-12	NE	
Benzo(k)fluoranthene	O	370	ug/kg	7.44E-09	1.2E-11	NE	
Chrysene	O	290	ug/kg	5.84E-09	9.3E-12	NE	
Dibenz(a,h)anthracene	O	140	ug/kg	2.82E-09	4.5E-12	NE	
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	5.63E-09	9.0E-12	NE	
Arsenic	I	1.2	mg/kg	2.41E-08	3.8E-11	50	1.9E-09
Beryllium	I	0.17	mg/kg	3.42E-09	5.4E-12	8.4	4.6E-11
						SUMMARY CANCER RISK	2E-09

NE = not evaluated

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
Benzo(a)anthracene	O	170	ug/kg	3.42E-09	2.0E-11	ND	
Benzo(a)pyrene	O	270	ug/kg	5.43E-09	3.2E-11	ND	
Benzo(b)fluoranthene	O	280	ug/kg	5.63E-09	3.3E-11	ND	
Benzo(k)fluoranthene	O	370	ug/kg	7.44E-09	4.4E-11	ND	
Chrysene	O	290	ug/kg	5.84E-09	3.4E-11	ND	
Dibenz(a,h)anthracene	O	140	ug/kg	2.82E-09	1.7E-11	ND	
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	5.63E-09	3.3E-11	ND	
Arsenic	I	1.2	mg/kg	2.41E-08	1.4E-10	ND	
Beryllium	I	0.17	mg/kg	3.42E-09	2.0E-11	ND	
						SUMMARY HAZARD INDEX	0E+00

ND = no data available.

TABLE D-3-5

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
CHILD RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S NAVAL STATION, MAYPORT, FLORIDA
SWMU 17

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, 1991
AGE-SPECIFIC BODY WEIGHT	BW	age-specific	kg	USEPA, 1989
EXPOSURE FREQUENCY	EF	350	days/year [1]	Assumption
EXPOSURE DURATION	ED	6	years	USEPA, 1991
AGE-SPECIFIC EXPOSURE DURATION	ED	age-specific	years	Assumption
AGE-WEIGHTED SURFACE AREA	SAsoil/adj	766	cm2-year/kg	[2]
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

[1] Units for exposure frequency are in events/year in the calculation of the dermally absorbed dose.
[2] 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.
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)

INTAKE-INGESTION = $\frac{CS \times IR \times FI \times CF \times EF \times ED}{BW \times AT \times 365\ days/yr}$

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

Note: For noncarcinogenic effects, AT = ED.

TABLE D-3-5

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
CHILD RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S NAVAL STATION, MAYPORT, FLORIDA
SWMU 17

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 [1]	INTAKE DERMAL (mg/kg-day)	DERMAL CSF [1, 3] (mg/kg-day)-1	CANCER RISK DERMAL	TOTAL CANCER RISK
Benzo(a)anthracene	O	170	ug/kg	1.9E-07	0.73	1.4E-07	0.01	1.8E-08	0.8	1.4E-08	1.5E-07
Benzo(a)pyrene	O	270	ug/kg	3.0E-07	7.3	2.2E-06	0.01	2.8E-08	8	2.3E-07	2.4E-06
Benzo(b)fluoranthene	O	280	ug/kg	3.1E-07	0.73	2.2E-07	0.01	2.9E-08	0.8	2.4E-08	2.5E-07
Benzo(k)fluoranthene	O	370	ug/kg	4.1E-07	0.073	3.0E-08	0.01	3.9E-08	0.08	3.1E-09	3.3E-08
Chrysene	O	290	ug/kg	3.2E-07	0.0073	2.3E-09	0.01	3.0E-08	0.008	2.4E-10	2.6E-09
Dibenz(a,h)anthracene	O	140	ug/kg	1.5E-07	7.3	1.1E-06	0.01	1.5E-08	8	1.2E-07	1.2E-06
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	3.1E-07	0.73	2.2E-07	0.01	2.9E-08	0.8	2.4E-08	2.5E-07
Arsenic	I	1.2	mg/kg	1.3E-06	1.5	2.0E-06	0.001	1.3E-08	1.5	1.9E-08	2.0E-06
Beryllium	I	0.17	mg/kg	1.9E-07	4.3	8.0E-07	0.001	1.8E-09	430	7.7E-07	1.6E-06
					SUMMARY CANCER RISK	7E-06				1E-06	8E-06

[1] Relative potency factors were applied to the CSFs for carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment of Polycyclic Aromatic Hydrocarbons," USEPA, 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.

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
Benzo(a)anthracene	O	170	ug/kg	2.2E-06	ND		0.01	2.1E-07	ND		
Benzo(a)pyrene	O	270	ug/kg	3.5E-06	ND		0.01	3.3E-07	ND		
Benzo(b)fluoranthene	O	280	ug/kg	3.6E-06	ND		0.01	3.4E-07	ND		
Benzo(k)fluoranthene	O	370	ug/kg	4.7E-06	ND		0.01	4.5E-07	ND		
Chrysene	O	290	ug/kg	3.7E-06	ND		0.01	3.6E-07	ND		
Dibenz(a,h)anthracene	O	140	ug/kg	1.8E-06	ND		0.01	1.7E-07	ND		
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	3.6E-06	ND		0.01	3.4E-07	ND		
Arsenic	I	1.2	mg/kg	1.5E-05	0.0003	5.1E-02	0.001	1.5E-07	0.00029	5.1E-04	5.2E-02
Beryllium	I	0.17	mg/kg	2.2E-06	0.005	4.3E-04	0.001	2.1E-08	0.00005	4.2E-04	8.5E-04
					SUMMARY HAZARD INDEX	5E-02				9E-04	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.

TABLE D-3-6

INHALATION OF PARTICULATES - SURFACE SOIL
CHILD RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMU 17

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical-specific	chemical-specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	[1]
CONCENTRATION IN 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	USEPA, 1991
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

[1] PEF has been derived in Appendix D-5 to the RFI General Information Report.
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.

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 x CF x (1/PEF)

Note:

For noncarcinogenic effects: AT = ED

TABLE D-3-6

INHALATION OF PARTICULATES - SURFACE SOIL
CHILD RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMU 17

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
Benzo(a)anthracene	O	170	ug/kg	3.42E-09	3.7E-10	NE	
Benzo(a)pyrene	O	270	ug/kg	5.43E-09	6.0E-10	NE	
Benzo(b)fluoranthene	O	280	ug/kg	5.63E-09	6.2E-10	NE	
Benzo(k)fluoranthene	O	370	ug/kg	7.44E-09	8.2E-10	NE	
Chrysene	O	290	ug/kg	5.84E-09	6.4E-10	NE	
Dibenz(a,h)anthracene	O	140	ug/kg	2.82E-09	3.1E-10	NE	
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	5.63E-09	6.2E-10	NE	
Arsenic	I	1.2	mg/kg	2.41E-08	2.6E-09	50	1.3E-07
Beryllium	I	0.17	mg/kg	3.42E-09	3.7E-10	8.4	3.1E-09
						SUMMARY CANCER RISK	1E-07

NE = not evaluated.

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
Benzo(a)anthracene	O	170	ug/kg	3.42E-09	4.4E-09	ND	
Benzo(a)pyrene	O	270	ug/kg	5.43E-09	6.9E-09	ND	
Benzo(b)fluoranthene	O	280	ug/kg	5.63E-09	7.2E-09	ND	
Benzo(k)fluoranthene	O	370	ug/kg	7.44E-09	9.5E-09	ND	
Chrysene	O	290	ug/kg	5.84E-09	7.5E-09	ND	
Dibenz(a,h)anthracene	O	140	ug/kg	2.82E-09	3.6E-09	ND	
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	5.63E-09	7.2E-09	ND	
Arsenic	I	1.2	mg/kg	2.41E-08	3.1E-08	ND	
Beryllium	I	0.17	mg/kg	3.42E-09	4.4E-09	ND	
						SUMMARY HAZARD INDEX	0E+00

ND = no data available.

TABLE D-3-7

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION MAYPORT, FLORIDA
SWMU 17

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-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 [1]	Assumption
EXPOSURE DURATION	ED	24	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	24	years	USEPA, 1991

[1] 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 ABSd x CF

Note: For noncarcinogenic effects, AT = ED.

TABLE D-3-7

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMU's
U.S. NAVAL STATION MAYPORT, FLORIDA
SWMU 17

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
Benzo(a)anthracene	O	170	ug/kg	8.0E-08	0.73	5.8E-08	0.01	4.6E-08	0.8	3.7E-08	9.5E-08
Benzo(a)pyrene	O	270	ug/kg	1.3E-07	7.3	9.3E-07	0.01	7.3E-08	8	5.8E-07	1.5E-06
Benzo(b)fluoranthene	O	280	ug/kg	1.3E-07	0.73	9.6E-08	0.01	7.6E-08	0.8	6.0E-08	1.6E-07
Benzo(k)fluoranthene	O	370	ug/kg	1.7E-07	0.073	1.3E-08	0.01	1.0E-07	0.08	8.0E-09	2.1E-08
Chrysene	O	290	ug/kg	1.4E-07	0.0073	9.9E-10	0.01	7.8E-08	0.008	6.3E-10	1.6E-09
Dibenz(a,h)anthracene	O	140	ug/kg	6.6E-08	7.3	4.8E-07	0.01	3.8E-08	8	3.0E-07	7.8E-07
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	1.3E-07	0.73	9.6E-08	0.01	7.6E-08	0.8	6.0E-08	1.6E-07
Arsenic	I	1.2	mg/kg	5.6E-07	1.5	8.5E-07	0.001	3.2E-08	1.5	4.9E-08	8.9E-07
Beryllium	I	0.17	mg/kg	8.0E-08	4.3	3.4E-07	0.001	4.6E-09	430	2.0E-06	2.3E-06
SUMMARY CANCER RISK						3E-06				3E-06	6E-06

[1] Relative potency factors were applied to the CSFs for carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment of Polycyclic Aromatic Hydrocarbons," USEPA, 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.

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
Benzo(a)anthracene	O	170	ug/kg	2.3E-07	ND		0.01	1.3E-07	ND		
Benzo(a)pyrene	O	270	ug/kg	3.7E-07	ND		0.01	2.1E-07	ND		
Benzo(b)fluoranthene	O	280	ug/kg	3.8E-07	ND		0.01	2.2E-07	ND		
Benzo(k)fluoranthene	O	370	ug/kg	5.1E-07	ND		0.01	2.9E-07	ND		
Chrysene	O	290	ug/kg	4.0E-07	ND		0.01	2.3E-07	ND		
Dibenz(a,h)anthracene	O	140	ug/kg	1.9E-07	ND		0.01	1.1E-07	ND		
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	3.8E-07	ND		0.01	2.2E-07	ND		
Arsenic	I	1.2	mg/kg	1.6E-06	0.0003	5.5E-03	0.001	9.5E-08	0.00029	3.3E-04	5.8E-03
Beryllium	I	0.17	mg/kg	2.3E-07	0.005	4.7E-05	0.001	1.3E-08	0.00005	2.7E-04	3.1E-04
SUMMARY HAZARD INDEX						6E-03				6E-04	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.
ND = no data available.

TABLE D-3-8

INHALATION OF PARTICULATES - SURFACE SOIL
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMU's
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMU 17

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical-specific	chemical-specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	[1]
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	USEPA, 1991
EXPOSURE FREQUENCY	EF	350	days/year	Assumption
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

[1] PEF has been derived in Appendix D-5 to the General Information Report.
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.

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 x CF x (1/PEF)

Note:

For noncarcinogenic effects: AT = ED

TABLE D-3-8

INHALATION OF PARTICULATES - SURFACE SOIL
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMU 17

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
Benzo(a)anthracene	O	170	ug/kg	3.42E-09	3.2E-10	NE	
Benzo(a)pyrene	O	270	ug/kg	5.43E-09	5.1E-10	NE	
Benzo(b)fluoranthene	O	280	ug/kg	5.63E-09	5.3E-10	NE	
Benzo(k)fluoranthene	O	370	ug/kg	7.44E-09	7.0E-10	NE	
Chrysene	O	290	ug/kg	5.84E-09	5.5E-10	NE	
Dibenz(a,h)anthracene	O	140	ug/kg	2.82E-09	2.6E-10	NE	
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	5.63E-09	5.3E-10	NE	
Arsenic	I	1.2	mg/kg	2.41E-08	2.3E-09	50	1.1E-07
Beryllium	I	0.17	mg/kg	3.42E-09	3.2E-10	8.4	2.7E-09
SUMMARY CANCER RISK							1E-07

NE = not evaluated.

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
Benzo(a)anthracene	O	170	ug/kg	3.42E-09	9.4E-10	ND	
Benzo(a)pyrene	O	270	ug/kg	5.43E-09	1.5E-09	ND	
Benzo(b)fluoranthene	O	280	ug/kg	5.63E-09	1.5E-09	ND	
Benzo(k)fluoranthene	O	370	ug/kg	7.44E-09	2.0E-09	ND	
Chrysene	O	290	ug/kg	5.84E-09	1.6E-09	ND	
Dibenz(a,h)anthracene	O	140	ug/kg	2.82E-09	7.7E-10	ND	
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	5.63E-09	1.5E-09	ND	
Arsenic	I	1.2	mg/kg	2.41E-08	6.6E-09	ND	
Beryllium	I	0.17	mg/kg	3.42E-09	9.4E-10	ND	
SUMMARY HAZARD INDEX							0E+00

ND = no data available.

TABLE D-3-9

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
OCCUPATIONAL WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMU 17

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 [1]	USEPA, 1991
EXPOSURE DURATION	ED	25	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	25	years	USEPA, 1991

[1] 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

TABLE D-3-9

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
OCCUPATIONAL WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMU 17

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 [1,3] (mg/kg-day)^-1	CANCER RISK DERMAL	TOTAL CANCER RISK
Benzo(a)anthracene	O	170	ug/kg	3.0E-08	0.73	2.2E-08	0.01	1.4E-08	0.8	1.1E-08	3.3E-08
Benzo(a)pyrene	O	270	ug/kg	4.7E-08	7.3	3.4E-07	0.01	2.2E-08	8	1.7E-07	5.2E-07
Benzo(b)fluoranthene	O	280	ug/kg	4.9E-08	0.73	3.6E-08	0.01	2.3E-08	0.8	1.8E-08	5.4E-08
Benzo(k)fluoranthene	O	370	ug/kg	6.5E-08	0.073	4.7E-09	0.01	3.0E-08	0.08	2.4E-09	7.1E-09
Chrysene	O	290	ug/kg	5.1E-08	0.0073	3.7E-10	0.01	2.3E-08	0.008	1.9E-10	5.6E-10
Dibenz(a,h)anthracene	O	140	ug/kg	2.4E-08	7.3	1.8E-07	0.01	1.1E-08	8	9.0E-08	2.7E-07
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	4.9E-08	0.73	3.6E-08	0.01	2.3E-08	0.8	1.8E-08	5.4E-08
Arsenic	I	1.2	mg/kg	2.1E-07	1.5	3.1E-07	0.001	9.6E-09	1.5	1.4E-08	3.3E-07
Beryllium	I	0.17	mg/kg	3.0E-08	4.3	1.3E-07	0.001	1.4E-09	430	5.9E-07	7.2E-07
SUMMARY CANCER RISK						1E-06				9E-07	2E-06

[1] Relative potency factors were applied to the CSFs of carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment of Polycyclic Aromatic Hydrocarbons," USEPA, 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.

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
Benzo(a)anthracene	O	170	ug/kg	8.3E-08	ND		0.01	3.8E-08	ND		
Benzo(a)pyrene	O	270	ug/kg	1.3E-07	ND		0.01	6.1E-08	ND		
Benzo(b)fluoranthene	O	280	ug/kg	1.4E-07	ND		0.01	6.3E-08	ND		
Benzo(k)fluoranthene	O	370	ug/kg	1.8E-07	ND		0.01	8.3E-08	ND		
Chrysene	O	290	ug/kg	1.4E-07	ND		0.01	6.5E-08	ND		
Dibenz(a,h)anthracene	O	140	ug/kg	6.8E-08	ND		0.01	3.2E-08	ND		
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	1.4E-07	ND		0.01	6.3E-08	ND		
Arsenic	I	1.2	mg/kg	5.9E-07	0.0003	2.0E-03	0.001	2.7E-08	0.00029	9.3E-05	2.1E-03
Beryllium	I	0.17	mg/kg	8.3E-08	0.005	1.7E-05	0.001	3.8E-09	0.00005	7.7E-05	9.3E-05
SUMMARY HAZARD INDEX						2E-03				2E-04	2E-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 D-3-10

INHALATION OF PARTICULATES - SURFACE SOIL
OCCUPATIONAL WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMU's
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMU 17

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical-specific	chemical-specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	[1]
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	USEPA, 1991
EXPOSURE DURATION	ED	25	years	USEPA, 1991
CONVERSION FACTOR	CF	0.001	mg/ug	Organics only
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	25	years	USEPA, 1991

[1] PEF has been derived in Appendix D-5 to the RFI General Information Report
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance
"Standard Default Exposure Factors", OSWER Directive 9285.6-03

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 x CF x (1/PEF)

Note: For noncarcinogenic effects, AT = ED.

TABLE D-3-10

INHALATION OF PARTICULATES - SURFACE SOIL
OCCUPATIONAL WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMU 17

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
Benzo(a)anthracene	O	170	ug/kg	3.42E-09	2.4E-10	NE	
Benzo(a)pyrene	O	270	ug/kg	5.43E-09	3.8E-10	NE	
Benzo(b)fluoranthene	O	280	ug/kg	5.63E-09	3.9E-10	NE	
Benzo(k)fluoranthene	O	370	ug/kg	7.44E-09	5.2E-10	NE	
Chrysene	O	290	ug/kg	5.84E-09	4.1E-10	NE	
Dibenz(a,h)anthracene	O	140	ug/kg	2.82E-09	2.0E-10	NE	
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	5.63E-09	3.9E-10	NE	
Arsenic	I	1.2	mg/kg	2.41E-08	1.7E-09	50	**8.4E-08**
Beryllium	I	0.17	mg/kg	3.42E-09	2.4E-10	8.4	**2.0E-09**
						SUMMARY CANCER RISK	**9E-08**

NE = not evaluated.

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
Benzo(a)anthracene	O	170	ug/kg	3.42E-09	6.7E-10	ND	
Benzo(a)pyrene	O	270	ug/kg	5.43E-09	1.1E-09	ND	
Benzo(b)fluoranthene	O	280	ug/kg	5.63E-09	1.1E-09	ND	
Benzo(k)fluoranthene	O	370	ug/kg	7.44E-09	1.5E-09	ND	
Chrysene	O	290	ug/kg	5.84E-09	1.1E-09	ND	
Dibenz(a,h)anthracene	O	140	ug/kg	2.82E-09	5.5E-10	ND	
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	5.63E-09	1.1E-09	ND	
Arsenic	I	1.2	mg/kg	2.41E-08	4.7E-09	ND	
Beryllium	I	0.17	mg/kg	3.42E-09	6.7E-10	ND	
						SUMMARY HAZARD INDEX	**0E+00**

ND = no data available.

TABLE D-3-11

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
SITE MAINTENANCE WORKER
RCRA FACILITY INVESTIGATION, GROUP III, SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMU 17

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 [1]	Assumption
EXPOSURE DURATION	ED	25	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	25	years	USEPA, 1991

[1] 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

TABLE D-3-11

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
SITE MAINTENANCE WORKER
RCRA FACILITY INVESTIGATION, GROUP III, SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMU 17

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 [1,3] (mg/kg-day)^-1	CANCER RISK DERMAL	TOTAL CANCER RISK
Benzo(a)anthracene	O	170	ug/kg	8.4E-09	0.73	6.1E-09	0.01	4.1E-09	0.8	3.3E-09	9.4E-09
Benzo(a)pyrene	O	270	ug/kg	1.3E-08	7.3	9.8E-08	0.01	6.5E-09	8	5.2E-08	1.5E-07
Benzo(b)fluoranthene	O	280	ug/kg	1.4E-08	0.73	1.0E-08	0.01	6.8E-09	0.8	5.4E-09	1.6E-08
Benzo(k)fluoranthene	O	370	ug/kg	1.8E-08	0.073	1.3E-09	0.01	8.9E-09	0.08	7.1E-10	2.1E-09
Chrysene	O	290	ug/kg	1.4E-08	0.0073	1.0E-10	0.01	7.0E-09	0.008	5.6E-11	1.6E-10
Dibenz(a,h)anthracene	O	140	ug/kg	6.9E-09	7.3	5.1E-08	0.01	3.4E-09	8	2.7E-08	7.8E-08
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	1.4E-08	0.73	1.0E-08	0.01	6.8E-09	0.8	5.4E-09	1.6E-08
Arsenic	I	1.2	mg kg	5.9E-08	1.5	8.9E-08	0.001	2.9E-09	1.5	4.3E-09	9.3E-08
Beryllium	I	0.17	mg/kg	8.4E-09	4.3	3.6E-08	0.001	4.1E-10	430	1.8E-07	2.1E-07
SUMMARY CANCER RISK						3E-07				3E-07	6E-07

[1] Relative potency factors have been applied to the CSFs of carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment of Polycyclic Aromatic Hydrocarbons," USEPA, 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.

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
Benzo(a)anthracene	O	170	ug/kg	2.4E-08	ND		0.01	1.1E-08	ND		
Benzo(a)pyrene	O	270	ug/kg	3.7E-08	ND		0.01	1.8E-08	ND		
Benzo(b)fluoranthene	O	280	ug/kg	3.9E-08	ND		0.01	1.9E-08	ND		
Benzo(k)fluoranthene	O	370	ug/kg	5.1E-08	ND		0.01	2.5E-08	ND		
Chrysene	O	290	ug/kg	4.0E-08	ND		0.01	2.0E-08	ND		
Dibenz(a,h)anthracene	O	140	ug/kg	1.9E-08	ND		0.01	9.5E-09	ND		
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	3.9E-08	ND		0.01	1.9E-08	ND		
Arsenic	I	1.2	mg/kg	1.7E-07	0.0003	5.5E-04	0.001	8.1E-09	0.00029	2.8E-05	5.8E-04
Beryllium	I	0.17	mg/kg	2.4E-08	0.005	4.7E-06	0.001	1.1E-09	0.00005	2.3E-05	2.8E-05
SUMMARY HAZARD INDEX						6E-04				5E-05	6E-04

[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 D-3-12

INHALATION OF PARTICULATES - SURFACE SOIL
SITE MAINTENANCE WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMU's
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMU 17

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical-specific	chemical-specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	[1]
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

[1] PEF has been derived in Appendix D-5 to the General Information Report
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance
"Standard Default Exposure Factors", OSWER Directive 9285.6-03

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 x CF x (1/PEF)

Note: For noncarcinogenic effects, AT = ED

TABLE D-3-12

INHALATION OF PARTICULATES - SURFACE SOIL
SITE MAINTENANCE WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMU 17

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
Benzo(a)anthracene	O	170	ug/kg	3.42E-09	2.9E-11	NE	
Benzo(a)pyrene	O	270	ug/kg	5.43E-09	4.6E-11	NE	
Benzo(b)fluoranthene	O	280	ug/kg	5.63E-09	4.7E-11	NE	
Benzo(k)fluoranthene	O	370	ug/kg	7.44E-09	6.2E-11	NE	
Chrysene	O	290	ug/kg	5.84E-09	4.9E-11	NE	
Dibenz(a,h)anthracene	O	140	ug/kg	2.82E-09	2.4E-11	NE	
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	5.63E-09	4.7E-11	NE	
Arsenic	I	1.2	mg/kg	2.41E-08	2.0E-10	50	1.0E-08
Beryllium	I	0.17	mg/kg	3.42E-09	2.9E-11	8.4	2.4E-10
						SUMMARY CANCER RISK	1E-08

NE = not evaluated.

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
Benzo(a)anthracene	O	170	ug/kg	3.42E-09	8.0E-11	ND	
Benzo(a)pyrene	O	270	ug/kg	5.43E-09	1.3E-10	ND	
Benzo(b)fluoranthene	O	280	ug/kg	5.63E-09	1.3E-10	ND	
Benzo(k)fluoranthene	O	370	ug/kg	7.44E-09	1.7E-10	ND	
Chrysene	O	290	ug/kg	5.84E-09	1.4E-10	ND	
Dibenz(a,h)anthracene	O	140	ug/kg	2.82E-09	6.6E-11	ND	
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	5.63E-09	1.3E-10	ND	
Arsenic	I	1.2	mg/kg	2.41E-08	5.7E-10	ND	
Beryllium	I	0.17	mg/kg	3.42E-09	8.0E-11	ND	
						SUMMARY HAZARD INDEX	0E+00

ND = no data available.

TABLE D-3-13

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMU 17

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 [1]	Assumption
EXPOSURE DURATION	ED	1	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	1	years	USEPA, 1991

[1] 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

TABLE D-3-13

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMU's
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMU 17

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 [1,3] (mg/kg-day)^-1	CANCER RISK DERMAL	TOTAL CANCER RISK
Benzo(a)anthracene	O	170	ug/kg	1.4E-09	0.73	1.0E-09	0.01	1.6E-10	0.8	1.3E-10	1.1E-09
Benzo(a)pyrene	O	270	ug/kg	2.2E-09	7.3	1.6E-08	0.01	2.6E-10	8	2.1E-09	1.8E-08
Benzo(b)fluoranthene	O	280	ug/kg	2.3E-09	0.73	1.6E-09	0.01	2.7E-10	0.8	2.2E-10	1.9E-09
Benzo(k)fluoranthene	O	370	ug/kg	3.0E-09	0.073	2.2E-10	0.01	3.6E-10	0.08	2.9E-11	2.5E-10
Chrysene	O	290	ug/kg	2.3E-09	0.0073	1.7E-11	0.01	2.8E-10	0.008	2.2E-12	1.9E-11
Dibenz(a,h)anthracene	O	140	ug/kg	1.1E-09	7.3	8.2E-09	0.01	1.4E-10	8	1.1E-09	9.3E-09
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	2.3E-09	0.73	1.6E-09	0.01	2.7E-10	0.8	2.2E-10	1.9E-09
Arsenic	I	1.2	mg/kg	9.7E-09	1.5	1.4E-08	0.001	1.2E-10	1.5	1.7E-10	1.5E-08
Beryllium	I	0.17	mg/kg	1.4E-09	4.3	5.9E-09	0.001	1.6E-11	430	7.1E-09	1.3E-08
SUMMARY CANCER RISK						5E-08				1E-08	6E-08

[1] Relative potency factors were applied to the CSFs of carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment of Polycyclic Aromatic Hydrocarbons," USEPA, 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.

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
Benzo(a)anthracene	O	170	ug/kg	9.6E-08	ND		0.01	1.1E-08	ND		
Benzo(a)pyrene	O	270	ug/kg	1.5E-07	ND		0.01	1.8E-08	ND		
Benzo(b)fluoranthene	O	280	ug/kg	1.6E-07	ND		0.01	1.9E-08	ND		
Benzo(k)fluoranthene	O	370	ug/kg	2.1E-07	ND		0.01	2.5E-08	ND		
Chrysene	O	290	ug/kg	1.6E-07	ND		0.01	2.0E-08	ND		
Dibenz(a,h)anthracene	O	140	ug/kg	7.9E-08	ND		0.01	9.5E-09	ND		
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	1.6E-07	ND		0.01	1.9E-08	ND		
Arsenic	I	1.2	mg/kg	6.8E-07	0.0003	2.3E-03	0.001	8.1E-09	0.00029	2.8E-05	2.3E-03
Beryllium	I	0.17	mg/kg	9.6E-08	0.005	1.9E-05	0.001	1.1E-09	0.00005	2.3E-05	4.2E-05
SUMMARY HAZARD INDEX						2E-03				5E-05	2E-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 D-3-14

INHALATION OF PARTICULATES - SURFACE SOIL
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMU's
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMU 17

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical-specific	chemical-specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	[1]
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

[1] PEF has been derived in Appendix D-5 to the General Information Report
USEPA, 1991 Human Health Evaluation Manual, Supplemental Guidance
Standard Default Exposure Factors, OSWER Directive 9285.6-03

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 x CF x (1/PEF)

Note: For noncarcinogens, AT = ED.

TABLE D-3-14

INHALATION OF PARTICULATES - SURFACE SOIL
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMU 17

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
Benzo(a)anthracene	O	170	ug/kg	3.42E-09	1.1E-12	NE	
Benzo(a)pyrene	O	270	ug/kg	5.43E-09	1.8E-12	NE	
Benzo(b)fluoranthene	O	280	ug/kg	5.63E-09	1.9E-12	NE	
Benzo(k)fluoranthene	O	370	ug/kg	7.44E-09	2.5E-12	NE	
Chrysene	O	290	ug/kg	5.84E-09	2.0E-12	NE	
Dibenz(a,h)anthracene	O	140	ug/kg	2.82E-09	9.5E-13	NE	
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	5.63E-09	1.9E-12	NE	
Arsenic	I	1.2	mg/kg	2.41E-08	8.1E-12	50	**4.1E-10**
Beryllium	I	0.17	mg/kg	3.42E-09	1.1E-12	8.4	**9.6E-12**
						SUMMARY CANCER RISK	**4E-10**

NE = not evaluated.

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
Benzo(a)anthracene	O	170	ug/kg	3.42E-09	8.0E-11	ND	
Benzo(a)pyrene	O	270	ug/kg	5.43E-09	1.3E-10	ND	
Benzo(b)fluoranthene	O	280	ug/kg	5.63E-09	1.3E-10	ND	
Benzo(k)fluoranthene	O	370	ug/kg	7.44E-09	1.7E-10	ND	
Chrysene	O	290	ug/kg	5.84E-09	1.4E-10	ND	
Dibenz(a,h)anthracene	O	140	ug/kg	2.82E-09	6.6E-11	ND	
Indeno(1,2,3-cd)pyrene	O	280	ug/kg	5.63E-09	1.3E-10	ND	
Arsenic	I	1.2	mg/kg	2.41E-08	5.7E-10	ND	
Beryllium	I	0.17	mg/kg	3.42E-09	8.0E-11	ND	
						SUMMARY HAZARD INDEX	0E+00

ND = no data available.

TABLE D-3-15

INGESTION OF GROUNDWATER AS DRINKING WATER (UNFILTERED SAMPLES)
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMU 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.

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	8	ug/l	9.4E-05	0.014	1.3E-06
TOTAL CANCER RISK					1E-06

NONCARCINOGENIC EFFECTS

COMPOUND	WATER CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	REFERENCE DOSE (mg/kg-day)	HAZARD QUOTIENT INGESTION
bis(2-Ethylhexyl)phthalate	8	ug/l	2.2E-04	0.02	1.1E-02
Iron	2220	ug/l	6.1E-02	0.3	2.0E-01
Manganese	295	ug/l	8.1E-03	0.047	1.7E-01
TOTAL HAZARD INDEX					4E-01

ND = no data available.

APPENDIX D-4

HUMAN HEALTH RISK ASSESSMENT SPREADSHEETS, SWMUS 14 AND 18

TABLE D-4-1

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
ADOLESCENT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 AND 18

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	
	CF	1.00E-09	kg/mg	
BODY WEIGHT	BW	40	kg	USEPA, 1989
AGE-SPECIFIC BODY WEIGHT	BWi	age-specific	kg	USEPA, 1989
EXPOSURE FREQUENCY	EF	45	days/year [1]	Assumption
EXPOSURE DURATION	ED	11	years	Assumption
AGE-SPECIFIC EXPOSURE DURATION	EDi	age-specific	years	Assumption
AGE-WEIGHTED SURFACE AREA [2]	SA_{wt-d}	1136	cm²-year/kg	Per USEPA, 1992a
DOSE ABSORBED PER EVENT	DA_{event}	chemical-specific	mg/cm²-event	Per USEPA, 1992a
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	11	years	Assumption

[1] Units for exposure frequency are in events/year in the calculation of the dermally absorbed dose.
[2] 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 Dermal Guidance Summary Appendix to this document.
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)

INTAKE-INGESTION = $\frac{CS \times IR \times FI \times CF \times EF \times ED}{BW \times AT \times 365\ days/yr}$

INTAKE-DERMAL = $(DA_{event} \times EF / AT \times 365\ days/year) \times SA_{wt-d}$

Where:

SA_{wt-d} = SUM (SAi x EDi / BWi)
DA_{event} = CS x AF x ABSd x CF

Note: For noncarcinogenic effects: AT = ED.

TABLE D-4-1

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
ADOLESCENT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 AND 18

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 [1,3] (mg/kg-day)^-1	CANCER RISK DERMAL	TOTAL CANCER RISK
Benzo(a)anthracene	O	889	ug/kg	4.3E-08	0.73	3.1E-08	0.01	1.8E-08	0.8	1.4E-08	4.6E-08
Benzo(a)pyrene	O	916	ug/kg	4.4E-08	7.3	3.2E-07	0.01	1.8E-08	8	1.5E-07	4.7E-07
Benzo(b)fluoranthene	O	982	ug/kg	4.8E-08	0.73	3.5E-08	0.01	2.0E-08	0.8	1.6E-08	5.0E-08
Benzo(k)fluoranthene	O	1012	ug/kg	4.9E-08	0.073	3.6E-09	0.01	2.0E-08	0.08	1.6E-09	5.2E-09
Chrysene	O	1022	ug/kg	5.0E-08	0.0073	3.6E-10	0.01	2.0E-08	0.008	1.6E-10	5.2E-10
Dibenz(a,h)anthracene	O	270	ug/kg	1.3E-08	7.3	9.5E-08	0.01	5.4E-09	8	4.3E-08	1.4E-07
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	3.9E-08	0.73	2.8E-08	0.01	1.6E-08	0.8	1.3E-08	4.1E-08
Dieldrin	O	3.6	ug/kg	1.7E-10	16	2.8E-09	0.25	1.8E-09	20	3.6E-08	3.9E-08
Arsenic	I	0.89	mg/kg	4.3E-08	1.5	6.5E-08	0.001	1.8E-09	1.5	2.7E-09	6.7E-08
Beryllium	I	0.12	mg/kg	5.8E-09	4.3	2.5E-08	0.001	2.4E-10	430	1.0E-07	1.3E-07
					SUMMARY CANCER RISK	6E-07				4E-07	1E-06

[1] Relative potency factors were applied to the CSFs for carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment for Polycyclic Aromatic Hydrocarbons," USEPA, 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.

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
Benzo(a)anthracene	O	889	ug/kg	2.7E-07	ND		0.01	1.1E-07	ND		
Benzo(a)pyrene	O	916	ug/kg	2.8E-07	ND		0.01	1.2E-07	ND		
Benzo(b)fluoranthene	O	982	ug/kg	3.0E-07	ND		0.01	1.3E-07	ND		
Benzo(k)fluoranthene	O	1012	ug/kg	3.1E-07	ND		0.01	1.3E-07	ND		
Chrysene	O	1022	ug/kg	3.2E-07	ND		0.01	1.3E-07	ND		
Dibenz(a,h)anthracene	O	270	ug/kg	8.3E-08	ND		0.01	3.4E-08	ND		
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	2.5E-07	ND		0.01	1.0E-07	ND		
Dieldrin	O	3.6	ug/kg	1.1E-09	0.00005	2.2E-05	0.25	1.1E-08	0.00004	2.9E-04	3.1E-04
Arsenic	I	0.89	mg/kg	2.7E-07	0.0003	9.1E-04	0.001	1.1E-08	0.00029	3.9E-05	9.5E-04
Beryllium	I	0.12	mg/kg	3.7E-08	0.005	7.4E-06	0.001	1.5E-09	0.00005	3.1E-05	3.8E-05
Copper	I	20.9	mg/kg	6.4E-06	ND		0.001	2.7E-07	ND		
					SUMMARY HAZARD INDEX	9E-04				4E-04	1E-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 D-4-2

INHALATION OF PARTICULATES - SURFACE SOIL
ADOLESCENT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 AND 18

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical-specific	chemical-specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	[1]
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

[1] PEF has been derived in Appendix D-5 to the RFI General Information Report.
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.

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

TABLE D-4-2

INHALATION OF PARTICULATES - SURFACE SOIL
ADOLESCENT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 AND 18

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
Benzo(a)anthracene	O	889	ug/kg	1.79E-08	2.9E-11	NE	
Benzo(a)pyrene	O	916	ug/kg	1.84E-08	3.0E-11	NE	
Benzo(b)fluoranthene	O	982	ug/kg	1.98E-08	3.2E-11	NE	
Benzo(k)fluoranthene	O	1012	ug/kg	2.04E-08	3.3E-11	NE	
Chrysene	O	1022	ug/kg	2.06E-08	3.3E-11	NE	
Dibenz(a,h)anthracene	O	270	ug/kg	5.43E-09	8.8E-12	NE	
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	1.60E-08	2.6E-11	NE	
Dieldrin	O	3.6	ug/kg	7.24E-11	1.2E-13	16	1.9E-12
Arsenic	I	0.89	mg/kg	1.79E-08	2.9E-11	50	1.4E-09
Beryllium	I	0.12	mg/kg	2.41E-09	3.9E-12	8.4	3.3E-11
						SUMMARY CANCER RISK	1E-09

NE = not evaluated.

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
Benzo(a)anthracene	O	889	ug/kg	1.79E-08	1.8E-10	ND	
Benzo(a)pyrene	O	916	ug/kg	1.84E-08	1.9E-10	ND	
Benzo(b)fluoranthene	O	982	ug/kg	1.98E-08	2.0E-10	ND	
Benzo(k)fluoranthene	O	1012	ug/kg	2.04E-08	2.1E-10	ND	
Chrysene	O	1022	ug/kg	2.06E-08	2.1E-10	ND	
Dibenz(a,h)anthracene	O	270	ug/kg	5.43E-09	5.6E-11	ND	
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	1.60E-08	1.6E-10	ND	
Dieldrin	O	3.6	ug/kg	7.24E-11	7.4E-13	ND	
Arsenic	I	0.89	mg/kg	1.79E-08	1.8E-10	ND	
Beryllium	I	0.12	mg/kg	2.41E-09	2.5E-11	ND	
Copper	I	20.9	mg/kg	4.21E-07	4.3E-09	ND	
						SUMMARY HAZARD INDEX	0E+00

ND = no data available.

TABLE D-4-3

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
ADULT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 AND 18
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	inorganics
	CF	1.00E-09	kg/ug	organics
BODY WEIGHT	BW	70	kg	USEPA, 1991
EXPOSURE FREQUENCY	EF	45	days/year [1]	Assumption
EXPOSURE DURATION	ED	19	years	Assumption
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	19	years	Assumption

[1] 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.

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 ABSd x CF

Note: For noncarcinogenic effects: AT = ED

TABLE D-4-3

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
ADULT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 AND 18
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 [1,3] (mg/kg-day)^-1	CANCER RISK DERMAL	TOTAL CANCER RISK
Benzo(a)anthracene	O	889	ug/kg	4.2E-08	0.73	3.1E-08	0.01	2.4E-08	0.8	2.0E-08	5.1E-08
Benzo(a)pyrene	O	916	ug/kg	4.4E-08	7.3	3.2E-07	0.01	2.5E-08	8	2.0E-07	5.2E-07
Benzo(b)fluoranthene	O	982	ug/kg	4.7E-08	0.73	3.4E-08	0.01	2.7E-08	0.8	2.2E-08	5.6E-08
Benzo(k)fluoranthene	O	1012	ug/kg	4.8E-08	0.073	3.5E-09	0.01	2.8E-08	0.08	2.2E-09	5.8E-09
Chrysene	O	1022	ug/kg	4.9E-08	0.0073	3.6E-10	0.01	2.8E-08	0.008	2.2E-10	5.8E-10
Dibenz(a,h)anthracene	O	270	ug/kg	1.3E-08	7.3	9.4E-08	0.01	7.4E-09	8	5.9E-08	1.5E-07
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	3.8E-08	0.73	2.8E-08	0.01	2.2E-08	0.8	1.8E-08	4.5E-08
Dieldrin	O	3.6	ug/kg	1.7E-10	16	2.8E-09	0.25	2.5E-09	20	4.9E-08	5.2E-08
Arsenic	I	0.89	mg/kg	4.3E-08	1.5	6.4E-08	0.001	2.4E-09	1.5	3.7E-09	6.7E-08
Beryllium	I	0.12	mg/kg	5.7E-09	4.3	2.5E-08	0.001	3.3E-10	430	1.4E-07	1.7E-07
					SUMMARY CANCER RISK	6E-07				5E-07	1E-06

[1] Relative potency factors were applied to the CSFs for carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment for Polycyclic Aromatic Hydrocarbons," USEPA, 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.

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
Benzo(a)anthracene	O	889	ug/kg	1.6E-07	ND		0.01	9.0E-08	ND		
Benzo(a)pyrene	O	916	ug/kg	1.6E-07	ND		0.01	9.3E-08	ND		
Benzo(b)fluoranthene	O	982	ug/kg	1.7E-07	ND		0.01	9.9E-08	ND		
Benzo(k)fluoranthene	O	1012	ug/kg	1.8E-07	ND		0.01	1.0E-07	ND		
Chrysene	O	1022	ug/kg	1.8E-07	ND		0.01	1.0E-07	ND		
Dibenz(a,h)anthracene	O	270	ug/kg	4.8E-08	ND		0.01	2.7E-08	ND		
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	1.4E-07	ND		0.01	8.1E-08	ND		
Dieldrin	O	3.6	ug/kg	6.3E-10	0.00005	1.3E-05	0.25	9.1E-09	0.00004	2.3E-04	2.4E-04
Arsenic	I	0.89	mg/kg	1.6E-07	0.0003	5.2E-04	0.001	9.0E-09	0.00029	3.1E-05	5.5E-04
Beryllium	I	0.12	mg/kg	2.1E-08	0.005	4.2E-06	0.001	1.2E-09	0.00005	2.4E-05	2.9E-05
Copper	I	20.9	mg/kg	3.7E-06	ND		0.001	2.1E-07	ND		
					SUMMARY HAZARD INDEX	5E-04				3E-04	8E-04

[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 D-4-4

INHALATION OF PARTICULATES - SURFACE SOIL
ADULT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 AND 18

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical-specific	chemical-specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	[1]
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

[1] PEF has been derived in Appendix D-5 to the RFI General Information Report.
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.

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

TABLE D-4-4

INHALATION OF PARTICULATES - SURFACE SOIL
ADULT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 AND 18

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
Benzo(a)anthracene	O	889	ug/kg	1.79E-08	2.8E-11	NE	
Benzo(a)pyrene	O	916	ug/kg	1.84E-08	2.9E-11	NE	
Benzo(b)fluoranthene	O	982	ug/kg	1.98E-08	3.1E-11	NE	
Benzo(k)fluoranthene	O	1012	ug/kg	2.04E-08	3.2E-11	NE	
Chrysene	O	1022	ug/kg	2.06E-08	3.3E-11	NE	
Dibenz(a,h)anthracene	O	270	ug/kg	5.43E-09	8.7E-12	NE	
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	1.60E-08	2.6E-11	NE	
Dieldrin	O	3.6	ug/kg	7.24E-11	1.2E-13	16	1.8E-12
Arsenic	I	0.89	mg/kg	1.79E-08	2.9E-11	50	1.4E-09
Beryllium	I	0.12	mg/kg	2.41E-09	3.8E-12	8.4	3.2E-11
						SUMMARY CANCER RISK	1E-09

NE = not evaluated.

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
Benzo(a)anthracene	O	889	ug/kg	1.79E-08	1.0E-10	ND	
Benzo(a)pyrene	O	916	ug/kg	1.84E-08	1.1E-10	ND	
Benzo(b)fluoranthene	O	982	ug/kg	1.98E-08	1.2E-10	ND	
Benzo(k)fluoranthene	O	1012	ug/kg	2.04E-08	1.2E-10	ND	
Chrysene	O	1022	ug/kg	2.04E-08	1.2E-10	ND	
Dibenz(a,h)anthracene	O	270	ug/kg	2.06E-08	1.2E-10	ND	
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	1.60E-08	9.4E-11	ND	
Dieldrin	O	3.6	ug/kg	7.24E-11	4.3E-13	ND	
Arsenic	I	0.89	mg/kg	1.79E-08	1.1E-10	ND	
Beryllium	I	0.12	mg/kg	2.41E-09	1.4E-11	ND	
Copper	I	20.9	mg/kg	4.21E-07	2.5E-09	ND	
						SUMMARY HAZARD INDEX	0E+00

ND = no data available.

TABLE D-4-5

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 and 18

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 [1]	Assumption
EXPOSURE DURATION	ED	1	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	1	years	USEPA, 1991

[1] 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

TABLE D-4-5

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 and 18

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 [1,3] (mg/kg-day)^-1	CANCER RISK DERMAL	TOTAL CANCER RISK
Benzo(a)anthracene	O	889	ug/kg	7.2E-09	0.73	5.2E-09	0.01	8.6E-10	0.8	6.9E-10	5.9E-09
Benzo(a)pyrene	O	916	ug/kg	7.4E-09	7.3	5.4E-08	0.01	8.8E-10	8	7.1E-09	6.1E-08
Benzo(b)fluoranthene	O	982	ug/kg	7.9E-09	0.73	5.8E-09	0.01	9.5E-10	0.8	7.6E-10	6.5E-09
Benzo(k)fluoranthene	O	1012	ug/kg	8.1E-09	0.073	5.9E-10	0.01	9.8E-10	0.08	7.8E-11	6.7E-10
Chrysene	O	1022	ug/kg	8.2E-09	0.0073	6.0E-11	0.01	9.9E-10	0.008	7.9E-12	6.8E-11
Dibenz(a,h)anthracene	O	270	ug/kg	2.2E-09	7.3	1.6E-08	0.01	2.6E-10	8	2.1E-09	1.8E-08
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	6.4E-09	0.73	4.7E-09	0.01	7.7E-10	0.8	6.1E-10	5.3E-09
Dieldrin	O	3.6	ug/kg	2.9E-11	16	4.6E-10	0.25	8.7E-11	20	1.7E-09	2.2E-09
Arsenic	I	0.89	mg/kg	7.2E-09	1.5	1.1E-08	0.001	8.6E-11	1.5	1.3E-10	1.1E-08
Beryllium	I	0.12	mg/kg	9.7E-10	4.3	4.2E-09	0.001	1.2E-11	430	5.0E-09	9.1E-09
SUMMARY CANCER RISK						1E-07				2E-08	1E-07

[1] Relative potency factors were applied to the CSFs for carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment for Polycyclic Aromatic Hydrocarbons," USEPA, 1993.
[2] USEPA Region I[illegible] specifies absorption factors of 1% for organics and 0.1% for inorganics (February 10, 1992).
[3] Calculated from oral CSFs.

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
Benzo(a)anthracene	O	889	ug/kg	5.0E-07	ND		0.01	6.0E-08	ND		
Benzo(a)pyrene	O	916	ug/kg	5.2E-07	ND		0.01	6.2E-08	ND		
Benzo(b)fluoranthene	O	982	ug/kg	5.5E-07	ND		0.01	6.6E-08	ND		
Benzo(k)fluoranthene	O	1012	ug/kg	5.7E-07	ND		0.01	6.8E-08	ND		
Chrysene	O	1022	ug/kg	5.8E-07	ND		0.01	6.9E-08	ND		
Dibenz(a,h)anthracene	O	270	ug/kg	1.5E-07	ND		0.01	1.8E-08	ND		
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	4.5E-07	ND		0.01	5.4E-08	ND		
Dieldrin	O	3.6	ug/kg	2.0E-09	0.00005	4.1E-05	0.25	6.1E-09	0.00004	1.5E-04	1.9E-04
Arsenic	I	0.89	mg/kg	5.0E-07	0.0003	1.7E-03	0.001	6.0E-09	0.00029	2.1E-05	1.7E-03
Beryllium	I	0.12	mg/kg	6.8E-08	0.005	1.4E-05	0.001	8.1E-10	0.00005	1.6E-05	3.0E-05
Copper	I	20.9	mg/kg	1.2E-05	ND		0.001	1.4E-07	ND		
SUMMARY HAZARD INDEX						2E-03				2E-04	2E-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 D-4-6

INHALATION OF PARTICULATES - SURFACE SOIL
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMU's
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 AND 18

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical-specific	chemical-specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	[1]
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

[1] PEF has been derived in Appendix X to this document. Derivation of Particulate Emission Factor
USEPA, 1991 Human Health Evaluation Manual, Supplemental Guidance
Standard Default Exposure Factors, OSWER Directive 9285.6-03

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 x CF x (1/PEF)

Note: For noncarcinogens, AT = ED.

TABLE D-4-6

INHALATION OF PARTICULATES - SURFACE SOIL
EXCAVATION WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 AND 18

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
Benzo(a)anthracene	O	889	ug/kg	1.79E-08	6.0E-12	NE	
Benzo(a)pyrene	O	916	ug/kg	1.84E-08	6.2E-12	NE	
Benzo(b)fluoranthene	O	982	ug/kg	1.98E-08	6.6E-12	NE	
Benzo(k)fluoranthene	O	1012	ug/kg	2.04E-08	6.8E-12	NE	
Chrysene	O	1022	ug/kg	2.06E-08	6.9E-12	NE	
Dibenz(a,h)anthracene	O	270	ug/kg	5.43E-09	1.8E-12	NE	
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	1.60E-08	5.4E-12	NE	
Dieldrin	O	3.6	ug/kg	7.24E-11	2.4E-14	16	3.9E-13
Arsenic	I	0.89	mg/kg	1.79E-08	6.0E-12	50	3.0E-10
Beryllium	I	0.12	mg/kg	2.41E-09	8.1E-13	8.4	6.8E-12
						SUMMARY CANCER RISK	3E-10

NE = not evaluated.

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
Benzo(a)anthracene	O	889	ug/kg	1.79E-08	4.2E-10	ND	
Benzo(a)pyrene	O	916	ug/kg	1.84E-08	4.3E-10	ND	
Benzo(b)fluoranthene	O	982	ug/kg	1.98E-08	4.6E-10	ND	
Benzo(k)fluoranthene	O	1012	ug/kg	2.04E-08	4.8E-10	ND	
Chrysene	O	1022	ug/kg	2.06E-08	4.8E-10	ND	
Dibe[illegible]anthracene	O	270	ug/kg	5.43E-09	1.3E-10	ND	
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	1.60E-08	3.8E-10	ND	
Dieldrin	O	3.6	ug/kg	7.24E-11	1.7E-12	ND	
Arsenic	I	0.89	mg/kg	1.79E-08	4.2E-10	ND	
Beryllium	I	0.12	mg/kg	2.41E-09	5.7E-11	ND	
Copper	I	20.9	mg/kg	4.21E-07	9.9E-09	ND	
						SUMMARY HAZARD INDEX	0E+00

ND = no data available.

TABLE D-4-7

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SEDIMENT
ADOLESCENT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMU's
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 and 18

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
CONCENTRATION SEDIMENT	CS	chemical-specific	chemical-specific	
INGESTION RATE	IR	100	mg/day	USEPA, 1991
FRACTION INGESTED	FI	100%	unitless	Assumption
ADHERENCE FACTOR	AF	1	mg/cm^2-event	USEPA, 1992a
ABSORPTION FRACTION	ABS	chemical-specific	unitless	USEPA, 1992b
AGE-WEIGHTED SURFACE AREA [1]	SA_{age}	1,136	cm^2	USEPA, 1992a
DOSE ABSORBED PER EVENT	DA_{event}	chemical-specific	mg/cm^2-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	40	kg	USEPA, 1991
EXPOSURE FREQUENCY	EF	45	days/year [2]	Assumption
EXPOSURE DURATION	ED	11	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	11	years	USEPA, 1991

[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.
[2] 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 $(mg/kg\text{-}day)^{-1}$

HAZARD QUOTIENT = INTAKE (mg/kg-day) / REFERENCE DOSE (mg/kg-day)

$$\text{INTAKE-INGESTION} = \frac{CS \times IR \times FI \times CF \times EF \times ED}{BW \times AT \times 365\ days/yr}$$

$$\text{INTAKE-DERMAL} = (DA_{event} \times EF / (AT \times 365\ days/year) \times SA_{age})$$

Where:

SA_{age} = SUM(SAI x EDI/BWI)
DA_{event} = CS x AF x ABS x CF

Note: For noncarcinogenic effects, AT = ED.

TABLE D-4-7

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SEDIMENT
ADOLESCENT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 and 18

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC (I/O)	SEDIMENT 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 [1,3] (mg/kg-day)$^{-1}$	CANCER RISK DERMAL	TOTAL CANCER RISK
Benzo(a)anthracene	O	700	ug/kg	3.4E-08	0.73	2.5E-08	0.01	1.4E-08	0.8	1.1E-08	3.6E-08
Benzo(a)pyrene	O	860	ug/kg	4.2E-08	7.3	3.0E-07	0.01	1.7E-08	8	1.4E-07	4.4E-07
Benzo(b)fluoranthene	O	1200	ug/kg	5.8E-08	0.73	4.2E-08	0.01	2.4E-08	0.8	1.9E-08	6.2E-08
Benzo(k)fluoranthene	O	1500	ug/kg	7.3E-08	0.073	5.3E-09	0.01	3.0E-08	0.08	2.4E-09	7.7E-09
Chrysene	O	1500	ug/kg	7.3E-08	0.0073	5.3E-10	0.01	3.0E-08	0.008	2.4E-10	7.7E-10
Dibenz(a,h)anthracene	O	302.5	ug/kg	1.5E-08	7.3	1.1E-07	0.01	6.1E-09	8	4.8E-08	1.6E-07
Indeno(1,2,3-cd)pyrene	O	540	ug/kg	2.6E-08	0.73	1.9E-08	0.01	1.1E-08	0.8	8.6E-09	2.8E-08
SUMMARY CANCER RISK						5E-07				2E-07	7E-07

[1] Relative potency factors were applied to the CSFs for carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment for Polycyclic Aromatic Hydrocarbons," USEPA, 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.

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC (I/O)	SEDIMENT 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
Benzo(a)anthracene	O	700	ug/kg	2.2E-07	ND		0.01	8.9E-08	ND		
Benzo(a)pyrene	O	860	ug/kg	2.7E-07	ND		0.01	1.1E-07	ND		
Benzo(b)fluoranthene	O	1200	ug/kg	3.7E-07	ND		0.01	1.5E-07	ND		
Benzo(g,h,i)perylene	O	510	ug/kg	1.6E-07	ND		0.01	6.5E-08	ND		
Benzo(k)fluoranthene	O	1500	ug/kg	4.6E-07	ND		0.01	1.9E-07	ND		
Chrysene	O	1500	ug/kg	4.6E-07	ND		0.01	1.9E-07	ND		
Dibenz(a,h)anthracene	O	302.5	ug/kg	9.3E-08	ND		0.01	3.9E-08	ND		
Fluoranthene	O	1700	ug/kg	5.2E-07	0.04	1.3E-05	0.01	2.2E-07	0.036	6.0E-06	1.9E-05
Fluorene	O	320	ug/kg	9.9E-08	0.04	2.5E-06	0.01	4.1E-08	0.036	1.1E-06	3.6E-06
Indeno(1,2,3-cd)pyrene	O	540	ug/kg	1.7E-07	ND		0.01	6.9E-08	ND		
Phenanthrene	O	1800	ug/kg	5.5E-07	ND		0.01	2.3E-07	ND		
Pyrene	O	2500	ug/kg	7.7E-07	0.03	2.6E-05	0.01	3.2E-07	0.027	1.2E-05	3.7E-05
SUMMARY HAZARD INDEX						4E-05				2E-05	6E-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 RfDs.
ND = no data available.

TABLE D-4-8

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SEDIMENT
ADULT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMU's
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 and 18

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
CONCENTRATION SEDIMENT	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	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
BODY WEIGHT	BW	70	kg	USEPA, 1991
EXPOSURE FREQUENCY	EF	45	days/year [1]	Assumption
EXPOSURE DURATION	ED	19	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	19	years	USEPA, 1991

[1] 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 $(mg/kg\text{-}day)^{-1}$

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 x AF x ABS x CF

Note: For noncarcinogenic effects, AT = ED.

TABLE D-4-8

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SEDIMENT
ADULT TRESPASSER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 and 18

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SEDIMENT 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, 3] (mg/kg-day)$^{-1}$	CANCER RISK DERMAL	TOTAL CANCER RISK
Benzo(a)anthracene	O	700	ug/kg	3.3E-08	0.73	2.4E-08	0.01	1.9E-08	0.8	1.5E-08	4.0E-08
Benzo(a)pyrene	O	860	ug/kg	4.1E-08	7.3	3.0E-07	0.01	2.4E-08	8	1.9E-07	4.9E-07
Benzo(b)fluoranthene	O	1200	ug/kg	5.7E-08	0.73	4.2E-08	0.01	3.3E-08	0.8	2.6E-08	6.8E-08
Benzo(k)fluoranthene	O	1500	ug/kg	7.2E-08	0.073	5.2E-09	0.01	4.1E-08	0.08	3.3E-09	8.5E-09
Chrysene	O	1500	ug/kg	7.2E-08	0.0073	5.2E-10	0.01	4.1E-08	0.008	3.3E-10	8.5E-10
Dibenz(a,h)anthracene	O	302.5	ug/kg	1.4E-08	7.3	1.1E-07	0.01	8.3E-09	8	6.7E-08	1.7E-07
Indeno(1,2,3-cd)pyrene	O	540	ug/kg	2.6E-08	0.73	1.9E-08	0.01	1.5E-08	0.8	1.2E-08	3.1E-08
SUMMARY CANCER RISK						5E-07				3E-07	8E-07

[1] Relative potency factors were applied to the CSFs for carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment for Polycyclic Aromatic Hydrocarbons," USEPA, 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.

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SEDIMENT 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
Benzo(a)anthracene	O	700	ug/kg	1.2E-07	ND		0.01	7.1E-08	ND		
Benzo(a)pyrene	O	860	ug/kg	1.5E-07	ND		0.01	8.7E-08	ND		
Benzo(b)fluoranthene	O	1200	ug/kg	2.1E-07	ND		0.01	1.2E-07	ND		
Benzo(g,h,i,)perylene	O	510	ug/kg	9.0E-08	ND		0.01	5.2E-08	ND		
Benzo(k)fluoranthene	O	1500	ug/kg	2.6E-07	ND		0.01	1.5E-07	ND		
Chrysene	O	1500	ug/kg	2.6E-07	ND		0.01	1.5E-07	ND		
Dibenz(a,h)anthracene	O	302.5	ug/kg	5.3E-08	ND		0.01	3.1E-08	ND		
Fluoranthene	O	1700	ug/kg	3.0E-07	0.04	7.5E-06	0.01	1.7E-07	0.036	4.8E-06	1.2E-05
Fluorene	O	320	ug/kg	5.6E-08	0.04	1.4E-06	0.01	3.2E-08	0.036	9.0E-07	2.3E-06
Indeno(1,2,3-cd)pyrene	O	540	ug/kg	9.5E-08	ND		0.01	5.5E-08	ND		
Phenanthrene	O	1800	ug/kg	3.2E-07	ND		0.01	1.8E-07	ND		
Pyrene	O	2500	ug/kg	4.4E-07	0.03	1.5E-05	0.01	2.5E-07	0.027	9.4E-06	2.4E-05
SUMMARY HAZARD INDEX						2E-05				2E-05	4E-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 RfDs.
ND = no data available.

TABLE D-4-9

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
CHILD RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 and 18

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, 1991
AGE-SPECIFIC BODY WEIGHT	BW	age-specific	kg	USEPA, 1989
EXPOSURE FREQUENCY	EF	350	days/year [1]	Assumption
EXPOSURE DURATION	ED	6	years	Assumption
AGE-SPECIFIC EXPOSURE DURATION	ED	age-specific	years	Assumption
AGE-WEIGHTED SURFACE AREA [2]	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

[1] Units for exposure frequency are in events/year in the calculation of the dermally absorbed dose.
[2] In estimating the dermally absorbed dose for children age1 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.
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)

INTAKE-INGESTION = $\frac{CS \times IR \times FI \times CF \times EF \times ED}{BW \times AT \times 365\ days/yr}$

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

Note: **For noncarcinogenic effects, AT = ED.**

TABLE D-4-9

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
CHILD RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMU's
U.S NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 and 18

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 [1,3] (mg/kg-day)-1	CANCER RISK DERMAL	TOTAL CANCER RISK
Benzo(a)anthracene	O	889	ug/kg	9.7E-07	0.73	7.1E-07	0.01	9.3E-08	0.8	7.5E-08	7.9E-07
Benzo(a)pyrene	O	916	ug/kg	1.0E-06	7.3	7.3E-06	0.01	9.6E-08	8	7.7E-07	8.1E-06
Benzo(b)fluoranthene	O	982	ug/kg	1.1E-06	0.73	7.9E-07	0.01	1.0E-07	0.8	8.2E-08	8.7E-07
Benzo(k)fluoranthene	O	1012	ug/kg	1.1E-06	0.073	8.1E-08	0.01	1.1E-07	0.08	8.5E-09	8.9E-08
Chrysene	O	1022	ug/kg	1.1E-06	0.0073	8.2E-09	0.01	1.1E-07	0.008	8.6E-10	9.0E-09
Dibenz(a,h)anthracene	O	270	ug/kg	3.0E-07	7.3	2.2E-06	0.01	2.8E-08	8	2.3E-07	2.4E-06
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	8.7E-07	0.73	6.4E-07	0.01	8.4E-08	0.8	6.7E-08	7.0E-07
Dieldrin	O	3.6	ug/kg	3.9E-09	16	6.3E-08	0.25	9.4E-09	20	1.9E-07	2.5E-07
Arsenic	I	0.89	mg/kg	9.8E-07	1.5	1.5E-06	0.001	9.3E-09	1.5	1.4E-08	1.5E-06
Beryllium	I	0.12	mg/kg	1.3E-07	4.3	5.7E-07	0.001	1.3E-09	430	5.4E-07	1.1E-06
					SUMMARY CANCER RISK	1E-05				2E-06	2E-05

[1] Relative potency factors were applied to the CSFs for carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment for Polycyclic Aromatic Hydrocarbons," USEPA, 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.

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
Benzo(a)anthracene	O	889	ug/kg	1.1E-05	ND		0.01	1.1E-06	ND		
Benzo(a)pyrene	O	916	ug/kg	1.2E-05	ND		0.01	1.1E-06	ND		
Benzo(b)fluoranthene	O	982	ug/kg	1.3E-05	ND		0.01	1.2E-06	ND		
Benzo(k)fluoranthene	O	1012	ug/kg	1.3E-05	ND		0.01	1.2E-06	ND		
Chrysene	O	1022	ug/kg	1.3E-05	ND		0.01	1.3E-06	ND		
Dibenz(a,h)anthracene	O	270	ug/kg	3.5E-06	ND		0.01	3.3E-07	ND		
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	1.0E-05	ND		0.01	9.7E-07	ND		
Dieldrin	O	3.6	ug/kg	4.6E-08	0.00005	9.2E-04	0.25	1.1E-07	0.00004	2.8E-03	3.7E-03
Arsenic	I	0.89	mg/kg	1.1E-05	0.0003	3.8E-02	0.001	1.1E-07	0.00029	3.8E-04	3.8E-02
Beryllium	I	0.12	mg/kg	1.5E-06	0.005	3.1E-04	0.001	1.5E-08	0.00005	2.9E-04	6.0E-04
Copper	I	20.9	mg/kg	2.7E-04	ND		0.001	2.6E-06	ND		
					SUMMARY HAZARD INDEX	4E-02				3E-03	4E-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.

TABLE D-4-10

INHALATION OF PARTICULATES - SURFACE SOIL
CHILD RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 and 18

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical-specific	chemical-specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	[1]
CONCENTRATION IN 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	USEPA, 1991
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

[1] PEF has been derived in Appendix D-5 to the RFI General Information Report.
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.

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

TABLE D-4-10

INHALATION OF PARTICULATES - SURFACE SOIL
CHILD RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 and 18

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
Benzo(a)anthracene	O	889	ug/kg	1.79E-08	2.0E-09	NE	
Benzo(a)pyrene	O	916	ug/kg	1.84E-08	2.0E-09	NE	
Benzo(b)fluoranthene	O	982	ug/kg	1.98E-08	2.2E-09	NE	
Benzo(k)fluoranthene	O	1012	ug/kg	2.04E-08	2.2E-09	NE	
Chrysene	O	1022	ug/kg	2.06E-08	2.3E-09	NE	
Dibenz(a,h)anthracene	O	270	ug/kg	5.43E-09	6.0E-10	NE	
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	1.60E-08	1.8E-09	NE	
Dieldrin	O	3.6	ug/kg	7.24E-11	7.9E-12	16	1.3E-10
Arsenic	I	0.89	mg/kg	1.79E-08	2.0E-09	50	9.8E-08
Beryllium	I	0.12	mg/kg	2.41E-09	2.6E-10	8.4	2.2E-09
						SUMMARY CANCER RISK	1E-07

NE = not evaluated.

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
Benzo(a)anthracene	O	889	ug/kg	1.79E-08	2.3E-08	ND	
Benzo(a)pyrene	O	916	ug/kg	1.84E-08	2.4E-08	ND	
Benzo(b)fluoranthene	O	982	ug/kg	1.98E-08	2.5E-08	ND	
Benzo(k)fluoranthene	O	1012	ug/kg	2.04E-08	2.6E-08	ND	
Chrysene	O	1022	ug/kg	2.06E-08	2.6E-08	ND	
Dibenz(a,h)anthracene	O	270	ug/kg	5.43E-09	6.9E-09	ND	
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	1.60E-08	2.0E-08	ND	
Dieldrin	O	3.6	ug/kg	7.24E-11	9.3E-11	ND	
Arsenic	I	0.89	mg/kg	1.79E-08	2.3E-08	ND	
Beryllium	I	0.12	mg/kg	2.41E-09	3.1E-09	ND	
Copper	I	20.9	mg/kg	4.21E-07	5.4E-07	ND	
						SUMMARY HAZARD INDEX	0E+00

ND = no data available.

TABLE D-4-11

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION MAYPORT, FLORIDA
SWMUs 14 and 18

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-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 [1]	Assumption
EXPOSURE DURATION	ED	24	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	24	years	USEPA, 1991

[1] 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 ABSd x CF

Note: For noncarcinogenic effects, AT = ED.

TABLE D-4-11

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION MAYPORT, FLORIDA
SWMUs 14 and 18

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 [1,3] (mg/kg-day)^-1	CANCER RISK DERMAL	TOTAL CANCER RISK
Benzo(a)anthracene	O	889	ug/kg	4.2E-07	0.73	3.0E-07	0.01	2.4E-07	0.8	1.9E-07	5.0E-07
Benzo(a)pyrene	O	916	ug/kg	4.3E-07	7.3	3.1E-06	0.01	2.5E-07	8	2.0E-06	5.1E-06
Benzo(b)fluoranthene	O	982	ug/kg	4.6E-07	0.73	3.4E-07	0.01	2.7E-07	0.8	2.1E-07	5.5E-07
Benzo(k)fluoranthene	O	1012	ug/kg	4.8E-07	0.073	3.5E-08	0.01	2.7E-07	0.08	2.2E-08	5.7E-08
Chrysene	O	1022	ug/kg	4.8E-07	0.0073	3.5E-09	0.01	2.8E-07	0.008	2.2E-09	5.7E-09
Dibenz(a,h)anthracene	O	270	ug/kg	1.3E-07	7.3	9.3E-07	0.01	7.3E-08	8	5.8E-07	1.5E-06
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	3.7E-07	0.73	2.7E-07	0.01	2.1E-07	0.8	1.7E-07	4.4E-07
Dieldrin	O	3.6	ug/kg	1.7E-09	16	2.7E-08	0.25	2.4E-08	20	4.9E-07	5.1E-07
Arsenic	I	0.89	mg/kg	4.2E-07	1.5	6.3E-07	0.001	2.4E-08	1.5	3.6E-08	6.6E-07
Beryllium	I	0.12	mg/kg	5.6E-08	4.3	2.4E-07	0.001	3.2E-12	430	1.4E-09	2.4E-07
SUMMARY CANCER RISK						6E-06				4E-06	1E-05

[1] Relative potency factors was applied to the CSFs for carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment of Polycyclic Aromatic Hydrocarbons," USEPA, 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.

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
Benzo(a)anthracene	O	889	ug/kg	1.2E-06	ND		0.01	7.0E-07	ND		
Benzo(a)pyrene	O	916	ug/kg	1.3E-06	ND		0.01	7.2E-07	ND		
Benzo(b)fluoranthene	O	982	ug/kg	1.3E-06	ND		0.01	7.7E-07	ND		
Benzo(k)fluoranthene	O	1012	ug/kg	1.4E-06	ND		0.01	8.0E-07	ND		
Chrysene	O	1022	ug/kg	1.4E-06	ND		0.01	8.1E-07	ND		
Dibenz(a,h)anthracene	O	270	ug/kg	3.7E-07	ND		0.01	2.1E-07	ND		
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	1.1E-06	ND		0.01	6.3E-07	ND		
Dieldrin	O	3.6	ug/kg	4.9E-09	0.00005	9.9E-05	0.25	7.1E-08	0.00004	1.8E-03	1.9E-03
Arsenic	I	0.89	mg/kg	1.2E-06	0.0003	4.1E-03	0.001	7.0E-08	0.00029	2.4E-04	4.3E-03
Beryllium	I	0.12	mg/kg	1.6E-07	0.005	3.3E-05	0.001	9.5E-09	0.00005	1.9E-04	2.2E-04
Copper	I	20.9	mg/kg	2.9E-05	ND		0.001	1.6E-06	ND		
SUMMARY HAZARD INDEX						4E-03				2E-03	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.
ND = no data available.

TABLE D-4-12

INHALATION OF PARTICULATES - SURFACE SOIL
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 and 18

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical-specific	chemical-specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	[1]
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

[1] PEF has been derived in Appendix D-5 to the General Information Report.
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors"; OSWER Directive 9285.6-03.

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 x CF x (1/PEF)

Note:

For noncarcinogenic effects: AT = ED

TABLE D-4-12

INHALATION OF PARTICULATES - SURFACE SOIL
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 and 18

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
Benzo(a)anthracene	O	889	ug/kg	1.79E-08	1.7E-09	NE	
Benzo(a)pyrene	O	916	ug/kg	1.84E-08	1.7E-09	NE	
Benzo(b)fluoranthene	O	982	ug/kg	1.98E-08	1.9E-09	NE	
Benzo(k)fluoranthene	O	1012	ug/kg	2.04E-08	1.9E-09	NE	
Chrysene	O	1022	ug/kg	2.06E-08	1.9E-09	NE	
Dibenz(a,h)anthracene	O	270	ug/kg	5.43E-09	5.1E-10	NE	
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	1.60E-08	1.5E-09	NE	
Dieldrin	O	3.6	ug/kg	7.24E-11	6.8E-12	16	1.1E-10
Arsenic	I	0.89	mg/kg	1.79E-08	1.7E-09	50	8.4E-08
Beryllium	I	0.12	mg/kg	2.41E-09	2.3E-10	8.4	1.9E-09
SUMMARY CANCER RISK							9E-08

NE = not evaluated.

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
Benzo(a)anthracene	O	889	ug/kg	1.79E-08	4.9E-09	ND	
Benzo(a)pyrene	O	916	ug/kg	1.84E-08	5.0E-09	ND	
Benzo(b)fluoranthene	O	982	ug/kg	1.98E-08	5.4E-09	ND	
Benzo(k)fluoranthene	O	1012	ug/kg	2.04E-08	5.6E-09	ND	
Chrysene	O	1022	ug/kg	2.06E-08	5.6E-09	ND	
Dibenz(a,h)anthracene	O	270	ug/kg	5.43E-09	1.5E-09	ND	
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	1.60E-08	4.4E-09	ND	
Dieldrin	O	3.6	ug/kg	7.24E-11	2.0E-11	ND	
Arsenic	I	0.89	mg/kg	1.79E-08	4.9E-09	ND	
Beryllium	I	0.12	mg/kg	2.41E-09	6.6E-10	ND	
Copper	I	20.9	mg/kg	4.21E-07	1.2E-07	ND	
SUMMARY HAZARD INDEX							0E+00

ND = no data available.

TABLE D-4-13

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
OCCUPATIONAL WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 and 18

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 [1]	USEPA, 1991
EXPOSURE DURATION	ED	25	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	25	years	USEPA, 1991

[1] 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

TABLE D-4-13

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
OCCUPATIONAL WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 and 18

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 [1,3] (mg/kg-day)^-1	CANCER RISK DERMAL	TOTAL CANCER RISK
Benzo(a)anthracene	O	889	ug/kg	1.6E-07	0.73	1.1E-07	0.01	7.1E-08	0.8	5.7E-08	1.7E-07
Benzo(a)pyrene	O	916	ug/kg	1.6E-07	7.3	1.2E-06	0.01	7.4E-08	8	5.9E-07	1.8E-06
Benzo(b)fluoranthene	O	982	ug/kg	1.7E-07	0.73	1.3E-07	0.01	7.9E-08	0.8	6.3E-08	1.9E-07
Benzo(k)fluoranthene	O	1012	ug/kg	1.8E-07	0.073	1.3E-08	0.01	8.1E-08	0.08	6.5E-09	1.9E-08
Chrysene	O	1022	ug/kg	1.8E-07	0.0073	1.3E-09	0.01	8.2E-08	0.008	6.6E-10	2.0E-09
Dibenz(a,h)anthracene	O	270	ug/kg	4.7E-08	7.3	3.4E-07	0.01	2.2E-08	8	1.7E-07	5.2E-07
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	1.4E-07	0.73	1.0E-07	0.01	6.4E-08	0.8	5.1E-08	1.5E-07
Dieldrin	O	3.6	ug/kg	6.3E-10	16	1.0E-08	0.25	7.2E-09	20	1.4E-07	1.5E-07
Arsenic	I	0.89	mg/kg	1.6E-07	1.5	2.3E-07	0.001	7.2E-09	1.5	1.1E-08	2.4E-07
Beryllium	I	0.12	mg/kg	2.1E-08	4.3	9.0E-08	0.001	9.6E-10	430	4.1E-07	5.0E-07
SUMMARY CANCER RISK						2E-06				2E-06	4E-06

[1] Relative potency factors were applied to the CSFs for carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment for Polycyclic Aromatic Hydrocarbons," USEPA, 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.

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
Benzo(a)anthracene	O	889	ug/kg	4.3E-07	ND		0.01	2.0E-07	ND		
Benzo(a)pyrene	O	916	ug/kg	4.5E-07	ND		0.01	2.1E-07	ND		
Benzo(b)fluoranthene	O	982	ug/kg	4.8E-07	ND		0.01	2.2E-07	ND		
Benzo(k)fluoranthene	O	1012	ug/kg	5.0E-07	ND		0.01	2.3E-07	ND		
Chrysene	O	1022	ug/kg	5.0E-07	ND		0.01	2.3E-07	ND		
Dibenz(a,h)anthracene	O	270	ug/kg	1.3E-07	ND		0.01	6.1E-08	ND		
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	3.9E-07	ND		0.01	1.8E-07	ND		
Dieldrin	O	3.6	ug/kg	1.8E-09	0.00005	3.5E-05	0.25	2.0E-08	0.00004	5.1E-04	5.4E-04
Arsenic	I	0.89	mg/kg	4.4E-07	0.0003	1.5E-03	0.001	2.0E-08	0.00029	6.9E-05	1.5E-03
Beryllium	I	0.12	mg/kg	5.9E-08	0.005	1.2E-05	0.001	2.7E-09	0.00005	5.4E-05	6.6E-05
Copper	I	20.9	mg/kg	1.0E-05	ND		0.001	4.7E-07	ND		
SUMMARY HAZARD INDEX						1E-03				6E-04	2E-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.
[3] ND = no data available.

TABLE D-4-14

INHALATION OF PARTICULATES - SURFACE SOIL
OCCUPATIONAL WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 and 18

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical-specific	chemical-specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	[1]
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

[1] PEF has been derived in Appendix D-5 to the RFI General Information Report
USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance
"Standard Default Exposure Factors"; OSWER Directive 9285.6-03

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 x CF x (1/PEF)

Note: For noncarcinogenic effects, AT = ED.

TABLE D-4-14

INHALATION OF PARTICULATES - SURFACE SOIL
OCCUPATIONAL WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 and 18

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
Benzo(a)anthracene	O	889	ug/kg	1.79E-08	1.3E-09	NE	
Benzo(a)pyrene	O	916	ug/kg	1.84E-08	1.3E-09	NE	
Benzo(b)fluoranthene	O	982	ug/kg	1.98E-08	1.4E-09	NE	
Benzo(k)fluoranthene	O	1012	ug/kg	2.04E-08	1.4E-09	NE	
Chrysene	O	1022	ug/kg	2.06E-08	1.4E-09	NE	
Dibenz(a,h)anthracene	O	270	ug/kg	5.43E-09	3.8E-10	NE	
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	1.60E-08	1.1E-09	NE	
Dieldrin	O	3.6	ug/kg	7.24E-11	5.1E-12	16	8.1E-11
Arsenic	I	0.89	mg/kg	1.79E-08	1.3E-09	50	6.3E-08
Beryllium	I	0.12	mg/kg	2.41E-09	1.7E-10	8.4	1.4E-09
SUMMARY CANCER RISK							6E-08

NE = not evaluated.

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
Benzo(a)anthracene	O	889	ug/kg	1.79E-08	3.5E-09	ND	
Benzo(a)pyrene	O	916	ug/kg	1.84E-08	3.6E-09	ND	
Benzo(b)fluoranthene	O	982	ug/kg	1.98E-08	3.9E-09	ND	
Benzo(k)fluoranthene	O	1012	ug/kg	2.04E-08	4.0E-09	ND	
Chrysene	O	1022	ug/kg	2.06E-08	4.0E-09	ND	
Dibenz(a,h)anthracene	O	270	ug/kg	5.43E-09	1.1E-09	ND	
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	1.60E-08	3.1E-09	ND	
Dieldrin	O	3.6	ug/kg	7.24E-11	1.4E-11	ND	
Arsenic	I	0.89	mg/kg	1.79E-08	3.5E-09	ND	
Beryllium	I	0.12	mg/kg	2.41E-09	4.7E-10	ND	
Copper	I	20.9	mg/kg	4.21E-07	8.2E-08	ND	
SUMMARY HAZARD INDEX							0E+00

ND = no data available.

TABLE D-4-15

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
SITE MAINTENANCE WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 and 18

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 [1]	Assumption
EXPOSURE DURATION	ED	25	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	25	years	USEPA, 1991

[1] 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

TABLE D-4-15

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SURFACE SOIL
SITE MAINTENANCE WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 and 18

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 [1,3] (mg/kg-day)^-1	CANCER RISK DERMAL	TOTAL CANCER RISK
Benzo(a)anthracene	O	889	ug/kg	4.4E-08	0.73	3.2E-08	0.01	2.1E-08	0.8	1.7E-08	4.9E-08
Benzo(a)pyrene	O	916	ug/kg	4.5E-08	7.3	3.3E-07	0.01	2.2E-08	8	1.8E-07	5.1E-07
Benzo(b)fluoranthene	O	982	ug/kg	4.9E-08	0.73	3.5E-08	0.01	2.4E-08	0.8	1.9E-08	5.4E-08
Benzo(k)fluoranthene	O	1012	ug/kg	5.0E-08	0.073	3.7E-09	0.01	2.4E-08	0.08	2.0E-09	5.6E-09
Chrysene	O	1022	ug/kg	5.1E-08	0.0073	3.7E-10	0.01	2.5E-08	0.008	2.0E-10	5.7E-10
Dibenz(a,h)anthracene	O	270	ug/kg	1.3E-08	7.3	9.8E-08	0.01	6.5E-09	8	5.2E-08	1.5E-07
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	3.9E-08	0.73	2.9E-08	0.01	1.9E-08	0.8	1.5E-08	4.4E-08
Dieldrin	O	3.6	ug/kg	1.8E-10	16	2.9E-09	0.25	2.2E-09	20	4.3E-08	4.6E-08
Arsenic	I	0.89	mg/kg	4.4E-08	1.5	6.6E-08	0.001	2.1E-09	1.5	3.2E-09	6.9E-08
Beryllium	I	0.12	mg/kg	5.9E-09	4.3	2.6E-08	0.001	2.9E-10	430	1.2E-07	1.5E-07
SUMMARY CANCER RISK						6E-07				5E-07	1E-06

[1] Relative potency factors were applied to the CSFs for carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment for Polycyclic Aromatic Hydrocarbons," USEPA, 1993.
[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.

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
Benzo(a)anthracene	O	889	ug/kg	1.2E-07	ND		0.01	6.0E-08	ND		
Benzo(a)pyrene	O	916	ug/kg	1.3E-07	ND		0.01	6.2E-08	ND		
Benzo(b)fluoranthene	O	982	ug/kg	1.4E-07	ND		0.01	6.6E-08	ND		
Benzo(k)fluoranthene	O	1012	ug/kg	1.4E-07	ND		0.01	6.8E-08	ND		
Chrysene	O	1022	ug/kg	1.4E-07	ND		0.01	6.9E-08	ND		
Dibenz(a,h)anthracene	O	270	ug/kg	3.7E-08	ND		0.01	1.8E-08	ND		
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	1.1E-07	ND		0.01	5.4E-08	ND		
Dieldrin	O	3.6	ug/kg	5.0E-10	0.00005	1.0E-05	0.25	6.1E-09	0.00004	1.5E-04	1.6E-04
Arsenic	I	0.89	mg/kg	1.2E-07	0.0003	4.1E-04	0.001	6.0E-09	0.00029	2.1E-05	4.3E-04
Beryllium	I	0.12	mg/kg	1.7E-08	0.005	3.3E-06	0.001	8.1E-10	0.00005	1.6E-05	2.0E-05
Copper	I	20.9	mg/kg	2.9E-06	ND		0.001	1.4E-07	ND		
SUMMARY HAZARD INDEX						4E-04				2E-04	6E-04

[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 D-4-16

INHALATION OF PARTICULATES - SURFACE SOIL
SITE MAINTENANCE WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 and 18

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
SOIL CONCENTRATION	C	chemical-specific	chemical-specific	
PART. EMISSION FACTOR	PEF	4.97E+07	m^3/kg	[1]
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

[1] PEF has been derived in Appendix X to this document, Derivation of Particulate Emission Factor
USEPA, 1991 Human Health Evaluation Manual, Supplemental Guidance
"Standard Default Exposure Factors", OSWER Directive 9285.6-03

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

TABLE D-4-16

INHALATION OF PARTICULATES - SURFACE SOIL
SITE MAINTENANCE WORKER
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 and 18

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
Benzo(a)anthracene	O	889	ug/kg	1.79E-08	1.5E-10	NE	
Benzo(a)pyrene	O	916	ug/kg	1.84E-08	1.5E-10	NE	
Benzo(b)fluoranthene	O	982	ug/kg	1.98E-08	1.7E-10	NE	
Benzo(k)fluoranthene	O	1012	ug/kg	2.04E-08	1.7E-10	NE	
Chrysene	O	1022	ug/kg	2.06E-08	1.7E-10	NE	
Dibenz(a,h)anthracene	O	270	ug/kg	5.43E-09	4.6E-11	NE	
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	1.60E-08	1.3E-10	NE	
Dieldrin	O	3.6	ug/kg	7.24E-11	6.1E-13	16	9.7E-12
Arsenic	I	0.89	mg/kg	1.79E-08	1.5E-10	50	7.5E-09
Beryllium	I	0.12	mg/kg	2.41E-09	2.0E-11	8.4	1.7E-10
SUMMARY CANCER RISK							8E-09

NE = not evaluated.

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
Benzo(a)anthracene	O	889	ug/kg	1.79E-08	4.2E-10	ND	
Benzo(a)pyrene	O	916	ug/kg	1.84E-08	4.3E-10	ND	
Benzo(b)fluoranthene	O	982	ug/kg	1.98E-08	4.6E-10	ND	
Benzo(k)fluoranthene	O	1012	ug/kg	2.04E-08	4.8E-10	ND	
Chrysene	O	1022	ug/kg	2.06E-08	4.8E-10	ND	
Dibenz(a,h)anthracene	O	270	ug/kg	5.43E-09	1.3E-10	ND	
Indeno(1,2,3-cd)pyrene	O	796	ug/kg	1.60E-08	3.8E-10	ND	
Dieldrin	O	3.6	ug/kg	7.24E-11	1.7E-12	ND	
Arsenic	I	0.89	mg/kg	1.79E-08	4.2E-10	ND	
Beryllium	I	0.12	mg/kg	2.41E-09	5.7E-11	ND	
Copper	I	20.9	mg/kg	4.21E-07	9.9E-09	ND	
SUMMARY HAZARD INDEX							0E+00

ND = no data available.

TABLE D-4-17

INGESTION OF GROUNDWATER AS DRINKING WATER (UNFILTERED SAMPLES)
ADULT RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 and 18

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)

$$\text{INTAKE} = \frac{CW \times IR \times EF \times ED \times CF}{BW \times AT \times 365\ \text{days/year}}$$

Note: For noncarcinogenic effects, AT = ED.

CARCINOGENIC EFFECTS

COMPOUND	WATER CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	CANCER SLOPE FACTOR (mg/kg-day)^-1	CANCER RISK INGESTION
Arsenic	4	ug/l	4.7E-05	1.5	7.0E-05
TOTAL CANCER RISK					7E-05

NONCARCINOGENIC EFFECTS

COMPOUND	WATER CONCENTRATION	UNITS	INTAKE INGESTION (mg/kg-day)	REFERENCE DOSE (mg/kg-day)	HAZARD QUOTIENT INGESTION
2-Methylnaphthalene	6.8	ug/l	1.9E-04	ND	
Fluorene	4	ug/l	1.1E-04	0.04	2.7E-03
Naphthalene	4	ug/l	1.1E-04	0.04	2.7E-03
Phenanthrene	3	ug/l	8.2E-05	ND	
Antimony	3	ug/l	8.2E-05	0.0004	2.1E-01
Arsenic	4	ug/l	1.1E-04	0.0003	3.7E-01
Iron	1910	ug/l	5.2E-02	0.3	1.7E-01
Manganese	112	ug/l	3.1E-03	0.047	6.5E-02
TOTAL HAZARD INDEX					8E-01

ND = no data available.

TABLE D-4-18

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SEDIMENT
CHILD RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 and 18

EXPOSURE PARAMETERS

PARAMETER	SYMBOL	VALUE	UNITS	SOURCE
CONCENTRATION SEDIMENT	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
ABSORPTION FRACTION	ABS	chemical-specific	unitless	USEPA, 1992b
AGE-WEIGHTED SURFACE AREA	SA_{adj}	766	cm²	[1]
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
BODY WEIGHT	BW	15	kg	USEPA, 1991
EXPOSURE FREQUENCY	EF	100	days/year [2]	Assumption
EXPOSURE DURATION	ED	6	years	USEPA, 1991
AVERAGING TIME				
CANCER	AT	70	years	USEPA, 1991
NONCANCER	AT	6	years	USEPA, 1991

[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 (see Appendix D-7 to the RFI General Information Report).
[2] 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 $(mg/kg\text{-}day)^{-1}$

HAZARD QUOTIENT = INTAKE (mg/kg-day) / REFERENCE DOSE (mg/kg-day)

$$\text{INTAKE-INGESTION} = \frac{CS \times IR \times FI \times CF \times EF \times ED}{BW \times AT \times 365\ days/yr}$$

INTAKE-DERMAL = (DAevent x EF/ AT x 365 days/year) x SAsoil/ad]

Where:

SA_{adj} = SUM(SAi x EDi/BWi)
DA_{event} = CS x AF x ABS x CF

Note: For noncarcinogenic effects, AT = ED.

TABLE D-4-18

DIRECT CONTACT WITH AND INCIDENTAL INGESTION OF SEDIMENT
CHILD RESIDENT
RCRA FACILITY INVESTIGATION, GROUP III SWMUs
U.S. NAVAL STATION, MAYPORT, FLORIDA
SWMUs 14 and 18

CARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SEDIMENT 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 [1,3] (mg/kg-day)$^{-1}$	CANCER RISK DERMAL	TOTAL CANCER RISK
Benzo(a)anthracene	O	700	ug/kg	2.2E-07	0.73	1.6E-07	0.01	2.1E-08	0.8	1.7E-08	1.8E-07
Benzo(a)pyrene	O	860	ug/kg	2.7E-07	7.3	2.0E-06	0.01	2.6E-08	8	2.1E-07	2.2E-06
Benzo(b)fluoranthene	O	1200	ug/kg	3.8E-07	0.73	2.7E-07	0.01	3.6E-08	0.8	2.9E-08	3.0E-07
Benzo(k)fluoranthene	O	1500	ug/kg	4.7E-07	0.073	3.4E-08	0.01	4.5E-08	0.08	3.6E-09	3.8E-08
Chrysene	O	1500	ug/kg	4.7E-07	0.0073	3.4E-09	0.01	4.5E-08	0.008	3.6E-10	3.8E-09
Dibenz(a,h)anthracene	O	302.5	ug/kg	9.5E-08	7.3	6.9E-07	0.01	9.1E-09	8	7.3E-08	7.6E-07
Indeno(1,2,3-cd)pyrene	O	540	ug/kg	1.7E-07	0.73	1.2E-07	0.01	1.6E-08	0.8	1.3E-08	1.4E-07
SUMMARY CANCER RISK						3E-06				3E-07	4E-06

[1] Relative potency factors were applied to the CSFs for carcinogenic PAHs. Relative potency factors are derived in "Provisional Guidance for Quantitative Risk Assessment for Polycyclic Aromatic Hydrocarbons," USEPA, 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.

NONCARCINOGENIC EFFECTS

COMPOUND	INORGANIC OR ORGANIC I/O	SEDIMENT 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
Benzo(a)anthracene	O	700	ug/kg	2.6E-06	ND		0.01	2.4E-07	ND		
Benzo(a)pyrene	O	860	ug/kg	3.1E-06	ND		0.01	3.0E-07	ND		
Benzo(b)fluoranthene	O	1200	ug/kg	4.4E-06	ND		0.01	4.2E-07	ND		
Benzo(g,h,i,)perylene	O	510	ug/kg	1.9E-06	ND		0.01	1.8E-07	ND		
Benzo(k)fluoranthene	O	1500	ug/kg	5.5E-06	ND		0.01	5.2E-07	ND		
Chrysene	O	1500	ug/kg	5.5E-06	ND		0.01	5.2E-07	ND		
Dibenz(a,h)anthracene	O	302.5	ug/kg	1.1E-06	ND		0.01	1.1E-07	ND		
Fluoranthene	O	1700	ug/kg	6.2E-06	0.04	1.6E-04	0.01	5.9E-07	0.036	1.7E-05	1.7E-04
Fluorene	O	320	ug/kg	1.2E-06	0.04	2.9E-05	0.01	1.1E-07	0.036	3.1E-06	3.2E-05
Indeno(1,2,3-cd)pyrene	O	540	ug/kg	2.0E-06	ND		0.01	1.9E-07	ND		
Phenanthrene	O	1800	ug/kg	6.6E-06	ND		0.01	6.3E-07	ND		
Pyrene	O	2500	ug/kg	9.1E-06	0.03	3.0E-04	0.01	8.7E-07	0.027	3.2E-05	3.4E-04
SUMMARY HAZARD INDEX						5E-04				5E-05	5E-04

[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.

APPENDIX D-5

SUPPLEMENTARY TOXICITY PROFILES

Copper. Copper is widely distributed in nature and is an essential element. Copper deficiency is characterized by anemia. Copper is used for medicinal purposes as an emetic and an astringent. Acute exposure to copper ingestion causes vomiting, hematesis, hypotension, coma, and jaundice. Chronic exposure of children to elevated concentrations of copper causes liver cirrhosis. Copper is not believed to be a human carcinogen.

References:
Amdur, Mary O., John Doull, Curtis D. Klaassen, 1991. Toxicology: The Basic Science of Poisons, 4th edition; Pergamon Press, Inc. New York.

1,1-Dichloroethene. 1,1-Dichloroethene is a man-made chlorinated solvent that is used to make polyvinylidene chloride copolymers, which are used as flexible films for packaging all types of materials, including food.

Data on 1,1-dichloroethene exposure in humans are limited. However, available evidence suggests that 1,1-dichloroethene causes central nervous system depression and liver toxicity in humans. Toxicity data on laboratory animals confirm this evidence, and also indicate that 1,1-dichloroethene may produce adverse effects on the kidney, heart, and lung. Pharmacokinetic data from laboratory animals suggest that 1,1-dichloroethene is metabolized to toxic metabolites, and that these metabolites are responsible for the adverse effects. Therefore, organs with high biotransformation enzyme activity, such as the liver, kidney, and lungs, are likely to be adversely impacted. Limited evidence in animals suggests that 1,1-dichloroethene may be carcinogenic. Therefore, the USEPA has placed 1,1-dichloroethene in weight-of-evidence group C, possible human carcinogen.

References:
MADEP, 1992. "Risk Assessment Shortform Residential Exposure Scenario, Version 1.6"; Policy #WSC/ORS-142-92; Office of Research and Standards and the Bureau of Waste Site Cleanup, Boston, MA; September 1992.

Agency for Toxic Substances and Disease Registry (ATSDR), 1992. "Toxicological Profile for 1,1-Dichloroethene"; Agency for Toxic Substances and Disease Registry, U.S. Public Health Service, October 1992.

Dieldrin. Dieldrin is a man-made chlorinated insecticide that was widely used in agriculture and for termite-proofing of wooden building material and residential dwellings, until it was banned for use in the U.S. in 1974. However, it is highly persistent in the environment and bioaccumulates in terrestrial and aquatic food chains. This, combined with extensive past use, has made dieldrin ubiquitous in the environment. Humans may be exposed to dieldrin from consumption of animal and agricultural products exposed to contaminated soil and from exposure associated with the use of dieldrin as a termite-proofing agent.

Exposure to high levels of dieldrin has been associated with central nervous system excitation that resulted in convulsions, and renal toxicity. Long-term low-level exposure to

dieldrin has also been associated with occasional cases of nervous system intoxication. In addition, hepatic degeneration, immunosuppression, and possible reproductive/developmental toxicity have been observed in laboratory animals exposed to dieldrin. Chronic oral exposure to dieldrin has produced liver cancer in laboratory mice and rats. Epidemiological investigations have been of insufficient quality to assess dieldrin carcinogenicity in humans. Based on animal data, the USEPA has placed dieldrin into group B2, probable human carcinogen.

References

Agency for Toxic Substances and Disease Registry (ATSDR), 1991. "Toxicological Profile for Aldrin/Dieldrin"; Agency for Toxic Substances and Disease Registry, U.S. Public Health Service, October 1991.

Mercury. Mercury has been used in the past for medicinal purposes; however, occupational exposure to mercury can occur during mining, smelting, chloralkali production, and in the manufacturing of mercury-containing products. There are three forms in which mercury can exist: elemental, inorganic, and organic. Its chemical form determines its toxicity. Metallic mercury causes behavioral effects and other nervous system damage. Inorganic mercury salts will produce kidney damage. Organic mercury compounds target the CNS. Most organic mercury compounds that contaminate the environment produce a toxic neuroencephalopathy (paresthesias, ataxia, spasticity, tremor, mental status changes, learning defects, and neurasthenic symptoms). Some organic mercury compounds readily break down in the body to inorganic compounds and thus produce toxicity similar to that produced by organic mercury compounds. Some studies have indicated that mercury is genotoxic. It has not been classified as to carcinogenicity by the USEPA.

References:

Amdur, Mary O., John Doull, Curtis D. Klaassen, 1991. Toxicology: The Basic Science of Poisons, 4th edition; Pergamon Press, Inc. New York.

Zinc. The most common use of zinc is as a protective coating for other metals. Zinc is emitted into the air during mining, refining, manufacturing, and combustion of zinc-containing materials. Zinc is an essential trace element and is found in many foods. Zinc compounds are of relatively low toxicity via ingestion; however, ingestion may result in gastrointestinal distress and diarrhea. Metal fume fever results from occupational inhalation of fumes of zinc oxide whose symptoms include chills, fever, and profuse sweating. There is no evidence that zinc is a carcinogen.

References:

Amdur, Mary O., John Doull, Curtis D. Klaassen, 1991. Toxicology: The Basic Science of Poisons, 4th edition; Pergamon Press, Inc. New York.

APPENDIX D-6

FLORIDA SOIL CLEANUP GOALS (SEPTEMBER 29, 1995)

Florida Department of
Environmental Protection

Memorandum

TO: District Directors
Waste Program Administrators

FROM: John M. Ruddell, Director JMR
Division of Waste Management

DATE: September 29, 1995

SUBJECT: **Soil Cleanup Goals for Florida**

Attached, please find the soil cleanup goals that should be used when making cleanup decisions. These cleanup goals were developed by Dr. Stephen M. Roberts (UF toxicologist under contract to FDEP). The health-based cleanup goals (residential and industrial) are based on human toxicity using generalized exposure assumptions and are applicable to the upper two feet of soil. If the industrial scenario is warranted, the site should have a deed restriction for the more restrictive land use. If there is ground water contamination above Florida standards and minimum criteria or if there was a recent discharge, the leachability-based cleanup goals should also be considered using the applicable direct contact scenario (residential and industrial). The lowest of the two should be the final cleanup goal for the upper two feet of soil. For soil below two feet, the leachability-based goal should be applied if the parameters of concern are detected above the Florida criteria. In addition, until further notice and where appropriate, the metals should pass TCLP as an indication not only that the soil is not a hazardous waste, but also that the soil will not act as a source of groundwater contamination.

If any of the levels is below site-specific background or the QA acceptable Method Detection Limit (MDL), any of the latter two will suffice.

Site-specific soil characteristics such as porosity, carbon content, moisture content, and dry bulk density are needed to refine acceptable soil concentrations based on site-specific parameters.

If you have any questions, please call Ligia Mora-Applegate at SC 278-3935.

JMR/lm-a

Attachment

cc: Doug Jones
Bill Hinkley
Jim Crane
Satish Kastury

BUREAU OF WASTE CLEANUP

SEP 2 1995

TECHNICAL REVIEW SECTION

Soil Cleanup Goals

Based on Direct Exposure and Migration to Groundwater

September 27, 1995

The appended Table 1 contains acceptable soil concentrations for over 200 chemicals commonly found as contaminants at sites in Florida. Soil cleanup goal concentrations based on direct exposure have been calculated using exposure assumptions consistent with both residential and commercial/industrial land use, and are presented in Table 1. For situations in which there is evidence that soil may be serving as a source of contamination for groundwater, soil cleanup goal concentrations for organic chemicals based on leaching from soil to groundwater are also provided in this table.

For evaluation of direct exposure to contaminants in soils, intake from incidental ingestion, dermal contact, and inhalation is considered. Soil concentrations are calculated using the following equation:

$$Cs = \frac{TR \times BW \times AT}{EF \times ED \times FC \times [A + B + C]}$$

When calculating soil concentrations based on potential carcinogenicity:

- the ingestion component, A = $\left(SF_o \times IR_o \times 10^{-6} kg / mg\right)$
- the dermal component, B = $\left(SF_d \times SA \times AF \times DA \times 10^{-6} kg / mg\right)$
- and the inhalation component, C = $\left(SF_i \times IR_i \times \left(\frac{1}{VF} + \frac{1}{PEF}\right)\right)$

When calculating soil concentrations based on potential non-cancer health effects:

- the ingestion component, A = $\left(\frac{1}{RfD_o} \times IR_o \times 10^{-6} kg / mg\right)$
- the dermal component, B = $\left(\frac{1}{RfD_d} \times SA \times AF \times DA \times 10^{-6} kg / mg\right)$
- and the inhalation component, C = $\left(\frac{1}{RfD_i} \times IR_i \times \left(\frac{1}{VF} + \frac{1}{PEF}\right)\right)$

The equation variables and assumptions are summarized in Table 2. For most chemicals in Table 1, toxicity criteria (reference doses and slope factors) can be taken from IRIS (Integrated Risk Information System, USEPA). When toxicity criteria are unavailable from IRIS, other sources (e.g. HEAST, ECAO, OPP, and the toxicological literature) were used. Intake from all

routes should be assumed to contribute to toxic endpoints that are systemic in nature. For toxic endpoints that are route-specific (e.g. carcinogenicity from inhalation of hexavalent chromium), only the relevant intake pathway is included in the calculation of the soil cleanup goal. Dermal toxicity criteria were derived using route-to-route extrapolation from available criteria for other routes; for some chemicals, inhalation toxicity criteria can also be derived using this method. For carcinogens, soil cleanup goal concentrations should be calculated for both carcinogenic and non-carcinogenic health effects. Only the lower of the two value is shown in Table 1. These values are intended to be applicable only to soil contamination within 2 feet of land surface.

For leaching of organic contaminants from soil to groundwater, the following equation was used to calculate a soil cleanup goal:

$$Cs = Cw\left[K_d + \frac{(\theta_w + \theta_a H')}{\rho_b}\right]$$

The variables and assumed values are summarized below:

Variable	Definition	Assumed Value
Cw	target soil leachate concentration (mg/L)	chemical-specific
K_d	soil-water partition coefficient (cm^3/g)	$K_{oc} \times f_{oc}$ (organics)
q_w	water-filled soil porosity (L_{water}/L_{soil})	0.3
q_a	air-filled soil porosity (L_{air}/L_{soil})	0.13
r_b	dry soil bulk density (kg/L)	1.5
Koc	organic carbon partition coefficient (cm^3/g)	chemical-specific
f_{oc}	organic carbon content of soil (g/g)	0.002 (0.2%)
H'	dimensionless Henry's Law constant	chemical-specific

Soil concentrations based on partitioning to groundwater are not calculated in the same way for inorganics, and for some organic chemicals the necessary physical-chemical characteristics may be unavailable. Soil cleanup goals for this latter group of chemicals may become available in future updates.

Some risk-based values presented in Table 1 may be less than natural background concentrations for the chemicals in the soils. In such cases, the background concentration would represent a reasonable cleanup goal. Similarly, if the risk based value is less than the Method of Detection Limit (MDL), the MDL would become the operational cleanup goal for practical reasons.

The values in Table 1 were calculated using generic assumptions regarding exposure and soil characteristics and are intended to be broadly applicable to sites in Florida. In some situations it may be desirable to utilize site-specific assumptions in the development of cleanup goals for contaminants in soils. For example, site-specific soil characteristics might be used to refine estimates of acceptable soil concentrations based on both direct contact and leachability. The use of more limited exposure assumptions should be considered in the development of soil cleanup goals only when they can be reasonably assured to reflect both current and plausible future land use.

It is important to recognize that acceptable soil concentrations for individual chemicals will change over time in response to new information regarding the toxicity of the chemical, improvement in exposure modeling, etc. Accordingly, this list will be updated periodically to ensure that the most current information is available.

Table 1. SELECTED SOIL CLEAN-UP GOALS *

Current as of September 27, 1995

All values are presented in mg/kg (ppm)

Chemical Name	CAS	Residential	Industrial	Leaching **
Acenaphthene	83-32-9	2800	30000	2.0
Acenaphthylene	208-96-8	670	5600	11
Acetone	67-64-1	260	1800	1.4
Acrolein	107-02-8	0.4	2.7	0.3
Acrylonitrile	107-13-1	0.1	0.2	0.02
Alachlor	15972-60-8	14	56	NC
Aldrin	309-00-2	0.06	0.2	0.05
Aluminum	7429-90-5	75000	†	NC
Anthracene	120-12-7	20000	300000	890
Antimony	7440-36-0	26	220	NC
Arsenic	7440-38-2	0.7	3.1	NC
Atrazine	1912-24-9	4.9	20	0.02
Barium	7440-39-3	5200	84000	NC
Benzene	71-43-2	1.4	2.0	0.003
Benzo(a)anthracene	56-55-3	1.4	4.9	29
Benzo(a)pyrene	50-32-8	0.1	0.5	3.7
Benzo(b)fluoranthene	205-99-2	1.4	5.0	71
Benzo(g,h,i)perylene	191-24-2	14	50	320
Benzo(k)fluoranthene	207-08-9	14	48	44
Benzoic acid	65-85-0	130000	†	56
Beryllium	7440-41-7	0.2‡	1.0‡	NC
Bis(2-chloroethoxy)methane	111-91-1	170	3000	0.03
Bis(2-chloroethyl)ether	111-44-4	0.5	0.9	0.005
Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	48	110	11
Boron	7440-42-8	7000	180000	NC
Bromodichloromethane	75-27-4	0.7	1.0 ~~01~~	0.002
Bromoform	75-25-2	65	130	0.02
Butanone, 2- (MEK)	78-93-3	2200	15000	8.7
Butyl benzyl phthalate, N-	85-68-7	15000	310000	960
Cadmium	7440-43-9	37	600	NC
Carbaryl	63-25-2	7600	150000	4.6
Carbazole	86-74-8	42	120	0.4

Table 1. SELECTED SOIL CLEAN-UP GOALS *

Current as of September 27, 1995

All values are presented in mg/kg (ppm)

Chemical Name	CAS	Residential	Industrial	Leaching **
Carbofuran	1563-66-2	380	7700	0.1
Carbon disulfide	75-15-0	5.2	34	2.5
Carbon tetrachloride	56-23-5	0.6	0.8	0.02
Chlordane	57-74-9	0.8	3.0	2.1
Chloro-m-cresol, p-	59-50-7	140000	†	42
Chloroaniline, 4-	106-47-8	240	3300	0.08
Chlorobenzene	108-90-7	44	300	0.6
Chloroethylvinylether, 2-	110-75-8	100	690	0.002
Chloroform	67-66-3	0.6	0.8	0.02
Chloromethane	74-87-3	0.2	0.3	0.01
Chloronaphthalene, beta-	91-58-7	560	4000	57
Chlorophenol, 2-	95-57-8	280	3700	0.3
Chlorpyrifos	2921-88-2	190	2900	2.6
Chromium (hexavalent)	18540-29-9	290	430	NC
Chromium (trivalent)	16065-83-1	66000	540000	NC
Chrysene	218-01-9	140	500	31
Cobalt	7440-48-4	4700	110000	NC
Coumaphos	56-72-4	19	410	NC
Cyanide	57-12-5	1600	40000	NC
DDD, 4,4'-	72-54-8	4.5	17	0.2
DDE, 4,4'-	72-55-9	3.0	11	0.2
DDT, 4,4'-	50-29-3	3.1	12	0.5
Dalapon	75-99-0	1900	28000	0.4
Demeton	8065-48-3	3.1	64	NC
Di-n-Butylphthalate	84-74-2	7300	140000	23
Di-n-Octylphthalate	117-84-0	1500	32000	†
Diazinon	333-41-5	66	1300	0.04
Dibenz(a,h)anthracene	53-70-3	0.1	0.5	7.2
Dibenzofuran	132-64-9	240	3500	NC
Dibromochloromethane	124-48-1	1.2	1.7	0.004
Dibromoethane, 1,2- (EDB)	106-93-4	0.01	0.04	0.00006
Dicamba	1918-00-9	1700	23000	0.7

Table 1. SELECTED SOIL CLEAN-UP GOALS *

Current as of September 27, 1995

All values are presented in mg/kg (ppm)

Chemical Name	CAS	Residential	Industrial	Leaching **
Dichlorobenzene, 1,2-	95-50-1	820	6000	5.8
Dichlorobenzene, 1,3-	541-73-1	1700	13000	0.4
Dichlorobenzene, 1,4-	106-46-7	7.5	11	0.9
Dichloroethane, 1,1-	75-34-3	310	2100	2.3
Dichloroethane, 1,2- (EDC)	107-06-2	0.7	1.0	0.008
Dichloroethene, 1,1-	75-35-4	0.1	0.1	0.03
Dichloroethene, cis-1,2-	156-59-2	26	180	0.2
Dichloroethene, trans-1,2-	156-60-5	62	430	0.3
Dichlorophenol, 2,4-	120-83-2	220	4000	0.02
Dichlorophenoxy acetic acid, 2,4-	94-75-7	110	800	0.2
Dichlorophenoxy) butyric acid, 4-(2,4-	94-82-6	610	13000	NC
Dichloroprop	120-36-5	3.8	15	NC
Dichloropropane, 1,2-	78-87-5	0.8	1.2	0.02
Dichloropropene, 1,3-	542-75-6	0.3	0.4	0.003
Dichlorvos	62-73-7	3.8	15	0.0003
Dicofol (Kelthane)	115-32-2	2.5	10	NC
Dieldrin	60-57-1	0.07	0.3	0.02
Diethylphthalate	84-66-2	56000	970000	20
Dimethylformamide, N,N-	68-12-2	1800	27000	1.5
Dimethylphenol, 2,4-	105-67-9	1200	16000	1.8
Dimethylphthalate	131-11-3	630000	†	200
Dinitrotoluene, 2,4-	121-14-2	130	2000	0.0006
Dinitrotoluene, 2,6-	606-20-2	71	1300	0.0006
Dinoseb	88-85-7	43	470	0.4
Disulfoton	298-04-4	2.8	50	0.01
Diuron	330-54-1	130	2100	0.1
Endosulfan	115-29-7	390	5900	0.7
Endrin	72-20-8	23	470	0.4
Endrin aldehyde	7421-93-4	23	480	0.05
Ethoprop	13194-48-4	1.2	25	NC
Ethyl chloride	75-00-3	8200	56000	0.6
Ethyl dipropylthiocarbamate, S- (EPTC)	759-94-4	1900	38000	NC

Table 1. SELECTED SOIL CLEAN-UP GOALS *

Current as of September 27, 1995

All values are presented in mg/kg (ppm)

Chemical Name	CAS	Residential	Industrial	Leaching **
Ethyl p-nitrophenyl phenylphosphorothioate	2104-64-5	0.8	15	0.008
Ethylbenzene	100-41-4	1400	10000	0.2
Fenamiphos	22224-92-6	19	410	0.06
Fensulfothion	115-90-2	19	410	NC
Fenthion	55-38-9	3.8	80	NC
Fluoranthene	206-44-0	2900	48000	280
Fluorene	86-73-7	2400	30000	45
Fluoride	16984-58-8	4700	120000	NC
Guthion (Azinphos-methyl)	86-50-0	120	2500	0.1
Heptachlor	76-44-8	0.2	0.5	0.06
Heptachlor epoxide	1024-57-3	0.1	0.3	0.03
Hexachlorobenzene	118-74-1	0.6	1.6	0.8
Hexachlorobutadiene	87-68-3	3.1	4.9	2.1
Hexachlorocyclohexane, alpha-	319-84-6	0.2	0.6	0.002
Hexachlorocyclohexane, beta-	319-85-7	0.6	2.3	0.005
Hexachlorocyclohexane, delta-	319-86-8	23	470	0.007
Hexachlorocyclohexane, gamma-	58-89-9	0.8	3.0	0.006
Hexachloroethane	67-72-1	27	120	0.4
Hexane, n-	110-54-3	76	510	1.0
Hexazinone	51235-04-2	2500	52000	NC
Indeno(1,2,3-cd)pyrene	193-39-5	1.4	5.0	17
Lead	7439-92-1	500	1000	NC
Linuron	330-55-2	150	3200	NC
Lithium	743-99-32	1600	40000	NC
Malathion	121-75-5	1500	23000	1.1
Manganese	7439-96-5	370	5500	NC
Mercury	7439-97-6	23	480	NC
Merphos	150-50-5	2.3	48	NC
Mesurol (Methiocarb)	2032-65-7	310	4600	NC
Methomyl	16752-77-5	1900	41000	0.5
Methoxychlor	72-43-5	380	7800	62
Methyl parathion	298-00-0	19	350	0.1

Table 1. SELECTED SOIL CLEAN-UP GOALS *

Current as of September 27, 1995

All values are presented in mg/kg (ppm)

Chemical Name	CAS	Residential	Industrial	Leaching **
Methyl tert-butyl ether	1634-04-4	3800	27000	0.1
Methyl-2-pentanone, 4- (MIBK)	108-10-1	520	3700	1.1
Methyl-4-chlorophenoxy acetic acid, 2-	94-74-6	38	800	NC
Methyl-4-chlorophenoxy propionic acid, 2-	93-65-2	77	1600	NC
Methylene chloride	75-09-2	16	23	0.01
Methylnaphthalene, 1-	90-12-0	930	8400	NC
Methylnaphthalene, 2-	91-57-6	960	8800	NC
Methylphenol, 2- (o-cresol)	95-48-7	2600	32000	1.1
Methylphenol, 3- (m-cresol)	108-39-4	3400	55000	4.2
Methylphenol, 4- (p-cresol)	106-44-5	340	5500	0.4
Metribuzin	21087-64-9	1900	42000	NC
Mevinphos	7786-34-7	19	420	NC
Mirex	2385-85-5	0.4	0.8	0.01
Molybdenum	7439-98-7	390	9600	NC
Monuron	150-68-5	9.6	190	NC
Naled	300-76-5	150	3200	NC
Naphthalene	91-20-3	1300	12000	0.1
Nickel	7440-02-0	1500	26000	NC
Nickel subsulfide	12035-72-2	7000	10000	NC
Nitrate	14797-55-8	120000	†	NC
Nitrite	14797-65-0	7800	200000	NC
Nitroaniline, o-	88-74-4	4.0	73	0.02
Nitroaniline, p-	100-01-6	230	4700	NC
Nitrobenzene	98-95-3	22	250	0.04
Nitroso-di-n-propylamine, N-	621-64-7	0.02	0.03	0.009
Nitrosodimethylamine, N-	62-75-9	0.003	0.004	0.02
Nitrosodiphenylamine, N-	86-30-6	73	130	0.06
Oxamyl	23135-22-0	1900	42000	NC
Parathion	56-38-2	450	9000	3.9
Pentachlorophenol	87-86-5	5.4	12	0.01
Phenanthrene	85-01-8	1700	21000	2.8
Phenol	108-95-2	34000	440000	0.02

Table 1. SELECTED SOIL CLEAN-UP GOALS *

Current as of September 27, 1995

All values are presented in mg/kg (ppm)

Chemical Name	CAS	Residential	Industrial	Leaching **
Phorate	298-02-2	14	240	0.05
Polychlorinated biphenyls (PCBs)	1336-36-3	0.9	3.5	44
Propazine	139-40-2	1500	32000	2.3
Pyrene	129-00-0	2200	41000	290
Pyridine	110-86-1	0.5	3.2	0.02
Ronnel	299-84-3	3700	71000	NC
Selenium	7782-49-2	390	9900	NC
Silver	7440-22-4	390	9000	NC
Sodium diethyldithiocarbamate	148-18-5	4.1	17	NC
Strontium	7440-24-6	47000	†	NC
Styrene	100-42-5	4100	34000	2.0
Tetrachloroethane, 1,1,1,2-	630-20-6	5.9	8.9	0.003
Tetrachloroethane, 1,1,2,2-	79-34-5	0.9	1.4	0.0007
Tetrachloroethene (PCE)	127-18-4	12	28	0.03
Tetrachlorvinphos (Stirophos)	961-11-5	45	180	NC
Tetraethyl dithiopyrophosphate	3689-24-5	34	590	0.06
Tetraethylpyrophosphate (TEPP)	107-49-3	2.5	51	NC
Tin	7440-31-5	44000	670000	NC
Tokuthion	34643-46-4	68	1400	NC
Toluene	108-88-3	520	3500	0.2
Toxaphene	8001-35-2	0.9	3.0	0.04
Trichlorobenzene, 1,2,4-	120-82-1	590	8200	2.3
Trichloroethane, 1,1,1-	71-55-6	610	4300	0.9
Trichloroethane, 1,1,2-	79-00-5	2.0	3.0	0.02
Trichloroethene (TCE)	79-01-6	6.5	9.3	0.01
Trichlorofluoromethane	75-69-4	6.6	44	400
Trichlorophenol, 2,4,5-	95-95-4	7100	130000	0.1
Trichlorophenol, 2,4,6-	88-06-2	87	280	0.08
Trichlorophenoxy acetic acid, 2,4,5-	93-76-5	760	15000	NC
Trichlorophenoxy propionic acid, 2,4,5	93-72-1	610	13000	2.7
Trimethylbenzene, 1,2,3-	526-73-8	6.7	51	0.2
Trimethylbenzene, 1,2,4-	95-63-6	6.2	47	0.2

Table 1. SELECTED SOIL CLEAN-UP GOALS *

Current as of September 27, 1995

All values are presented in mg/kg (ppm)

Chemical Name	CAS	Residential	Industrial	Leaching **
Trimethylbenzene, 1,3,5-	108-67-8	3.7	27	0.1
Uranium, natural	7440-61-1	120	410	NC
Vanadium	7440-62-2	490	4800	NC
Vinyl acetate	108-05-4	180	1200	0.5
Vinyl chloride	75-01-4	0.005	0.007	0.005
Xylene, total	1330-20-7	13000	92000	0.1
Zinc	7440-66-6	23000	560000	NC

* Soil cleanup goals in these tables are based on human toxicity using generalized exposure assumptions. Some tabulated soil cleanup goals may be less than the minimum detection limit (MDL) for that chemical in soils; in such cases the MDL would be the applicable cleanup goal.

** TCLP for metals applies as appropriate.

NC = No Value Calculated

TCLP = Toxicity Leaching Characteristic Leaching Procedure.

† = Number exceeds 1E+06.

‡ = Based on dermal absorption of 0.0001

Table 2. Variables and Assumptions for Calculating Soil Cleanup Goals Based on Direct Exposure to Soil

Variable	Child Resident[1] (age 1-6 years)	Aggregate Resident[2] (age 1 - 30 yrs)	On-Site Worker[3]
BW (body weight)	15 kg	59 kg	70 kg
IRo (ingestion rate, oral)	200 mg/kg	120 mg/day	50 mg/day
IRi (inhalation rate)	10 m^3/day	15 m^3/day	20 m^3/day
FC (fraction from contam. source)	1.0 (100%)	1.0 (100%)	1.0 (100%)
EF (exposure frequency)	350 days/yr	350 days/yr	250 days/yr
ED (exposure duration)	6 yrs	30 yrs	25 yrs
SA (surface area of skin exposed)	1,800 cm^2/day	4,855 cm^2/day	2,300 cm^2/day
AF (adherence factor)	0.2 mg/cm^2	0.2 mg/cm^2	0.6 mg/cm2
AT (averaging time)			
• non-carcinogens	2,190 days	10,950	9,125 days
• carcinogens	25,550 days	25,550 days	25,550 days

[1] used in calculating soil cleanup goals based on non-cancer health effects for a residential scenario

[2] used in calculating soil cleanup goals based on potential carcinogenicity for a residential scenario.

[3] used in calculating soil cleanup goals based on both cancer and non-cancer health effects for commercial/industrial land use.

Variable	
TR (target risk)	1×10^{-6} for carcinogens; hazard quotient of 1.0 for non-carcinogens
DA (dermal absorption)	0.01 for organics; 0.001 for inorganics[4]
PEF (particulate emission factor)	1.24 E+09 m^3/kg
VF (volatilization factor)	compound specific[5]
SF (slope factor)	compound and route specific
RfD (reference dose)	compound and route specific

[4] based upon Region IV guidance

[5] refer to *Technical Background Document for Draft Soil Screening Level Guidance*, EPA 540/R-94/018, July 1994, for the method of calculation.

APPENDIX D-7

DRINKING WATER REGULATIONS AND HEALTH ADVISORIES (MAY 1995)

DRINKING WATER REGULATIONS

AND HEALTH ADVISORIES

by

Office of Water
U.S. Environmental Protection Agency
Washington, D.C.
202-260-7571

SAFE DRINKING WATER HOTLINE
1-800-426-4791
Monday thru Friday, 9:00 AM to 5:30 PM EST

May 1995

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LEGEND

Abbreviations column descriptions are:

MCLG - Maximum Contaminant Level Goal. A non-enforceable concentration of a drinking water contaminant that is protective of adverse human health effects and allows an adequate margin of safety.

MCL - Maximum Contaminant Level. Maximum permissible level of a contaminant in water which is delivered to any user of a public water system.

RfD - Reference Dose. An estimate of a daily exposure to the human population that is likely to be without appreciable risk of deleterious effects over a lifetime.

DWEL - Drinking Water Equivalent Level. A lifetime exposure concentration protective of adverse, non-cancer health effects, that assumes all of the exposure to a contaminant is from a drinking water source.

(*) The codes for the Status Reg and Status HA columns are as follows:

F - final
D - draft
L - listed for regulation
P - proposed
T - tentative

Other codes found in the table include the following:

NA - not applicable
PS - performance standard 0.5 NTU - 1.0 NTU
TT - treatment technique

** - No more than 5% of the samples per month may be positive. For systems collecting fewer than 40 samples/month, no more than 1 sample per month may be positive.

*** - guidance

- Large discrepancies between Lifetime and Longer-term HA values may occur because of the Agency's conservative policies, especially with regard to carcinogenicity, relative source contribution, and less than lifetime exposures in chronic toxicity testing. These factors can result in a cumulative UF (uncertainty factor) of up to 5 to 5000 when calculating a Lifetime HA.

The scheme for categorizing chemicals according to their carcinogenic potential is as follows: *

Group A: Human carcinogen

Sufficient evidence in epidemiologic studies to support causal association between exposure and cancer

Group B: Probable human carcinogen

Limited evidence in epidemiologic studies (Group B1) *and/or* sufficient evidence from animal studies (Group B2)

Group C: Possible human carcinogen

Limited evidence from animal studies *and* inadequate or no data in humans

Group D: Not classifiable

Inadequate or no human and animal evidence of carcinogenicity

Group E: No evidence of carcinogenicity for humans

No evidence of carcinogenicity in at least two adequate animal tests in different species *or* in adequate epidemiologic and animal studies

Drinking Water Health Advisories (HAs) are defined as follows:

One-day HA

The concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to 5 consecutive days of exposure, with a margin of safety.

Ten-day HA

The concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects up to 14 consecutive days of exposure, with a margin of safety.

Long-term HA

The concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects up to approximately 7 years (10% of an individual's lifetime) of exposure, with a margin of safety.

*EPA is in the process of revising the Cancer Guidelines.

Lifetime HA

The concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects over a lifetime of exposure, with a margin of safety.

Chemicals	Standards				Health Advisories								Cancer Group
					10-kg Child			70-kg Adult					
	Status Reg.	MCLG (mg/l)	MCL (mg/l)	Status HA	One-day (mg/l)	Ten-day (mg/l)	Longer-term (mg/l)	Longer-term (mg/l)	RfD (mg/kg/day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10^{-4} Cancer Risk	
ORGANICS													
Acenaphthene	-	-	-	-	-	-	-	-	0.06	-	-	-	-
Acifluorfen	T	zero	-	F	2	2	0.1	0.4	0.013	0.4	-	0.1	B2
Acrylamide	F	zero	TT	F	1.5	0.3	0.02	0.07	0.002	0.007	-	0.001	B2
Acrylonitrile	T	zero	-	D	-	-	-	-	-	-	-	0.006	B1*
Adipate (diethylhexyl)	F	0.4	0.4	-	20	20	20	60	0.6	20	0.4	3	C
Alachlor	F	zero	0.002	F	0.1	0.1	-	-	0.01	0.4	-	0.04	B2
Aldicarb**	D	0.007	0.007	D	-	-	-	-	0.001	0.035	0.007	-	D
Aldicarb sulfone**	D	0.007	0.007	D	-	-	-	-	0.001	0.035	0.007	-	D
Aldicarb sulfoxide**	D	0.007	0.007	D	-	-	-	-	0.001	0.035	0.007	-	D
Aldrin	-	-	-	D	0.0003	0.0003	0.0003	0.0003	0.00003	0.001	-	0.0002	B2
Ametryn	-	-	-	F	9	9	0.9	3	0.009	0.3	0.06	-	D
Ammonium sulfamate	-	-	-	F	20	20	20	80	0.28	8	2	-	D
Anthracene (PAH)***	-	-	-	-	-	-	-	-	0.3	-	-	-	D
Atrazine	F	0.003	0.003	F	0.1	0.1	0.05	0.2	0.035	0.2*	0.003*	-	C
Baygon	-	-	-	F	0.04	0.04	0.04	0.1	0.004	0.1	0.003	-	C
Bentazon	T	0.02	-	F	0.3	0.3	0.3	0.8	0.0025	0.09	0.02	-	D
Benz(a)anthracene (PAH)	-	-	-	-	-	-	-	-	-	-	-	-	B2
Benzene	F	zero	0.005	F	0.2	0.2	-	-	-	-	-	0.1	A
Benzo(a)pyrene (PAH)	F	zero	0.002	-	-	-	-	-	-	-	-	*0.0002*	B2*
Benzo(b)fluoranthene (PAH)	-	-	-	-	-	-	-	-	-	-	-	*0.0002*	B2
Benzo(g,h,i)perylene (PAH)	-	-	-	-	-	-	-	-	-	-	-	-	D
Benzo(k)fluoranthene (PAH)	-	-	-	-	-	-	-	-	-	-	-	*0.0002*	B2
bis-2-Chloroisopropyl ether	-	-	-	F	4	4	4	13	0.04	1	0.3	-	D
Bromacil	L	-	-	F	6	6	3	9	0.13	5	0.09	-	C
Bromobenzene	L	-	-	D	-	-	-	-	-	-	-	-	-

* Under review.

**NOTE: The HA value or the MCLG/MCL value for any two or more of these three chemicals should remain at 0.007 mg/L because of similar mode of action.

***PAH = Polyaromatic hydrocarbon*

NOTE: Anthracene and Benzo(g,h,i)perylene — not proposed in Phase V.

NOTE: Changes from the last version are noted in Italic and Bold Face print.

Drinking Water Standards and Health Advisories

May 1995

Chemicals	Standards			Status HA	Health Advisories								Cancer Group
					10-kg Child			70-kg Adult					
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		One-day (mg/l)	Ten-day (mg/l)	Longer-term (mg/l)	Longer-term (mg/l)	RfD (mg/kg/day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10-4 Cancer Risk	
Bromochloroacetonitrile	L	-	-	D	-	-	-	-	-	-	-	-	-
Bromochloromethane	-	-	-	F	60	1	1	6	0.013	0.5	0.09	-	-
Bromodichloromethane (THM)	P	zero	0.1*/0.08	D	6	6	4	13	0.02	0.7	-	0.06	B2
Bromoform (THM)	P	zero	0.1*/0.08	D	6	2	2	6	0.02	0.7	-	0.4	B2
Bromomethane	T	-	-	F	0.1	0.1	0.1	0.5	0.001	0.04	0.01	-	D
Butyl benzyl phthalate (PAE)***	-	-	-	-	-	-	-	-	0.2	7	-	-	C
Butylate	-	-	-	F	2	2	1	4	0.05	2	0.35	-	D
Butylbenzene n-	-	-	-	D	-	-	-	-	-	-	-	-	-
Butylbenzene sec-	-	-	-	D	-	-	-	-	-	-	-	-	-
Butylbenzene tert-	-	-	-	D	-	-	-	-	-	-	-	-	-
Carbaryl	-	-	-	F	1	1	1	1	0.1	4	0.7	-	D
Carbofuran	F	0.04	0.04	F	0.05	0.05	0.05	0.2	0.005	0.2	0.04	-	E
Carbon tetrachloride	F	zero	0.005	F	4	0.2	0.07	0.3	0.0007	0.03	-	0.03	B2
Carboxin	-	-	-	F	1	1	1	4	0.1	4	0.7	-	D
Chloral hydrate	P	0.04	0.06**	D	7	0.2	0.2	0.6	0.0002	0.06	0.06	-	C
Chloramben	-	-	-	F	3	3	0.2	0.5	0.015	0.6	0.1	-	D
Chlordane	F	zero	0.002	F	0.08	0.08	-	-	0.00006	0.002	-	0.003	B2
Chlorodibromomethane (THM)	P	0.08	0.1*/0.08	D	6	6	2	8	0.02	0.7	0.06	-	C
Chloroethane	L	-	-	D	-	-	-	-	-	-	-	-	B
Chloroform (THM)	P	zero	0.1*/0.08	D	4	4	0.1	0.4	0.01	0.4	-	0.6	B
Chloromethane	L	-	-	F	9	0.4	0.4	1	0.004	0.1	0.003	-	C
Chlorophenol (2-)	L	-	-	D	0.05	0.05	0.05	0.2	0.005	0.2	0.04	-	D
p-Chlorophenyl methyl sulfide/sulfone/sulfoxide	-	-	-	**	-	-	-	-	-	-	-	-	D
Chloropicrin	L	-	-	-	-	-	-	-	-	-	-	-	-
Chlorothalonil	-	-	-	F	0.2	0.2	0.2	0.5	0.015	0.5	-	0.15	B2
Chlorotoluene o-	L	-	-	F	2	2	2	7	0.02	0.7	0.1	-	D
Chlorotoluene p-	L	-	-	F	2	2	2	7	0.02	0.7	0.1	-	D
Chlorpyrifos	-	-	-	F	0.03	0.03	0.03	0.1	0.003	0.1	0.02	-	D
Cyanazine	T	0.001	-	D	0.1	0.1	0.02	0.07	0.002	0.07	0.001	-	C

* Current MCL ~A HA will not be developed due to insufficient data; a "Database Deficiency Report has been published.

* 1994 Proposed rule for Disinfectants and Disinfection By-products : Total for all THMs combined cannot exceed the 0.08 level.

**Total for all haloacetic acids cannot exceed 0.06 level. ***PAE = phthalate acid ester

Chemicals	Standards				Health Advisories								Cancer Group
					10-kg Child			70-kg Adult					
	Status Reg.	MCLG (mg/l)	MCL (mg/l)	Status HA	One-day (mg/l)	Ten-day (mg/l)	Longer-term (mg/l)	Longer-term (mg/l)	RfD (mg/kg/day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10^{-4} Cancer Risk	
Cyanogen chloride	L	-	-	-	-	-	-	-	-	-	-	-	-
Cymene p-	-	-	-	D	-	-	-	-	-	-	-	-	-
2,4-D	F	0.07	0.07	F	1	0.3	0.1	0.4	0.01	0.4	0.07	-	D
DCPA (Dacthal)	L	-	-	F	80	80	5	20	0.6	20	4	-	D
Dalapon	F	0.2	0.2	F	3	3	0.3	0.9	0.026	0.9	0.2	-	D
Di[2-ethylhexyl]adipate	F	0.4	0.4	-	20	20	20	60	0.6	20	0.4	3	C
Diazinon	-	-	-	F	0.02	0.02	0.005	0.02	0.00009	0.003	0.0006	-	E
Dibromoacetonitrile	L	-	-	D	2	2	2	6	0.02	0.6	0.02	-	C
Dibromochloropropane (DBCP)	F	zero	0.0002	F	0.2	0.05	-	-	-	-	-	0.003	B2
Dibromomethane	L	-	-	-	-	-	-	-	-	-	-	-	D
Dibutyl phthalate (PAE)	-	-	-	-	-	-	-	-	0.1	4	-	-	D
Dicamba	L	-	-	F	0.3	0.3	0.3	1	0.03	1	0.2	-	D
Dichloroacetaldehyde	L	-	-	D	-	-	-	-	-	-	-	-	-
Dichloroacetic acid	P	zero	0.06**	D	1	1	1	4	0.004	0.1	-	-**	B2
Dichloroacetonitrile	L	-	-	D	1	1	0.8	3	0.008	0.3	0.006	-	C
Dichlorobenzene o-	F	0.6	0.6	F	9	9	9	30	0.09	3	0.6	-	D
Dichlorobenzene m- *	F	0.6	0.6	F	9	9	9	30	0.09	3	0.6	-	D
Dichlorobenzene p-	F	0.075	0.075	F	10	10	10	40	0.1	4	0.075	-	C
Dichlorodifluoromethane	L	-	-	F	40	40	9	30	0.2	5	1	-	D
Dichloroethane (1,1-)	L	-	-	D	-	-	-	-	-	-	-	-	-
Dichloroethane (1,2-)	F	zero	0.005	F	0.7	0.7	0.7	2.6	-	-	-	0.04	B2
Dichloroethylene (1,1-)	F	0.007	0.007	F	2	1	1	4	0.009	0.4	0.007	-	C
Dichloroethylene (cis-1,2-)	F	0.07	0.07	F	4	3	3	11	0.01	0.4	0.07	-	D
Dichloroethylene (trans-1,2-)	F	0.1	0.1	F	20	2	2	6	0.02	0.6	0.1	-	D
Dichloromethane	F	zero	0.005	F	10	2	-	-	0.06	2	-	0.5	B2
Dichlorophenol (2,4-)	-	-	-	D	0.03	0.03	0.03	0.1	0.003	0.1	0.02	-	D
Dichloropropane (1,1-)	-	-	-	D	-	-	-	-	-	-	-	-	-
Dichloropropane (1,2-)	F	zero	0.005	F	-	0.09	-	-	-	-	-	0.06	B2
Dichloropropane (1,3-)	L	-	-	D	-	-	-	-	-	-	-	-	-

* The values for m-dichlorobenzene are based on data for o-dichlorobenzene.

** ***A quantitative risk estimate has not been determined.***

** Total for all haloacetic acids cannot exceed 0.06 level.

Drinking Water Standards and Health Advisories

May 1995

Chemicals	Standards			Status HA	Health Advisories								Cancer Group
					10-kg Child			70-kg Adult					
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		One-day (mg/l)	Ten-day (mg/l)	Longer-term (mg/l)	Longer-term (mg/l)	RfD (mg/kg/day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10^{-4} Cancer Risk	
Dichloropropane (2,2-)	L	-	-	D	-	-	-	-	-	-	-	-	-
Dichloropropene (1,1-)	L	*	*	D	*	*	*	*	*	*	*	*	*
Dichloropropene (1,3-)	T	zero	-	F	0.03	0.03	0.03	0.09	0.0003	0.01	-	0.02	B2
Dieldrin	*	*	*	F	0.0005	0.0005	0.0005	0.002	0.00005	0.002	*	0.0002	B2
Diethyl phthalate (PAE)	-	-	-	D	-	-	-	-	0.8	30	5	-	D
Diethylene glycol dinitrate	*	*	*	*	*	*	*	*	*	*	*	*	*
Diethylhexyl phthalate (PAE)	F	zero	0.006	D	-	-	-	-	0.02	0.7	-	0.3	B2
Diisopropyl methylphosphonate	*	*	*	F	8	8	8	30	0.08	3	0.6	*	D
Dimethrin	-	-	-	F	10	10	10	40	0.3	10	2	-	D
Dimethyl methylphosphonate	*	*	*	F	2	2	2	8	0.2	7	0.1	0.7	C
Dimethyl phthalate (PAE)	-	-	-	-	-	-	-	-	-	-	-	-	D
1,3-Dinitrobenzene	*	*	*	F	0.04	0.04	0.04	0.14	0.0001	0.005	0.001	-	D
Dinitrotoluene (2,4-)	L	-	-	F	0.50	0.50	0.30	1	0.002	0.1	-	0.005	B2
Dinitrotoluene (2,6-)	L	*	*	F	0.40	0.40	0.40	1	0.001	0.04	-	0.005	B2
tg 2,6 & 2,4 dinitrotoluene **	-	-	-	-	-	-	-	-	-	-	-	0.005	B2
Dinoseb	F	0.007	0.007	F	0.3	0.3	0.01	0.04	0.001	0.04	0.007	*	D
Dioxane p-	-	-	-	F	4	0.4	-	-	-	-	-	0.7	B2
Diphenamid	*	*	*	F	0.3	0.3	0.3	1	0.03	1	0.2	*	D
Diphenylamine	-	-	-	F	1	1	0.3	1	0.03	1	0.2		D
Diquat	F	0.02	0.02	*	*	*	*	*	0.0022	0.08	0.02	*	D
Disulfoton	-	-	-	F	0.01	0.01	0.003	0.009	0.00004	0.001	0.0003	-	E
Dithiane (1,4-)	*	*	*	F	0.4	0.4	0.4	1	0.01	0.4	0.08	*	D
Diuron	-	-	-	F	1	1	0.3	0.9	0.002	0.07	0.01	-	D
Endothall	F	0.1	0.1	F	0.8	0.8	0.2	0.2	0.02	0.7	0.1	*	D
Endrin	F	0.002	0.002	F	0.02	0.02	0.003	0.01	0.0003	0.01	0.002	-	D
Epichlorohydrin	F	zero	TT	F	0.1	0.1	0.07	0.07	0.002	0.07	*	0.4	B2
Ethylbenzene	F	0.7	0.7	F	30	3	1	3	0.1	3	0.7	-	D
Ethylene dibromide (EDB)	F	zero	0.00005	F	0.008	0.008	*	*	*	*	*	0.00004	B2
Ethylene glycol	-	-	-	F	20	6	6	20	2	40	7	-	D
ETU	L	*	*	F	0.3	0.3	0.1	0.4	0.00008	0.003	*	0.03	B2
Fenamiphos	-	-	-	F	0.009	0.009	0.005	0.02	0.00025	0.009	0.002	-	D

* An HA will not be developed due to insufficient data; a "Database Deficiency Report" has been published.

** tg = technical grade

Chemicals	Standards			Status HA	Health Advisories								Cancer Group
					10-kg Child			70-kg Adult					
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		One-day (mg/l)	Ten-day (mg/l)	Longer-term (mg/l)	Longer-term (mg/l)	RfD (mg/kg/day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10^{-4} Cancer Risk	
Fluometron	-	-	-	F	2	2	2	5	0.013	0.4	0.09		D
Fluorene (PAH)	-	-	-	-	-	-	-	-	0.04	-	-	-	D
Fluorotrichloromethane	L	-	-	F	7	7	3	10	0.3	10	2	-	D
Fog Oil	-	-	-	D	-	-	-	-	-	-	-	-	-
Fonofos	-	-	-	F	0.02	0.02	0.02	0.07	0.002	0.07	0.01	-	D
Formaldehyde	D	-	-	D	10	5	5	20	0.15	5	1	-	B1**
Gasoline, unleaded (benzene)	-	-	-	D	-	-	-	-	-	-	0.005	-	-
Glyphosate	F	0.7	0.7	F	20	20	1	1	0.1	4	0.7	-	E
Heptachlor	F	zero	0.0004	F	0.01	0.01	0.005	0.005	0.0005	0.02	-	0.0008	B2
Heptachlor epoxide	F	zero	0.0002	F	0.01	-	0.0001	0.0001	1E-5	0.0004	-	0.0004	B2
Hexachlorobenzene	F	zero	0.001	F	0.05	0.05	0.05	0.2	0.0008	0.03	-	0.002	B2
Hexachlorobutadiene	T	0.001	-	F	0.3	0.3	0.1	0.4	0.002	0.07	0.001	-	C
Hexachlorocyclopentadiene	F	0.05	0.05	-	-	-	-	-	0.007	0.2	-	-	D
Hexachloroethane	L	-	-	F	5	5	0.1	0.5	0.001	0.04	0.001	-	C
Hexane (n-)	-	-	-	F	10	4	4	10	-	-	-	-	D
Hexazinone	-	-	-	F	3	3	3	9	0.033	1	0.2	-	D
HMX	-	-	-	F	5	6	5	20	0.05	2	0.4	-	D
Indeno(1,2,3,-c,d)pyrene (PAH)	-	-	-	D	-	-	-	-	-	-	-	-	B2
Isophorone	L	-	-	F	15	15	15	15	0.2	7	0.1	4	C
Isopropyl methylphosphonate	-	-	-	D	30	30	30	100	0.1	4.0	0.7	-	D
Isopropylbenzene	-	-	-	D	-	-	-	-	-	-	-	-	-
Lindane	F	0.0002	0.0002	F	1	1	0.03	0.1	0.0003	0.01	0.0002	-	C
Malathion	-	-	-	F	0.2	0.2	0.2	0.8	0.02	0.8	0.2	-	D
Maleic hydrazide	-	-	-	F	10	10	5	20	0.5	20	4	-	D
MCPA	-	-	-	F	0.1	0.1	0.1	0.4	0.0016	0.06	0.01	-	E
Methomyl	L	-	-	F	0.3	0.3	0.3	0.3	0.025	0.9	0.2	-	D
Methoxychlor	F	0.04	0.04	F	0.05	0.05	0.05	0.2	0.005	0.2	0.04	-	D
Methyl ethyl ketone	-	-	-	F	-	-	-	-	-	-	-	-	-
Methyl parathion	-	-	-	F	0.3	0.3	0.03	0.1	0.00025	0.009	0.002	-	D

* Under review.

** *Carcinogenicity based on inhalation exposure.*

Drinking Water Standards and Health Advisories

May 1995

Chemicals	Standards			Health Advisories									Cancer Group
					10-kg Child			70-kg Adult					
	Status Reg.	MCLG (mg/l)	MCL (mg/l)	Status HA	One-day (mg/l)	Ten-day (mg/l)	Longer-term (mg/l)	Longer-term (mg/l)	RfD (mg/kg/day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10^{-4} Cancer Risk	
Methyl tert butyl ether	L	-	-	D	24	24	3	12	0.03	1.0	0.02-0.2*	-	C***
Metolachlor	L	*	*	F	1	1	1	3.5	0.1	3.5	0.07	-	C
Metribuzin	L	-	-	F	5	5	0.3	0.5	0.013**	0.5	0.1	-	D
Monochloroacetic acid	L	-	-	D	*	*	-	*	*	*	*	-	*
Monochlorobenzene	F	0.1	0.1	F	2	2	2	7	0.02	0.7	0.1	-	D
Naphthalene	*	*	*	F	0.5	0.5	0.4	1	0.004	0.1	0.02	-	D
Nitrocellulose (non-toxic)	-	-	-	F	-	-	-	-	-	-	-	-	-
Nitroguanidine	*	*	*	F	10	10	10	40	0.1	4	0.7	-	D
Nitrophenol p-	-	-	-	F	0.8	0.8	0.8	3	0.008	0.3	0.06	-	D
Oxamyl (Vydate)	F	0.2	0.2	F	0.2	0.2	0.2	0.9	0.026	0.9	0.2	-	E
Paraquat	-	-	-	F	0.1	0.1	0.05	0.2	0.0045	0.2	0.03	-	E
Pentachloroethane	*	*	*	D	*	*	*	*	*	*	*	-	*
Pentachlorophenol	F	zero	0.001	F	1	0.3	0.3	1	0.03	1	-	0.03	B2
Phenanthrene (PAH)	*	*	*	*	*	*	*	*	*	*	*	*	*
Phenol	-	-	-	D	6	6	6	20	0.6	20	4	-	D
Picloram	F	0.5	0.5	F	20	20	0.7	2	0.07	2	0.5	-	D
Polychlorinated biphenyls (PCBs)	F	zero	0.0005	P	-	-	-	-	-	-	-	0.0005	B2
Prometon	L	*	*	F	0.2	0.2	0.2	0.5	0.015*	0.5*	0.1*	-	D
Pronamide	-	-	-	F	0.8	0.8	0.8	3	0.075	3	0.05	-	C
Propachlor	*	*	*	F	0.5	0.5	0.1	0.5	0.013	0.5	0.09	-	D
Propazine	-	-	-	F	1	1	0.5	2	0.02	0.7	0.01	-	C
Prophetn	*	*	*	F	5	5	5	20	0.02	0.6	0.1	-	D
Propylbenzene n-	-	-	-	D	-	-	-	-	-	-	-	-	-
Pyrene (PAH)	*	*	*	*	*	*	*	*	0.03	*	*	-	D
RDX	-	-	-	F	0.1	0.1	0.1	0.4	0.003	0.1	0.002	0.03	C
Simazine	F	0.004	0.004	F	0.07	0.07	0.07	0.07	0.005	0.2	0.004	-	C
Styrene	F	0.1	0.1	F	20	2	2	7	0.2	7	0.1	-	C
2,4,5-T	L	*	*	F	0.8	0.8	0.8	1	0.01	0.35	0.07	-	D
2,3,7,8-TCDD (Dioxin)	F	zero	3E-08	F	1E-06	1E-07	1E-08	4E-08	1E-09	4E-08	-	2E-08	B2

* Under review. NOTE: Phenanthrene — not proposed.

*** The RfD for metribuzin was revised Dec. 1994 to 0.013 mg/kg/day. Based on this revised RfD the Lifetime HA would be 0.1 mg/l assuming a 20% relative source contribution for drinking water. This information has not been incorporated in the Health Advisory document.*

**** Tentative.*

** If the cancer classification C is accepted, the Lifetime HA is 0.20; otherwise it is 0.200 mg/L*

Chemicals	Standards			Status HA	Health Advisories								Cancer Group
					10-kg Child			70-kg Adult					
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		One-day (mg/l)	Ten-day (mg/l)	Longer-term (mg/l)	Longer-term (mg/l)	RfD (mg/kg /day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10^{-4} Cancer Risk	
Tebuthiuron	-	-	-	F	3	3	0.7	2	0.07	2	0.5	-	D
Terbacil	-	-	-	F	0.3	0.3	0.3	0.9	0.013	0.4	0.09	-	E
Terbufos	-	-	-	F	0.005	0.005	0.001	0.005	0.00013	0.005	0.0009	-	D
Tetrachloroethane (1,1,1,2-)	L	-	-	F	2	2	0.9	3	0.03	1	0.07	0.1	C
Tetrachloroethane (1,1,2,2-)	L	-	-	D	-	-	-	-	-	-	-	-	-
Tetrachloroethylene	F	zero	0.005	F	2	2	1	5	0.01	0.5	-	0.07	-
Tetranitromethane	-	-	-	**	-	-	-	-	-	-	-	-	-
Toluene	F	1	1	F	20	2	2	7	0.2	7	1	-	D
Toxaphene	F	zero	0.003	F	-	-	-	-	0.1*	-	-	0.003	B2
2,4,5-TP	F	0.05	0.05	F	0.2	0.2	0.07	0.3	0.0075	0.3	0.05	-	D
1,1,2-Trichloro-1,2,2-trifluoroethane	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroacetic acid	P	0.3	0.06**	D	4	4	4	13	0.1	4.0	0.3	-	C
Trichloroacetonitrile	L	-	-	D	0.05	0.05	-	-	-	-	-	-	-
Trichlorobenzene (1,2,4-)	F	0.07	0.07	F	0.1	0.1	0.1	0.5	0.001	0.04	0.07	-	D
Trichlorobenzene (1,3,5-)	-	-	-	F	0.6	0.6	0.6	2	0.006	0.2	0.04	-	D
Trichloroethane (1,1,1-)	F	0.2	0.2	F	100	40	40	100	0.035	1	0.2	-	D
Trichloroethane (1,1,2-)	F	0.003	0.005	F	0.6	0.4	0.4	1	0.004	0.1	0.003	-	C
Trichloroethanol (2,2,2-)	L	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethylene	F	zero	0.005	F	-	-	-	-	-	0.3	-	0.3	B2
Trichlorophenol (2,4,6-)	L	-	-	D	-	-	-	-	-	-	-	0.3	B2
Trichloropropane (1,1,1-)	-	-	-	D	-	-	-	-	-	-	-	-	-
Trichloropropane (1,2,3-)	L	-	-	F	0.6	0.6	0.6	2	0.006	0.2	0.04	0.6	B2
Trifluralin	L	-	-	F	0.08	0.08	0.08	0.3	0.0075	0.3	0.005	0.5	C
Trimethylbenzene (1,2,4-)	-	-	-	D	-	-	-	-	-	-	-	-	-
Trimethylbenzene (1,3,5-)	-	-	-	D	-	-	-	-	-	-	-	-	-
Trinitroglycerol	-	-	-	F	0.005	0.005	0.005	0.005	-	-	0.005	-	-
Trinitrotoluene	-	-	-	F	0.02	0.02	0.02	0.02	0.0005	0.02	0.002	0.1	C
Vinyl chloride	F	zero	0.002	F	3	3	0.01	0.05	-	-	-	0.0015	A
Xylenes	F	10	10	F	40	40	40	100	2	60	10	-	D

* Under review.

** A HA will not be developed due to insufficient data; a "Database Deficiency Report" has been published.

** Total for all haloacetic acids cannot exceed 0.06 mg/l level.

Drinking Water Standards and Health Advisories

May 1995

Chemicals	Standards			Status HA	Health Advisories								Cancer Group
					10-kg Child			70-kg Adult					
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		One-day (mg/l)	Ten-day (mg/l)	Longer-term (mg/l)	Longer-term (mg/l)	RfD (mg/kg /day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10^{-4} Cancer Risk	
INORGANICS													
Aluminum	L	-	-	D	-	-	-	-	-	-	-	-	-
Ammonia		-	-	D	-	-	-	-	-	-	30	-	D
Antimony	F	0.006	0.006	F	0.01	0.01	0.01	0.015	0.0004	0.01	0.003	-	D
Arsenic	[4]	-	0.05	D	-	-	-	-	-	-	-	0.002	A
Asbestos (fibers/l >10μm length)	F	7 MFL	7 MFL	-	-	-	-	-	-	-	-	700 MFL	A
Barium	F	2	2	F	-	-	-	-	0.07	2	2	-	D
Beryllium	F	0.004	0.004	D	30	30	4	20	0.005	0.2	-	0.0008	B2
Boron	L	-	-	D	4	0.9	0.9	3	0.09	3	0.6	-	D
Bromate	L	zero	0.01	-	-	-	-	-	-	-	-	-	-
Cadmium	F	0.005	0.005	F	0.04	0.04	0.005	0.02	0.0005	0.02	0.005	-	D
Chloramine	P	4***	4	D	1	1	1	1	0.1	3.3	3/4***	-	-
Chlorate	L	-	-	D	-	-	-	-	-	-	-	-	-
Chlorine	P	4	4	D	-	-	-	-	0.1	-	-	-	D
Chlorine dioxide	T	0.3	0.8	D	-	-	-	-	0.01	0.35	0.3	-	D
Chlorite	L	0.08	1	D	-	-	-	-	0.003	0.1	0.08	-	D
Chromium (total)	F	0.1	0.1	F	1	1	0.2	0.8	0.005	0.2	0.1	-	D
Copper *(at tap)*	F	1.3	TT**	-	-	-	-	-	-	-	-	-	D
Cyanide	P	0.2	0.2	F	0.2	0.2	0.2	0.8	0.022	0.8	0.2	-	D
Fluoride*	F	4	4	-	-	-	-	-	0.12	-	-	-	-
Hypochlorite	P	4[1]	-	-	-	-	-	-	-	-	-	-	-
Hypochlorous acid	P	4[1]	-	-	-	-	-	-	-	-	-	-	-
Lead (at tap)	F	zero	TT**	-	-	-	-	-	-	-	-	-	B2
Manganese	L	-	-	D	-	-	-	-	0.14[3]/ 0.005[3]	-	-	-	-
Mercury (inorganic)	F	0.002	0.002	F	-	-	-	0.002	0.0003	0.01	0.002	-	D
Molybdenum	L	-	-	D	*0.04*	*0.04*	*0.04*	0.05	0.005	0.2	0.04	-	D
Nickel	F	*0.1*[4]	*0.1*[4]	F	1	1	0.5	1.7	0.02	0.6	0.1	-	D
Nitrate (as N)	F	10	10	F	-	10[2]	-	-	1.6	-	-	-	-

* Under review. ** Copper — action level 1.3 mg/L. *** Measured as free chlorine.
Lead — action level 0.015 mg/L.

[1] Regulated as chlorine. [2] In food. [3] In water. [4] *Being remanded*

Chemicals	Standards				Health Advisories								Cancer Group
					10-kg Child			70-kg Adult					
	Status Reg.	MCLG (mg/l)	MCL (mg/l)	Status HA	One-day (mg/l)	Ten-day (mg/l)	Longer-term (mg/l)	Longer-term (mg/l)	RfD (mg/kg/day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10^{-4} Cancer Risk	
Nitrite (as N)	F	1	1	F	-	1*	-	-	0.16*	-	-	-	*
Nitrate + Nitrite (both as N)	F	10	10	F	-	-	-	-	-	-	-	-	*
Selenium	F	0.05	0.05	-	-	-	-	-	0.005	-	-	-	-
Silver	-	-	-	D	0.2	0.2	0.2	0.2	0.005	0.2	0.1	-	D
Sodium	-	-	-	D	-	-	-	-	-	20**	-	-	-
Strontium	L	-	-	D	25	25	25	90	0.6	90	17	-	D
Sulfate	P	500	500	D	-	-	-	-	-	-	-	-	-
Thallium	F	0.0005	0.002	F	0.007	0.007	0.007	0.02	0.00007	0.002	0.0004	-	-
Vanadium	L	-	-	D	-	-	-	-	-	-	-	-	D
White phosphorous	-	-	-	F	-	-	-	-	0.00002	0.0005	0.0001	-	D
Zinc	L	-	-	F	6	6	3	10	0.3	10	2	-	D
Zinc chloride (measured as Zinc)	L	-	-	F	6	6	3	10	0.3	10	2	-	D
RADIONUCLIDES													
Beta particle and photon activity (formerly man-made radionuclides)	P	zero	4 mrem	-	-	-	-	-	-	-	-	4 mrem/y	A
Gross alpha particle activity	P	zero	15 pCi/L	-	-	-	-	-	-	-	-	15 pCi/L	A
Radium 226	P	zero	20 pCi/L	-	-	-	-	-	-	-	-	20 pCi/L	A
Radium 228	P	zero	20 pCi/L	-	-	-	-	-	-	-	-	20 pCi/L	A
Radon	P	zero	300 pCi/L+	-	-	-	-	-	-	-	-	150 pCi/L	A
Uranium	P	zero	20 µg/L	-	-	-	-	-	0.003	-	-	-	A

* Under review. ** Guidance.

+1991 Proposed National Primary Drinking Water Rule for Radionuclides

Secondary Maximum Contaminant Levels

Chemicals	Status	SMCLs (mg/L)
Aluminum	F	0.05 to 0.2
Chloride	F	250
Color	F	15 color units
Copper	F	1.0
Corrosivity	F	non-corrosive
Fluoride*	F	2.0
Foaming agents	F	0.5
Iron	F	0.3
Manganese	F	0.05
Odor	F	3 threshold odor numbers
pH	F	6.5 — 8.5
Silver	F	0.1
Sulfate	F	250
Total dissolved solids (TDS)	F	500
Zinc	F	5

Status Codes: P — proposed, F — final

* Under review.

Microbiology

	Status	MCLG	MCL
Cryptosporidium	L	-	-
Giardia lamblia	F	zero	TT
Legionella	F	zero	TT
Standard Plate Count	F	NA	TT
Total Coliforms	F	zero	**
Turbidity	F	NA	PS
Viruses	F	zero	TT

Key: PS, TT, F, defined as previously stated.

Final for systems using surface water; also being considered for regulation under groundwater disinfection rule.

APPENDIX E

ECOLOGICAL RISK ASSESSMENT SUPPORT DOCUMENTATION

Appendix E-1	Aquatic Information Retrieval (AQUIRE) Database Information and Search Results
Appendix E-2	Bioconcentration Factors
Appendix E-3	Reference Toxicity Values (RTVs)
Appendix E-4	Ingestion Toxicity Information for Terrestrial Wildlife
Appendix E-5	Model for Potential Exposures and Risks for Representative Wildlife Species to ECPCs in Surface Water and Sediment at SWMUs 14 and 18

APPENDIX E-1

AQUATIC INFORMATION RETRIEVAL (AQUIRE) DATABASE INFORMATION AND SEARCH RESULTS

APPENDIX E-1
AQUIRE Database Information and 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. Saltwater data was searched for groundwater ecological chemicals of potential concern. Each record in Appendix E-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 Standards (FAC 62-302) and the Federal Ambient Water Quality Standards (USEPA, 1986). 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 E-1
AQUIRE Information and Database Search Results
List of Abbreviations

CM	Centimeter(s)
CONC	Concentration
D	Day(s)
DVP	Development
EC50GR	Effect Concentration (Growth) exhibited by 50% of the test population
EC50IM	Effect Concentration (Immobilization) exhibited by 50% of the test population
FLT	Filtration rate
FT	Flow-through
G	Gram(s)
GRO	Growth
H	Hour(s)
HAT	Hatchability
IMM	Immobilization
LC50	Lethal Concentration for 50% of the test population
LET	Lethal
MG	Milligram(s)
ML	Milliliter(s)
MM	Millimeter(s)
MOR	Mortality
NR	Not Reported
OC/OXC	Oxygen Consumption
PGR	Population Growth
REP	Reproduction
RN	Renewal
ST	Static
SW	Saltwater
μg/l	Microgram(s) per liter
YR	Year(s)

APPENDIX E-1
AQUIRE Toxicity Information

Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc.	Units	Aquire Ref. #	Yr
1,1-Dichloroethylene	*Menidia beryllina*; Inland silverside	40-100 MM	SW; LAB	ST - LAB	96 H	7.6 to 7.9	MOR LC50	250000	ug/L	200256	77
1,1-Dichloroethylene	*Cyprinodon variegatus*; Sheepshead minnow	NR	SW; LAB	ST - LAB	96 H	(NR)	MOR LC50	250	mg/L	275837	81
2-Methylnaphthalene	*Decapoda*; Crustacean	JUVENILE, 0.3 G	SW; LAB	ST - LAB	96 H	8.1	LC50	600	UG/L	203233	78
2-Methylnaphthalene	*Palaemonetes pugio*; Grass shrimp, freshwater prawn	ADULT	SW; LAB	ST - LAB	96 H	8.1	LC50	1100	UG/L	203234	78
2-Methylnaphthalene	*Cancer magister*; Dungeness or edible crab	1ST INSTAR ZOEAE	SW; LAB	ST - LAB	96 H	(NR)	LC50	1300	UG/L	204927	77
2-Methylnaphthalene	*Cancer magister*; Dungeness or edible crab	1ST INSTAR ZOEAE	SW; LAB	ST - LAB	48 H	(NR)	LC50	5000	UG/L	204928	77
2-Methylnaphthalene	*Cyprinodon variegatus*; Sheepshead minnow	NR	SW; LAB	ST - LAB	24 H	(NR)	LC50	2000	UG/L	208684	74
2-Methylnaphthalene	*Palaemonetes pugio*; Grass shrimp, freshwater prawn	NR	SW; LAB	ST - LAB	24 H	(NR)	LC50	1700	UG/L	208685	74
2-Methylnaphthalene	*Decapoda*; Crustacean	NR	SW; LAB	ST - LAB	24 H	(NR)	LC50	700	UG/L	208686	74
2-Methylnaphthalene	*Eurytemora affinis*; Calanoid copepod	NR	SW; LAB	ST - LAB	24 H	(NR)	LC50	1499	UG/L	213261	78
2-Methylnaphthalene	*Eurytemora affinis*; Calanoid copepod	FEMALES W/EGG SACS	SW; LAB	RN - LAB	NR	(NR)	REP	15.03	UG/L	213262	78
2-Methylnaphthalene	*Gadidae*; Fish	EGG, 24 H POST-FER	SW; LAB	ST - LAB	4 D	(NR)	DVP	300	UG/L	286195	84
2-Methylnaphthalene	*Hippoglossoides platessoides*; Rough dab, american plaice	EGG, 24 H POST-FER	SW; LAB	ST - LAB	4 D	(NR)	DVP	1000	UG/L	286196	84
2-Methylnaphthalene	*Pleuronectes platessa*; Plaice, sand dab	EGG, 24 H POST-FER	SW; LAB	ST - LAB	4 D	(NR)	DVP	6000	UG/L	286197	84
2-Methylnaphthalene	*Platichthys flesus*; Starry, european flounder	EGG, 24 H POST-FER	SW; LAB	ST - LAB	4 D	(NR)	LET	6000	UG/L	286198	84

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AQUIRE Toxicity Information

Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc.	Units	Aquire Ref. #	Yr
2-Methylnaphthalene	*Cylopteridae*; Fish	EGG, 24 H POST-FER	SW; LAB	ST - LAB	4 D	(NR)	DVP	10000	UG/L	286199	84
2-Methylnaphthalene	*Osmeridae*; Fish	EGG, 24 H POST-FER	SW; LAB	ST - LAB	4 D	(NR)	DVP	10000	UG/L	286200	84
2-Methylnaphthalene	*Osmeridae*; Fish	NEWLY HAT LARVAE	SW; LAB	ST - LAB	4 D	(NR)	LET	3000	UG/L	286201	84
2-Methylnaphthalene	*Hippoglossoides platessoides*; Rough dab, american plaice	NEWLY HAT LARVAE	SW; LAB	ST - LAB	4 D	(NR)	LET	3000	UG/L	286202	84
2-Methylnaphthalene	*Cylopteridae*; Fish	NEWLY HAT LARVAE	SW; LAB	ST - LAB	4 D	(NR)	LET	3000	UG/L	286203	84
2-Methylnaphthalene	*Gadidae*; Fish	NEWLY HAT LARVAE	SW; LAB	ST - LAB	NR	(NR)	LET	6000	UG/L	286204	84
2-Methylnaphthalene	*Pleuronectes platessa*; Plaice, sand dab	NEWLY HAT LARVAE	SW; LAB	ST - LAB	NR	(NR)	LET	6000	UG/L	286205	84
2-Methylnaphthalene	*Platichthys flesus*; Starry, european flounder	NEWLY HAT LARVAE	SW; LAB	ST - LAB	NR	(NR)	LET	6000	UG/L	286206	84
2-Methylnaphthalene	*Stronglyocentrotus droebachien*; Sea urchin	FERTILIZED EGG	SW; LAB	ST - LAB	2 D	(NR)	LET	3080	UG/L	291650	82
2-Methylnaphthalene	*Gadidae*; Fish	EGG, < 2 H POST-FER	SW; LAB	ST - LAB	2 D	(NR)	LET	3080	UG/L	291651	82
2-Methylnaphthalene	*Stronglyocentrotus droebachien*; Sea urchin	FERTILIZED EGG	SW; LAB	ST - LAB	2 D	(NR)	LET	3080	UG/L	291652	82
2-Methylnaphthalene	*Stronglyocentrotus droebachien*; Sea urchin	FERTILIZED EGG	SW; LAB	ST - LAB	1 D	(NR)	LET	3300	UG/L	291653	82
2-Methylnaphthalene	*Gadidae*; Fish	EGG, < 2 H POST-FER	SW; LAB	ST - LAB	2 D	(NR)	LET	3300	UG/L	291654	82
2-Methylnaphthalene	*Stronglyocentrotus droebachien*; Sea urchin	EGG	SW; LAB	ST - LAB	2 D	(NR)	LET	2900	UG/L	294068	84
2-Methylnaphthalene	*Stronglyocentrotus droebachien*; Sea urchin	EGG	SW; LAB	ST - LAB	2 D	(NR)	LET	3000	UG/L	294069	84

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AQUIRE Toxicity Information

Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc.	Units	Aquire Ref. #	Yr
2-Methylnaphthalene	*Gadidae*; Fish	EGG	SW; LAB	ST - LAB	2 D	(NR)	LET	2900	UG/L	294070	84
2-Methylnaphthalene	*Gadidae*; Fish	EGG	SW; LAB	ST - LAB	4 D	(NR)	LET	2000	UG/L	294071	84
9H-Fluorene	*Nereis arenaceodentata*, Polychaete	IMMATURE	SW; LAB	ST - LAB	96 H	(NR)	LC50	1000	UG/L	204176	78
9H-Fluorene	*Agmenellum quadruplicatum*, Blue-green algae	5-10000 CELLS/ML	LAB	VI - LAB	to 8 D	(NR)	PGR	10000	UG	206886	74
9H-Fluorene	*Anabaena flos-aquae*, Blue-green algae	10000 CELLS/ML	LAB	ST - LAB	14 D	(NR)	PGR	1089	UG/L	292995	82
Arsenic	*Phaeodactylum tricornutum*; Diatom	NR	SW; LAB	ST - LAB	NR	(NR)	EC50	25000	UG/L	311886	88
Dibenzofuran	*Cyprinodon variegatus*; Sheepshead minnow	NR	SW; LAB	ST - LAB	96 H	(NR)	MOR	1	mg/L	214183	81
Dibenzofuran	*Cyprinodon variegatus*; Sheepshead minnow	NR	SW; LAB	ST - LAB	96 H	(NR)	MOR	1.8	mg/L	262629	81
Iron	*Crangon crangon*, Common shrimp	NR	SW; LAB	ST - LAB	48 H	(NR)	LC50	33000 to 100000	UG/L	270695	72
Iron	*Cerastoderma edule*, Cockle	NR	SW; LAB	ST - LAB	48 H	(NR)	LC50	100000 to 330000	UG/L	270696	72
Iron	*Gymnodinium splendens*; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	200 to 5000	UG/L	281939	80
Iron	*Gymnodinium splendens*; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	100 to 4000	UG/L	281940	80
Iron	*Isochrysis galbana*; Haptophyte	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	500 to 20000	UG/L	281941	80
Iron	*Isochrysis galbana*; Haptophyte	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	1000 to 25000	UG/L	281942	80
Iron	*Thalassiosira guillardii*; Diatom	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	8000 to > 20000	UG/L	281943	80

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Iron	*Thalassiostra guillardii*; Diatom	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	7000 to > 20000	UG/L	281944	80
Iron	*Glenodinium halli*; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	200 to 2000	UG/L	281945	80
Iron	*Glenodinium halli*; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	500 to 5000	UG/L	281946	80
Iron	*Isochrysis galbana*; Haptophyte	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	35000	UG/L	281947	80
Iron	*Thalassiostra guillardii*; Diatom	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	20000	UG/L	281948	80
Iron	*Gymnodinium splendens*; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	30000	UG/L	281949	80
Iron	*Gymnodinium splendens*; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	35000	UG/L	281950	80
Iron	*Glenodinium halli*; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	6 D	(NR)	PGR	100000	UG/L	281951	80
Manganese	*Macoma balthica*; Balthica macoma or clam	NR	SW; LAB	NR	NR	(NR)	OC	20000	UG/L	252402	70
Manganese	*Mya arenaria*; Sand gaper, soft shell clam	NR	SW; LAB	NR	NR	(NR)	OC	20000	UG/L	252403	70
Manganese	*Dreissena polymorpha*; Zebra mussel	NR	SW; LAB	NR	NR	(NR)	OC	20000	UG/L	252404	70
Naphthalene	*Nereis arenaceodentata*; Polychaete	IMMATURE YOUNG ADULTS	SW; LAB	ST - LAB	96 H	8.0 to 8.4	MOR	3800	ug/L	203166	78
Naphthalene	*Penaeus aztecus*; Brown shrimp	JUVENILE, 0.3 G	SW; LAB	ST - LAB	96 H	8.1	MOR	2500	ug/L	203238	78
Naphthalene	*Palaemonetes pugio*; Daggerblade grass shrimp	ADULT	SW; LAB	ST - LAB	96 H	8.1	MOR	2350	ug/L	203239	78
Naphthalene	*Elasmopus pectinicrus*; Scud	ADULT	SW; LAB	RN - LAB	24 H	(NR)	MOR	3650	ug/L	204160	78

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AQUIRE Toxicity Information

Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc.	Units	Aquire Ref. #	Yr
Naphthalene	*Elasmopus pectinicrus*; Scud	ADULT	SW; LAB	RN - LAB	48 H	(NR)	MOR	2800	ug/L	204161	78
Naphthalene	*Elasmopus pectinicrus*; Scud	ADULT	SW; LAB	RN - LAB	96 H	(NR)	MOR	2680	ug/L	204162	78
Naphthalene	*Cancer magister*; Dungeness or edible crab	1ST INSTAR ZOEAL	SW; LAB	ST - LAB	96 H	(NR)	MOR	>2000	ug/L	204420	77
Naphthalene	*Cancer magister*; Dungeness or edible crab Crustacean	1ST ZOEAL STAGE	SW; LAB	FT - LAB	13 D	(NR)	DVP	130	ug/L	204421	77
Naphthalene	*Parhyale hawaiensis*; Scud	ADULT	SW; LAB	ST - LAB	24 H	(NR)	MOR	1000	ug/L	204488	78
Naphthalene	*Parhyale hawaiensis*; Scud	ADULT	SW; LAB	ST - LAB	24 H	(NR)	MOR	3000	ug/L	204489	78
Naphthalene	*Parhyale hawaiensis*; Scud	ADULT	SW; LAB	ST - LAB	24 H	(NR)	MOR	4000	ug/L	204490	78
Naphthalene	*Parhyale hawaiensis*; Scud	ADULT	SW; LAB	ST - LAB	24 H	(NR)	MOR	10000	ug/L	204491	78
Naphthalene	*Parhyale hawaiensis*; Scud	ADULT	SW; LAB	ST - LAB	24 H	(NR)	MOR	6000	ug/L	204492	78
Naphthalene	*Parhyale hawaiensis*; Scud	ADULT	SW; LAB	ST - LAB	24 H	(NR)	MOR	8000	ug/L	204493	78
Naphthalene	*Parhyale hawaiensis*; Scud	ADULT	SW; LAB	ST - LAB	24 H	(NR)	MOR	10000	ug/L	204494	78
Naphthalene	*Parhyale hawaiensis*; Scud	ADULT	SW; LAB	ST - LAB	24 H	(NR)	MOR	15000	ug/L	204495	78
Naphthalene	*Parhyale hawaiensis*; Scud	ADULT	SW; LAB	ST - LAB	24 H	(NR)	MOR	5000	ug/L	204496	78
Naphthalene	*Parhyale hawaiensis*; Scud	ADULT	SW; LAB	ST - LAB	24 H	(NR)	MOR	7500	ug/L	204497	78
Naphthalene	*Parhyale hawaiensis*; Scud	ADULT	SW; LAB	ST - LAB	24 H	(NR)	MOR	9000	ug/L	204498	78

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Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc.	Units	Aquire Ref. #	Yr
Naphthalene	*Parhyale hawaiensis*; Scud	ADULT	SW; LAB	ST - LAB	24 H	(NR)	MOR	20000	ug/L	204499	78
Naphthalene	*Cyprinodon variegatus*; Sheepshead minnow	NR	SW; LAB	ST - LAB	24 H	(NR)	MOR	2400	ug/L	208681	74
Naphthalene	*Palaemonetes pugio*; Daggerblade grass shrimp	NR	SW; LAB	ST - LAB	24 H	(NR)	MOR	2600	ug/L	208682	74
Naphthalene	*Penaeus aztecus*; Brown shrimp	NR	SW; LAB	ST - LAB	24 H	(NR)	MOR	2500	ug/L	208683	74
Naphthalene	*Eurytemora affinis*; Calanoid copepod	NR	SW; LAB	ST - LAB	24 H	(NR)	MOR	3798	ug/L	213259	78
Naphthalene	*Fundulus heteroclitus*; Mummichog	7.4 CM, 5.2 G	SW; LAB	RN - LAB	30 H	8.0 to 8.4 (Mean (NR))	MOR	4000	ug/L	218957	79
Naphthalene	*Fundulus heteroclitus*; Mummichog	7.4 CM, 5.2 G	SW; LAB	RN - LAB	30 H	8.0 to 8.4	MOR	6000	ug/L	218958	79
Naphthalene	*Fundulus heteroclitus*; Mummichog	7.4 CM, 5.2 G	SW; LAB	RN - LAB	30 H	8.0 to 8.4 (Mean (NR))	MOR	6000	ug/L	218959	79
Naphthalene	*Crassostrea gigas*; Pacific oyster	EGGS	SW; LAB	ST - LAB	48 H	(NR)	DVP EC50	194000	ug/L	231859	74
Naphthalene	*Crassostrea gigas*; Pacific oyster	EGGS	SW; LAB	ST - LAB	48 H	(NR)	MOR	110000	ug/L	231860	74
Naphthalene	*Anadara granosa*; Ark shell	2-3 YR, 3-6 CM	SW; LAB	ST - LAB	to 96 H	(NR)	OXC	10000	ug/L	244048	89
Naphthalene	*Anadara granosa*; Ark shell	2-3 YR, 3-6 CM	SW; LAB	ST - LAB	to 96 H	(NR)	OXC	5000	ug/L	244049	89
Naphthalene	*Callinectes sapidus*; Blue crab	ADULT INTERMOLT, 50-227 G	SW; LAB	FT - LAB	24 H	(NR)	MOR	1980	ug/L	249802	82

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Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc.	Units	Aquire Ref. #	Yr
Naphthalene	*Callinectes sapidus*; Blue crab	ADULT INTERMOLT, 50-227 G	SW; LAB	FT - LAB	24 H	(NR)	MOR	2250	ug/L	249803	82
Naphthalene	*Callinectes sapidus*; Blue crab	ADULT INTERMOLT, 50-227 G	SW; LAB	FT - LAB	24 H	(NR)	MOR	3120	ug/L	249839	82
Naphthalene	*Oncorhynchus gorbuscha*; Pink salmon	FRY, 0.35 G, 3.5 CM	SW; LAB	ST - LAB	96 H	(NR)	MOR	1370	ug/L	253850	79
Naphthalene	*Oncorhynchus gorbuscha*; Pink salmon	FRY, 0.35 G, 3.5 CM	SW; LAB	ST - LAB	96 H	(NR)	MOR	1840	ug/L	253851	79
Naphthalene	*Oncorhynchus gorbuscha*; Pink salmon	FRY, 0.35 G, 3.5 CM	SW; LAB	ST - LAB	96 H	(NR)	MOR	1240	ug/L	253852	79
Naphthalene	*Pandalus goniurus*; Humpy shrimp	0.8 G, 6 CM	SW; LAB	ST - LAB	96 H	(NR)	MOR	2160	ug/L	253853	79
Naphthalene	*Pandalus goniurus*; Humpy shrimp	0.8 G, 6 CM	SW; LAB	ST - LAB	96 H	(NR)	MOR	1020	ug/L	253854	79
Naphthalene	*Pandalus goniurus*; Humpy shrimp	0.8 G, 6 CM	SW; LAB	ST - LAB	96 H	(NR)	MOR	971	ug/L	253855	79
Naphthalene	*Pandalus goniurus*; Humpy shrimp	0.8 G, 6 MM	SW; LAB	ST - LAB	24 H	(NR)	MOR	2210	ug/L	261586	77
Naphthalene	*Pandalus goniurus*; Humpy shrimp	0.8 G, 6 MM	SW; LAB	ST - LAB	24 H	(NR)	MOR	2060	ug/L	261587	77
Naphthalene	*Pandalus goniurus*; Humpy shrimp	0.8 G, 6 MM	SW; LAB	ST - LAB	24 H	(NR)	MOR	1290	ug/L	261588	77
Naphthalene	*Oncorhynchus gorbuscha*; Pink salmon	FRY, 350 MG, 35 MM	SW; LAB	ST - LAB	24 H	(NR)	MOR	1560	ug/L	261589	77
Naphthalene	*Oncorhynchus gorbuscha*; Pink salmon	FRY, 350 MG, 35 MM	SW; LAB	ST - LAB	24 H	(NR)	MOR	1840	ug/L	261590	77
Naphthalene	*Oncorhynchus gorbuscha*; Pink salmon	FRY, 350 MG, 35 MM	SW; LAB	ST - LAB	24 H	(NR)	MOR	1380	ug/L	261591	77

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Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc.	Units	Aquire Ref. #	Yr
Naphthalene	*Daphnia pulex*; Water flea	NEONATE	SW; LAB	ST - LAB	48 H	7.2	MOR	2920 to 3890	ug/L	266984	82
Naphthalene	*Oncorhynchus gorbuscha*; Pink salmon	JUVENILE, 325 MG, 32 MM	SW; LAB	FT - LAB	40 D	(NR)	MOR	1200	ug/L	275259	83
Naphthalene	*Oncorhynchus gorbuscha*; Pink salmon	JUVENILE, 325 MG, 32 MM	SW; LAB	FT - LAB	96 H	(NR)	MOR	1200	ug/L	275260	83
Naphthalene	*Oncorhynchus gorbuscha*; Pink salmon	JUVENILE, 325 MG, 32 MM	SW; LAB	FT - LAB	30 D	(NR)	GRO	560	ug/L	275261	83
Naphthalene	*Oncorhynchus gorbuscha*; Pink salmon	JUVENILE, 325 MG, 32 MM	SW; LAB	FT - LAB	30 D	(NR)	GRO	800	ug/L	275262	83
Naphthalene	*Oncorhynchus gorbuscha*; Pink salmon	JUVENILE, 325 MG, 32 MM	SW; LAB	FT - LAB	20 D	(NR)	GRO	800	ug/L	275263	83
Naphthalene	*Oncorhynchus gorbuscha*; Pink salmon	JUVENILE, 325 MG, 32 MM	SW; LAB	FT - LAB	40 D	(NR)	GRO	120	ug/L	275264	83
Naphthalene	*Oncorhynchus gorbuscha*; Pink salmon	JUVENILE, 325 MG, 32 MM	SW; LAB	FT - LAB	30 D	(NR)	GRO	380	ug/L	275265	83
Naphthalene	*Oncorhynchus gorbuscha*; Pink salmon	JUVENILE, 325 MG, 32 MM	SW; LAB	FT - LAB	40 D	(NR)	GRO	380	ug/L	275266	83
Naphthalene	*Menidia beryllina*; Inland silverside	EMBRYOS, BLASTULA STAGE	SW; LAB	ST - LAB	to 8 D	6.4 to 7.0	MOR	600 to 6500	ug/L	277076	88
Naphthalene	*Menidia beryllina*; Inland silverside	EMBRYOS, 2-4 CELL	SW; LAB	ST - LAB	to 8 D	6.3 to 7.1	MOR	550 to 4950	ug/L	277077	88
Naphthalene	*Uca pugilator*; Fiddler crab	MALE, 1.5-1.8 CM, CARAPACE WIDTH	SW; LAB	ST - LAB	96 H	(NR)	MOR	16690	ug/L	279497	84
Naphthalene	*Hemigrapsus nudus*; Shore crab	NR	SW; LAB	FT - LAB	8 D	(NR)	MOR	1100 to 2800	ug/L	280082	87
Naphthalene	*Neomysis americana*; Opossum shrimp	NR	SW; LAB	FT - LAB	96 H	(NR)	MOR	1280	ug/L	280193	83

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Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc.	Units	Aquire Ref. #	Yr
Naphthalene	*Neomysis americana*; Opossum shrimp	NR	SW; LAB	FT - LAB	96 H	(NR)	MOR	850	ug/L	280194	83
Naphthalene	*Artemia salina*; Brine shrimp	NAUPLII	SW; LAB	ST - LAB	24 H	8.5 to 8.7	IMM EC50	3190	ug/L	289906	84
Naphthalene	*Artemia salina*; Brine shrimp	STAGE II NAUPLII	SW; LAB	ST - LAB	24 H	8.3 to 8.6	IMM EC50	2890	ug/L	289911	85
Naphthalene	*Artemia salina*; Brine shrimp	STAGE II NAUPLII	SW; LAB	ST - LAB	24 H	8.3 to 8.6	IMM EC50	2110	ug/L	289912	85
Naphthalene	*Neomysis americana*; Opossum shrimp	NR	SW; LAB	FT - LAB	24 H	(NR)	OXC	88	ug/L	291400	84
Naphthalene	*Neomysis americana*; Opossum shrimp	NR	SW; LAB	FT - LAB	24 H	(NR)	OXC	1110	ug/L	291401	84
Naphthalene	*Stronglyocentrotus droebachien*; Green sea urchin	FERTILIZED EGG	SW; LAB	ST - LAB	2 D	(NR)	MOR	3070	ug/L	291649	82
Naphthalene	*Champia parvula*; Red algae	FEMALE, TETRASPOROPHYTES	SW; LAB	RN - LAB	1 to 14 D	(NR)	GRO	2210	ug/L	292064	85
Naphthalene	*Champia parvula*; Red algae	TETRASPOROPHYTES	SW; LAB	RN - LAB	1 to 14 D	(NR)	GRO	695	ug/L	292065	85
Naphthalene	*Champia parvula*; Red algae	FEMALE, TETRASPOROPHYTES	SW; LAB	RN - LAB	1 to 14 D	(NR)	REP	2210	ug/L	292066	85
Naphthalene	*Champia parvula*; Red algae	TETRASPOROPHYTES	SW; LAB	RN - LAB	1 to 14 D	(NR)	REP	1160	ug/L	292067	85
Naphthalene	*Stronglyocentrotus droebachien*; Green sea urchin	EGG	SW; LAB	ST - LAB	2 D	(NR)	MOR	2700	ug/L	294062	84
Naphthalene	*Stronglyocentrotus droebachien*; Green sea urchin	EGG	SW; LAB	ST - LAB	4 D	(NR)	MOR	2780	ug/L	294063	84

APPENDIX E-1
AQUIRE Toxicity Information

Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc.	Units	Aquire Ref. #	Yr
Naphthalene	*Pavlova lutheri*; Haptophyte	LOG PHASE	SW; LAB	ST - LAB	24 H	(NR)	MOR	1.0	ug/L	294186	86
Naphthalene	*Eualus suckleyi*; Shortscale eualid	1 G	SW; LAB	FT - LAB	96 H	(NR)	MOR	1390	ug/L	307918	89
Naphthalene	*Oncorhynchus gorbuscha*; Pink salmon	FRY	SW; LAB	FT - LAB	48 H	(NR)	MOR	960	ug/L	307919	89
Naphthalene	*Oncorhynchus gorbuscha*; Pink salmon	FRY	SW; LAB	FT - LAB	48 H	(NR)	MOR	900	ug/L	307920	89
Naphthalene	*Oncorhynchus gorbuscha*; Pink salmon	FRY	SW; LAB	FT - LAB	48 H	(NR)	MOR	990	ug/L	307921	89
Naphthalene	*Oncorhynchus gorbuscha*; Pink salmon	FRY	SW; LAB	FT - LAB	48 H	(NR)	MOR	1010	ug/L	307922	89
Naphthalene	*Oncorhynchus gorbuscha*; Pink salmon	FRY	SW; LAB	FT - LAB	48 H	(NR)	MOR	890	ug/L	307923	89
Naphthalene	*Metapenaeus monoceros*; Sand shrimp	JUVENILE, 0.900 G	SW; LAB	ST - LAB	to 4 H	(NR)	OXC	1500 to 4500	ug/L	308775	83
Naphthalene	*Metapenaeus monoceros*; Sand shrimp	JUVENILE, 0.900 G	SW; LAB	ST - LAB	to 4 H	(NR)	OXC	1500 to 4500	ug/L	308776	83
Naphthalene	*Metapenaeus monoceros*; Sand shrimp	JUVENILE, 0.900 G	SW; LAB	ST - LAB	to 4 H	(NR)	OXC	1500 to 4500	ug/L	308777	83
Naphthalene	*Metapenaeus monoceros*; Sand shrimp	JUVENILE, 0.900 G	SW; LAB	ST - LAB	to 4 H	(NR)	OXC	1500 to 4500	ug/L	308778	83
Naphthalene	*Metapenaeus monoceros*; Sand shrimp	JUVENILE, 0.900 G	SW; LAB	ST - LAB	to 4 H	(NR)	OXC	1500 to 4500	ug/L	308779	83
Naphthalene	*Acrosiphonia sonderi*; Green algae	NR	SW; LAB	ST - LAB	to 2 H	(NR)	PSE	10000 to 25000	ug/L	310946	80
Naphthalene	*Fundulus heteroclitus*; Mummichog	7.4 CM, 5.2 G	SW; LAB	RN - LAB	to 2 H	8.0 to 8.4	OXC	4000	ug/L	315612	79
Phenenthrene	*Nereis arenaceodentata*; Polychaete	IMMATURE	SW; LAB	ST - LAB	96 H	(NR)	LC50	600	UG/L	203167	78

Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc.	Units	Aquire Ref. #	Yr
Phenenthrene	*Agmenellum quadruplicatum*; Blue-green algae	5-10000 CELLS/ML	LAB	VI - LAB	to 8 D	(NR)	PGR	500	UG	206876	74
Phenenthrene	*Chlorella autotrophica*; Green algae	5-10000 CELLS/ML	LAB	VI - LAB	to 8 D	(NR)	PGR	2000	UG	206877	74
Phenenthrene	*Rhithropanopeus harrisii*; Mud crab	JUVENILE, 3RD-4TH CRAB STAGE	SW; LAB	RN - LAB	10 D	8.0 to 8.4	MOR	300	UG/L	262780	79
Phenenthrene	*Rhithropanopeus harrisii*; Mud crab	JUVENILE, 3RD-4TH CRAB STAGE	SW; LAB	RN - LAB	10 D	8.0 to 8.4	MOR	300	UG/L	262781	79
Phenenthrene	*Rhithropanopeus harrisii*; Mud crab	JUVENILE, 3RD-4TH CRAB STAGE	SW; LAB	RN - LAB	10 D	8.0 to 8.4	MOR	300	UG/L	262782	79
Phenenthrene	*Rhithropanopeus harrisii*; Mud crab	JUVENILE, 3RD-4TH CRAB STAGE	SW; LAB	RN - LAB	10 D	8.0 to 8.4	MOR	75	UG/L	262785	79
Phenenthrene	*Rhithropanopeus harrisii*; Mud crab	JUVENILE, 3RD-4TH CRAB STAGE	SW; LAB	RN - LAB	10 D	8.0 to 8.4	MOR	75	UG/L	262786	79
Phenenthrene	*Rhithropanopeus harrisii*; Mud crab	JUVENILE, 3RD-4TH CRAB STAGE	SW; LAB	RN - LAB	10 D	8.0 to 8.4	MOR	150	UG/L	262787	79
Phenenthrene	*Rhithropanopeus harrisii*; Mud crab	JUVENILE, 3RD-4TH CRAB STAGE	SW; LAB	RN - LAB	10 D	8.0 to 8.4	MOR	150	UG/L	262788	79
Phenenthrene	*Rhithropanopeus harrisii*; Mud crab	JUVENILE, 3RD-4TH CRAB STAGE	SW; LAB	RN - LAB	10 D	8.0 to 8.4	MOR	150	UG/L	262789	79
Phenenthrene	*Agmenellum quadruplicatum*; Blue-green algae	5-10000 CELLS/ML	LAB	VI - LAB	to 8 D	(NR)	PGR	1000	UG	265190	74
Phenenthrene	*Agmenellum quadruplicatum*; Blue-green algae	5-10000 CELLS/ML	LAB	VI - LAB	to 8 D	(NR)	PGR	2000	UG	265191	74

Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc.	Units	Aquire Ref. #	Yr
Phenenthrene	*Agmenellum quadruplicatum*; Blue-green algae	5-10000 CELLS/ML	LAB	VI - LAB	to 8 D	(NR)	PGR	10000	UG	265192	74
Phthalic acid, bis(2-Ethylhexyl) ester	*Mtocra spinipes*; Harpacticoid copepod	0.6-0.8MM, ADULTS	SW; LAB	ST - LAB	96 H	7.8	MOR LC50	>300000	ug/L	203822	79
Phthalic acid, bis(2-Ethylhexyl) ester	*Gymnodinium breve*; Dinoflagellate	1000-5000 CELLS PER ML	SW; LAB	ST - LAB	96 H	(NR)	GRO EC50	31000000	ug/L	258268	78
Phthalic acid, bis(2-Ethylhexyl) ester	*Cyprinodon variegatus*; Sheepshead minnow	NR	SW; LAB	ST - LAB	96 H	(NR)	MOR LC50	>550	mg/L	262626	81
Phthalic acid, bis(2-Ethylhexyl) ester	*Mtocra spinipes*; Harpacticoid copepod	NR	SW; LAB	ST - LAB	96 H	(NR)	MOR LC50	> 1000000	ug/L	280927	83
Vanadium	*Dunaliella sp*; Green algae	NR	SW; LAB	ST - LAB	NR	(NR)	PGR	50000	ug/L	225467	79
Vanadium	*Gymnodinium splendens*; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	1000 to 20000	ug/L	280623	80
Vanadium	*Gymnodinium splendens*; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	500 to 18000	ug/L	280624	80
Vanadium	*Isochrysis galbana*; Haptophyte	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	18000 to 40000	ug/L	280625	80
Vanadium	*Isochrysis galbana*; Haptophyte	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	20000 to 30000	ug/L	280626	80
Vanadium	*Thalassiosira guillardii*; Diatom	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	10000 to 30000	ug/L	280627	80
Vanadium	*Thalassiosira guillardii*; Diatom	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	5000 to 30000	ug/L	280628	80
Vanadium	*Glenodinium halli*; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	1000 to 10000	ug/L	280629	80
Vanadium	*Glenodinium halli*; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR	2000 to 20000	ug/L	280630	80

Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc.	Units	Aquire Ref. #	Yr
Vanadium	*Isochrysis galbana*; Haptophyte	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR (Delayed)	100000	ug/L	280631	80
Vanadium	*Thalassiosira guillardii*; Diatom	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR (Delayed)	100000	ug/L	280632	80
Vanadium	*Gymnodinium splendens*; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR (Delayed)	30000	ug/L	280633	80
Vanadium	*Gymnodinium splendens*; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	PGR (Delayed)	35000	ug/L	280634	80
Vanadium	*Glenodinium halli*; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	6 D	(NR)	PGR (Delayed)	500000	ug/L	280635	80
Vanadium	*Gymnodinium splendens*; Dinoflagellate; Pyrrophyta; AL; ALGAE	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	GRO EC50	24000	ug/L	280640	80
Vanadium	*Gymnodinium splendens*; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	GRO EC50	42000	ug/L	280641	80
Vanadium	*Gymnodinium splendens*; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	GRO EC50	1800	ug/L	280642	80
Vanadium	*Gymnodinium splendens*; Dinoflagellate	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	GRO EC50	7000	ug/L	280643	80
Vanadium	*Thalassiosira guillardii*; Diatom	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	GRO EC50	26000	ug/L	280644	80
Vanadium	*Thalassiosira guillardii*; Diatom	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	GRO EC50	18000	ug/L	280645	80
Vanadium	*Thalassiosira guillardii*; Diatom	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	GRO EC50	13000	ug/L	280646	80
Vanadium	*Thalassiosira guillardii*; Diatom	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	GRO EC50	12000	ug/L	280647	80

APPENDIX E-1
AQUIRE Toxicity Information

Chemical Name	Species Identification	Age/Life Stage	Test Condition	Route/ Method	Duration	pH	Endpoint	Effect Conc.	Units	Aquire Ref. #	Yr
Vanadium	*Thalassiosira guillardii*; Diatom	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	GRO EC50	21000	ug/L	280648	80
Vanadium	*Thalassiosira guillardii*; Diatom	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	GRO EC50	35000	ug/L	280649	80
Vanadium	*Thalassiosira guillardii*; Diatom	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	GRO EC50	27000	ug/L	280650	80
Vanadium	*Thalassiosira guillardii*; Diatom	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	GRO EC50	35000	ug/L	280651	80
Vanadium	*Thalassiosira guillardii*; Diatom	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	GRO EC50	33000	ug/L	280652	80
Vanadium	*Thalassiosira guillardii*; Diatom	ACTIVELY GROWING CULT	SW; LAB	ST - LAB	48 H	(NR)	GRO EC50	37000	ug/L	280653	80

APPENDIX E-2

BIOCONCENTRATION FACTORS

Appendix E-2
Summary of Bioconcentration Factors (BCF)

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

Analyte [a]	Bioconcentration Factor
Iron	3,570
Lead	924
Zinc	345

[a] BCFs are presented for ecological chemicals of potential concern (ECPCs) in surface water.

Notes: BCF = bioconcentration factor.
RCRA = Resource Conservation and Recovery Act.
SWMU = solid waste management unit.

Appendix E-2
Bioconcentration Factors

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

Chemical Name	Species Identification	Test Condition	Age/Life Stage	Route/ Method	Duration	Effect Conc. (µg/ℓ)	BCF	AQUIRE Ref. #/ Reference	Year
Iron chloride	Fucus serratus; Toothed wrack	SW	Immature, 10-20 G	RN-LAB	70 D	5.8	2000 to 2500	236341	75
Iron chloride	Littorina obtustata; Round periwinkle	SW	1.2-1.7 G	RN-LAB	72 H	3.3	9400	236345	75
Iron chloride	Littorina obtustata; Round periwinkle	SW	1.2-1.7 G	RN-LAB	11 D	3.3	11000	236346	75
Iron chloride	Littorina obtustata; Round periwinkle	SW	1.2-1.7 G	RN-LAB	23 D	3.3	9100	236347	75
Iron chloride	Littorina obtustata; Round periwinkle	SW	1.2-1.7 G	RN-LAB	31 D	3.3	9700	236348	75
Iron chloride	Littorina obtustata; Round periwinkle	SW	1.2-1.7 G	RN-LAB	44 D	3.3	9700	236349	75
Iron chloride	Littorina obtustata; Round periwinkle	SW	1.2-1.7 G	RN-LAB	49 D	3.3	8500	236350	75
Iron chloride	Raja clavata; Thornback ray	SW	37 G	RN-LAB	84 D	10	10540	212362	73
Iron chloride	Raja clavata; Thornback ray	SW	37 G	RN-LAB	84 D	10	2920	212364	73
Iron chloride	Raja clavata; Thornback ray	SW	37 G	RN-LAB	84 D	10	10980	212365	73
Iron chloride	Raja clavata; Thornback ray	SW	37 G	RN-LAB	84 D	10	6280	212367	73
Iron chloride	Raja clavata; Thornback ray	SW	37 G	RN-LAB	84 D	10	3340	212368	73
Iron chloride	Raja clavata; Thornback ray	SW	37 G	RN-LAB	84 D	10	920	212370	73
Iron chloride	Raja clavata; Thornback ray	SW	37 G	RN-LAB	84 D	10	1360	212371	73
Iron chloride	Raja clavata; Thornback ray	SW	37 G	RN-LAB	84 D	10	2450	212373	73
Iron chloride	Raja clavata; Thornback ray	SW	37 G	RN-LAB	84 D	10	920	212375	73
Iron chloride	Raja clavata; Thornback ray	SW	37 G	RN-LAB	84 D	10	260	212376	73
Iron chloride	Raja clavata; Thornback ray	SW	37 G	RN-LAB	84 D	10	540	212378	73
Iron chloride	Raja clavata; Thornback ray	SW	37 G	RN-LAB	84 D	10	1.0	212379	73
Iron chloride	Raja clavata; Thornback ray	SW	37 G	RN-LAB	84 D	10	1.3	212380	73
Iron chloride	Raja clavata; Thornback ray	SW	37 G	RN-LAB	84 D	10	1.0	212382	73
Iron chloride	Raja clavata; Thornback ray	SW	37 G	RN-LAB	84 D	10	10.9	212384	73

Appendix E-2
Bioconcentration Factors

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

Chemical Name	Species Identification	Test Condition	Age/Life Stage	Route/ Method	Duration	Effect Conc. (µg/ℓ)	BCF	AQUIRE Ref. #/ Reference	Year
Iron chloride	Raja clavata; Thornback ray	SW	37 G	RN-LAB	84 D	10	1.7	212386	73
Iron chloride	Raja clavata; Thornback ray	SW	37 G	RN-LAB	84 D	10	5.6	212387	73
Iron chloride	Raja clavata; Thornback ray	SW	37 G	RN-LAB	84 D	10	11.5	212388	73
Iron chloride	Raja clavata; Thornback ray	SW	37 G	RN-LAB	84 D	10	4.4	212947	73
Iron chloride	Raja clavata; Thornback ray	SW	37 G	RN-LAB	84 D	10	0.6	212948	73
Iron chloride	Raja clavata; Thornback ray	SW	37 G	RN-LAB	84 D	10	1.3	212950	73
Lead nitrate	Mytilus edulis; Blue mussel	SW	NR	NR	40 D	NR	650	USEPA	1987
Lead chloride	Mytilus edulis; Blue mussel	SW	NR	NR	37 D	NR	200	USEPA	1987
Lead nitrate	Mytilus edulis; Blue mussel	SW	NR	NR	130 D	NR	2,570	USEPA	1987
Lead nitrate	Mytilus edulis; Blue mussel	SW	NR	NR	130 D	NR	2,080	USEPA	1987
Lead nitrate	Mytilus edulis; Blue mussel	SW	NR	NR	130 D	NR	796	USEPA	1987
Lead nitrate	Crassostrea virginica; Eastern oyster	SW	NR	NR	140 D	NR	536	USEPA	1987
Lead nitrate	Crassostrea virginica; Eastern oyster	SW	NR	NR	49 D	NR	68	USEPA	1987
Lead nitrate	Crassostrea virginica; Eastern oyster	SW	NR	NR	70 D	NR	1,400	USEPA	1987
Lead nitrate	Mercenaria mercenaria; Quahog clam	SW	NR	NR	56 D	NR	17.5	USEPA	1987
Zinc sulfate	Nereis diversicior; Polychaete	SW	Adult	NR	34 D	NR	20	USEPA	1980
Zinc chloride	Littorina obtusata; Gastropod	SW	Adult	RN	50 D	NR	670	USEPA	1980

Notes
RCRA = Resource Conservation and Recovery Act.
Conc. = concentration.
BCF = bioconcentration factor.
SW = saltwater.
D = days.
MO = month(s).
SWMU = solid waste management unit.
µg/ℓ = micrograms per liter.
Ref = reference.
NR = not reported.
USEPA = U.S. Environmental Protection Agency.

APPENDIX E-3

REFERENCE TOXICITY VALUES (RTVS)

Appendix E-3
Summary of Reference Ingestion Toxicity Values for Representative Wildlife Species (mg/kg BW)

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

Chemical Name	Marsh Rabbit		Spotted Sandpiper		Herring Gull	
	Lethal [a]	Sublethal [b]	Lethal [a]	Sublethal [b]	Lethal [a]	Sublethal [b]
Acetone	1,068	273,000				
2-Butanone	547.4					
Carbon disulfide	510	350				
Acenaphthene						
Anthracene	3,400					
Benzo (a) anthracene						
Benzo (a) pyrene	24	10				
Benzo (b) fluoranthene						
Benzo (g,h,i) perylene						
Benzo (k) fluoranthene						
Chrysene						
Dibenz (a,h) anthracene						
Fluoranthene	400					
Fluorene						
Indeno(1,2,3-cd) pyrene						
n-Nitrosodiphenylamine	330					
Phenanthrene	140					
Pyrene	160					
bis(2-Ethylhexyl) phthalate	6,800	35				
4,4'-DDD	22.6	150 [c]	77.2	0.14 [c]	77.2	0.14 [c]
4,4'-DDE	140	150 [c]	77.2 [d]	0.58	77.2 [d]	0.58
4,4'-DDT	50	150	119	0.14	119	0.14
Dieldrin	9	0.014	1.8		1.8	
Barium	430	198				
Copper		152		29		29
Iron	63.8					
Lead	60	200		125		125
Zinc	390	200	1,292		1,292	

[a] 1/5th of the LD_{50} value or lowest reported does 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] Value for 4-4'-DDT used as a surrogate.
[d] Value for 4-4'-DDD used as a surrogate.

Notes: mg/kg BW = milligrams per kilogram body weight.
4,4'-DDD = 4,4'-dichlorodiphenyl dichloroethane.
4,4'-DDE = 4,4'-dichlorodiphenyl dichloroethylene
4,4'-DDT = 4,4'-dichlorodiphenyltrichloroethane.

APPENDIX E-4

INGESTION TOXICITY INFORMATION FOR TERRESTRIAL WILDLIFE

Appendix E-4
Ingestion Toxicity Information for Terrestrial Wildlife

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

Chemical	Test Species	Test Type	Duration	Effect	Result (mg/kg BW/day)		Reference
					Lethal	Sublethal	
Volatiles							
Acetone	Rat	Oral	NR	LD_{50}	5,800		RTECS, 1994
	Rat	Single Oral Dose		LD_{50}	9,750		Sax, 1984
	Rat	Oral	NR	LOAEL for reproductive effects		273,000	RTECS, 1994
	Mouse	Oral	NR	LD_{50}	3,000		RTECS, 1994
	Rabbit	Oral	NR	LD_{50}	5,340		RTECS, 1994
2-Butanone	Rat	Oral dose	NR	LD_{50}	2,737		RTECS, 1994
	Rat	Oral (subchronic)	13 weeks	NOAEL for neurological effects		173	ATSDR, 1991a
	Mouse	Oral dose	NR	LD_{50}	4,050		RTECS, 1994
Carbon disulfide	Rat	Oral	NR	LD_{50}	3,188		RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		2,000	RTECS, 1994
	Mouse	Oral	NR	LD_{50}	2,780		RTECS, 1994
	Rabbit	Oral	NR	LD_{50}	2,550		RTECS, 1994
	Rabbit	Oral	NR	LOAEL for reproductive effects		350	RTECS, 1994
	Rabbit	Oral	NR	LOAEL for reproductive effects		2,100	RTECS, 1994
	Rabbit	Oral (subchronic)	3 months	Mortality, blood chemistry, histopathology		12.5	USEPA, 1984a
	Guinea pig	Oral	NR	LD_{50}	2,125		RTECS, 1994
Semivolatiles							
Acenaphthene	Mouse	Oral (chronic)	90 days	NOAEL for liver weight increase		175	IRIS, 1990
	Rat	Oral (chronic)	32 days	LOAEL for physiological changes		2000	USEPA, 1984b
Anthracene	Mouse	Oral LD50	NR	Mortality	17000		RTECS, 1994
	Rodents	Oral (chronic)	NS	Carcinogenicity		3300	Eisler, 1987a

Appendix E-4
Ingestion Toxicity Information for Terrestrial Wildlife

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

Chemical	Test Species	Test Type	Duration	Effect	Result (mg/kg BW/day)		Reference
					Lethal	Sublethal	
	Mouse	Oral (chronic)	90 days	LOAEL for clinical and pathological effects		1000	IRIS, 1990
Benzo(a)anthracene	Rodents	Oral (chronic)	NR	Carcinogenicity		2	Eisler, 1987a
Benzo(a)pyrene	Rat	Oral (chronic)	Pregnancy	LOAEL for sterility in offspring		40	USEPA, 1984b
	Rat	Oral (chronic)	3.5 months	LOAEL for reproductive		50	USEPA, 1984b
	Mouse	Oral	Multi-generational	LOAEL for decreased fertility of F1 progeny, decreased F2 litter size		10	MacKenzie and Angevine, 1981
	Mouse	Oral (subchronic)	6 months	Mortality	120		ATSDR, 1993
Benzo(b)fluoranthene	Rodents	Oral (chronic)	NR	Carcinogenicity		40	Eisler, 1987a
Benzo(g,h,i)perylene	Rodents	Oral (chronic)	NR	Carcinogenicity		99	Eisler, 1987a
Benzo(k)fluoranthene	Rodents	Oral (chronic)	NR	Carcinogenicity		40	Eisler, 1987a
Chrysene	Rodents	Oral (chronic)	NR	Carcinogenicity		99	Eisler, 1987a
Fluoranthene	Rat	Oral LD dose	NR	LD_{50}	2,000		RTECS, 1994
	Mouse	Oral (subchronic)	90 days	LOAEL for nephropathy; clinical and pathological effects		250	IRIS, 1990
Fluorene	Mouse	Oral (subchronic)	13 weeks	Loael for hematological changes		125	IRIS, 1990
Indeno(1,2,3-cd)pyrene	Rodents	Oral (chronic)	NR	Carcinogenicity		72	Eisler, 1987a
N-Nitrosodiphenylamine	Rat	Single oral dose		LD_{50}	1,650		Sax, 1984
	Rat	Oral	NR	LD_{50}	1,825		RTECS, 1994
	Mouse	Oral	NR	LD_{50}	1,860		RTECS, 1994
Phenanthrene	Mouse	Oral dose	NR	LD_{50}	700		RTECS, 1994
	Mouse	Oral (subchronic)	6 months	LOAEL for increased liver weight		120	ATSDR, 1989a
Pyrene	Rat	Oral dose	NR	LD_{50}	2,700		RTECS, 1993 and NIOSH, 1985

Appendix E-4
Ingestion Toxicity Information for Terrestrial Wildlife

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

Chemical	Test Species	Test Type	Duration	Effect	Result (mg/kg BW/day)		Reference
					Lethal	Sublethal	
	Mouse	Oral dose	NR	LD_{50}	600		RTECS, 1993 and NIOSH, 1985
	Mouse	Oral (subchronic)	13 weeks	LOAEL for renal effects		125	IRIS, 1990
bis(2-ethylhexyl)phthalate	Rat	Oral	NR	LD_{50}	30,600		RTECS, 1994
	Rat	Single oral dose		LD_{50}	26,000		ATSDR, 1988
	Rat	Single oral dose		LD_{50}	8,600		NIOSH, 1985
	Rat	Oral	NR	LOAEL for reproductive effects		7,140	RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		35	RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		6,000	RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		17,200	RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		10,000	RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		9,766	RTECS, 1994
	Mouse	Oral	NR	LD_{50}	30,000		RTECS, 1994
	Mouse	Single oral dose		LD_{50}	800		RTECS, 1993 and NIOSH, 1985
	Mouse	Oral	NR	LOAEL for reproductive effects		78,880	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		4,200	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		50	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		1,000	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		2,040	RTECS, 1994
	Mouse	Oral (subchronic)	13 weeks	LOAEL for renal effects		125	RTECS, 1993
	Rabbit	Oral	NR	LD_{50}	34,000		RTECS, 1994
	Guinea pig	Oral	NR	LD_{50}	26,000		RTECS, 1994
	Guinea pig	Oral	NR	LOAEL for reproductive effects		20,000	RTECS, 1994
	Mammal	Oral	NR	LOAEL for reproductive effects		20,000	RTECS, 1993
	Mammal	Oral	NR	LOAEL for reproductive effects		500,000	RTECS, 1993

Appendix E-4
Ingestion Toxicity Information for Terrestrial Wildlife

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

Chemical	Test Species	Test Type	Duration	Effect	Result (mg/kg BW/day)		Reference
					Lethal	Sublethal	
Pesticides/PCBs							
4,4-DDD	Rat	Oral	NR	LD_{50}	113		RTECS, 1994
	Hamster	Oral	NR	LD_{50}	>5,000		RTECS, 1994
	Ring-necked pheasant	Oral dose	NR	LD_{50}	386		USFWS, 1984
	Mallard	Oral dose	NR	LD_{50}	2,000		USFWS, 1984
4,4'-DDE	Rat	Oral	NR	LD_{50}	880		RTECS, 1994
	Mouse	Oral	NR	LD_{50}	700		RTECS, 1994
	Hamster	Oral	NR	LD_{50}	>5,000		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	LD_{50}	87		RTECS, 1994
	Rat	Single oral dose		LD_{50}	100		USEPA, 1985a
	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		1,890	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	LD_{50}	135		RTECS, 1994
	Mouse	Single oral dose		LD_{50}	200		USEPA, 1985a
	Mouse	Oral	NR	LOAEL for reproductive effects		504	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		81	RTECS, 1994

Appendix E-4
Ingestion Toxicity Information for Terrestrial Wildlife

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

Chemical	Test Species	Test Type	Duration	Effect	Result (mg/kg BW/day)		Reference
					Lethal	Sublethal	
	Mouse	Oral	NR	LOAEL for reproductive effects		124	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		148	RTECS, 1994
	Rabbit	Oral	NR	LD_{50}	250		RTECS, 1994
	Rabbit	Oral	NR	LOAEL for reproductive effects		150	RTECS, 1994
	Guinea pig	Oral	NR	LD_{50}	150		RTECS, 1994
	Hamster	Oral	NR	LD_{50}	>5,000		RTECS, 1994
	Dog	Single oral dose		LD_{50}	150		RTECS, 1994
	Dog	Oral	NR	LD_{50}	60		USEPA, 1985a
	Dog	Oral	NR	LOAEL for reproductive effects		3,540	RTECS, 1994
	Monkey	Oral	NR	LD_{50}	200		RTECS, 1994
	Chicken	Oral	NR	Decreased reproductive success; toxic symptoms		91.4*	USEPA, 1985a
	Rock dove	Single oral dose		LD_{50}	4,000		USFWS, 1984
	Black duck	Oral	NR	Reduced eggshell thickness		0.14*	Longcore and Stendell, 1977
	Mallard	Single oral dose		LD_{50}	2,240		USFWS, 1984
	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		LD_{50}	595		USFWS, 1984
	Japanese quail	Single oral dose		LD_{50}	841		USFWS, 1984
	Pheasant	Single oral dose		LD_{50}	1,334		USFWS, 1984
	Sandhill crane	Single oral dose		LD_{50}	1,200		USFWS, 1984
	Kestrel	Oral	NR	Reduced eggshell thickness		0.56*	USEPA, 1985a
	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

Appendix E-4
Ingestion Toxicity Information for Terrestrial Wildlife

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

Chemical	Test Species	Test Type	Duration	Effect	Result (mg/kg BW/day)		Reference
					Lethal	Sublethal	
Dieldrin	Mouse	Single oral dose		LD_{50}	38		Allen et al., 1979
	Mouse	Oral	NR	LD_{50}	38		RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		30.6	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		15	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		2.25	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		12.5	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		4.5	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		6.25	RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		0.014	RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		0.336	RTECS, 1994
	Rat	Single oral dose		LD_{50}	46		Allen et al., 1979
	Rat	Oral	NR	LD_{50}	38.3		RTECS, 1994
	Dog	Oral	NR	LOAEL for reproductive effects		2.19	RTECS, 1994
	Hamster	Oral	NR	LOAEL for reproductive effects		30	RTECS, 1994
	Guinea pig	Single oral dose		LD_{50}	25		Allen et al., 1979
	Guinea pig	Oral	NR	LD_{50}	49		RTECS, 1994
	Rabbit	Single oral dose		LD_{50}	45		Allen et al., 1979
	Rabbit	Oral	NR	LD_{50}	45		RTECS, 1994
	Goat	Single oral dose		LD_{50}	100		Allen et al., 1979
	Sheep	Single oral dose		LD_{50}	50		Allen et al., 1979
	Cattle	Single oral dose		LD_{50}	60		Allen et al., 1979
	Mule deer	Single oral dose		LD_{50}	75		Allen et al., 1979
	Cat	Single oral dose		LD_{50}	300		Allen et al., 1979
	Cat	Oral	NR	LD_{50}	500		RTECS, 1994
	Dog	Single oral dose		LD_{50}	65		Allen et al., 1979
	Dog	Oral	NR	LD_{50}	65		RTECS, 1994

Appendix E-4
Ingestion Toxicity Information for Terrestrial Wildlife

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

Chemical	Test Species	Test Type	Duration	Effect	Result (mg/kg BW/day)		Reference
					Lethal	Sublethal	
	Hamster	Oral	NR	LD_{50}	60		RTECS, 1994
	Pig	Oral	NR	LD_{50}	38		RTECS, 1994
	Monkey	Oral	NR	LD_{50}	3		RTECS, 1994
	House sparrow	Single oral dose		LD_{50}	48		USFWS, 1984
	Chicken	Single oral dose		LD_{50}	20		Allen et al., 1979
	Chicken	Oral	NR	LD_{50}	20		RTECS, 1994
	Rock dove	Single oral dose		LD_{50}	27		USFWS, 1984
	Gray partridge	Single oral dose		LD_{50}	9		USFWS, 1984
	Chukar	Single oral dose		LD_{50}	25		USFWS, 1984
	Japanese quail	Oral	5 days	LD_{50}	6[a]		Hill et al., 1975
	Japanese quail	Single oral dose		LD_{50}	70		USFWS, 1984
	California quail	Single oral dose		LD_{50}	9		USFWS, 1984
	Quail	Oral	NR	LD_{50}	10.78		RTECS, 1994
	Bobwhite	Oral	5 days	LD_{50}	3[a]		Hill et al., 1975
	Pheasant	Single oral dose		LD_{50}	79		USFWS, 1984
	Mallard	Oral	5 days	LD_{50}	12[a]		Hill et al., 1975
	Mallard	Oral	5 days	LD_{50}	11[a]		Hill et al., 1975
	Mallard	Oral	NR	LD_{50}	381[3]		RTECS, 1994
	Mallard	Single oral dose		LD_{50}	381		USFWS, 1984
Inorganics							
Barium	Rat	Oral	13 weeks	20% population mortality	430		Dietz et al., 1979
	Rat	Oral	10 days	Decreased ovarian weight		198	ATSDR, 1990a
Copper	Rat	Single oral dose		LOAEL for reproductive effects		152	NIOSH, 1985 and RTECS, 1994
	Mouse	Oral	30 days	Decreased litter sizes with teratogenic effects		100	Lecyk, 1980
	Mallard	Oral	NR	LOAEL		29	NRC, 1977

Appendix E-4
Ingestion Toxicity Information for Terrestrial Wildlife

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

Chemical	Test Species	Test Type	Duration	Effect	Result (mg/kg BW/day)		Reference
					Lethal	Sublethal	
Iron	Rat	Oral	NR	LD_{50}	30,000		RTECS, 1994
	Rat	Single oral dose	NR	LD_{50}	319		Sax, 1984
	Mouse	Single oral dose	NR	LD_{50}	979		Sax, 1984
	Guinea pig	Oral	NR	LD_{50}	20,000		RTECS, 1994
	Guinea pig	Single oral dose	NR	LD_{50}	1,200		Sax, 1984
Lead	Guinea pig	Single oral dose		LD_{50}	300		Sax, 1984
	Rat	Oral	3 weeks	50% of progeny dead		200	
	Rat	Oral	NR	LOAEL for reproductive effects		790	RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		1,140	RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		520	RTECS, 1994
	Rat	Oral	NR	LOAEL for reproductive effects		1,100	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		1,120	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		6,300	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		300	RTECS, 1994
	Mouse	Oral	NR	LOAEL for reproductive effects		4,800	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 hematological effects		169	Eisler, 1988b
Metallic lead powder	American kestrel nestlings	Oral	10 days	Reduced growth and brain weight; abnormal development		125	Eisler, 1988b
Tetraethyl lead	Rat	Single oral dose		LD_{50}	12		Eisler, 1988b
	Cattle	Oral	105 days	LOAEL for mortality	6		Eisler, 1988b
	Horse	Oral	NR	LOAEL for mortality	2.4		Eisler, 1988b
Triethyl lead chloride	Starling	Oral	11 days	Reduced food consumption; no mortality		2.8	Eisler, 1988b
Zinc	Rat	Single oral dose		LD_{50}	2,510		Sax, 1984

Appendix E-4
Ingestion Toxicity Information for Terrestrial Wildlife

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

Chemical	Test Species	Test Type	Duration	Effect	Result (mg/kg BW/day)		Reference
					Lethal	Sublethal	
	Rat	Oral	Gestation	Fetal resorptions in 4 -20% of population		200	Schlicker and Cox, 1968
	Ferret	Oral	3-13 days	LOAEL for mortality	390		Straube et. al., 1980
Zinc phosphide	Mallard	Diet	5 days	LC50	6,458[a]		Hill et. al., 1975

a) Converted to dose per kilogram body weight by multiplying by food ingestion rate and dividing by body weight.

Notes:
mg/kg BW/day = milligrams per kilogram body weight per day.
NR = not reported.
LD_{50} = Dose resulting in 50 percent mortality in test population.
RTECS = Registry of Toxic Effects of Chemical Substances.
LOAEL = lowest observed adverse effect level.
NOAEL = no observed adverse effect level.
ATSDR = Agency for Toxic Substance and Disease Registry.
IRIS = Integrated Risk Information System.
NIOSH = National Institute for Occupational Safety and Health.
DDD = dichlorodiphenyldichloroethane.
DDE = dichlorodiphenyldichloroethylene.
DDT = dichlorodiphenyltrichloroethane.
USEPA = U.S. Environmental Protection Agency.
% = percent.
14d = 14 days

APPENDIX E-5

MODEL FOR POTENTIAL EXPOSURES AND RISKS FOR REPRESENTATIVE WILDLIFE SPECIES TO ECPCS IN SURFACE WATER AND SEDIMENT AT SWMUS 14 AND 18

Appendix E-5
Exposure Parameters and Assumptions for Representative Wildlife Species North of SWMU 14

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

Representative Wildlife Species		Percent Prey in Diet [a] Aquatic Organisms	Plants	Sediment	Home Range [a] (acres)	ED [b]	Site Foraging Frequency [c]	Food Ingestion Rate [a] (kg/day)	Water Ingestion Rate [a] (l/day)	Body Weight [a] (kg)
Marsh rabbit	(Herb. Mammal)	0%	94%	6%	7.39	1.0	1.66E-01	0.11	0.124	1.35
Herring gull	(Omniv. Aquatic Bird)	98%	0%	2%	0.75	1.0	1.00E+00	0.16	0.06	1.03
Sandpiper	(Omniv. Bird)	80%	0%	20%	0.62	1.0	1.00E+00	0.01	0.01	0.04
SITE AREA:	1.23 acres									

NOTES:
[a] From Table 6-37.
[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 E-5

Estimation of ECPC Exposure Concentrations for Representative Wildlife Species North of SWMU 14
Maximum Surface Water and Sediment Concentrations
RCRA Facility Investigation, Group III SWMUs
U.S. Naval Station Mayport, Mayport, Florida

EXPOSURE CONCENTRATION DATA			ESTIMATED TISSUE LEVELS IN PRIMARY FOOD ITEMS	
ECPC	MAXIMUM SEDIMENT CONCENTRATION [a] (mg/kg)	MAX. SURFACE WATER CONCENTRATION [b] [mg/l]	Aquatic BCF [c]	Aquatic Organism Tissue Concent. (mg/kg)
2-Butanone	0.031			0.0E+00
Acetone	0.0798			0.0E+00
Carbon disulfide	0.012			0.0E+00
Acenaphthene	0.19			0.0E+00
Anthracene	0.22			0.0E+00
Benzo(a)anthracene	1.9			0.0E+00
Benzo(a)pyrene	2.1			0.0E+00
Benzo(b)fluoranthene	3.5			0.0E+00
Benzo(g,h,i)perylene	1.4			0.0E+00
Benzo(k)fluoranthene	3.2			0.0E+00
Chrysene	3.7			0.0E+00
Dibenz(a,h)anthracene	302.5			0.0E+00
Fluoranthene	4.4			0.0E+00
Fluorene	0.32			0.0E+00
Indeno(1,2,3-cd)pyrene	1.4			0.0E+00
N-Nitrosodiphenylamine (1)	1.6			0.0E+00
Phenanthrene	1.8			0.0E+00
Pyrene	6			0.0E+00
bis(2-Ethylhexyl)phthalate	2.4			0.0E+00
4,4-DDD	0.001			1.0E-03
4,4-DDE	0.0063			6.3E-03
4,4-DDT	0.0047			4.7E-03
Dieldrin	0.00081			8.1E-04
Barium	23			0.0E+00
Copper	52			0.0E+00
Iron		0.552	3570	2.0E+03
Lead	12.2	0.003	924	2.8E+00
Zinc	206	0.0113	345	3.9E+00

[a] From Table 6-35.
[b] From Table 6-34.
[c] BCF = Bioconcentration Factor. From Appendix E-2.
ECPC = Ecological Chemical of Potential Concern

Appendix E-5
Hazard Quotients and Indices for Potential Lethal Effects for Representative Wildlife Species Associated with Maximum Exposure Concentrations of ECPCs in Surface Water and Sediment North of SWMU 14

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

ANALYTE	Marsh rabbit			Herring gull			Sandpiper		
	PDE	RTV	HQ	PDE	RTV	HQ	PDE	RTV	HQ
2-Butanone	1.5E-04	5.47E+02	2.77E-07	9.5E-05			1.0E-03		
Acetone	3.9E-04	1068	3.65E-07	2.4E-04			2.6E-03		
Carbon disulfide	5.9E-05	5.10E+02	1.15E-07	3.7E-05			4.0E-04		
Acenaphthene	9.3E-04			5.8E-04			6.3E-03		
Anthracene	1.1E-03	3.40E+03	3.16E-07	6.7E-04			7.2E-03		
Benzo(a)anthracene	9.3E-03			5.8E-03			6.3E-02		
Benzo(a)pyrene	1.0E-02	2.40E+01	4.28E-04	6.4E-03			6.9E-02		
Benzo(b)fluoranthene	1.7E-02			1.1E-02			1.2E-01		
Benzo(g,h,i)perylene	6.8E-03			4.3E-03			4.6E-02		
Benzo(k)fluoranthene	1.6E-02			9.8E-03			1.1E-01		
Chrysene	1.8E-02			1.1E-02			1.2E-01		
Dibenz(a,h)anthracene	1.5E+00			9.3E-01			1.0E+01		
Fluoranthene	2.2E-02	4.00E+02	5.38E-05	1.3E-02			1.4E-01		
Fluorene	1.6E-03			9.8E-04			1.1E-02		
Indeno(1,2,3-cd)pyrene	6.8E-03			4.3E-03			4.6E-02		
N-Nitrosodiphenylamine (1)	7.8E-03	3.30E+02	2.37E-05	4.9E-03			5.3E-02		
Phenanthrene	8.8E-03	1.40E+02	6.29E-05	5.5E-03			5.9E-02		
Pyrene	2.9E-02	1.60E+02	1.83E-04	1.8E-02			2.0E-01		
bis(2-Ethylhexyl)phthalate	1.2E-02	6.80E+03	1.73E-06	7.4E-03			7.9E-02		
4,4-DDD	4.9E-06	2.26E+01	2.16E-07	1.5E-04	7.72E+01	1.98E-06	1.6E-04	7.7E+01	2.13E-06
4,4-DDE	3.1E-05	1.40E+02	2.20E-07	9.6E-04	7.72E+01	1.25E-05	1.0E-03	7.7E+01	1.34E-05
4,4-DDT	2.3E-05	5.00E+01	4.60E-07	7.2E-04	1.19E+02	6.05E-06	7.7E-04	1.2E+02	6.51E-06
Dieldrin	4.0E-06	9.00E+00	4.40E-07	1.2E-04	1.80E+00	6.89E-05	1.3E-04	1.8E+00	7.41E-05
Barium	1.1E-01	4.30E+02	2.61E-04	7.0E-02			7.6E-01		
Copper	2.5E-01			1.6E-01			1.7E+00		
Iron	8.4E-03	6.38E+01	1.32E-04	3.0E+02			2.6E+02		
Lead	6.0E-02	6.00E+01	9.95E-04	4.5E-01			7.7E-01		
Zinc	1.2E-02	3.90E+02	3.01E-05	7.4E-03	1.29E+03	5.69E-06	7.3E+00	1.3E+03	5.65E-03
SUMMARY HAZARD INDEX			2.2E-03			9.5E-05			5.7E-03

PDE = Potential Dietary Exposure (mg/kgBW/day) calculated according to equations in Table 2-7 of the GIR (ABB-ES, 1995).
RTV = Reference Toxicity Value (mg/kgBW/day) = 1/5 of the lowest reported LD50 or lowest reported adverse effect level (LOAEL) for mortality from Appendix E-4 for closest related species.
HQ = Hazard Quotient (calculated by dividing PDE by RTV)

Appendix E-5

Hazard Quotients and Indices for Potential Sublethal Effects for Representative Wildlife Species Associated with Maximum Exposure Concentrations of ECPCs in Surface Water and Sediment North of SWMU 14

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

ANALYTE	Marsh rabbit			Herring gull			Sandpiper		
	PDE	RTV	HQ	PDE	RTV	HQ	PDE	RTV	HQ
2-Butanone	1.5E-04			9.5E-05			1.0E-03		
Acetone	3.9E-04	2.73E+05	1.43E-09	2.4E-04			2.6E-03		
Carbon disulfide	5.9E-05	3.50E+02	1.68E-07	3.7E-05			4.0E-04		
Acenaphthene	9.3E-04			5.8E-04			6.3E-03		
Anthracene	1.1E-03			6.7E-04			7.2E-03		
Benzo(a)anthracene	9.3E-03			5.8E-03			6.3E-02		
Benzo(a)pyrene	1.0E-02	1.00E+01	1.03E-03	6.4E-03			6.9E-02		
Benzo(b)fluoranthene	1.7E-02			1.1E-02			1.2E-01		
Benzo(g,h,i)perylene	6.8E-03			4.3E-03			4.6E-02		
Benzo(k)fluoranthene	1.6E-02			9.8E-03			1.1E-01		
Chrysene	1.8E-02			1.1E-02			1.2E-01		
Dibenz(a,h)anthracene	1.5E+00			9.3E-01			1.0E+01		
Fluoranthene	2.2E-02			1.3E-02			1.4E-01		
Fluorene	1.6E-03			9.8E-04			1.1E-02		
Indeno(1,2,3-cd)pyrene	6.8E-03			4.3E-03			4.6E-02		
N-Nitrosodiphenylamine (1)	7.8E-03			4.9E-03			5.3E-02		
Phenanthrene	8.8E-03			5.5E-03			5.9E-02		
Pyrene	2.9E-02			1.8E-02			2.0E-01		
bis(2-Ethylhexyl)phthalate	1.2E-02	3.50E+01	3.35E-04	7.4E-03			7.9E-02		
4,4-DDD	4.9E-06	1.50E+02	3.26E-08	1.5E-04	1.40E-01	1.09E-03	1.6E-04	1.40E-01	1.18E-03
4,4-DDE	3.1E-05	1.50E+02	2.05E-07	9.6E-04	5.80E-01	1.66E-03	1.0E-03	5.80E-01	1.79E-03
4,4-DDT	2.3E-05	1.50E+02	1.53E-07	7.2E-04	1.40E-01	5.14E-03	7.7E-04	1.40E-01	5.53E-03
Dieldrin	4.0E-06	1.40E-02	2.83E-04	1.2E-04			1.3E-04		
Barium	1.1E-01	1.98E+02	5.68E-04	7.0E-02			7.6E-01		
Copper	2.5E-01	1.52E+02	1.67E-03	1.6E-01	2.90E+01	5.49E-03	1.7E+00	2.90E+01	5.91E-02
Iron	8.4E-03			3.0E+02			2.6E+02		
Lead	6.0E-02	2.00E+02	2.98E-04	4.5E-01	1.25E+02	3.63E-03	7.7E-01	1.25E+02	6.14E-03
Zinc	1.2E-02	2.00E+02	5.87E-05	7.4E-03			7.3E+00		
SUMMARY HAZARD INDEX			4.2E-03			1.7E-02			7.4E-02

PDE = Potential Dietary Exposure (mg/kgBW/day) calculated according to equations in Table 2-7 of the GIR (ABB-ES, 1995).
RTV = Reference Toxicity Value (mg/kgBW/day) = Lowest reported adverse effect level (LOAEL) for reproduction or growth from Appendix E-4 for closest related species.
HQ = Hazard Quotient (calculated by dividing PDE by RTV)

APPENDIX F

RESPONSE TO REGULATORY COMMENTS

1.0 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 U.S. 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 Florida Department of Environmental Protection (FDEP) and U.S. Environmental Protection Agency (USEPA) concerning the report entitled *Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI), Group III Solid Waste Management Units (SWMUs)*, NAVSTA Mayport, Florida (ABB-ES, 1996a). Below is a listing of the correspondence received from the FDEP and USEPA.

- May 30, 1966, Memoranda from Jane Fugler, Hazardous Waste Sites Technical Review to Mr. James Cason, Department of Defense (DOD) Facilities Technical Review Section, Subject: Review of Risk Assessments for Group III SWMUs 1, 14, 17, 18, 23, 24, 25, 44 and 45 at Mayport Naval Station.

- June 21, 1966, Correspondence from James H. Cason, P.G. Remedial Project Manager, FDEP, to Mr. David Driggers, Department of the Navy, Southern Division Naval Facilities Engineering Command (SOUTHNAVFAC-ENGCOM), Subject: Draft RFI for Group III SWMUs, Volumes I and II, Naval Station Mayport.

- July 5, 1996, Correspondence from Martha Berry, Remedial Project Manager, Federal Facilities Branch, Region IV, USEPA, Subject: Draft Group III RFI Report for Naval Station Mayport, ABB Environmental, March, 1996.

The following chapters of this response to comments provide point-by-point responses to FDEP and USEPA comments. The report is organized to include:

- Chapter 2.0 contains responses to comments made in memoranda dated May 30, 1966 (Section 2.1) and correspondence dated June 21, 1966 (Sections 2.2 through 2.4) from the FDEP concerning the RFI for Group III SWMUs, NAVSTA Mayport, Florida.

- Chapter 3.0 contains responses to comments made in correspondence dated July 5, 1996 from USEPA concerning the RFI for Group III SWMUs, NAVSTA Mayport, Florida.

PROJECT REVIEW COMMENTS

U.S. Naval Station
Mayport, Florida
Resource Conservation and Recovery Act
Facility Investigation Group III
Solid Waste Management Units

2.0 Response To Comments by the Florida Department of Environmental Protection (FDEP).

Below are responses to comments in memoranda dated May 30, 1966 (Section 2.1) and correspondence dated June 21, 1966 (Sections 2.2 through 2.4) from FDEP to SOUTHNAVFACENGCOM.

2.1 Review of Risk Assessments for Group III Solid Waste Management Units (SWMUs).

2.1.1 The Shipyard Area, SWMUs 1, 23, 24, 25, 44 and 45, was assessed for current industrial use and considered adolescent and adult trespassers. Please note, that the current land use for surface soil to trespassers cancer risk of $2x10^{-6}$ (Table 4-29, page 4-140) does not include children, which are expected to have a higher risk. The occupational worker scenario also had an unacceptable risk.

The future residential exposure to the dried sludge was not evaluated because it is expected to be remediated or removed (4.3.2.3, page 4-131). However, it is stated later, that remediation may not occur for the sludge and at some future time the future risks should be evaluated (first bullet 4.3.5, page 4-143). As a risk assessor, it is necessary to evaluate all possible scenarios. Human health risk analysis should be conducted for the future residential scenario and the exposure to the sludge.

SWMU 45 is located within a fenced in area at the Station's Federally-owned Wastewater Treatment Plant (FOWTP), an industrial area. Additionally, the Navy Public Works Center in Jacksonville, Florida is currently preparing plans for removing the sludge drying beds. The current land use and removal action are the basis for limiting the evaluation of SWMU 45 to the most likely receptors: trespassers (adult and adolescent), occupational workers, site maintenance workers and excavation workers (Table 4-25). Should the removal action not be conducted, an evaluation of the hypothetical future use of SWMU 45 site area as residential (child and adult) would be considered a data gap and would be conducted.

The occupational worker exposure (incidental ingestion, dermal contact, and inhalation of particulate) to the HHCPCs in the sludge samples was calculated to be $1x10^{-6}$. This value is the risk management goal that has been established by the Florida Department of Environmental Protection. Concentrations of benzo(a)pyrene and arsenic exceeded their respective Florida residential guidance values for soil clean-up goals. However, these chemicals were not detected at concentrations that exceed the industrial guidance values (FDEP, 1995), which is consistent with site usage.

2.1.2 Laboratory analysis of the Shipyard Area groundwater indicates that the concentrations discharging into the St. Johns River exceed state surface water quality standards. For example, groundwater iron concentrations were 9,040 and 1,149 $\mu g/\ell$, the state standard is 300 $\mu g/\ell$, and maximum background concentration was 3,540 $\mu g/\ell$. The consultant's argument for no expected risk is because of dilution of the discharge upon entering a

waterbody that is already polluted. They have listed a LOAEL of 100 μg/ℓ, levels above this concentration have the potential to cause harm to aquatic species. These additional discharges may be sufficient to cause serious harm to an already stressed environment. Cyanide groundwater concentrations also exceeded surface water quality standards (Table 4-35, page 4-159).

Groundwater samples collected at the Shipyard Area SWMUs contained iron at concentrations ranging from 55.9 to 603 μg/ℓ for shallow wells, 51.9 to 894 μg/ℓ for the intermediate wells and 3,170 to 9,040 μg/ℓ for the deep wells. Iron was not detected in groundwater samples collected from shallow water table zone monitoring wells located within 400 feet from the St. Johns River.

The distribution of iron increasing with depth and not detected along the coast line is consistent with findings by the U.S. Geological Survey (USGS) that the water within the upper part of the surficial aquifer is fresh and becomes increasingly brackish with depth (Franks, 1980).

The data collected at the Shipyard Area for the RFI and the USGS data support assumptions for no additional risk or that adverse effects to ecological receptors, if any, could not be differentiated from those that are occurring naturally.

2.1.3 **At the Carbonaceous Fuel Boiler, SWMU 17, the arsenic soil concentration, 1,200 μg/kg medium value, exceeded FDEP soil cleanup goal, 700 μg/kg. Arsenic was also detected in the groundwater, but not above standards. It has been suggested that the arsenic, iron and manganese may be from dredging spoils deposited in this area and not due to site operations. The human health risk assessment has determined these levels to be acceptable, but the exceedance of the soil goals causes concern. Also, the remedial goal option calculated for arsenic is 380 μg/kg for $1x10^{-6}$ risk; the suggested option would not require remediation. The residential use of groundwater risk is unacceptable due to various contaminants; it is proposed that a restriction be put upon the groundwater.**

Comment acknowledged.

2.1.4 **Soil samples were collected from around the helicopter and plane mockup areas in the Fleet Training Center, SWMUs 14 and 18, but not from underneath. This area may be closed this year, but no soil data from under the mockup areas is available to assess human health risk to the exposure of these soils.**

No explanation was provided as to why only adults and adolescents and not children were considered for current surface soil exposure. The risk to these two receptors was only $1x10^{-6}$. The children receptor would be expected to have a higher risk.

The excavation worker was not included in the future land use scenario, but residential and maintenance personnel were.

In the ecological risk portion, terrestrial receptor species were listed, but not aquatic species (6.4.2.1, page 6-121). Also, only dermal exposure to surface water was considered to the aquatic receptor species and not ingestion. All these issues should be addressed.

The department does not accept the premise that only the dissolved phase of metals in water is biologically available; dissolved and nondissolved should be considered in future risk assessments.

The presence of many of the contaminants detected at these sites may possibly be due to current land uses, such as pesticide applications and vehicular traffic. A stormwater management plan that includes collection and primary treatment before discharging into a state water body would reduce surface water impacts.

Sampling and analysis beneath the aircraft mockup and concrete detention basin at SWMU 14 were conducted in August 1996. The results of the sampling event will be provided to USEPA and FDEP in a technical memorandum.

SWMU 14, an industrial area, is located within a fenced in area at the Station. The land surface at the site is predominantly paved with concrete therefore under current land use there would be no exposure to surface soil, except by an excavation worker. However, in addition to the excavation worker, the current land use evaluation of SWMU 14 surface soil included trespassers (adult and adolescent) (Table 6-28).

The excavation worker was evaluated for exposure to surface soil under the current land use condition. Assuming that HHCPCs at the site do not change over time and remain at the concentrations detected (a conservative assumption), the evaluation of a future exposure by an excavation worker to surface soil would be the same as the current land use. Additionally, exposure to subsurface soil by an excavation worker was not conducted for either current or future land use because no HHCPCs were selected for this medium (Tables 6-24 and 6-28).

Selection of ecological chemicals of potential concern (ECPC) for the surface water samples (See Plate 4, sample locations MPT-14-SW04 and MPT-14-SW05) are identified on Table 6-36. Aquatic receptors evaluated for exposure to ECPCs detected in surface water samples are identified in Table 6-40. Only one chemical, iron, was identified as an ECPC for surface water. The concentrations detected in two of the surface water samples (103 and 115 $\mu g/\ell$) was less than Florida surface water quality standard (300 $\mu g/\ell$) (Florida Administrative Code [FAC] 62-302). A duplicate to one of the samples contained iron at 989 $\mu g/\ell$, and is thought to represent an anomaly and not represent either of the sampling locations. Additionally, it was stated in

the Group III RFI report (ABB-ES, 1996a) that: "It is not likely that the concentrations of iron detected in the surface water samples pose a risk to aquatic receptors because of the ephemeral nature of the system. The surface water drainage ditch is dry during periods of low tide, and habitat utilization by aquatic receptors is limited to periods of high tide, when the area is flooded by water from the St. Johns River or Atlantic Ocean."

The analytical data used in this ecological risk assessment included results from unfiltered surface and/or groundwater samples. The unfiltered water samples contain both dissolved and nondissolved fractions of a chemical(s). It is understood that FDEP does not recognize that the fraction of chemicals in the dissolved phase is the phase most likely to be biologically available and potentially toxic to aquatic organisms (USEPA, 1993). Recognition of the dissolved phase as the fraction biologically available is a legitimate uncertainty for unfiltered groundwater and surface water samples. Future ecological risk assessments will also include analytical results from unfiltered surface and/or groundwater samples.

The chemicals detected in SWMU 14 sediment samples may be from either past or current site use. We concur with the concept of stormwater management as a means to reduce the potential for surface water runoff to adversely impact to the environment.

2.2 The Shipyard Area: SWMUs 1, 23, 24, 25, 44 and 45.

2.2.1 I agree that, considering the present distribution of contaminants, interim measures should be accomplished for the surface soil and the sludge to eliminate those areas where "hot spots" exist that exceed FDEP industrial soil cleanup guidance. Following the successful remediation of those particular locations, I also agree that the shipyard area should be restricted for industrial land use and that surficial ground water production from this area for potable purposes be prohibited. As pointed out by Ms. Jane Fugler, the child trespasser scenario, which was not assessed for this area, should also be accomplished and presented in the report.

Comment acknowledged, the recommendations were made in subsection 7.1.3. In addition, concerning the evaluation of a child trespasser please refer to the response to subsection 2.1.1.

2.2.2 The proposition that dilution will decrease the ecological risk is not valid. I agree that fish and other mobile riverine fauna will likely be exposed to diluted ground water; however, as previously stated at the partnering meetings, macroinvertebrate infauna and other attached or sessile organisms at the land/water interface will likely be subjected to, and be at risk from, relatively undiluted ground water before it discharges to the surface water. This risk should at least be acknowledged by the Navy.

Comment acknowledged, please refer to the response to subsection 2.1.2.

2.2.3 **One of the Navy's justifications for not recommending additional investigation at this time or to not conduct corrective measures at the area was that the ground water was similar to that in a Class G-III aquifer. I realize that we have discussed this before but, for the record, the aquifer is a G-II aquifer and even though I tend to agree that limited quantities of potable water may be produced from it, this does not seem to be a reasonable justification as stated in the report.**

Measurements of chloride, hardness, sulfate and total dissolved solids are provided in Table 2-1 for four monitoring well clusters at the Shipyard Area (Refer to Plate 2 in the Group III RFI report). The highest concentrations of these parameters were measured in groundwater samples from the monitoring wells screened in the deep zone of the surficial aquifer and the lowest concentration were measured in the monitoring wells screened in the water table zone. The highest concentrations of arsenic, iron, magnesium, manganese, and sodium were detected in groundwater samples collected from monitoring wells screened in the deep zone of the surficial aquifer. Based on the criterion (10,000 mg/ℓ), established by the State of Florida under FAC 62-520 the groundwater beneath the Shipyard Area has characteristics of Class G-III. These data are consistent with findings by the USGS that the water within the upper part of the surficial aquifer is fresh and becomes increasingly brackish with depth (Franks, 1980).

Additionally, a current study by the USGS (draft publication expected in January 1997) of the surficial aquifer beneath NAVSTA by the USGS also has data that suggest the aquifer has not been completely flushed of marine or brackish water. Based on the aquifer geochemical characteristics, the recommendations provided in Subsection 7.1.3 of the Group III RFI report for no additional investigation or corrective measure are reasonable.

Currently, the surficial aquifer beneath NAVSTA Mayport is not used as a water supply, therefore, there is no current exposure or risk to human health. However, under current technology there are residential water treatment systems that would reduce organic and inorganic chemical concentrations in a Class G-III aquifer to acceptable drinking water levels. Currently, there are no plans by NAVSTA Mayport to use the surficial aquifer as a potable water supply.

2.2.4 **In this document (and other Mayport documents), it is stated that the presence of certain contaminants (such as arsenic and beryllium) cannot be determined to be from a release from a SWMU or if it may be due to the ubiquitous dredge spoil emplacement throughout the base. At some point, a data analysis or a rational assessment of the presence of the contaminants allegedly resulting from this practice should be presented, along with appropriate references or other justification for those conclusions.**

A statistical summary of the concentrations of arsenic and beryllium detected in surface soil samples at sites investigated under the RCRA Corrective Action Program at NAVSTA Mayport is provided in Tables 2-2 and 2-3, respectively. The statistical summary includes the frequency

of detection, the minimum and maximum detected concentrations, the arithmetic mean, the variance (population), the standard deviation (population), and the distribution of samples within standard deviations intervals. The standard deviation intervals are -2 to 4 for arsenic and -3 to 4 for beryllium. The overall trend of standard deviations for the sites is shown by the total at the bottom of the standard deviation from the mean column. The sites are ranked in Tables 2-2 and 2-3 in order of increasing variance.

The background surface soil samples (ABB-ES, 1995a) are shown on the first row of each table. Arsenic was not detected in the background surface soil samples. Beryllium was detected in 2 of the 6 background surface soil samples, therefore, the frequency of occurrence is insufficient to calculate the variance and standard deviation. The comparison of the surface soil sample analytical results for background and SWMU specific samples suggest that the background sampling locations do not reflect any relict concentrations of arsenic and beryllium that may have been present when the dredge material was placed and that the locations represent minimal anthropogenic influence. The background sampling locations therefore could be considered a conservative screening criteria.

A statistical summary of sediment sample data from SWMU 50, the Dredge Material Holding Area is also included in the tables. The SWMU 50 sediment sample data was included with the data set because it represents materials (sand, silt and clay) dredged from Mayport Turning Basin that were used to construct the landmass at NAVSTA Mayport (See Figure 1-4 in the NAVSTA Mayport General Information Report (GIR) (ABB-ES, 1995b). It is assumed that the analytical results from the SWMU 50 sediment samples are representative of the chemical concentrations for the materials used to construct the NAVSTA Mayport landmass.

The distribution of standard deviations suggest that arsenic and beryllium have a bimodal distribution in the SWMU 50 sediment samples. It is not known if this bimodal distribution is a function of particle size distribution (i.e., percentage of sand silt and clay). The distribution of standard deviations for the other samples in Tables 2-2 and 2-3 suggest a skewed distribution with most of the samples occurring in the interval between the mean and one standard deviation less than the mean. Also, there is some uncertainty associated with the analytical methods detection limit. It is possible that the analytical methods detection limit precludes detecting the lowest concentrations of the chemicals and the data could have a "bell shaped" normal distribution.

The largest variance for the arsenic analytical results was for the SWMU 50 sediment samples. The largest variance for the beryllium analytical results was for SWMU 24.

Three interpretations of the data presented in Tables 2-2 and 2-3 are possible including:

(1) the chemical concentrations are a result of industrial activities,

(2) the chemical concentrations may be a relic from the dredge material, or

(3) the chemical concentrations may be a combination of industrial activities and a relic from the dredge material.

Below is a discussion of the three interpretations.

Industrial Activities. Two of the sites that were reported by the Navy to have been used for pesticide handling, SWMU 15 and the Original Pesticide Handling Area, have larger variances for arsenic than beryllium. Arsenic is used in formulations for both pesticides and herbicides (Table 2-2). Beryllium is used in an alloy with copper in springs, electrical contacts, spot-welding electrodes and nonsparking tools. SWMUs 1 and 23, and SWMU 24 where shipyard repair activities are conducted had the highest variances for beryllium (Table 2-3).

SWMUs 14 and 18, SWMU 28, SWMU 5, and SWMUs 1 and 23, have measurements (outliers) that exceed 4 standard deviations from the mean for arsenic (Table 2-2) and SWMU 28 and SWMUs 1 and 23, have outliers for beryllium (Table 2-3). The outlier is based on the Empirical Rule for a normal distribution that predicts the mean ± 3 standard deviations would include all measurements (Mendenhall, 1975). An uncertainty associated with this observation is that the data set is skewed and the Empirical Rule may not accurately describe the measurements.

Dredge Material. The basis for the interpretation that the chemical concentrations are a relic from the dredge material is the assumption that SWMU 50 sediment is representative of materials used to construct the NAVSTA Mayport landmass. This is suggested by the background data, SWMU 2, SWMU 28, and SWMU 48. The background data represents areas at NAVSTA Mayport where industrial activities have not occurred and the inorganic chemicals have been leached out over time. The other sites, SWMUs 2, 28 and 48 represent industrial use sites that have been paved for a substantial amount of time. The pavement would prevent infiltration of precipitation and therefore limit the amount of leaching that could occur and also prevent the introduction of inorganic chemicals to the subsurface. An uncertainty associated with this interpretation is as the pavement becomes distressed (cracked) inorganic chemicals could be introduced from industrial activities and/or some leaching of chemicals present could occur.

Combination of Industrial Activities and Dredge Material. The landfill SWMUs 3, 4 and 5 represent influences from a mixture of industrial activities and dredge material. SWMU 3 has the lowest variance for the three sites. SWMU 3 is a wooded area that has not been used for industrial activities since landfill activities ceased in 1965. Next in the ranking of variance for the three landfill sites is SWMU 4, landfill activities at SWMU 4 ceased in 1980. Part of SWMU 4 is used as a laydown yard by contractors at NAVSTA Mayport and the other part is an overgrown field with numerous mounds left from landfill activities. SWMU 5 has the

highest variance for the three landfill sites, landfilling activities at SWMU 5 ceased in 1985. SWMU 5 is currently used by Navy personnel to store vehicles. Most of SWMU 5 is heavily vegetated and has wetland areas that are affected by overland flow from recent dredging activities. The distribution of standard deviations for SWMU 3 appears to be skewed and for SWMUs 4 and 5 is relatively symmetrical (even distributions for ± 1 standard deviations from the mean). This could be a relict of the distribution of standard deviations observed for SWMU 50.

These three landfill sites are examples of areas where the chemical concentrations are likely from the combined effect of the mixing of landfill material, dredge material, and industrial activities. The industrial activities are minimal at SWMU 3 to moderate at SWMUs 4 and 5 since use of these sites as landfills.

The statistical summaries presented in Tables 2-2 and 2-3 support a conclusion that industrial activities have contributed organic chemicals to the environment (surface soil) at some of the SWMUs. Based on the ranking of variance for arsenic and beryllium, sites with a high industrial use have a greater potential for inorganic chemicals to be attributed to the industrial activities.

Because arsenic was not detected in the background surface soil samples and beryllium was not detected at a frequency sufficient to conduct a statistical evaluation, a statistical comparison can not be made between background samples and SWMU specific samples. However, site cultural features (i.e., pavement) may limit the leaching of inorganic chemicals. Therefore it is possible that inorganics could be present at residual concentrations that can not be differentiated from industrial activities. A relationship between leaching and relict concentrations may also be illustrated by the variance and standard deviations for landfill SWMUs 3, 4 and 5.

The data in Tables 2-2 and 2-3 also suggest that the background surface soil samples were collected at locations where minimal industrial activities have occurred and leaching of inorganic chemicals has occurred, therefore, the background data is conservative. The conservative background surface soil data may result in overstating risk to human and ecological receptors because anthropogenic concentrations of inorganic chemicals are not being eliminated during the screening of human health and ecological chemicals of potential concern.

2.2.5 **Page 4-112: The statement is made concerning the increasing salinity of the ground water with depth which seemingly justifies the observed arsenic and other metal concentrations. This statement should be better explained and properly referenced since (to me at least) the facts of the implied justification are not obvious.**

Please refer to the response to subsections 2.1.2 and 2.2.3.

2.2.6 **Table 4-25: There seems to be an inconsistency in the current and future land use scenarios for subsurface soil; under future land use, the statement is made that excavation workers exposure were evaluated under the current land use category, yet in that category it states that no HHCPCs were identified and were not selected for evaluation. Please clarify this apparent inconsistency.**

Comment acknowledged, paragraph 4.3.2.2 will be modified to be consistent with Table 4-25. Chemicals detected in subsurface soil samples were initially evaluated during the human health risk assessment by screening for HHCPCs (Table 4-22). No HHCPCs were selected, therefore an exposure assessment for the excavation worker pathway was not evaluated.

2.2.7 **Paragraph 4.3.2.3, Page 131 and Subsection 4.3.5, page 143: Discussed the remediation of the sludge material. On page 131 it states that exposure to the sludge was not evaluated because removal was planned in the near future; then on page 143 it is stated that "it is possible that....sludge at SWMU 45 will not be remediated in the near future." It is strongly suggested that the Navy complete the evaluation of the sludge at SWMU 45 and include the evaluation in a formal manner in the next draft document for this group.**

Please refer to the response to Subsection 2.1.1.

2.2.8 **Page 4-145: The statement is made concerning the concentrations of arsenic that tend to be present in the area surrounding NAVSTA Mayport are high enough...." to contribute to a significant cancer risk. Did the author mean the area of NAVSTA Mayport rather than the area surrounding NAVSTA Mayport? Please correct this apparent inconsistency or explain it more fully. The same comment applies to the evaluation of SWMU 17, page 5-53.**

The statement should refer to the uncertainty associated with excess lifetime cancer risk for concentrations of arsenic detected in surface soil and groundwater samples collected at NAVSTA Mayport. The text on pages 4-145, 5-53, and 6-103 will be revised.

2.2.9 **Paragraph 4.3.6.3, page 4-151: The statement is made that "there does appear to be a numerical pattern for the distribution of inorganic analytes collected from the surficial aquifer (Subsection 4.2.5)." This statement is apparently not documented or elaborated in Subsection 4.2.5; please state the nature of the numerical distribution in Paragraph 4.3.6.3.**

The statement in paragraph is a typographical omission, "this does appear" should have read "this does not appear".

2.3 SWMU 17: The Carbonaceous Fuel Boiler

2.3.1 No comment other than that in comment 8, above, regarding the relationship of the cancer risk from arsenic and the concentrations of arsenic at NAVSTA Mayport.

This comment refers to the uncertainty for arsenic on page 5-53, please refer to the response provided in Subsection 2.2.8.

2.4 SWMUs 14 and 18, Fleet Training Center (FTC) and FTC Diesel Generator Sump

2.4.1 Page 6-34: Similar to comment 4 (Subsection 2.2.4), the placement of dredge material is used to question the determination of a release from the SWMU. This is a generalized statement that is applied to an area that possibly did not receive dredge material. Has this area, in fact, been an area for dredge spoil emplacement? If not, has a release to the environment occurred?

Review of historic aerial photographs suggest that dredge material was placed in the vicinity of SWMUs 14 and 18, therefore the uncertainty of a release to the environment or uncertainty from the use of dredge material exists for arsenic and beryllium (Please refer to the response to Subsection 2.2.4).

2.4.2 Table 6-10 contains a number of incorrect values for the Florida Soil Cleanup Goals; xylene, pyrene, tin, vanadium and zinc are incorrect. All such tables should be checked and corrected where applicable. Copper is listed in Table 6-10 but it is actually not included in the Department's September 29, 1995 Soil Cleanup Goals.

Comment noted, corrections will be made to the text.

2.4.3 I agree with the recommended interim measure for removal of semivolatile organic compounds (SVOCs) in the drainage culverts north of SWMU 14. In the future, the Navy should consider the removal of these materials within the context of a storm water management program which includes an active discharge prevention component for these materials in addition to their physical removal.

Comment acknowledged.

2.4.4 In our general discussions we have characterized some of the soil contaminants as being distributed as "hot spots." In reviewing the data, I wonder if they may be better characterized as being more evenly distributed with the "hot spots" resulting from those areas that exceed FDEP industrial soil cleanup goals?

Some of the inorganic chemicals were detected at concentrations less than residential use criteria on a wide spread basis. However, contamination implies the presence of a chemical(s) at a concentration that make a site or part of a site unfit for use. The use of the term "hot spot" is consistent with the detection of a chemical(s) at a concentration(s) that exceed industrial screening criteria. This implies that the sampling location(s) and a very limited area surrounding the sampling location is unfit for the use defined by the screening criteria.

3.0 Response to Comments by the U.S. Environmental Protection Agency

3.1 General Comments.

3.1.1 There is concern that the groundwater pathway to the St. Johns River may not have been adequately addressed. Contaminant concentrations exceeding the benchmark concentrations have been detected in groundwater samples from monitoring wells located directly adjacent to the St. Johns River. For example, at the Shipyard Area, contaminant concentrations exceeding the benchmark concentrations have been detected in monitoring wells MPT-23-MW04S, MPT-23-MW05, and MPT-45-MW01. At the Carbonaceous Fuel Boiler, contaminant concentrations exceeding the benchmark concentrations have been detected in monitoring well MPT-17-MW03S, and at the Fleet Training Center, contaminant concentrations exceeding the benchmark concentrations have been detected in monitoring wells MPT-14-MW02S, MPT-14-MW01S, MPT-14-MW05S, and MPT-14-MW06S. In each of these examples, no other groundwater monitoring points were located between the wells and the St. Johns River to substantiate whether the contaminants are migrating off site at concentrations exceeding risk-based levels. Please address this concern.

We do not concur with the reviewers comments, below are responses for the three areas discussed.

Shipyard Area. The Region III risk based concentration (RBC) of 0.038 micrograms per liter ($\mu g/\ell$) was exceeded for arsenic in the groundwater sample collected from monitoring well MPT-23-MW04S (2 $\mu g/\ell$). It should be noted that the Region III RBC is less than the detection limit, therefore, when this chemical is detected it exceeds this screening criteria. The State and Federal maximum contaminant level (MCL) for this chemical in groundwater is 50 $\mu g/\ell$, which was not exceeded. The State surface water quality criteria for Class III marine water is 50 $\mu g/\ell$, which was not exceeded. Organic chemicals were not detected in the ground water sample from monitoring well MPT-23-MW04S.

The Region III (RBC) of 5 $\mu g/\ell$ was exceeded for 1,2-dichloroethene in the groundwater sample collected from monitoring well MPT-23-MW05I (5.5 $\mu g/\ell$). The State and Federal maximum contaminant levels (MCL) for this chemical is 70 $\mu g/\ell$, which was not exceeded. The State has not established a surface water quality screening criteria for 1,2-dichloroethene. Organic chemicals were not detected in monitoring wells MPT-23-MW05S and MPT-23-MW23D.

Inorganic chemicals that exceed benchmarks in groundwater samples from monitoring well clusters at the Shipyard Area were arsenic, iron, manganese and sodium (Table 2-4) (Please refer to Plate 2 in the Group III RFI report for the monitoring well locations). Only manganese was detected at concentrations that exceed a benchmark in groundwater samples from the water

table zone monitoring wells. Iron, manganese and sodium were detected at concentrations that exceed a benchmark in groundwater samples from the intermediate zone monitoring wells. Arsenic, iron, manganese and sodium were detected at concentrations that exceed a benchmark in groundwater samples from the deep zone monitoring wells.

The analytical data for groundwater samples collected from the monitoring well clusters is consistent with findings by the USGS that the water within the upper part of the surficial aquifer is fresh and becomes increasingly brackish with depth (Franks, 1980), and are not a result of a release from the Shipyard Area SWMUs. As previously stated, a current study by the USGS (draft publication expected in January 1997) of the surficial aquifer beneath NAVSTA by the USGS also has data that suggest the aquifer has not been completely flushed of marine or brackish water.

Carbonaceous Fuel Boiler. The Region III RBC (4.8 $\mu g/\ell$) and the Florida groundwater guidance concentration (6 $\mu g/\ell$) was exceeded for bis(2-ethylhexyl)phthalate in the groundwater sample collected from monitoring well MPT-17-MW03S (8 $\mu g/\ell$). The presence of bis(2-ethylhexyl)phthalate in groundwater samples has not been confirmed at other SWMUs in Group I and II investigated at NAVSTA Mayport. This is corroborated by the comparison of analytical results from groundwater samples collected in 1992, 1993 and 1994 (Table 2-5) from Group I and II SWMUs. It is likely that the concentration of bis(2-ethylhexyl)phthalate detected in the groundwater samples from SWMU 17 are sampling or laboratory artifacts (USEPA, 1990).

Three inorganic analytes, arsenic, iron, and manganese were detected at concentrations that exceed benchmarks. Arsenic exceeded the Region III RBCs but not the Florida groundwater guidance concentrations. Iron was detected at concentrations exceeding the Florida groundwater guidance concentrations but not the maximum concentration for an essential nutrient (ABB-ES, 1995b). Manganese was detected at concentrations exceeding Region III RBCs and Florida groundwater guidance concentrations. It was stated on page 5-33 of the Group III RFI report that the highest concentrations were detected in monitoring wells located hydraulically upgradient or sidegradient to SWMU 17, suggesting that the inorganic chemicals are not site related.

Fleet Training Center. Antimony, arsenic, iron, and manganese were detected at concentrations exceeding benchmarks. Antimony was detected at 6.2 $\mu g/\ell$ as a single occurrence (1 of 19 groundwater samples) in the groundwater sample collected from monitoring well MPT-14-MW04S. The concentration detected exceeded the USEPA Region III RBC (1.5 $\mu g/\ell$) and the Florida groundwater guidance concentration (6 $\mu g/\ell$) . The single detection is not likely representative of the groundwater quality and based on the frequency of detection is more likely an artifact.

Arsenic was detected at concentrations exceeding the USEPA Region III RBC, but not the Florida groundwater guidance concentration.

The analytical results for iron and manganese detected in groundwater samples are consistent with findings by the USGS that the water within the upper part of the surficial aquifer is fresh and becomes increasingly brackish with depth (Franks, 1980), and are not a result of a release from the Fleet Training Center.

3.1.2 **The RFI Report indicates on page 4-33 that the groundwater samples were collected using a peristaltic pump and disposable Teflon tubing. EPA guidance discourages the use of peristaltic pumps for the collection of volatile organic compound (VOC) groundwater samples. Please explain this deviation from the sampling procedures outlined in the GIR.**

The RCRA Corrective Action program at NAVSTA Mayport has been proactive in using the low-flow sampling technique as the most effective means to collect groundwater samples that are representative of the aquifer zone monitored. The low-flow sampling procedure described in the NAVSTA Mayport GIR and the Group III RFI Report is in general conformance with purging and sampling procedures described in Chapter 7 of USEPA's Environmental Investigations Standard Operating Procedures and Quality Assurance Manual, dated May 1996.

3.1.3 **The RFI Report discusses dilution of groundwater entering the St. Johns River without providing any information on the assumptions used to calculate dilution. Since dilution is used to dismiss iron as a constituent of potential ecological concern in Subsections 4.4.4, 5.4.4, and 6.4.4.2, the flow characteristics of the river that will ensure dilution must be discussed. Additionally, explain why it is not suggested that groundwater be resampled to measure the dissolved concentration of iron, rather than simply assuming that the dissolved concentration will be at acceptable levels to ecological receptors.**

Please refer to the response in Subsections 2.1.2, 2.2.3, and 3.1.1.

3.1.4 **It is not clear what scenario has been used to derive the soil and sediment remedial goal options (RGOs) based on carcinogenicity. Paragraphs 4.3.6.1, 5.3.6.1, and 6.3.6.1 only state that these goals have been derived based on residential or industrial use. It is also not clear whether the residential uses are based on adult or child exposures. Revise the RFI to more clearly describe how the RGOs were developed.**

RGOs are a ratio of a chemicals site specific risk for aggregate residential exposure (child and adult receptors) for a medias pathways (i.e., incidental ingestion, dermal contact and inhalation of particulate) and the chemicals exposure point concentration at designated excess lifetime cancer risk levels of $1x10^{-4}$, $1x10^{-5}$, and $1x10^{-6}$ and Hazard Quotients of 0.1, 1 and 3 (USEPA, 1995). The future residential scenario is used for RGO because it represents the most restrictive site usage.

3.1.5 Since it is considered possible that the future adult resident might be exposed to contaminated groundwater, explain why it is considered improbable that a child resident would be similarly exposed.

The human health risk assessment for SWMU Groups I, II and III were conducted using standard USEPA guidance to evaluate 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, where the critical effect is developmental or may pose a threat to a developing child noncancer HQs greater than 0.5 for CPCs are evaluated by a toxicologist and the results of this analysis discussed in uncertainty analysis. Chemicals that were a threat to a developing child were not detected. Additionally, in the future, human health baseline risk assessments will include the child receptor for groundwater.

3.1.6 Please reference the source of the RBC for iron. The 13,267 $\mu g/\ell$ RBC used in the RFI isn't found in the February 9, 1995 Region III RBC tables and it is not the RBC listed for iron in the GIR.

The comment is a result of the reviewer using the draft version of the NAVSTA Mayport GIR. The RBCs and other screening criteria concentrations are provided are provided in Appendix D of the NAVSTA Mayport GIR (ABB-ES, 1995b).

3.2 Specific Comments on Chapter 3.0, Group III SWMUs Physical Characteristics.

3.2.1 Subsection 3.2.1, Tidal Influence (page 3-14): The last sentence on page 3-14 states that the tidal effect in the water table zone of the surficial aquifer is limited to areas located less than 330 feet from the shoreline of the St. Johns River at the Shipyard Area, and 400 feet at the Fleet Training Center. However, the hydrograph of the intermediate and deep wells presented as Figure 3-2 suggests that the tidal radius of influence may be more distal in the intermediate and deep portions of the aquifer. Please provide a discussion/evaluation in the revised Group III RFI Report of the larger tidal influence in the intermediate and deep portions of the aquifer and any potential impact of this tidal influence with regard to contaminant fate and transport.

The USGS is currently completing an evaluation of the surficial aquifer beneath NAVSTA Mayport. A draft of their evaluation is expected to be completed in January 1997.

3.2.2 Subsection 3.2.3, Table 3-13 (page 3-30): Table 3-13 apparently contains several errors. The cm/sec values reported in the table do not properly equate with the ft/day values reported. For example, a value of 0.00000008 cm/sec is equivalent to 0.00023 ft/day, not 0.007 ft/day as reported in the table. Likewise, 0.00024 cm/sec is equivalent to 0.68 ft/day,

not 20.7 ft/day. Furthermore, the text in the paragraph immediately preceding the table states that the average of the two hydraulic conductivity values was calculated to be 0.9 ft/day. The arithmetic average of 0.007 and 20.7 is 10.4 ft/day rather than 0.9 ft/day. Please provide the corrected values to Table 3-13 in the revised Group III RFI Report.

Typographical errors in Table 3-13 will be corrected.

3.2.3 **Subsection 3.2.4, Table 3-14 (page 3-31): Table 3-14 apparently contains several errors. The estimated linear groundwater flow rate values reported in column D are incorrect for all of the values reported at the Shipyard Area and the Carbonaceous Fuel Boiler. For example, the estimated linear groundwater flow rate for well MPT-1-MW01S at the Shipyard Area should be 0.05 ft/day instead of 0.02 ft/day. Furthermore, the estimated linear groundwater flow rate for well MPT-17-MW02S reported in column E should be 34 ft/year instead of 35 ft/year. Please provide the corrected values to Table 3-14 in the revised Group III RFI Report.**

Typographical errors in Table 3-14 will be corrected.

3.2.4 **Subsection 3.2.4, Groundwater Flow Velocity (page 3-32): The last paragraph on page 3-32 states that the "values for the vertical linear groundwater flow rate are likely similar to the horizontal linear groundwater flow rates in the Shipyard Area." However, this is not supported by either the text or the data presented in the previous sections of the RFI Report. The statement implies that the horizontal and vertical flow rates are similar at the Shipyard Area. However, the report states on page 3-28 that "the wide range of conductivity values is likely a reflection of the heterogeneity of the fine- to coarse-grained dredge materials that comprise the shallow aquifer." Page 3-30 further states that "the vertical hydraulic conductivity has the potential of being several orders of magnitude less than the horizontal radial hydraulic conductivity values where fine-grained materials predominate." These latter statements indicate that the soils beneath the facility are vertically heterogeneous, and because of this heterogeneity, are characterized by vertical hydraulic conductivity values several orders of magnitude less than the horizontal hydraulic conductivity. Please provide clarification in the revised Group III RFI Report of the relationship between the vertical and horizontal hydraulic conductivity values.**

Three of four deep borings suggest that the predominate material of the undifferentiated post-Hawthorn deposits are primarily poorly graded sands, with little or no fines and that the Upper Hawthorn Group deposits are sandy clays and clayey sands (Please refer to Figure 3-1 in the Group III RFI report). Only three borings were terminated into the Hawthorn Group deposits in the Shipyard Area. The characterization of hydraulic properties has some uncertainties depending on the assumption that the undifferentiated post-Hawthorn are predominated by poorly graded sands with little or no fine material (clay) or are clays, silty clays or sandy clays.

Because of the limited amount of data available and the need to characterize the surficial aquifer, the USGS has been developing a model to simulate hydraulic properties of the surficial aquifer beneath NAVSTA Mayport. There is sufficient hydrologic data over NAVSTA Mayport to calibrate the model. A draft of the modeling effort should be published in January 1997.

3.3 Specific Comments on Chapter 4.0, The Shipyard Area, SWMUs 1, 23, 24, 25, 44 and 45.

3.3.1 Section 4.2, Findings (page 4-34): The first paragraph states that "groundwater is discussed last to assess whether or not target analytes have migrated beyond the boundaries of the industrial Shipyard Area." However, the section on groundwater results (Subsection 4.2.5, pages 4-87 through 4-112) discusses the analytes detected in the groundwater and whether the detections exceed the benchmark concentrations, but does not present any evaluations or conclusions regarding whether the constituents detected in the groundwater were released from the SWMUs in the Shipyard Area. The text does state (page 4-112) that the occurrence of antimony, vanadium, copper, lead and nickel, and possibly manganese and arsenic "suggests that a release to the environment has occurred." The text does not, however, discuss the origins of the VOC and SVOC detections. Please provide greater discussion in the revised Group III RFI Report of the origins of the contaminant detections.

Based on the concentrations detected and frequency of occurrence (See Tables 4-18 and 4-19 in the Group III RFI report) a specific source area for the VOCs and SVOCs was not determined. Additionally, the concentrations of VOCs and SVOCs did not exceed Florida groundwater guidance concentrations. On page 4-110 in the draft Group III RFI report it was indicated that a significant release of volatile organic compounds is not apparent. The statement will be modified to include the semivolatile organics. Additionally, a statement will be made that a specific source area for these chemicals was not identified.

3.4 Specific Comments on Chapter 5.0, SWMU 17 - The Carbonaceous Fuel Boiler.

3.4.1 Paragraph 5.2.1.1, Organics (page 5-6): The RFI text states that benzo(a)pyrene was detected in 3 of the 15 samples and exceeded FDEP and U.S. EPA benchmarks for residential exposure in 2 samples. Furthermore, Table 5-4 (page 5-15) indicates that the frequency of benzo(a)pyrene detections above risk-based screening concentrations is 2/15, while Table 5-3 (page 5-12) indicates that the maximum concentration was detected in soil sample 17S00801 (MPT-17-SS08). However, Table 5-1 (pages 5-7 and 5-8) does not report the analytical results for sample MPT-17-SS08. Please provide the missing information in the revised Group III RFI Report.

Analytical results for surface soil samples inadvertently omitted from Table 5-6 will be added to the revised Group III RFI report.

3.4.2 **Table 5-4, Comparison of Concentrations Detected in Surface Soil Samples at SWMU 17 (p 5-16). Footnote 2 indicates that background screening concentrations are calculated for inorganic constituents only; yet a background screening concentration of 2.3 μg/kg for the organic constituent 4,4-DDE is provided.**

A statement will be added to Table 5-4 that the organic value(s) shown in the background screening column are the mean of the concentrations detected in the background surface soil samples and are only provided for reference.

3.4.3 **Paragraph 5.2.1.1, Organics (page 5-18): The RFI text states in the second paragraph on page 5-18 that a likely source for the benzo(a)pyrene and dibenzo(a,h)anthracene is residues from vehicle exhaust and/or engine fluids on the parking lot of the Carbonaceous Fuel Boiler. To support this assertion, the RFI Report should present the analytical results for surface soil samples MPT-17-SS07 and MPT-17-SS09 (which are not included in Table 5-1) and provide a discussion of the concentrations of the constituents detected in these samples. Please provide the missing information and associated discussion in the revised Group III RFI Report.**

The paragraph will be modified to more clearly identify the polynuclear aromatic hydrocarbons (PAHs) that were detected in surface soil samples collected from the Carbonaceous Fuel Boiler. Analytical results for surface soil samples inadvertently omitted from Table 5-1 will be added to the revised Group III RFI report.

3.4.4 **Paragraph 5.2.3.2, Organics (page 5-32): The RFI Report states in the fifth paragraph that the occurrence of bis(2-ethylhexyl)phthalate in the groundwater samples "is related to field or laboratory contamination and is not related to a release from SWMU 17." Since this contaminant was also present in the groundwater sample MPT-17-MW01S, please explain how it was determined to be a field or laboratory contaminant.**

Please refer to the response pertaining to the Carbonaceous Fuel Boiler in Subsection 3.1.1.

3.5 **Specific Comments on Chapter 6.0, SWMUs 14 and 18 - Mercury/Oil Waste Spill and Fleet Training Center (FTC) Diesel Generator Sump.**

3.5.1 **Paragraph 6.2.4.1, Figures 6-5, 6-6, 6-7, and 6-8 (pages. 6-57 to 6-60): Figures 6-5, 6-6, 6-7, and 6-8 illustrate the orientation of various groundwater contaminant plumes present beneath the Mayport facility. Each plume appears to be most concentrated at monitoring well MPT-14-MW09 and generally tapers in concentration toward the northeast. The concentration gradient reduction to the northeast would normally be expected with a groundwater flow direction to the northeast. However, the groundwater flow patterns described in the text and illustrated in Plate 1 indicate that groundwater flows to the north**

or northwest in the vicinity of the Fleet Training Center. Please provide a discussion in the revised Group III RFI Report of the contaminant distribution patterns observed at the Fleet Training Center and indicate how these patterns resulted given the observed groundwater flow directions.

The groundwater flow direction inferred from the potentiometric lines on Plate 1 of the Group III RFI report is toward the north-northeast in the vicinity of the monitoring well MPT-14-MW09. The groundwater flow direction has some uncertainty because it is for a single date (July 19, 1995) that may not be representative of the overall groundwater flow direction.

The direction of the plumes interpreted from the field screening data was a more northwestern direction. A possible deviation of the plumes direction of flow from the groundwater flow direction shown on Plate 1 may be hydraulic influence from permeable bedding for a pipeline that conveys fluids from the training areas, structures 364 and 492 to the a 10,000-gallon capacity oil-water separator (please refer to the location of the oil-water separator on Figures 6-2 and 6-3 of the RFI report).

3.5.2 **Paragraph 6.2.4.2, Groundwater Samples from Monitoring Wells (page 6-70): In the third paragraph on page 6-70, the RFI Report describes the lack of correlation observed between the field screening samples and the groundwater samples collected from the monitoring wells in the Fleet Training Center. If the lower contaminant concentrations observed from the monitoring wells were the result of longer well screens as discussed in the RFI Report, the monitoring well samples may not adequately characterize the groundwater present beneath the Fleet Training Center (i.e., the maximum concentrations may not be detected). Please provide a discussion in the revised Group III RFI Report of what procedures will be instituted to ensure that the groundwater samples collected from the monitoring wells will adequately characterize the contaminants present beneath the Fleet Training Center.**

The field screening program, installation of monitoring wells and groundwater sampling techniques for the NAVSTA Mayport Corrective Action Program follow procedures and protocols that are consistent with FDEP and USEPA guidance and are documented in the NAVSTA Mayport GIR (ABB-ES, 1995b) and in this report.

3.5.3 **Table 6-25, Selection of Human Health Chemicals of Potential Concern, Surface Water Associated with SWMUs 14 and 18 (page 6-79): Please explain in greater detail why iron has been eliminated from consideration as a chemical of potential concern. Iron in groundwater at SWMUs 14 and 18 is selected as a constituent of potential concern. Also, explain why iron in the surface water is attributed to tidal influences rather than from a discharge of groundwater or surface runoff.**

Iron was eliminated from consideration as a HHCPC for surface water because the surface water sample was collected from a tidal area that is inundated two times a day. Iron was selected as a HHCPC for groundwater because the maximum concentration detected in the groundwater samples (1,910 $\mu g/\ell$) exceed the Florida groundwater guidance concentration (300 $\mu g/\ell$).

The concentration of chloride detected in the surface water (3,900 to 10,500 mg/ℓ) and groundwater 13.1 to 40.6 mg/ℓ samples suggest that the water in the tidal pool is more likely from the St. Johns River than the surficial aquifer. It is possible that groundwater could discharge to the surface water at the tidal pool area, although this has not been observed. There had not been a recent rainfall event, therefore, the concentration was not related to surface water runoff.

3.6 Specific Comments on Chapter 7.0, Conclusions and Recommendations.

3.6.1 Subsection 7.1.1, Human Health Risk Assessment (page 7-4): For clarity, the conclusions section of the RFI report for the Shipyard Area SWMUs should indicate that future land uses that might result in contact with contaminated sludge were not considered in the report. However, as stated on page 4-143, funding concerns may prevent the sludge from being remediated. A statement should be added to Subsection 7.1.1 that if the sludge is not remediated, then human health risks for future land uses must be addressed.

Please refer to the response to Subsection 2.1.1.

3.6.2 Section 7.2, The Carbonaceous Fuel Boiler, SWMU 17 (page. 7-9): Revise the RFI report to state whether or not the data validation effort supports the conclusion that the high bis(2-ethylhexyl)phthalate detected in one groundwater sample is due to field or laboratory contamination. Tables 5-3 and 5-11 indicates that bis(2-ethylhexyl)phthalate was detected in 3 of 15 soil samples and 2 of 3 groundwater samples. This would suggest that contamination of environmental media by this constituent has occurred at SWMU 17. If the data validation effort does not support rejection of the high groundwater sample result, then explain why resampling of the well (including collection of appropriate field and laboratory quality assurance/quality control samples) is not suggested as a follow-up activity.

Please refer to the response pertaining to the Carbonaceous Fuel Boiler in Subsection 3.1.1.

3.6.3 Section 7.2, The Carbonaceous Fuel Boiler, SWMU 17 (page 7-10): Detected levels of bis(2-ethylhexyl)phthalate, iron, and manganese in groundwater and detected levels of benzo(a)pyrene, dibenz(a,h)anthracene, arsenic, and beryllium in soil at SWMU 17 appear to be high enough to warrant calculation of RGOs. Therefore, the statement that there

does not appear to have been any significant release of chemicals at SWMU 17 should be removed or more thoroughly justified.

Please refer to the responses to subsections 2.1.3, 3.1.1, and 3.4.3.

3.6.4 **Subsection 7.3.3, Recommendations (page 7-21): The Subsection 7.3.3 discussion of sediment results does not address the pesticides in the tidal pool area that were determined to be of ecological concern (see Table 6-43). Please explain why the RFI report does not recommend that the high levels of pesticides be addressed as part of future corrective action activities at the site.**

The pesticides were detected in 1 of 5 sediment samples. The pesticides were detected in one of the samples collected in the tidal pool, and were not at concentrations exceeding the detection limit, if present, in the other sample approximately 120 feet away. This suggest that the detection is a localized hot spot. The source of the pesticide is likely the historic application of pesticides and are not a result of a release from SWMUs 14 and 18.

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ABB-ES, 1995b, RCRA Facility Assessment Sampling Visit Report, Solid Waste Management Unit Groups I and II, U.S. Naval Station (NAVSTA) Mayport, prepared for SOUTHNAVFACENGCOM, North Charleston, South Carolina, July.

ABB-ES, 1995c, Surface and subsurface soil sampling and analytical results, Aircraft Display Area, NAVSTA Mayport, Florida prepared for SOUTHNAV-FACENGCOM, North Charleston, South Carolina, October 16.

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ABB-ES, 1995e, Surface soil sampling and analytical results, Original Pesticide Handling Area, NAVSTA Mayport, Florida prepared for SOUTHNAVFACENGCOM, North Charleston, South Carolina, September 7.

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Table F-1
Water Quality Parameters for Monitoring Wells Screened in Shallow, Intermediate and Deep Zones of the Surficial Aquifer In the Shipyard Area

Response to FDEP and USEPA Comments
U.S. Naval Station
Mayport, Florida

Sample Location	Parameter Name	Analytical Result (mg/ℓ)	Validated Qualifier
MPT-45-MW01D	Chloride	10,500	
MPT-23-MW05D	Chloride	9,240	
MPT-44-MW01D	Chloride	5,750	
MPT-1-MW01D	Chloride	4,400	
MPT-23-MW05I	Chloride	415	
MPT-44-MW01I	Chloride	207	
MPT-23-MW05	Chloride	61	
MPT-45-MW01I	Chloride	37.7	
MPT-45-MW01	Chloride	32.8	
MPT-44-MW01	Chloride	23.4	
MPT-1-MW01I	Chloride	15.1	
MPT-1-MW01S	Chloride	11.4	
MPT-23-MW05D	Hardness as CaCO3	4,760	
MPT-45-MW01D	Hardness as CaCO3	4,250	
MPT-1-MW01D	Hardness as CaCO3	2,350	
MPT-44-MW01D	Hardness as CaCO3	2,270	
MPT-23-MW05I	Hardness as CaCO3	441	
MPT-23-MW05	Hardness as CaCO3	300	
MPT-44-MW01	Hardness as CaCO3	269	
MPT-45-MW01	Hardness as CaCO3	262	
MPT-1-MW01I	Hardness as CaCO3	246	
MPT-44-MW01I	Hardness as CaCO3	233	
MPT-45-MW01I	Hardness as CaCO3	227	
MPT-1-MW01S	Hardness as CaCO3	163	

See notes at end of table.

Table F-1 (Continued)
Water Quality Parameters for Monitoring Wells Screened in Shallow, Intermediate and Deep Zones of the Surficial Aquifer In the Shipyard Area

Response to FDEP and USEPA Comments
U.S. Naval Station
Mayport, Florida

Sample Location	Parameter Name	Analytical Result (mg/ℓ)	Validated Qualifier
MPT-45-MW01D	Sulfate	1,410	
MPT-23-MW05D	Sulfate	1,180	
MPT-44-MW01D	Sulfate	597	
MPT-1-MW01D	Sulfate	520	
MPT-23-MW05	Sulfate	114	
MPT-45-MW01	Sulfate	67.6	
MPT-44-MW01	Sulfate	49.4	
MPT-1-MW01I	Sulfate	18.3	
MPT-1-MW01S	Sulfate	13.1	
MPT-23-MW05I	Sulfate	12.1	
MPT-45-MW01I	Sulfate	12.1	
MPT-44-MW01I	Sulfate	10	U
MPT-45-MW01D	Total Dissolved Solids	19,300	
MPT-23-MW05D	Total Dissolved Solids	17,200	
MPT-44-MW01D	Total Dissolved Solids	10,200	
MPT-1-MW01D	Total Dissolved Solids	9,300	
MPT-23-MW05I	Total Dissolved Solids	1,170	
MPT-44-MW01I	Total Dissolved Solids	871	
MPT-23-MW05	Total Dissolved Solids	487	
MPT-45-MW01I	Total Dissolved Solids	455	
MPT-45-MW01	Total Dissolved Solids	399	
MPT-44-MW01	Total Dissolved Solids	362	
MPT-1-MW01I	Total Dissolved Solids	287	
MPT-1-MW01S	Total Dissolved Solids	218	

Notes: mg/ℓ = milligrams per liter.
U = concentration of analyte, if present, was less than the detection limit.

Table F-2
Statistical Evaluation of Arsenic Detected in Surface Soil Samples

Response to FDEP and USEPA Comments
U.S. Naval Station
Mayport, Florida

Site	Frequency	Minimum (mg/kg)	Maximum (mg/kg)	Mean (mg/kg)	VarP.	Std. DevP.	Standard Deviations From the Mean					
							-2	-1	1	2	3	4
[1]Background	0/4	--	--	nc	nc	nc	nc	nc	nc	nc	nc	nc
[2]SWMU 22	0/4	--	--	nc	nc	nc	nc	nc	nc	nc	nc	nc
[3]ACDA	2/2	1.5	2.5	2	nc	nc	nc	nc	nc	nc	nc	nc
[4]SWMU 12	4/4	0.96	1.3	1.1	0.01	0.1	0	2	0	1	0	0
[2]SWMU 13	3/3	0.33	0.69	0.48	0.02	0.2	0	2	0	1	0	0
[5]SWMU 48	5/5	0.23	0.7	0.41	0.03	0.2	1	2	1	1	0	0
[2]SWMU 3	3/3	0.27	0.77	0.51	0.04	0.2	1	1	0	1	0	0
[5]SWMU 56	8/8	0.62	1.2	0.93	0.04	0.2	2	1	3	2	0	0
[2]SWMU 2	4/4	0.75	1.3	0.99	0.04	0.2	1	2	0	1	0	0
[6]SWMU 25	9/9	0.53	1.3	0.8	0.05	0.2	3	3	3	0	1	0
[5]SWMU 19	5/5	0.74	1.2	0.07	0.08	0.3	1	2	1	1	0	0
[6]SWMU 17	14/15	0.33	1.8	0.76	0.1	0.4	3	5	5	0	1	0
[5]SWMU 26	4/4	0.63	1.6	0.96	0.2	0.4	0	2	0	1	0	0
[6]SWMUs 44 and 45	19/19	0.28	2	1.02	0.2	0.4	1	11	3	3	1	0
[6]SWMUs 14 and 18	30/33	0.36	2.2	0.78	0.2	0.4	2	17	5	4	0	1
[5]SWMU 28	35/35	0.49	3.2	0.97	0.2	0.5	0	21	10	3	0	1
[7]SWMUs 20 and 21	8/8	0.3	2.2	0.92	0.3	0.6	2	2	3	0	1	0
[2]SWMU 4	12/12	0.62	2.6	1.23	0.4	0.6	1	8	2	1	1	0
[6]SWMU 24	4/7	0.69	2.75	1.8	0.5	0.7	1	1	1	1	0	0
[8]OPHA	6/6	0.27	2.67	1.09	0.7	0.8	1	3	1	1	0	0
[4]SWMU 15	8/8	1.2	5	2.4	1.6	1.3	0	4	3	0	1	0
[2]SWMU 5	18/21	0.36	6.9	1.92	2	1.5	1	11	4	1	0	1
[6]SWMUs 1 and 23	37/38	0.02	13.9	2.1	7.2	2.7	0	27	5	2	1	1
[5]SWMU 50	18/18	0.6	16.4	7.2	42	6.47	4	7	2	5	0	0
						Total	25	134	52	30	7	4

See notes on following page.

Table F-2 (Continued)
Statistical Evaluation of Arsenic Detected in Surface Soil Samples

Response to FDEP and USEPA Comments
U.S. Naval Station
Mayport, Florida

[1] Resource Conservation and Recovery Act (RCRA) General Information Report for U.S. Naval Station Mayport Florida (ABB-ES, 1995a).
[2] RCRA Facility Investigation for Group I SWMUs (ABB-ES, 1996b).
[3] Surface and subsurface soil sampling and analytical results for the Aircraft Display Area (ABB-ES, 1995c).
[4] RCRA Facility Investigation for Group II SWMUs (ABB-ES, 1996c).
[5] RCRA Facility Assessment Sampling Visit Report for Group I and II SWMUS (ABB-ES, 1995b).
[6] RCRA Facility Investigation for Group III SWMUs (ABB-ES, 1996d).
[7] RCRA Facility Assessment Sampling Visit Report for Group III SWMUS (ABB-ES, 1995b)
[9] Surface soil sampling and analytical results for the Original Pesticide Handling Area (ABB-ES, 1995c).

Notes: FDEP = Florida Department of Environmental Protection.
USEPA = United States Environmental Protection Agency.
SWMU = solid waste management unit.
ACDA = Aircraft Display Area.
OPHA = Original Pesticide Handling Area.
Frequency = Frequency of detection is the number of samples in which the analyte was detected, divided by the total number of samples analyzed (excluding rejected samples).
Min. = Minimum concentration detected.
mg/kg = milligrams kilogram (mg/kg).
Max. = Maximum concentration detected.
Mean = Arithmetic mean of detected concentrations (mg/kg); including the average of a sample and a duplicate and not including samples in which the analyte was not detected.
VarP. = Average of the square of the deviations of the measurements for the sample population.
Std. DevP. = Positive square root of the variance for the sample population.
-- = Concentration of analyte, if present, was less than the detection limit.
nc = Calculation not conducted, because of nondetection or insufficient sample size for a site.

Table F-3
Statistical Evaluation of Beryllium Detected in Surface Soil Samples

Response to FDEP and USEPA Comments
U.S. Naval Station
Mayport, Florida

Site	Frequency	Minimum (mg/kg)	Maximum (mg/kg)	Mean (mg/kg)	VarP.	Std. DevP.	Standard Deviations From the Mean						
							-3	-2	-1	1	2	3	4
[1]Background	2/6	0.06	0.09	0.08	nc	nc	nc	nc	nc	nc	nc	nc	nc
[2]OPHA	0/6	--	--	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
[3]SWMU 13	0/3	--	--	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
[4]SWMU 48	0/5	--	--	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
[5]ACDA	1/2	0.24	0.24	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
[6]SWMU 12	4/4	0.05	0.08	0.06	0.0001	0.01	0	1	2	0	0	0	0
[3]SWMU 3	3/3	0.08	0.1	0.09	0.0001	0.01	0	0	1	0	2	0	0
[7]SWMUs 20 and 21	6/8	0.06	0.11	0.09	0.0003	0.02	0	2	1	3	0	0	0
[8]SWMU 15	8/8	0.07	0.17	0.12	0.001	0.03	0	1	4	1	2	0	0
[4]SWMU 56	4/8	0.11	0.19	0.14	0.001	0.03	0	1	2	0	1	0	0
[3]SWMU 2	4/4	0.11	0.21	0.15	0.001	0.04	0	1	2	0	1	0	0
[6]SWMUs 44 and 45	19/19	0.06	0.24	0.11	0.002	0.05	0	1	13	2	2	1	0
[6]SWMU 17	10/15	0.04	0.17	0.1	0.003	0.05	0	3	2	3	2	0	0
[6]SWMUs 14 and 18	32/33	0.05	0.27	0.11	0.004	0.06	0	2	21	4	3	2	0
[3]SWMU 22	3/4	0.08	0.27	0.15	0.008	0.09	0	0	2	0	1	0	0
[3]SWMU 4	9/12	0.08	0.35	0.18	0.01	0.08	0	2	3	3	1	1	0
[4]SWMU 19	4/5	0.07	0.26	0.16	0.01	0.09	0	1	1	1	1	0	0
[4]SWMU 26	4/4	0.11	0.33	0.17	0.01	0.1	0	0	2	0	1	0	0
[6]SWMU 25	8/9	0.09	0.3	0.16	0.01	0.1	0	1	4	1	1	1	0
[3]SWMU 5	8/21	0.07	0.54	0.23	0.02	0.14	0	1	3	3	0	1	0
[4]SWMU 28	29/35	0.05	0.2	0.1	0.02	0.15	0	0	24	3	0	1	1
[4]SWMU 50	9/18	0.59	1.6	1.3	0.1	0.31	1	1	0	6	1	0	0
[6]SWMUs 1 and 23	37/38	0.05	1.9	0.25	0.1	0.33	0	0	29	5	3	0	1
[9]SWMU 24	7/9	0.06	1.25	0.33	0.2	0.4	0	0	5	1	0	1	0
						Total	1	18	121	36	22	8	2

See notes on following page.

Table F-3 (Continued)
Statistical Evaluation of Beryllium Detected in Surface Soil Samples

Response to FDEP and USEPA Comments
U.S. Naval Station
Mayport, Florida

[1] Resource Conservation and Recovery Act (RCRA) General Information Report for U.S. Naval Station Mayport Florida (ABB-ES, 1995a).
[2] RCRA Facility Investigation for Group I SWMUs (ABB-ES, 1996b).
[3] Surface and subsurface soil sampling and analytical results for the Aircraft Display Area (ABB-ES, 1995c).
[4] RCRA Facility Investigation for Group II SWMUs (ABB-ES, 1996c).
[5] RCRA Facility Assessment Sampling Visit Report for Group I and II SWMUS (ABB-ES, 1995b).
[6] RCRA Facility Investigation for Group III SWMUs (ABB-ES, 1996d).
[7] RCRA Facility Assessment Sampling Visit Report for Group III SWMUS (ABB-ES, 1995b)
[8] Surface soil sampling and analytical results for the Original Pesticide Handling Area (ABB-ES, 1995c).

Notes: FDEP = Florida Department of Environmental Protection.
USEPA = United States Environmental Protection Agency.
SWMU = solid waste management unit.
ACDA = Aircraft Display Area.
OPHA = Original Pesticide Handling Area.
Frequency = Frequency of detection is the number of samples in which the analyte was detected, divided by the total number of samples analyzed (excluding rejected samples).
Minimum = Minimum concentration detected.
mg/kg = milligram per kilogram [mg/kg]).
Maximum = Maximum concentration detected.
Mean = Arithmetic mean of detected concentrations (mg/kg); including the average of a sample and a duplicate and not including samples in which the analyte was not detected.
VarP. = Average of the square of the deviations of the measurements for the sample population.
Std. DevP. = Positive square root of the variance for the sample population.
– = Concentration of analyte, if present, was less than the detection limit.
nc = Calculation not conducted, because of nondetection or insufficient sample size for a site.

Table F-4
Inorganic Analytes Detected in Groundwater Samples from the Shipyard Area Monitoring Well Clusters

Response to FDEP and USEPA Comments
U.S. Naval Station
Mayport, Florida

Analytical Batch Number:	R9994	RA061	RA061	R9994	RA061	R9994	Florida Groundwater Guidance Concentration[1]	Florida Class III Marine Guidance Concentration[2]
Sample Location:	MPT-1-MW01S	MPT-1-MW01I	MPT-1-MW01D	MPT-44-MW01S	MPT44-MW01I	MPT-44-MW01D		
Sample Number:	01F00101	01G00102	01G00103	44G00101	44G00102	44G00103		
Date Sampled:	07-JUN-95	21-JUN-95	21-JUN-95	07-JUN-95	21-JUN-95	20-JUN-95		
Distance From Shoreline (ft)	1,150	1,150	1,150	640	640	640		
Arsenic	5.7 J	0.7 J	57	5.4 J	--	80.5	50	50
Iron	75.9 J	51.9 J	3,930	230	536	3,170	300	300
Manganese	3.4 J	5.5 J	150	117	73.6	701	50	NS
Sodium	5,320	13,400	3,630,000	12,900	218,000	3,100,000	160,000	NS
Analytical Batch Number:							Florida Groundwater Guidance Concentration[1]	Florida Class III Marine Guidance Concentration[2]
Sample Location:								
Sample Number:								
Date Sampled:								
Distance From Shoreline (ft)								
Arsenic	2 J	--	102	4.5 J	--	--	65.5	50
Iron	--	894	8,140	--	136	140	9,040	300
Manganese	35.8	199	200	25.8	25.6	24.6	182	50
Sodium	42,000	346,000	4,900,000	24,600	63,300	60,100	5,370,000	160,000

[1] The value is from Florida guidance concentrations dated June 1994.
[2] The value is from Florida Administrative Code 62-302.
[3] Suffix Dup designates a duplicate sample.

Notes: Shaded values denote concentrations that exceed the screening criteria.
FDEP = Florida Department of Environmental Protection.
USEPA = United States Environmental Protection Agency.
NS = no screening criteria.
J = estimated concentration.
-- = Concentration of analyte, if present, was less than the detection limit.

Table F-5
Occurrence of Bis(2-ethylhexyl)phthalate in Multiple Groundwater Sampling Events

Response to FDEP and USEPA Comments
U.S. Naval Station
Mayport, Florida

Monitoring Well Location	First Sampling Event Result[1] (μg/ℓ)	Second Sampling Event Result[2] (μg/ℓ)	Table Number	Page Number	Report
MPT-2-MW02S	7 J	--	4-60	4-160	Group I RFI (ABB-ES, 1996b)
MPT-2-MW03S	8 J	--	4-60	4-160	Group I RFI (ABB-ES, 1996b)
MPT-2-MW07I	10	--	4-60	4-161	Group I RFI (ABB-ES, 1996b)
MPT-2-MW08S	--	--	4-60	4-161	Group I RFI (ABB-ES, 1996b)
MPT-2-MW09I	6 J	--	4-60	4-162	Group I RFI (ABB-ES, 1996b)
MPT-2-MW11I	2 J	--	4-60	4-162	Group I RFI (ABB-ES, 1996b)
MPT-2-MW16D	2 J	--	4-160	4-163	Group I RFI (ABB-ES, 1996b)
MPT-13-MW02S	16	--	5-9	5-15	Group I RFI (ABB-ES, 1996b)
MPT-13-MW04S	2 J	--	5-9	5-15	Group I RFI (ABB-ES, 1996b)
MPT-13-MW06S	41	--	5-9	5-16	Group I RFI (ABB-ES, 1996b)
MPT-9-MW02S	--	--	4-16	4-57	Group II RFI (ABB-ES, 1996c)
MPT-8-MW20S	--	--	4-16	4-58	Group II RFI (ABB-ES, 1996c)
MPT-16-MW02S	2 J	--	7-6	7-15	Group II RFI (ABB-ES, 1996c)
MPT-16-MW03S	--	3 J[3]	7-6	7-15	Group II RFI (ABB-ES, 1996c)
MPT-S-MW01S	6 J[4]	--	3-28	3-91	NAVSTA Mayport GIR (ABB-ES, 1995b)
MPT-S-MW01S	6 J[5]	--	3-28	3-91	NAVSTA Mayport GIR (ABB-ES, 1995b)

[1] First sampling event for Group I SWMUs was in 1992 and in 1993 for Group II.
[2] Second sampling event was in 1994 for Group I and II SWMUs.
[3] Analytical result for a sample and duplicate collected in 1994.
[4] First sampling event 1993 and second event in 1994
[5] Analytical result for a sample and duplicate collected in 1994.

Notes: FDEP = Florida Department of Environmental Protection.
USEPA = United States Environmental Protection Agency.
RFI = Resource Conservation and Recovery Act Facility Investigation.
GIR = General Information Report.
J = estimated concentration.
-- = Concentration of analyte, if present, was less than the detection limit.